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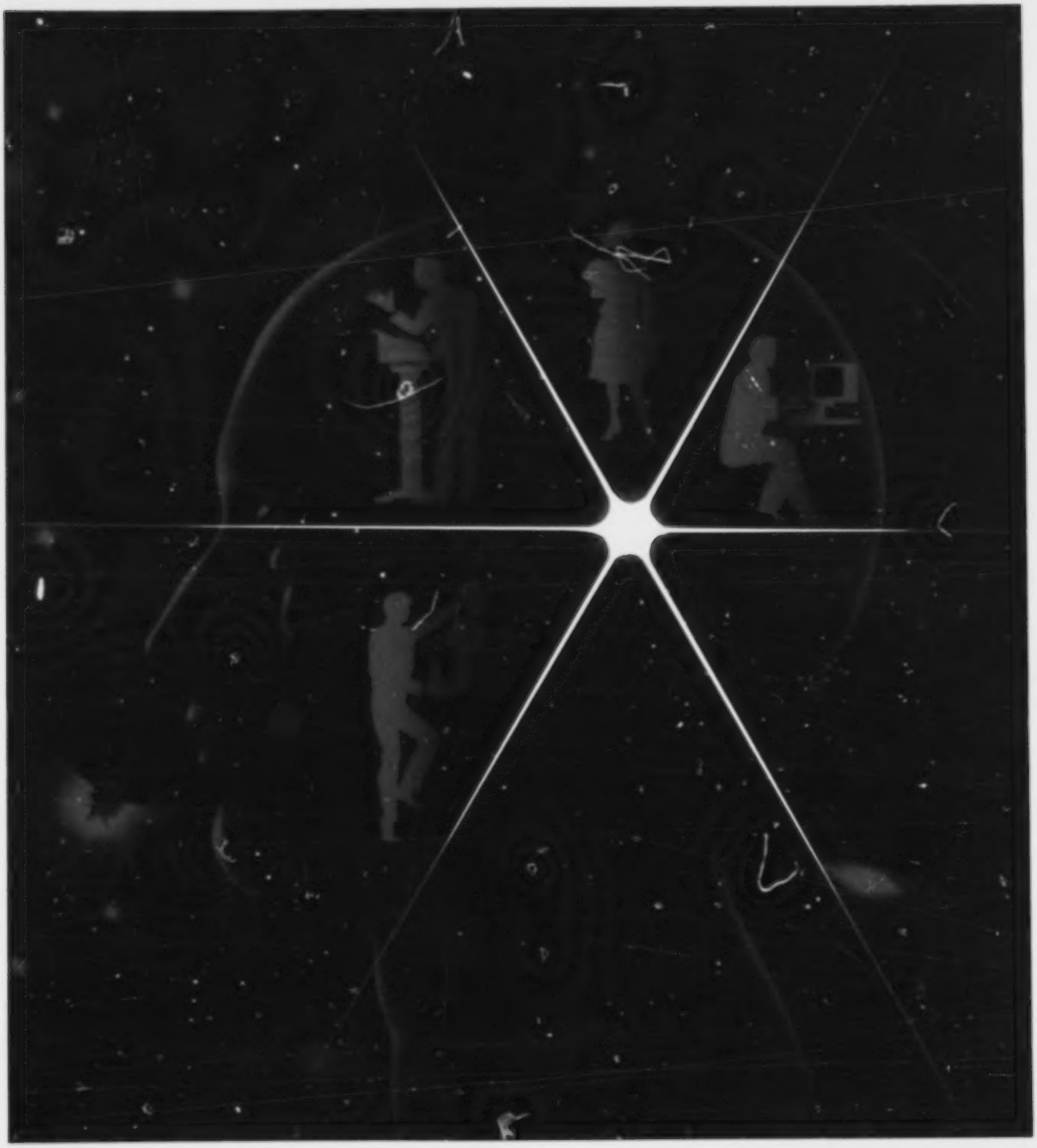
Dictionary of Occupational Titles

Volume II
Fourth Edition, Revised 1991

U.S. Department of Labor
Employment and Training Administration
1991



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Dictionary of Occupational Titles

Fourth Edition, Revised 1991

Volume II

U.S. Department of Labor
Lynn Martin, Secretary

Employment and Training Administration
Roberts T. Jones
Assistant Secretary of Labor

U.S. Employment Service
1991

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6 MACHINE TRADES OCCUPATIONS

This category includes occupations concerned with the operation of machines that cut, bore, mill, abrade, print, and similarly work such materials as metal, paper, wood, plastics, and stone. A worker's relationship to the machine is of primary importance. The more complicated jobs require an understanding of machine functions, blueprint reading, making mathematical computations, and exercising judgment to attain conformance to specifications. In less complicated jobs, eye and hand coordination may be the most significant factor. Installation, assembly, repair, and maintenance of machines and mechanical equipment and weaving, knitting, spinning, and similarly working textiles are included.

60 METAL MACHINING OCCUPATIONS

This division includes occupations concerned with shaping metal parts or products through the use of cutting tools, with or without removing excess material from stock or objects, primarily by such means as cutting, boring, milling, broaching, turning, sawing, abrading, and planing. Includes laying out, job setting, repairing, maintaining, calibrating, fitting, and assembling. The machining of nonmetallic materials is also included when the methods and machine tools commonly applied to the machining of metal are used. Occupations primarily concerned with the machining of clay, glass, and related materials are included in Division 67.

600 MACHINISTS AND RELATED OCCUPATIONS

This group includes occupations concerned with shaping metal parts by milling, turning, planing, abrading, boring, chipping, sawing, and shaving, using a variety of metalworking machines. Includes laying out, job setting, fitting, assembling, and repairing. The machining of nonmetallic materials, except wood, is also included when the methods and machine tools commonly applied to the machining of metal are used. Occupations primarily concerned with machine shop tools are included in Group 601 and machining gears in Group 602.

600.130-010 MACHINE-SHOP SUPERVISOR, TOOL (machine shop)
Supervises and coordinates activities of workers engaged in custom-machining metallic and nonmetallic workpieces to produce, maintain, or repair parts for machines, molds, and equipment, applying knowledge of machine shop procedures, variety of machine-tool setup and operating techniques, metal and plastic properties, and custom-machining methods. May supervise workers in related processes, such as forming, welding, inspecting, testing, or assembling. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.03.07 STRENGTH: M GED: R4 M4 L4 SVP: 8 DLU: 89

600.131-014 SALVAGE ENGINEER (machinery mfg.)
Supervises and coordinates activities of workers engaged in reworking rejected ball bearings: Disassembles and inspects races, faceways, cups, cones, retainers, and bearings. Diagnoses imperfections, such as parts not within tolerance, scratches, burrs, rust, or dirt and determines if part can be reworked or should be rejected. Assigns bearings to assistants to be reworked, advises them on problems involving bearing salvage, and trains workers in principles and practices of salvaging rejects. Inspects reworked bearings and components, using special go-not-go gauges, calipers, and micrometers. May operate lathes to turn, bore, face, and polish raceways, and perform related operations to rework bearings.
GOE: 06.01.01 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

600.260-014 EXPERIMENTAL MECHANIC (motor-bicycles) alternate titles: development mechanic
Sets up and operates variety of machines to fabricate experimental motorcycles or components to meet operating and endurance standards required by blueprints, sketches, or oral instructions: Assembles motorcycle or components, using handtools. Positions and clamps motorcycle on test rack. Attaches test equipment, such as tachometers, thermocouples, pressure and strain gauges, flow and velocity meters, to motorcycles, using handtools. Operates motorcycle at specified speeds and loads, and records meter and instrument readings on test records form. Disassembles motorcycle and analyzes cause of defect in components, such as exhaust system, frame, hydraulic fork, spring, or wheels, using handtools or power tools, calipers, micrometers, gauges, and other measuring instruments. Operates drill press, engine lathe, milling machine, or other machines to fabricate experimental motorcycle parts for testing, and secures test equipment to motorcycle, using jigs & fixtures. Test rides motorcycle to verify performance and durability of motorcycle components. Compiles and submits report to engineering department to show results of tests and recommendations for design or material changes.
GOE: 05.05.09 STRENGTH: M GED: R4 M4 L3 SVP: 8 DLU: 77

600.260-018 MODEL MAKER, FIREARMS (ordnance) alternate titles: sample maker
Sets up and operates metalworking machines to cut, shape, and fit parts to fabricate prototypes or modify existing models of small arms for use as production models, analyzing specifications and determining procedures according to knowledge of metal machining and layout: Lays out design of new parts on steel stock according to blueprints and scale drawings. Determines fixtures, tooling, and sequence of machining operations to fabricate parts. Sets up and operates metalworking machines to cut, shape, and fit parts [MACHINIST (machine shop)]. Files, grinds, burnishes, and polishes parts to obtain smooth movements [FILER, FINISH (ordnance)]. Verifies conformance of machined workpiece to specifications, using sine bars, verniers, calipers, and micrometers. Records data for use of TOOL MAKER (machine shop) and TOOL DESIGNER (profess. & kin.) in establishing operating standards and machinery procedures. May test fire prototypic arms.
GOE: 05.05.07 STRENGTH: M GED: R4 M4 L3 SVP: 8 DLU: 77

600.260-022 MACHINIST, EXPERIMENTAL (machine shop) alternate titles: prototype machinist
Sets up and operates machine tools, and fits and assembles parts to fabricate tools, mechanisms, and machines for experimental purposes, such as solving problems relative to materials, tools, work-holding arrangements, machine settings, product specifications, and fabrication methods for production process, applying knowledge of mechanics, shop mathematics, metal properties, layout, and machining procedures: Consults with engineer and other personnel regarding product information, such as design, capacity and purpose, and types of material to be used to fabricate product. Analyzes written specifications, drawings, rough sketches, and verbal instructions to plan layout and determine sequence of operations. Selects metal stock and lays out design according to dimensions computed from scale drawings [LAY-OUT WORKER (any industry) I 809.281-010]. Designs fixtures, tooling, and experimental parts to meet special engineering needs. Sets up and operates metalworking machine tools, such as lathe, milling machine, shaper, or grinder to machine parts to specifications, and verifies conformance of parts to specifications, using measuring instruments [TOOL-MACHINE SET-UP OPERATOR (machine shop) 601.280-054]. Tests experimental models under simulated operating conditions for such purposes as development, standardization, and feasibility of design. Installs parts and materials, such as sheet metal covering, hydraulic systems, electrical wiring, lubricants, and batteries into machines and mechanisms. Evaluates experimental procedures and recommends changes or modifications for efficiency and adaptability to setup and production. May establish work procedures for fabricating new structural products, using variety of metalworking machines. May fabricate molds and *power press* dies to produce plastic parts and stamp metal parts. May perform heat-treating and heliarc welding. May train workers in setup and operation of machine tools.
GOE: 05.05.07 STRENGTH: H GED: R4 M4 L3 SVP: 8 DLU: 88

600.261-010 ASSEMBLER, STEAM-AND-GAS TURBINE (engine-turbine) alternate titles: leadman, turbine assembly
Fits and assembles machined parts and castings to erect steam and gas turbines according to drawings and specifications, using machine tools, power tools, handtools, and measuring instruments: Erects, levels, and aligns vertical supports for bedplates of steam turbines, using levels, transit, and *master straightedge*. Lays out work for other assemblers on *thrust end*, oil tank, and cylinder assemblies, following specified assembly procedure. Chips, grinds, bores, and drills machined parts and castings, using portable grinders, boring bar, and lapping disk. Levels and aligns high and low pressure cylinders, oil tank, thrust end assembly, and exhaust assembly, using pin gauges. Scribes foundation holes, lays out offset marks, and directs machine operator to drill foundation holes. Shrink-fits spindle blade rings, diaphragm rings, dummy rings, ring gears, sleeves, couplings, and bushings on shafts to build turbine spindles, using portable gas heating unit. Measures clearance and alignment of spindle to cylinder, using micrometers and calipers. Adjusts spindle bearing pads or moves blade rings to obtain specified clearances. Starts auxiliary oil pump to flush oil piping and bearings. Starts turbine and measures balance of spindle, using vibroscope. Observes functioning of unit and instruments to adjust alignment and clearances and to assure operation according to specifications. Repairs worn and damaged turbines.
GOE: 05.05.07 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

600.280-010 INSTRUMENT MAKER (any industry) alternate titles: mechanical technician; parts mechanic; precision-instrument and tool maker; precision-mechanical-instrument maker
Fabricates, modifies, or repairs mechanical instruments or mechanical assemblies of electrical or electronic instruments, such as chronometric timing devices, barographs, thermostats, seismographs, and servomechanisms, applying knowledge of mechanics, metal properties, shop mathematics, and machining procedures and using machine tools, welding and heat-treating equipment, pre-

cision measuring instruments, and handtools: Measures, marks, and scribes stock, such as silver, nickel, platinum, steel, ivory, and plastic, following blueprints and engineering sketches, and using square, rule, and scribe to lay out workpiece for machining [LAY-OUT WORKER (machine shop)]. Sets up and operates machine tools, such as lathes, drill presses, punch presses, milling machines, grinders, brakes, and *lapping* and polishing machines, to machine parts to specifications [MACHINIST (machine shop)]. Anneals and tempers metal parts [HEAT TREATER (heat treating) I]. Assembles parts in jig and brazes or welds. Fits and installs precision components, such as timing devices, springs, balance mechanisms, and gear trains, in housing, using jeweler's lathe, tweezers, loupe, and handtools. Verifies dimensions of parts and installation of components, using measuring instruments, such as micrometer, calipers, and electronic gauges. Coats assembled instrument with protective finish, such as lacquer or enamel, using spray gun. May install wiring and electrical components to specifications. May set up and operate machines to fabricate dies for punch presses [DIE MAKER, BENCH, STAMPING (machine shop)]. May be designated according to product assembled.
GOE: 05.05.11 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

600.280-014 INSTRUMENT-MAKER AND REPAIRER (petrol. & gas)

Sets up and operates machine tools to remodel electrical and electronic instruments used in electrical logging, gun perforating, sub-surface surveying, and other oil, gas, or borehole prospecting, testing and servicing operations, following engineering orders and specifications and applying knowledge of electronics, mechanics, metal properties, shop mathematics, and machining procedures: Measures, marks, and scribes dimensions of parts to be made on metal or plastic stock, using layout tools, such as rule, square, or scribe [LAY-OUT WORKER (machine shop)]. Machines parts to specifications, using machine tools, such as lathes, drill presses, and grinders [MACHINIST (machine shop)]. Assembles fabricated mechanical parts and such purchased parts as pulleys, springs, and dials, using bolts, screws, tweezers, wrenches, and screwdrivers [INSTRUMENT MAKER (any industry)]. Installs electrical and electronic parts, such as sockets, switches, and rheostats, in chassis. Connects circuit components, such as tubes, coils, and switches, using wire strippers and soldering iron and following circuit diagrams. Tests instruments to determine conformance to specifications, using equipment, such as voltmeters and ohmmeters. May be designated according to product remodeled or repaired.
GOE: 05.05.10 STRENGTH: L GED: R4 M4 L2 SVP: 7 DLU: 77

600.280-018 INSTRUMENT-MAKER APPRENTICE (any industry) alternate titles: precision-mechanical-instrument-maker apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.11 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

600.280-022 MACHINIST (machine shop) alternate titles: machinist, first-class; machinist, general

Sets up and operates conventional, special-purpose, and numerical control (NC) machines and machining centers to fabricate metallic and nonmetallic parts, and fits and assembles machined parts into complete units, applying knowledge of machine shop theory and procedures, shop mathematics, machinability of materials, and layout techniques: Studies blueprints, sketches, drawings, manuals, specifications, or sample part to determine dimensions and tolerances of finished workpiece, sequence of operations, and setup requirements. Measures, marks, and scribes dimensions and reference points on material or workpiece as guides for subsequent machining [LAY-OUT WORKER (machine shop) 600.281-018]. Selects, aligns, and secures holding fixtures, cutting tools, attachments, accessories, and materials on machines, such as mills, lathes, jig borers, grinders, and shapers. Calculates and sets controls to regulate machining factors, such as speed, feed, coolant flow, and depth and angle of cut, or enters commands to retrieve, input, or edit computerized machine control media. Starts and observes machine operation to detect malfunctions or out-of-tolerance machining, and adjusts machine controls or control media as required. Verifies conformance of finished workpiece to specifications, using precision measuring instruments. Sets up and operates machine on trial run to verify accuracy of machine settings or programmed control data. Fits and assembles parts into complete assembly, using jigs, fixtures, surface plate, surface table, handtools, and power tools. Verifies dimensions and alignment of assembly, using measuring instruments, such as micrometers, height gauges, and gauge blocks. May install machined replacement parts in mechanisms, machines, and equipment, and test operation of unit to ensure functionality and performance. May operate welding equipment to cut or weld parts. May develop specifications from general description and draw sketch of part or product to be fabricated. May confer with engineers, production personnel, programmers, or others to resolve machining or assembly problems. May specialize in setting up and operating NC machines and machining centers and be designated Numerical Control Machine Machinist (machine shop); or set up and operate NC machines linked to automated storage, retrieval, and moving devices and be designated Flexible Machining System Machinist (machine shop).
GOE: 05.05.07 STRENGTH: M GED: R4 M4 L4 SVP: 7 DLU: 89

600.280-026 MACHINIST APPRENTICE (machine shop) alternate titles: machine-shop apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.07 STRENGTH: M GED: R4 M4 L4 SVP: 7 DLU: 77

600.280-030 MACHINIST APPRENTICE, AUTOMOTIVE (automotive ser.)

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.07 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

600.280-034 MACHINIST, AUTOMOTIVE (automotive ser.)

Sets up and operates variety of general or specialized metalworking machines to repair automotive engine parts or auxiliary units, such as transmission, differential, springs, or brakes, applying knowledge of mechanics, shop mathematics, metal properties, and machine procedures: Operates lathe to machine water-pump castings, piston heads, valves, and other automotive parts. Clamps piston in carriage of piston-grinding-and-turning machine to grind piston heads to fit cylinders. Adjusts grinding wheel to make cut of specified depth. Clamps valves in position on grinding wheel to grind seating surfaces of valves, moving levers to achieve required depth of cut. Operates boring machine to machine internal surfaces of cylinders in engine block. Cleans parts, before and after machining, in agitator-type cleaning tank to remove grease, rust stains, and foreign matters. Operates lathe, boring, or honing machine to refinish internal surfaces of bearings and connecting rods. Verifies dimensions, using measuring instruments, such as micrometers, calipers, and height gauges to ensure adherence to tolerance specifications. May grind metal surfaces of engine block or other parts, using portable or *bench grinders*. May spray worn or gouges parts with molten aluminum, zinc, or other metal to build up parts [METAL SPRAYER, MACHINED PARTS (any industry)]. May examine parts for fractures, using magnaflux test equipment. May repair cracks in engine head and other vehicle parts with arc or gas welding equipment. May operate drum lathe to resurface brake drums. May repair and resurface leaf and coil springs, axles, king pins, bushings, and universal joints.
GOE: 05.05.07 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

600.280-042 MAINTENANCE MACHINIST (machine shop) alternate titles: machine repairer; machinist, general maintenance; shop mechanic

Sets up and operates variety of machine tools, and fits and assembles parts to fabricate or repair machine tools and maintain industrial machines, applying knowledge of mechanics, shop mathematics, metal properties, layout, and machining procedures: Observes and listens to operating machines or equipment to diagnose machine malfunction and determine need for adjustment or repair. Studies blueprints, sketches, machine parts or specifications to determine type and dimensions of metal stock required. Measures, marks, and scribes dimensions and reference points on metal stock surfaces, using such measuring and marking devices as calibrated ruler, micrometer, caliper, and scriber [LAY-OUT WORKER (machine shop) 600.281-018]. Dismantles machine or equipment, using handtools or power tools, to examine parts for defect or to remove defective part. Replaces defective part with new part or repairs or reproduces part from various kinds of metal stock, using handtools, such as scraper, file, and drill, and machine tools, such as lathe, milling machine, shaper, borer, and grinder [MACHINIST (machine shop) 600.280-022]. Assembles and test operates machine to verify correction of malfunction. Maintains and lubricates machine tools and equipment. May weld parts, using arc or gas welding equipment. May repair or replace faulty wiring, switches, or relays.
GOE: 05.05.07 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 86

600.280-046 PATTERNMAKER APPRENTICE, METAL (foundry)

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.07 STRENGTH: M GED: R4 M4 L3 SVP: 8 DLU: 77

600.280-050 PATTERNMAKER, METAL (foundry)

Lays out, mills, drills, turns, grinds, fits, and assembles castings and parts to make metal foundry patterns, core boxes, and match plates, using handtools and machine tools, and analyzing specifications, according to knowledge of patternmaking methods: Studies blueprint of part to be cast, computes dimensions, and plans sequence of operations. Measures, marks, and scribes layout on castings [LAY-OUT WORKER (machine shop)]. Sets up and operates machine tools, such as milling machines, lathes, drill presses, and grinders, to machine castings to specifications [TOOL-MACHINE SET-UP OPERATOR (machine shop)]. Assembles pattern, using handtools, and bolts, screws, or other fasteners. Cleans and hand finishes workpiece, using emery cloth, files, scrapers, and powered hand grinders. Verifies conformance of machined pattern to blueprint specifications, using templates and measuring instruments, such as scale, calipers, and micrometers. May make templates for layout and inspection [TEMPLATE MAKER (any industry)]. May operate welding equipment in assembling pattern [WELDER, COMBINATION (welding)].
GOE: 05.05.07 STRENGTH: M GED: R4 M4 L3 SVP: 8 DLU: 77

600.280-054 SAMPLE MAKER, APPLIANCES (house. appl.; light. fix.) alternate titles: model maker

Sets up and operates machines to construct complete working models of new or redesigned household electrical appliances, such as fans, heaters, and hair driers: Lays out and fabricates metal and plastic parts, using handtools and machine tools. Devises and constructs own tools, dies, molds, jigs, and fixtures, or modifies existing tools and equipment [TOOL-AND-DIE MAKER (machine shop)]. Assembles mechanical and electrical parts, and installs wiring circuits.
GOE: 05.05.07 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

600.281-010 FLUID-POWER MECHANIC (any industry)

Fabricates, assembles, services, maintains, repairs, and tests fluid power equipment, such as power steering units, and components, following blueprints,

schematics, or drawings, using handtools, power tools, and testing devices and applying knowledge of hydraulic, pneumatic, and electrical principles: Analyzes blueprints, schematics, diagrams, and drawings to determine fabrication specifications. Sets up and operates milling machines, lathes, shapers, grinders, drill presses, and welders to make precision parts. Verifies conformance to specifications, using instruments, such as micrometers, verniers, and calipers. Assembles fluid power components, such as pumps, cylinders, valves, reservoirs, motors, accumulators, filters, and controls, using handtools and holding devices. Connects unit to test equipment, and analyzes and records data, such as fluid pressure, flow measure, and power loss due to friction and parts wear. Recommends modifications in unit and in test procedures, instrumentation, or setup, based on analysis of test results.
GOE: 05.05.07 STRENGTH: L GED: R4 M4 L3 SVP: 7 DLU: 77

600.281-014 LAY-OUT INSPECTOR (machine shop) alternate titles: inspector, rough castings; lay-out worker

Inspects castings, forgings, or wax patterns of castings for conformance to blueprints by laying out reference lines and points, and measuring dimensions, using surface plate, precision measuring instruments, and layout procedures: Analyzes blueprint and examines casting to determine reference points for layout. Applies blue pigment or whitewash to layout surface on casting, using rag or brush. Positions casting on surface plate, using parallel bars, angle plates, dial indicator, gauge blocks, V-blocks, shims, and vernier height gauge, to establish reference points for measuring. Computes layout dimensions relative to reference points, using shop mathematics. Marks and scribes reference lines and points on casting and measures dimensions, using instruments, such as micrometer, protractor, combination square, vernier height gauge, and *layout machine*. Records location and extent of defect in rejected casting. May inspect metal equipment used in production of casting to determine source of error.
GOE: 06.01.05 STRENGTH: M GED: R4 M4 L3 SVP: 6 DLU: 77

600.281-018 LAY-OUT WORKER (machine shop)

Lays out metal stock or workpieces, such as castings, plates, or machine parts, to indicate location, dimensions, and tolerances necessary for further processing, such as machining, welding, or assembly, analyzing specifications and computing dimensions according to knowledge of product, subsequent processing, shop mathematics, and layout procedures: Studies blueprint, sketch, model, or other specifications and plans layout. Examines workpiece and verifies such requirements as dimensions and squareness, using rule, square, and straightedge. Lifts and positions workpiece in relation to surface plate manually or with hoist, using such work aids as shims, parallel blocks, and angle plates. Verifies position with measuring instruments, such as gauge blocks, height gauges, and dial indicators. Determines reference points and computes layout dimensions. Sets indicators on height gauge, protractor, or *layout machine* to computed dimensions, or projects dimensions by setting indicators to specified locations on model and moving instrument or machine so that indicators bear on corresponding locations on workpiece. Indents layout points, using prick punch, center punch, and hammer. Marks or scribes layout lines, using handtools and work aids, such as surface gauge, straightedge, compasses, templates, and scriber. Marks such data as dimensions, instructions, and part identification on workpiece. Works to tolerances as close as plus 0.001 inch. May position model in parallel relationship to workpiece. May apply pigment to layout surfaces, using paint brush. May inspect machined parts to verify conformance to specifications. May add dimensional details to blueprints or prepare dimensional drawings to be followed by other workers. May layout sheet metal or plate steel, applying specialized knowledge of sheet metal layout geometry [SHEET-METAL LAY-OUT WORKER (any industry)].
GOE: 05.05.07 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

600.281-022 MACHINE BUILDER (machinery mfg.; machine tools) alternate titles: assembler, special machine; bench hand; fitter; machinist, bench; vise hand

Fits and assembles component according to assembly blueprints, manuals, engineering memos, sketches, and knowledge of machine construction to construct, rebuild, and repair machines and equipment, using handtools and power tools: Analyzes assembly blueprint and specifications manual, and plans machine building operations. Verifies conformance of parts to stock list and blueprints, using measuring instruments, such as calipers, gauges, and micrometers. Lays out hole locations and drills and taps holes on parts for assembly. Aligns components for assembly, manually or with hoist, and bolts, screws, dowels, welds, or rivets parts together, using handtools, rivet gun, and welding equipment, or arranges for assembly by welder and electrician. Brushes blue pigment on parts and mates them to detect high spots on surfaces. Removes high spots, and smooths surfaces, using chisels, scrapers, files, and powered hand grinder [SCRAPER, HAND (machine shop)]. Verifies alignment and tolerances of moving parts, using measuring instruments, such as dial indicators and thickness gauges. Tests operation of assembly by hand. Assembles, sets up, and operates machine to verify functioning, machine capabilities, and conformance to customer's specifications. May form and fasten piping, fixtures, and attachments required to service machine with air, water, and oil. May install wiring and electrical components to specifications. May work as member of team on limited part of fabrication process. May set up and operate metalworking machines to shape parts [TOOL-MACHINE SET-UP OPERATOR (machine shop)]. May be designated according to type of machine or machine component as Fixture Builder (machinery mfg.).
GOE: 05.05.09 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

600.360-010 MACHINE TRY-OUT SETTER (machine tools) alternate titles: detail maker and fitter

Sets up prototype metalworking machines, such as lathe, milling machine, or forging press to verify conformance to operating specifications, according to knowledge of inspection and machining techniques, tools and processes: Examines electrical components, such as electrical timers, relays, and switches, to ensure adequate functioning of automatic cycles. Compares rotary table *indexing*, when present, to specifications. Inspects fixture alignment, machine table movement, and position of cutting tools, using instruments, such as dial indicators, height setting devices annd gauges. Installs dies or tool holders and tools, following blueprints, and using handtools and measuring instruments. Sets controls to regulate speed of feed, depth of cut, or length of ram stroke, according to type of machine being tested. Operates machine to obtain sample workpiece. Verifies conformance of workpiece to specifications, using measuring instruments, such as calipers, micrometers, and gauges. Determines cause of malfunction from inspection data. Repairs electrical and mechanical components and reports electronic malfunction to supervisor. Records operational data, such as pressure readings, length of stroke, feeds, and speeds, for customer use. May demonstrate setup and operation for customer personnel. May be designated according to type of machine as Honing-Machine Try-Out Setter (machine tools).
GOE: 06.01.05 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

600.360-014 MACHINE SETTER (machine shop) alternate titles: machinist, job setter

Sets up and adjusts machine tools, such as lathes, milling machines, boring machines, drills and punch presses, grinders, gear hobbers, and plastic molding machines for other workers, such as PRODUCTION-MACHINE TENDERS (machine shop) 609.685-018, according to specifications and tooling instructions, applying knowledge of machining methods: Reads blueprint or job order for product specifications, such as dimensions and tolerances, and tooling instructions, such as feed rate, cutting speed, depth of cut, fixtures, and cutting tools to be used. Installs and adjusts holding device and fastens specified cutting and shaping tools in position to enable operator to produce finished workpiece to specifications, using handtools, such as wrenches, screwdrivers, and pliers. Selects and sets speed and feed of machine according to type of operation and specified material and finish. Starts machine to obtain first-run workpiece and verifies dimensional tolerances, using micrometers, gauges, and templates. Changes worn cutting tools and adjusts operation of machine, such as cutting speed, feed rate, or depth of cut, when required. May replace parts on machines, such as bearings, filters, wiring, and switches, using handtools. May instruct operators or other workers in machine setup and operation. May set up machines and equipment other than machine tools, such as welding machine and flame cutting equipment.
GOE: 06.01.02 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 86

600.380-010 FIXTURE MAKER (light. fix.)

Sets up and operates metal-working machines to machine workpieces, and fabricate electrical lighting fixture prototypes, such as floor and wall lamps and hanging fixtures, according to specifications: Examines drawings or blueprints to ascertain number and finished dimensions of parts required. Sets up and operates lathes to spin [SPINNER, HYDRAULIC (any industry)] or turn [ENGINE-LATHE SET-UP OPERATOR (machine shop)] ferrous or nonferrous metal, according to specifications. Cuts and shapes sheet metal [MACHINE OPERATOR (any industry) I 616.380-018]. Heats and bends metal to shape fixture parts [ORNAMENTAL-METAL WORKER (metal prod., nec)]. Verifies conformance of parts to specification, using rule, micrometer, square, and protractor. Solders, brazes, and welds parts, using welding and brazing equipment. Attaches glass parts, sockets, and wires to metal parts to form fixture, using handtools. May be designated according to type of fixture fabricated as Chandelier Maker (light. fix.).
GOE: 05.05.07 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

600.380-018 MACHINE SET-UP OPERATOR (machine shop) alternate titles: machine operator, all around; machine operator, general; machine specialist; machinist

Sets up and operates machine tools, such as lathes, milling machines, boring machines, and grinders, to machine metallic and nonmetallic workpieces according to specifications, tooling instructions, and standard charts, applying knowledge of machining methods: Reads blueprint or job order for product specifications, such as dimensions and tolerances, and tooling instructions, such as fixtures, feed rates, cutting speeds, depth of cut, and determines sequence of operations. Selects, positions, and secures tool in toolholder (chuck, collet, or toolpost). Positions and secures workpiece in holding device, machine table, chuck, centers, or fixtures, using clamps and wrenches. Moves controls to position tool and workpiece in relation to each other, and to set specified feeds, speeds, and depth of cut. Sets up fixture or feeding device, starts machine, and turns handwheel to feed tool to workpiece or vice versa, and engages feed. Turns valve handle to direct flow of coolant or cutting oil against tool and workpiece. Observes operation of machine and verifies conformance of machined workpiece to specifications, using measuring instruments, such as fixed gauges, calipers, and micrometers. Operates bench grinder to sharpen tools. May set up and operate machines and equipment other than machine tools, such as welding machines and flame-cutting equipment.
GOE: 06.01.03 STRENGTH: M GED: R4 M4 L3 SVP: 6 DLU: 89

600.380-022 MACHINE SETTER (clock & watch)

Sets up variety of metalworking machines to cut, drill, bore, abrade, mill, and assemble clock, watch, and timer parts, according to specifications and

tooling instructions, applying knowledge of metal machining methods: Confers with supervisor and studies blueprints and operation sheet to determine parts or assemblies to be processed. Installs dies, holding devices, and tools, such as cams, gears, chucks, cutters, and drills, using handtools. Operates machine to fabricate sample parts or assemblies and verifies conformance of workpiece to specifications visually and using gauges, such as micrometer, go-not-go, and calipers. Demonstrates operation of machine to workers. Observes machine operation for malfunctions, and notifies supervisor when machine repair or overhaul is required. Adjusts and makes minor machine repairs as required. May repair cams. May teach new operators to operate machine and maintain setup. May tend machines to meet production demands. May operate semiautomatic or hand operated machine to produce low production or experimental parts. May be designated according to type of machine set up as Machine Setter, Automatic (clock & watch); Machine Setter, Hand (clock & watch); Machine Setter, Semiautomatic (clock & watch). Important variables may be designated by brand name of machine used.
GOE: 06.01.02 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

600.380-026 TURBINE-BLADE ASSEMBLER (engine-turbine)
Fabricates blade structure of steam and gas turbines according to specifications and drawings, using machine tools, handtools, and measuring devices: Positions blades on bench to form sections, or positions and secures disc on positioner. Measures tenon location on blades with dial indicator and selects two blades with equal tenons for end blades of section. Sets up and operates milling machines and pedestal grinders to grind and mill blade roots to obtain specified section lengths, radial alignment, and root contact. Inserts blades into grooves of spindle, cylinder, or fixture (for section blading) and pounds metal caulking into groove to tighten blades. Operates grinders and metal saw to shape cylinder blade locking device, spindle filler pieces, and wedges from metal stock. Fits locking device to pocket of blade and smooths surfaces, using chalk, files, and abrasive paper. Drills, reams, and taps locking items, such as cylinder locks, spindle filler pieces, seals, and wedges, using drill press, and fastens them to blade by peening or inserting setscrew. Fits shroud over blade ends and peens blade tenon to round edges of rivets, using hammer and capping tool or pneumatic hammer. Measures head of rivet for specified clearance, using measuring tool. Grinds shroud end of each blade section to obtain specified clearance between shrouds, using pedestal grinder. May roll, cut, and chamfer shroud.
GOE: 06.01.03 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

601 TOOLMAKERS AND RELATED OCCUPATIONS

This group includes occupations concerned with the entire scope of constructing, repairing, maintaining, and calibrating machine-shop tools, jigs, fixtures, instruments, and metal-forming dies.

601.130-010 TOOL-AND-DIE SUPERVISOR (machine shop)
Supervises and coordinates activities of workers engaged in production and repair of metalworking dies, jigs, fixtures, gauges, and cutting tools, applying knowledge of machining and tool and die construction. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.07 STRENGTH: L GED: R4 M4 L3 SVP: 8 DLU: 77

601.260-010 TOOL-AND-DIE MAKER (machine shop)
Analyzes specifications, lays out metal stock, sets up and operates machine tools, and fits and assembles parts to fabricate and repair metalworking dies, cutting tools, jigs and fixtures, gauges, and machinists' handtools, applying knowledge of tool and die design and construction, shop mathematics, metal properties, and layout, machining, and assembly procedures: Studies specifications, such as blueprints, sketches, models, or descriptions, and visualizes product to determine materials required and machines to be used to fabricate parts. Computes dimensions, plans layout, and determines assembly method and sequence of operations. Measures, marks, and scribes metal stock for machining [LAY-OUT WORKER (machine shop) 600.281-018]. Sets up and operates machine tools, such as lathes, milling machine, shaper, and grinder, to machine parts, and verifies conformance of machined parts to specifications [TOOL-MACHINE SET-UP OPERATOR (machine shop) 601.280-054]. Lifts machined parts manually or using hoist, and positions and secures parts on surface plate or worktable, using devices, such as vises, V-blocks, and angle plates. Smooths flat and contoured surfaces, using scrapers, abrasive stones, and power grinders, and fits and assembles parts together and into assemblies and mechanisms, using handtools. Verifies dimensions, alignments, and clearances, using measuring instruments, such as dial indicators, gauge blocks, thickness gauges, and micrometers. Heat-treats tools or parts [HEAT TREATER (heat treating) II 504.682-018]. May connect wiring and hydraulic lines to install electrical and hydraulic components. May examine standard or previously used dies, tools, and jigs and fixtures, and recommend design modifications regarding construction and function of part. May develop specifications from general descriptions for specialty tools and draw or sketch design of product. May specialize in repair work and be designated Tool-And-Die Repairer (machine shop).
GOE: 05.05.07 STRENGTH: M GED: R4 M4 L4 SVP: 8 DLU: 89

601.260-014 TOOL-AND-DIE-MAKER APPRENTICE (machine shop)
Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.07 STRENGTH: M GED: R4 M4 L4 SVP: 8 DLU: 77

601.261-010 INSPECTOR, SET-UP AND LAY-OUT (machine shop)
Develops gauging setup and surface plate layout procedures, draws patterns and templates, and inspects variety of parts and tools, to provide inspection devices and fixtures for use in machining or assembly, using blueprints, formulas, trigonometry, and precision measuring instruments: Analyzes inspection problem by comparing part with blueprints or sketches, and devises procedures necessary to measure specified dimensions. Lays out part on surface plate or positions in gauging setup to verify dimensions, using master gauges, *indexing* head, gauge blocks, comparators, verniers, micrometers, and indicators. Develops and draws patterns and templates used to measure curves and angles. Tests surface finish of machined parts, using profilameter. Tests hardness of metal parts [HARDNESS INSPECTOR (heat treating)]. Analyzes defective parts to determine reasons for dimensional variations, such as faulty machining, or assembly procedures, setup, tools, or fixtures. Recommends corrective procedures to design, methods, process, or production engineering departments. Inspects machining or assembly fixtures, tools, or gauges, and suggests replacement or use of new equipment. May approve parts not within specified dimension tolerances. May change allowable tolerances specified on blueprint.
GOE: 05.05.07 STRENGTH: L GED: R4 M4 L4 SVP: 8 DLU: 77

601.280-010 DIE MAKER, STAMPING (machine shop) alternate titles: body-die maker
Lays out, machines, fits, assembles, and finishes metal castings and parts to make and repair stamping dies, analyzing specifications and applying knowledge of die design and construction: Studies blueprints of product and die, prototype products, and die models. Visualizes structure and function of die and plans operations, applying knowledge of shop mathematics, machining and assembly methods, properties of sheet metal under pressure, and metal-forming presses. Measures, marks, and scribes castings and stock for machining. Sets up and operates machine tools, such as lathe, milling machine, *radial drill press*, shaper, and grinder, to machine parts to specifications, and verifies conformance of machined parts to specifications [TOOL-MACHINE SET-UP OPERATOR (machine shop)]. Lifts machined parts manually or using hoist, and positions them on worktable or surface plate for assembly. Shapes, smooths, and fits flat and contoured surfaces of die members and parts, using handtools, such as stones, files, and powered grinders [DIE FINISHER (machine shop)]. Verifies dimensions, clearances, and alignment of members and parts in die, using dial indicators, gauge blocks, thickness gauges, and micrometers. Dowels and bolts parts together, using handtools, such as hammers and wrenches. Connects wiring and hydraulic lines to install electric and hydraulic components. Fits and assembles components for mechanical action within die. May operate power press, perform final shaping and smoothing operations on die in press, and inspect sheet metal product, to complete tryout of die [DIE-TRY-OUT WORKER, STAMPING (machine shop)]. May only repair dies and be designated Die Repairer, Stamping (machine shop).
GOE: 05.05.07 STRENGTH: M GED: R4 M4 L4 SVP: 8 DLU: 77

601.280-014 DIE MAKER, TRIM (machine shop) alternate titles: trim die maker; trimmer maker
Lays out, machines, assembles, and finishes metal stock to make dies that trim excess metal *flash* from forged metal parts, following blueprints and applying knowledge of die design and construction, shop mathematics, and metal properties: Analyzes blueprint of part or die and plans sequence of operations. Measures and scribes metal stock to layout design of die. Sets up and operates variety of machine tools, such as shaper, vertical turret lathe, and engine lathe to machine die parts [TOOL-MACHINE SET-UP OPERATOR (machine shop)]. Bolts and dowels die parts to assemble die, using handtools, such as power grinder, scrapers, files, and emery cloth to fit die parts and to obtain specified dimensions and contours. Inspects assembled die with sample part and measuring instruments, such as calipers, micrometers, and height gauges to verify conformance to specifications. May make dies containing mechanical or hydraulic components. May make dies that trim flash diecastings. May make templates to verify dimensions [TEMPLATE MAKER, EXTRUSION DIE (machine shop)]. May make tools to form die parts [TOOL MAKER (machine shop)]. May repair dies and be designated Die Repairer, Trimmer Dies (machine shop).
GOE: 05.05.07 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

601.280-018 DIE MAKER, WIRE DRAWING (machine shop)
Lays out, machines, and finishes metal, carbide, and diamond parts to make and repair wiredrawing dies, analyzing specifications and applying knowledge of metal properties, shop mathematics, and wiredrawing die construction: Studies specifications, such as blueprints, sketches, and standard charts, and visualizes shape of die. Computes die dimensions and plans sequence of operations. Measures, marks, and scribes metal stock to lay out for machining [LAY-OUT WORKER (machine shop)]. Sets up and operates machine tools, such as lathes, milling machines, and grinders, to machine die parts [TOOL-MACHINE SET-UP OPERATOR (machine shop)]. Polishes die bores by *lapping* manually or using die-finishing machines, applying progressively finer grades of diamond dust compound. Inspects die for defects, such as cracks and scratches, using loupe or microscope. Pulls wire or rod through die bore manually or using wiredrawing machine. Measures wire or rod, using measuring instruments such as micrometer, vernier gauge, or protractor, to verify conformance of die bore to specifications. May design and make tools, jigs, and fixtures. May be designated according to type of die made or repaired as Carbide-Die Maker (machine shop); Diamond-Die Maker (machine shop).

GOE: 05.05.07 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

601.280-022 DIE SINKER (machine shop) alternate titles: forging-die sinker

Lays out, machines, and finishes impression cavities in die blocks to produce forging dies, following blueprints and applying knowledge of diesinking: Analyzes blueprint of part or die and plans sequence of operations. Measures and marks die block to lay out designs of cavities. Sets up and operates variety of machine tools, such as shaper, vertical turret lathe, and engine lathe to machine cavities in die block [TOOL-MACHINE SET-UP OPERATOR (machine shop)]. Obtains specified dimensions, contours, and finish of die cavities, using tools, such as power grinder, scrapers, files, and emery cloth. Inspects die cavities, using templates and measuring instruments, such as calipers, micrometers, and height gauges to verify conformance to specifications. May develop die design from blueprint of part, using knowledge of machining and forging processes. May make templates to verify dimensions of cavities [TEMPLATE MAKER, EXTRUSION DIE (machine shop)]. May make and inspect sample lead or plaster cast of part to verify fit of die members and basic shape of part. May repair forging dies and be designated Die Repairer, Forging (machine shop). May set up and operate machines to plane surfaces and edges of forging dies and be known as Edger Machine Setter (machine shop).
GOE: 05.05.07 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

601.280-030 MOLD MAKER, DIE-CASTING AND PLASTIC MOLDING (machine shop) alternate titles: die-cast-die maker; mold maker, plastic molds

Lays out, machines, fits, assembles, and finishes metal parts to make and repair dies for diecasting of metal products and metal molds for injection or compression molding of plastic or glass products, analyzing specifications, and applying knowledge of die and mold design and construction: Studies blueprints of product and die or mold, and computes specifications, applying knowledge of shop mathematics and metal diecasting or plastic or glass molding processes and machinery. Plans sequence of operations, visualizing shape of die or mold in reverse of product. Measures, marks, and scribes metal stock to lay out for machining [LAY-OUT WORKER (machine shop)]. Gives machining specifications to TOOL-MACHINE SET-UP OPERATORS (machine shop) or sets up and operates machines, such as horizontal boring mill, engine lathe, profile milling machine, and pantograph machine to machine outer dimensions and contoured cavity of die or mold [TOOL-MACHINE SET-UP OPERATOR (machine shop); PANTOGRAPH-MACHINE SET-UP OPERATOR (machine shop)]. Grinds, files, and sands parts, using files, emery cloth, and powered grinders, to fit parts for assembly and to smooth and finish cavity. Assembles die or mold, using handtools. Verifies dimensions, using calipers, *planer gauges*, and dial indicators. May repair molds and be designated Mold Repairer, Die-Casting And Plastic Molding (machine shop).
GOE: 05.05.07 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 77

601.280-034 TAP-AND-DIE-MAKER TECHNICIAN (clock & watch)

Sets up and operates machines, such as watchmaker's lathe, bench miller, and tap grinder to make taps and dies used in manufacture of watch screws and taps: Makes master taps following blueprints and working to pitch (thread) tolerance of 0.00002 inch and outside diameter tolerance of 0.0001 inch. Threads master dies, using master taps. Makes working taps and dies from master taps and dies, using variety of semiautomatic machine tools. Laps, mills, spots, etches, drills, and taps die blanks, using variety of abrasives, bench machines, and precision gauges. Anneals and hardens dies, utilizing knowledge of heat-treating operations.
GOE: 05.05.07 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

601.280-038 TEMPLATE MAKER, EXTRUSION DIE (machine shop)

Lays out sheet or plate steel, and sets up and operates machine tools to make templates (replicas of cross sections of products to be extruded) used in manufacture of extrusion dies: Analyzes blueprints to determine product specifications and plans operations, applying knowledge of template making, extrusion of nonferrous metals, shop mathematics and sheet metalwork. Applies copper sulfate solution to surface of steel plate, using cloth or brush. Computes dimensions, and measures and scribes outline of product cross section on steel. Saws, files, and operates drill press, arbor press, band-sawing machine, filing machine, and vertical milling machine to drill, saw, shape, and smooth workpiece to layout lines [TOOL-MACHINE SET-UP OPERATOR (machine shop)]. Verifies conformance of template to specifications, using measuring instruments, such as micrometers, calipers, and protractors. May operate bench grinder to grind standard files to shape for particular operation.
GOE: 05.05.07 STRENGTH: M GED: R4 M4 L4 SVP: 7 DLU: 77

601.280-042 TOOL MAKER (machine shop)

Analyzes variety of specifications, lays out metal stock, sets up and operates machine tools, and fits and assembles parts to fabricate or repair cutting tools, jigs, fixtures, gauges, or machinists' handtools, applying knowledge of tool design, shop mathematics, metal properties, and layout, machining, and assembly procedures: Studies specifications, such as blueprints, sketches, or tool description, and plans sequence of operations. Measures, marks, and scribes metal stock to lay out workpieces for machining [LAY-OUT WORKER (machine shop) 600.281-018]. Sets up and operates machine tools, such as lathe, milling machine, shaper, and grinder, to machine parts to specifications, and verifies conformance of machined parts to specifications [TOOL-MACHINE SET-UP OPERATOR (machine shop) 601.280-054]. Positions and secures parts on surface plate or worktable, using devices such as vises, V-blocks, and angle plates. Fits and assembles parts into assemblies or mechanisms, using handtools. Verifies dimensions and alignment, using measuring instruments such as micrometers, height gauges, and gauge blocks. Examines standard tools and modifies tools as required. Develops specifications from general descriptions and draws or sketches tool to be fabricated, using drafting tools or computer and software programs. May heattreat tools or parts [HEAT TREATER (heat treating) II 504.682-018]. May be designated according to special materials used as Carbide-Tool Maker (clock & watch); Diamond-Tool Maker (clock & watch). May only repair tools and be designated Tool Repairer (machine shop).
GOE: 05.05.07 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 88

601.280-054 TOOL-MACHINE SET-UP OPERATOR (machine shop) alternate titles: machine-tool operator, general; machinist; set-up-operator, tool

Sets up and operates variety of machine tools, such as *radial drill press*, lathes, milling machines, shapers, and grinders, to machine metal workpieces, such as patterns and machine, tool, or die parts, usually on custom basis. Analyzes specifications and determines tooling, applying knowledge of metal properties, machining, and shop mathematics: Studies blueprint or layout on workpiece to visualize machining required, and plans sequence of operations. Selects method of holding workpiece. Lifts workpiece manually or using hoist, and positions and secures it to holding device, such as machine table, chuck, centers, or fixture, using wrenches and aids, such as shims, parallel blocks, planter gauges, and clamps. Verifies workpiece position, using instruments, such as surface gauges, height gauges, and dial indicator. Selects feed rate, cutting speed, depth of cut, and cutting tool (bar tool, rotary cutter, or abrasive wheel) for each operation, according to knowledge of metal properties, machining, and shop mathematics. Positions and secures tool in toolholder (chuck, collet, or toolpost). Moves controls to position tool and workpiece in relation to each other, and to set feeds, speeds, and depth of cut. Starts machine, turns handwheel to feed tool in workpiece or vice versa, and engages automatic feeding device. Turns valve handle to start flow of coolant against tool and workpiece. Observes operation and regulates tool position and action. Verifies conformance of machined workpiece to specifications, using instruments, such as micrometers, gauges, and gauge blocks. May measure, mark, and scribe workpiece to lay out for machining [LAY-OUT WORKER (machine shop) 600.281-018]. May devise ways of clamping workpieces and make special jigs and fixtures as needed. May work on nonmetallic materials. May operate bench grinder or cutter grinding machine to sharpen tools [TOOL-GRINDER OPERATOR (machine shop) 603.280-038].
GOE: 05.05.07 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 89

601.280-058 TOOL-MAKER APPRENTICE (machine shop)

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.07 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

601.281-010 DIE MAKER, BENCH, STAMPING (machine shop) alternate titles: bench die maker; die maker; stamping-die maker, bench

Lays out, fits, and assembles castings and metal parts to make and repair stamping dies, analyzing specifications according to knowledge of shop mathematics, die construction, and properties of sheet metal under pressure: Studies blueprints of die and product, die models, templates, and prototype parts and visualizes shape, mechanical structure, and operation of die. Computes dimensions, plans machining, layout, and assembly operations. Measures, marks, and scribes metal stock for machining by other workers. Operates drill press to drill and tap holes in parts for assembly. Lifts machined parts manually or with hoist, and positions them for assembly on worktable or surface plate. Smooths flat and contoured surfaces and fits parts to each other, using handtools, such as abrasive stones, files, and power grinder. Verifies dimensions, alignments, and clearances, using dial indicators, gauge blocks, thickness gauges, and micrometers. Dowels and bolts parts together, using handtools, such as hammers and wrenches. Works to tolerances as close as 0.0005 inch. May fit and assemble cam-operated mechanisms for lateral movement of part of die. May connect wiring and hydraulic lines to install electric and hydraulic components. May dismantle die and repair or replace parts. May make multistation *progressive dies* and be designated Progressive-Die Maker (machine shop).
GOE: 05.05.07 STRENGTH: M GED: R4 M4 L4 SVP: 7 DLU: 77

601.281-014 DIE-TRY-OUT WORKER, STAMPING (machine shop)

Tests, shapes, and smooths stamping die, using tryout power press and abrading handtools, until die members impart specified characteristics to sheet metal product: Studies blueprint of die and model of part, applying knowledge of die construction and flowing properties of metal under pressure. Installs die in press. Applies blue pigment to one die member and orange to other, and intermittently operates press through part of cycle to press die members together. Observes pigment markings to locate high spots. Secures press, using blocks, to prevent premature closing, climbs into open press, and uses powered hand grinder and handtools, such as scrapers, files, and abrasive stones, to remove high spots and shape and smooth die surface to conform to other die member. Adjusts press to allow for thickness of sheet metal workpiece and inserts model part. Repeatedly operates press. Observes markings on model part, and performs shaping and smoothing operations accordingly. Inserts sheet metal blank, operates press, and inspects and compares stamped workpiece with model part and customer's specifications, using measuring devices and checking fixture.

May operate power shear to cut blank [SHEAR OPERATOR (any industry) II]. May consult with superiors and other workers to solve metal forming problems.
GOE: 05.05.09 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 77

601.281-018 INSPECTOR, GAUGE AND INSTRUMENT (machine shop) alternate titles: gauge checker

Inspects and adjusts gauges, measuring instruments, and testing equipment for conformance to blueprint specifications: Verifies accuracy of gauges and measuring instruments, such as dial indicators, fixed gauges, height gauges, and electrical and functional gauges, using master gauges or master parts. Examines gauges or measuring instruments for wear or adjustment. Disassembles inaccurate or worn gauges and measuring instruments with handtools. Inspects parts for wear, warping, or other defects. Verifies dimensions of parts against blueprint specifications, using gauge blocks, micrometer, vernier height gauge, sine bar, bevel protractor, and optical comparator. Measures surface flatness and finish, using optical flats and profilameter. Computes unspecified dimensions and other data, using shop mathematics and trigonometry. Laps corroded or pitted surfaces. Reassembles gauge and adjusts stops and levers to specified settings. Inspects accuracy of new gauges and instruments for conformance to blueprint specifications before they are released for production use.
GOE: 06.01.05 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

601.281-022 INSPECTOR, TOOL (machine shop) alternate titles: precision inspector; surface-plate inspector; tool-and-die inspector; tool-and-gauge inspector; tooling inspector

Inspects, tests, and adjusts new and reworked tools, dies, gauges, jigs, and fixtures, for conformance to specifications, such as dimensions, tolerances, and hardness, applying knowledge of tool and die design, shop mathematics, and machining and testing procedures, using precision measuring instruments, testing equipment, and handtools: Computes angles, radii, and other unspecified dimensions of workpiece, using algebra, geometry, and trigonometry. Positions workpiece on surface plate and lays out reference points and center lines on parts [LAY-OUT WORKER (machine shop) 600.281-018]. Measures angular dimensions, radii, contours, clearances, thread lead, and other specifications, using precision measuring instruments, such as micrometer, gauge blocks, dial indicators, height gauges, level protractors, and optical comparators. Tests units for fit of moving parts and mechanical functioning. Tests parts for hardness, using hardness testing equipment [HARDNESS INSPECTOR (heat treating) 504.387-010]. Inspects, adjusts, and verifies accuracy of gauges and measuring instruments for conformance to specifications [INSPECTOR, GAUGE AND INSTRUMENT (machine shop) 601.281-018]. Examines defective parts to determine cause of defect and recommends changes or modifications. Determines salvageability of defective items, utilizing knowledge of material and machining costs. Measures surface finish of part, using profilometer. Inspects first run parts and assemblies. Writes report regarding inspection and testing results. May draw enlarged part details for use on optical comparator. May use laser-equipped measuring instruments. May inspect parts for flaws or internal fissures, using ultrasonic equipment or fluorescent lights. May test gauges used in manufacture and assembly of watches, using measuring devices and microscope, and be designated Gauge Controller (clock & watch).
GOE: 05.07.01 STRENGTH: M GED: R4 M4 L4 SVP: 8 DLU: 88

601.281-026 TOOL MAKER, BENCH (machine shop)

Lays out, fits, and assembles parts to make and repair cutting tools, jigs, fixtures, gauges, or machinists' handtools, analyzing specifications according to knowledge of tool designs, shop mathematics, machining, and layout and assembly procedures: Studies blueprint to determine machining to be done and plans layout and assembly. Measures, marks, and scribes metal stock to lay out for machining by other workers [LAY-OUT WORKER (machine shop) 600.281-018]. Operates drill press to drill and tap holes in parts [DRILL-PRESS SET-UP OPERATOR, SINGLE SPINDLE (machine shop) 606.682-018]. Smooths and scrapes parts to fit, using handtools such as files and scrapers. Positions and secures parts on surface plate with devices such as V-blocks, vises, and angle plates. Assembles parts into product, using tools such as wrenches, hammers, and tweezers, and verifies dimensions and alignments, using measuring instruments such as micrometers, height gauges, and gauge blocks. May set up and operate surface grinder [GRINDER OPERATOR, SURFACE, TOOL (machine shop) 603.280-014] to grind surface of parts. May test assembled mechanism. May be designated according to specialized function as Tool Repairer, Bench (machine shop); or according to product made as Gauge Maker (machine shop); Jig-And-Fixture Maker (machine shop).
GOE: 05.05.07 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

601.281-030 TOOL AND FIXTURE REPAIRER (auto. mfg.)

Replaces and adjusts tools and fixtures of production machines and components of transfer systems in industrial establishment, using handtools and precision-measuring instruments, following specifications and blueprints, and applying knowledge of hydraulics, pneumatics, and machine programming and maintenance: Observes production machines, such as punch and drill presses, milling machines, lathes and robotic equipment, to detect malfunctions, need for adjustment and alignment, or replacement of worn or broken tools and fixtures. Removes, replaces, adjusts, and aligns components of machines and equipment, such as production fixtures, programmable machines (robots), and conveyors and transfer devices (workpiece shuttle mechanisms), using precision-measuring instruments and handtools. Enters instructions on *programmable controller* or *robot controller*, to adjust speed, motion and alignment of programmable machines, applying knowledge of machine programming and operations and production processes. Repairs and calibrates electronic measuring gauges, using electrical test equipment, master gauges, and handtools. Operates machines to verify that repairs, adjustments, and alignments have corrected problems and that machines function according to specifications. Disassembles, cleans, and polishes machine components. Informs supervisor of machine malfunctions requiring repair by other maintenance workers, such as ELECTRICIAN, MAINTENANCE (any industry) 829.261-018. May set up and operate machine tools, such as lathes, mills, and surface grinders, to repair worn or broken production tools and fixtures.
GOE: 05.05.09 STRENGTH: M GED: R4 M4 L4 SVP: 7 DLU: 90

601.380-010 CARBIDE OPERATOR (machine shop) alternate titles: carbide grinder

Fabricates tungsten-carbide cutting tips for use on lathes, planers, milling machines, and other metalworking tools, using mechanical or hydraulic press, furnaces, cutting and grinding wheels, and precision-measuring instruments: Weighs cobalt, carbon, tungsten, titanium, and other powdered metals on balance scale to obtain specified molding mixture. Pours mixture from pans into molds or into hoppers for automatic feeding into molds in press. Turns valves on press to compress mixture into billet. Removes billet from press. Sets automatic feed, time, and temperature controls on sintering furnace. Feeds billets into furnace to fuse metals together. Removes billets from furnace and cuts and grinds them into cutting tips, using diamond cutting wheel and electric grinding wheel. Measures cutting edges of tips to ensure attainment of specified tolerances, using gauges, rulers, micrometers, and protractors. Sets pyrometer controls of heat-treating furnace, and feeds cutting tips into furnace to harden them. May regrind cutting tips and remeasure for conformance to specifications.
GOE: 05.05.07 STRENGTH: M GED: R4 M4 L3 SVP: 6 DLU: 77

601.381-010 DIE FINISHER (machine shop) alternate titles: die fitter

Grinds, files, sands, and polishes surfaces of metalworking die members to specified shape and smoothness and inspects dies for conformity to wood, plastic, or plaster die models or prototype parts: Lifts and positions die member on bench manually or with hoist. Studies blueprints, die models, and prototype parts, and compares them with die member to ascertain contours. Verifies dimensions and radii, using micrometers, dial indicators, and calipers. Brushes blue pigment on ridged and grooved surface of rough-milled die member, and grinds down ridges with powered hand grinder until only traces of blue pigment remain. Brushes contrasting pigments on die member and prototype part, die model, or corresponding die member, and presses them together, manually or with press. Observes pattern of pigments where surfaces have made contact, and grinds and files high spots until die member conforms to specified contour. Polishes die member, using hand stones. Inspects smoothness and contour conformity visually and tactually. May be designated according to part finished as Punch Finisher (machine shop).
GOE: 05.05.07 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

601.381-014 DIE MAKER (jewelry-silver.) alternate titles: die cutter; hub cutter

Fabricates set of dies for use in forming and shaping metal jewelry blanks, following drawings or blueprints and using variety of metalworking machines and engraver's handtools: Brushes blue dye on surface of steel block workpiece. Measures, locates, and marks center of block with cross-lines, using divider and drafter's pencil. Copies design, freehand, from sample drawing or blueprint, maintaining size specifications. Scribes along drawn line, using scribe. Measures finished design for conformance to specifications, using calipers and gauges. Positions workpiece in vise and cuts out lines of design. Chips and cuts away excess metal to complete design, using metalworking machines and handtools. Verifies dimensions of workpiece, using calipers and gauges. Hardens and tempers steel block and drives it into another block of soft steel or plastic to form sunken design, using press, or sends it to machine shop for processing. Engraves other half of die by pounding thin sheets of metal into completed half. May engrave lettering and designs into dies, using pantograph machine. May cut out, shape, and harden upper steel die (forcer) used to stamp out jewelry articles and be known as Forcer Maker (jewelry-silver.).
GOE: 05.05.07 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

601.381-018 DIE POLISHER (nonfer. metal)

Polishes and resurfaces bores and cavities of wire drawing dies to specified size and angles, using hand laps or various die polishing machines, tools, and diamond cutting pastes: Cleans dies by immersing them in tank with water, detergent, and agitating pebbles or sonic cleaner. Inspects worn dies to ascertain extent of wear, using loupe, steel gauge pins, and micrometer. Laps die surfaces to specified dimensions as it revolves in *lapping* machine or on bench lathe, using cotton swabs and progressively finer diamond pastes; or resurfaces and polishes die, using polishing machine and diamond pastes. Inspects die for cracks and smoothness of finish, using loupe or microscope, and measures diameter of die openings for conformance to specifications, using steel gauge pins and micrometer. May resurface and clean dies, using powered drill, grinder, or files and other handtools.
GOE: 05.05.07 STRENGTH: L GED: R3 M3 L2 SVP: 6 DLU: 77

601.381-022 DIE-MAKER APPRENTICE (jewelry-silver.) alternate titles: die-cutter apprentice; hub-cutter apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.07 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

601.381-026 PLASTIC TOOL MAKER (machine shop)
Molds and assembles plastic tools, such as gauges, jigs, templates, and fixtures, following blueprints: Spreads layers of glass cloth on molds or forms and brushes each layer with plastic to build plastic tool following configuration of mold. Pries cured plastic tool from mold with prying tool. Calculates, from blueprints, location of guide and reference lines and holes for tools. Measures and marks location of lines and holes on tools, using calipers, micrometers, and protractors. Drills holes in tools, using drill press, and forces bushings into holes, using arbor press or hammer. Assembles tools by laminating them with glass cloth and resin. Verifies alignment and dimensions of assembly, using calipers, height gauges, gram scale, and sight level. Trims excess material from tool parts with power grinder. Fills space between adjoining parts with plastic. May build wood frame to support and maintain alignment of complex tools, using carpenter's handtools. May laminate tools to frame.
GOE: 06.01.04 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

601.381-030 PLASTIC-FIXTURE BUILDER (machine shop) alternate titles: model maker, plastic
Fabricates precision plastic checking fixtures used to determine accuracy of stamped metal parts: Casts plastic reproduction from model of part [PLASTIC DUPLICATOR (machine tools)]. Lays out reference lines on cast as guides in assembling, fitting, and trimming operations, using height gauges, surface plates, squares, protractors, and other measuring instruments. Cuts and trims casts following reference lines, using files, saws, planes, and other handtools. Assembles casts with glue, bolts, and other fasteners. Fits and fastens metal inserts into fixture at specified points to increase strength or accuracy. Verifies dimensions of completed fixture for conformance to specifications, using templates and measuring instruments. May fabricate metal inserts used in fixture, using powered saws, powered grinder, and files.
GOE: 05.05.07 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

601.381-034 SAW MAKER (cutlery-hrdwr.) alternate titles: saw mechanic
Fabricates blades for bandsaws, circular saws, and jigsaws from steel blanks or band stock, following work order specifications and using handtools, machine tools, and knowledge of metal characteristics: Selects blank or band stock, according to size, type, and operating requirements of blade. Hammers dents, kinks, and twists from blank or band stock. Operates power roller to straighten blade and stretch (roll) blade to specified temper. Installs specified serrating dies in punch press and operates press to cut teeth in blade. Sharpens and sets blade teeth, using power grinder and swaging machine. Operates butt welding machine to join ends of bandsaw blade. May operate surface grinder to grind blanks to specified thickness. May heat-treat saws to relieve internal stress and temper metal [HEAT TREATER (heat treating) I]. May specialize in tempering and aligning blades and be designated Sawsmith (cutlery-hrdwr.).
GOE: 05.05.07 STRENGTH: L GED: R4 M4 L3 SVP: 6 DLU: 77

601.381-038 TEMPLATE MAKER (any industry)
Designs and fabricates templates of assorted materials, such as metal, fiberglass, wood, and plastic, for laying out reference points and dimensions on metal plates, sheets, tubes, and structural shapes used for fabricating, welding, and assembling structural metal products or dies: Plans and develops layout according to blueprints, work orders, tool planning orders, mockups, or sample parts, applying knowledge of trigonometry, product design, and properties of metal. Lays out design onto template material, using instruments, such as compass, protractor, dividers, and ruler, and marks shape and reference points, using scriber, pencil, chalk, and punch. Cuts, trims, drills, reams, files, shapes, and forms templates, using handtools, power tools, and fabricating machines, such as bandsaw, drill press, jointer, punch press, and shear. Nails, glues, screws, bolts, solders, or welds component parts to assemble templates. Marks job numbers, file codes, dimensions, layout, and fabricating instructions on templates. Repairs and reworks templates. May construct jigs and fixtures for fabricating machine operations [TOOL MAKER, BENCH (machine shop) 601.281-026].
GOE: 06.01.04 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 88

601.381-042 DIE MAKER, ELECTRONIC (machine shop)
Lays out, machines, fits, and assembles metal parts to fabricate electronic (heat-sealing) dies used to form plastic products, working from blueprints or drawings and using milling machine, tools, and precision instruments: Studies blueprints, drawings, and specifications to plan machine operations applying knowledge of metal properties and machine shop math. Selects and positions brass or steel stock on milling table, by hand or using hoist. Sets up and operates milling machine to machine channels of specified width and depth in stock to form electrodes. Measures, marks, and cuts electrodes to specified sizes, using rule, scribe, and cutoff knife. Sets aside electrodes for further processing by other workers. Positions completed electrodes on die board template to locate reference points for lugs and die parts, and marks reference points, using hammer and punch. Drills and taps holes in aluminum plate that serves as base for die, using power drill with tapping attachment, and mounts dies to base with screws, using screwdriver. Operates milling machine to reduce electrode altitude from die bottom to top of electrodes, working to tolerances of plus or minus .001 inch. Measures dies to verify conformance to specifications, using vernier gauge, micrometer, and ruler.
GOE: 05.05.07 STRENGTH: M GED: R4 M3 L2 SVP: 7 DLU: 86

601.482-010 PROFILE-GRINDER TECHNICIAN (clock & watch)
Sets up and operates grinding equipment to grind precision cutting tools and dies from tungsten carbide and high-speed steel, working from blueprints and to tolerances of 0.0001 inch: Plans and lays out work and sets up equipment, using variety of precision measuring devices and machine attachments and fixtures. Grinds tools and dies to prescribed dimensions by turning handwheels or adjusting controls to feed work against grinders. Measures dimensions with precision gauges. Removes, dresses, and installs emery, diamond-impregnated, and diamond-charged cast-iron grinding wheels.
GOE: 05.05.07 STRENGTH: L GED: R3 M3 L3 SVP: 6 DLU: 77

601.682-010 TOOL DRESSER (any industry) alternate titles: drill-sharpener operator
Operates compressed-air or steam-driven machine to sharpen large drills, such as rock drills, used in construction, mining, quarrying, and well-drilling: Places cutting end of drill in forge to heat cutting edge to increase malleability. Inserts heated drill into die space on machine. Starts hammering action of die to shape cutting edge of drill. Stops machine and removes edged drill. Tempers drill by heating it in forge and quenching it in water, brine, or oil.
GOE: 06.04.02 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

602 GEAR MACHINING OCCUPATIONS

This group includes occupations concerned with shaping metal gears by any combination of milling, turning, planing, abrading, boring, chipping, sawing, or shaving.

602.280-010 GEAR-CUTTING-MACHINE SET-UP OPERATOR, TOOL (machine shop) alternate titles: gear cutter; gear shaper; tool-room gear-machine operator
Sets up and operates variety of gear-cutting machines, such as gear shapers, hobs, and generators to machine spline, *rack*, or gear teeth on metal blanks, analyzing specifications according to knowledge of gear designs, shop mathematics, and gear machining procedures: Studies blueprint to visualize machining required, and plans sequence of operations. Selects machine and method of holding workpiece. Computes machine settings from gear specifications. Positions and secures workpiece to cutting angle on arbor, in chuck or other holding device, using wrenches. Selects, positions, and secures cutters in toolhead, in spindle, or on arbor. Sets feed rates and rotation speeds of cutters and workpiece in relation to each other by selecting and mounting gears, cams, or templates, or by moving levers. Moves controls to set cutting speeds and depth of stroke and cut for reciprocating cutters, and to position tool and workpiece in relation to each other. May select and mount guides to impart twisting motion to spindle for cutting helical gears. Starts machine, turns valve handle to start flow of coolant against cutter and workpiece. Verifies conformance of machined gear to specifications, using gear *measuring wires, involute checker*, master gears, optical comparator (shadowgraph), and other special gear inspection equipment. May operate broaching machine to broach internal splines or gears [BROACHING-MACHINE SET-UP OPERATOR (machine shop) 605.382-010]. May work on nonmetallic materials. May be required to have experience with particular gear type, material, or size, type, or trade name of machine.
GOE: 06.01.03 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

602.360-010 GRINDER SET-UP OPERATOR, GEAR, TOOL (machine shop) alternate titles: gear-and-spline grinder
Sets up and operates precision gear grinding machine with special *indexing* equipment to grind master and precision gears, usually on custom basis, analyzing specifications and selecting tooling according to knowledge of gear grinding procedures: Studies blueprints and machining instructions to determine grinding operations and to plan sequence of operations. Computes machine indexing ratios and cam dimensions for specified spacing and contour of gear teeth, using shop mathematics. Selects index plate, cams, grinding wheel, feed rates, grinding speed, and depth of cut, according to computations, gear specifications, and knowledge of gear design, metal properties, and abrasives. Positions and secures index plate, cams, and grinding wheel in machine, using wrenches and measuring devices. Sets up automatic dressing device to dress wheel to specified profile. Moves controls to set synchronized rotation speeds and feed rates. Positions and secures workpiece on mandrel between centers or in chuck, and turns handwheels to position workpiece and wheel, verifying positions with thickness gauges, dial indicators, and micrometers. Turns valve handle and directs flow of coolant against wheel and workpiece. Moves controls to index workpiece and feed wheel to workpiece, adjusting depth of cut in part by sight and feel. Verifies dimensions of ground workpiece for conformance to specifications, using gear *measuring wires and involute checker*. May grind nonmetallic materials. May be required to have experience with particular type of gear, precision level, or type or trade name of machine.
GOE: 06.01.03 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

602.362-010 GEAR INSPECTOR (machine shop)
Sets up and operates gear inspection equipment to measure curvature of gear tooth, distance between teeth, concentricity of gear, profile and surface dimensions, surface finish, and material hardness of production and prototype gears, utilizing knowledge of gear inspection techniques and procedures: Reads blueprints or specifications to determine dimensions and tolerances. Mounts master gears on testing machine, attaches recording instrument leads and styluses to gear, and starts machine to calibrate machine instruments. Mounts and secures gear on spindle or arbor of machine, sets instrument stylus on gears, and turns instrument dials to zero. Starts machine and reads instrument dials to determine

dimensions of gear, and compares readings to specifications. Measures profile and surface dimensions of gear, using optical comparator and micrometer, vernier gauges, and sine blocks. Measures surface finish, using profilameter. Measures material hardness, using hardness gauge. Recommends corrections on gear forming machine setup to eliminate defects. Maintains records of gears tested and measured. May lay out and mark drill holes, keyways, and gear tooth profile on blanks, using measuring devices and marking tools. May check gear-forming machine setup, using master gears.
GOE: 06.03.01 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

602.362-014 GEAR-SORTING-AND-INSPECTING MACHINE OPERATOR (machine shop) alternate titles: gear-coding machine operator

Sets up and operates gear inspecting and sorting machines to measure gears for deviations from dimensional specifications and to test mesh of gears with master (inspection) gears. Positions gear in spindle and moves controls to engage it with master gear. Rotates gear and observes mating with master gear and listens for sounds indicating defective gear. Marks gear with ink or attaches tracing stylus to gear to locate and highlight wear points. Color codes gears to enable other workers to match gears having similar deviations. May file burrs or highspots on gears. May test mesh and accuracy of finished transmission gears and be designated Gear Roller (machine shop).
GOE: 06.03.01 STRENGTH: L GED: R3 M3 L2 SVP: 4 DLU: 77

602.380-010 GEAR-CUTTING-MACHINE SET-UP OPERATOR (machine shop) alternate titles: all-around-gear-machine operator; gear cutter; gear-machine operator, general

Sets up and operates two or more types of gear-cutting and finishing machines, such as gear shapers, hobs, honers and lappers, and generators, to machine spline or gear teeth on metal blanks according to machining instructions and knowledge of gear types and gear machining: Reads blueprint or job order to determine gear dimensions and specifications, fixture and cutter to use, and machine settings. Secures and positions cutters in toolhead, on spindle, or on arbor, and bolts fixtures on machine. Mounts gears, cams, or templates, or moves levers to set feed rates and rotation speeds of cutters and workpiece in relation to each other. Positions and secures workpiece to specified cutting angle on arbor, in chuck, or in fixture, using wrenches. Starts machine, turns valve handle, and directs flow of coolant against tool and workpiece. Verifies conformance to specifications, using micrometers, gear *measuring wires*, master gears, and special gear inspection equipment. May set cutting speeds and depth of stroke and cut for reciprocating cutters. May mount guides to control twisting motion of spindle for cutting helical gears. May compute gear dimensions and machine settings, applying knowledge of shop mathematics and gear design. May machine nonmetallic materials. May be required to have experience with custom or production work, or with particular material, product, or size, type, or trade name of machine.
GOE: 06.01.03 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

602.382-010 GEAR HOBBER SET-UP OPERATOR (machine shop) alternate titles: hobbing-machine operator

Sets up and operates one or more gear *hobbing* machines to machine splines or gear teeth on metal blanks according to specifications, machining instructions, and knowledge of gear hobbing procedures: Reads machining instructions or blueprints to determine machine settings, fixtures and hobs to use, and gear specifications, such as dimensions and tolerances. Clamps workpiece in fixture or presses it on arbor and mounts arbor between centers. Positions and secures specified hob on arbor in relation to workpiece, using wrenches. Moves levers or mounts gears in machine to set feed rates and rotation speeds of hob and workpiece following machining instructions. Turns handwheel to feed hob to workpiece or vice versa, and engages automatic feed. Turns valve handle and directs flow of coolant against hob and workpiece. Verifies conformance of hobbed gears to specifications, using micrometers, gear *measuring wires*, master gears, and *involute checker*. May compute data, such as gear dimensions and machine settings, applying knowledge of shop mathematics. May machine plastic or other nonmetallic materials. May be required to have experience with custom or production work, or with particular material, product, or size, type, or trade name of machine.
GOE: 06.03.01 STRENGTH: M GED: R3 M3 L3 SVP: 5 DLU: 77

602.382-014 GEAR-GENERATOR SET-UP OPERATOR, SPIRAL BEVEL (machine shop) alternate titles: curved-tooth-gear-generator operator; gleason-gear generator; hypoid-gear generator; spiral-gear generator

Sets up and operates one or more spiral-bevel *gear generating* machines to cut and shape spiral or hypoid teeth on metal bevel-gear blanks according to specifications, machining instructions, and knowledge of gear types and generating procedures: Reads blueprint or machining instructions to determine gear type, dimensions, and number of teeth, and machine settings and cutter to be used. Clamps workpiece in fixture or presses it on arbor, and positions it to cutting angle. Positions and secures cutter on spindle in relation to workpiece, using wrenches and turning handwheels. Moves levers to set cutter and workpiece rotation speeds in relation to each other. Mounts gears, cams, or templates in machine to control *indexing* of workpiece and rolling motion of cutter. Starts machine, turns valve handle, and directs flow of coolant against cutter and workpiece. Verifies conformance of machined gear to specifications, using micrometers, master gears, and special gear inspection equipment. May compute data, such as gear dimensions and machine settings, applying knowledge of shop mathematics. May machine plastics or other nonmetallic materials. May be required to have experience with custom or production work, or with particular material, product, or size, type, or trade name of machine.
GOE: 06.02.02 STRENGTH: M GED: R3 M3 L3 SVP: 5 DLU: 77

602.382-018 GEAR-GENERATOR SET-UP OPERATOR, STRAIGHT BEVEL (machine shop) alternate titles: bevel-gear-generator operator; generator operator, straight-bevel gear; straight-tooth-gear-generator operator

Sets up and operates one or more straight-tooth bevel-gear generating machines to cut and shape straight teeth on metal bevel-gear blanks, according to machining instructions and knowledge of *gear generating* procedures: Reads blueprint or machining instructions to determine machine settings, fixtures and cutters to use, and gear type, dimensions, tolerances, and number of teeth to be generated. Mounts workpiece on arbor and positions it to cutting angle. Positions and clamps two cutters in toolheads, and positions cutter cradle to specified angle, using wrenches. Mounts gears and cams in machine to control rotation speed and *indexing* of workpiece, cutting speed, and rolling motion of cutter cradle. Starts machine, turns valve handle, and directs flow of coolant against reciprocating cutters and workpiece. Verifies conformance of machined gear to specifications, using micrometers, master gears, and special gear inspection equipment. May compute such data as gear dimensions and machine settings, applying knowledge of shop mathematics. May machine plastics or other nonmetallic materials. May be required to have experience with custom or production work, or with particular material, product, or size, type, or trade name of machine.
GOE: 06.02.02 STRENGTH: M GED: R3 M3 L3 SVP: 5 DLU: 77

602.382-022 GEAR-MILLING-MACHINE SET-UP OPERATOR (machine shop) alternate titles: milling-machine operator, gear

Sets up and operates one or more gear milling machines to machine splines or gear teeth on metal blanks, according to machining instructions and knowledge of gear milling procedures: Reads blueprints or machining instructions to determine machine settings, fixtures and milling tools to use, and gear specifications, such as dimensions and tolerances. Clamps workpiece in fixture or presses it onto arbor. Positions and secures cutter on spindle in relation to workpiece, using wrenches. Moves levers or mounts gears in machine to set feed rates and rotation speeds of cutter and workpiece in relation to each other. Starts machine, turns valve handle, and directs flow of coolant against cutter and workpiece. Verifies conformance of machined gears to specifications, using micrometers, gear *measuring wires*, and special gear inspection equipment. May compute data, such as gear dimensions and machine settings, applying knowledge of shop mathematics. May machine plastics or other nonmetallic materials. May be required to have experience with custom or production work, or with particular material, product, or size, type, or trade name of machine.
GOE: 06.02.02 STRENGTH: M GED: R3 M3 L3 SVP: 5 DLU: 77

602.382-026 GEAR-SHAPER SET-UP OPERATOR (machine shop)

Sets up and operates one or more gear shaping machines to machine splines or gear teeth in metal blanks, according to machining instructions and knowledge of gear types and gear shaping procedures: Reads machining instructions or blueprints to determine machine settings, holding fixtures and cutters to use, and gear type, dimensions, tolerances, and number of teeth to be cut and shaped. Clamps workpiece in fixture or presses it on arbor. Positions and secures specified cutter on spindle in relation to workpiece and sets length of stroke, using wrenches. Moves levers or mounts gears in machine to set feed rates, cutting speeds, and rotation speeds of cutter and workpiece, according to machining instructions. Turns valve handle and directs flow of coolant against cutter and workpiece. Verifies conformance of machined gears to specifications, using micrometers, master gears, gear *measuring wires*, and special gear inspection equipment. May mount guides to control twisting motion of spindle for cutting helical gears. May compute data, such as gear dimensions and machine settings, applying knowledge of shop mathematics. May machine plastics or other nonmetallic materials. May be required to have experience with custom or production work or with particular material, product, or size, type, or trade name of machine.
GOE: 06.02.02 STRENGTH: M GED: R3 M3 L3 SVP: 5 DLU: 77

602.382-030 GEAR-SHAVER SET-UP OPERATOR (machine shop)

Sets up and operates one or more gear-shaving machines that utilize gashed, gear-shaped cutting tools to shape and smooth gear teeth or to correct distortions remaining from roughing (gear-cutting) operation, following machining instructions and knowledge of gear-shaving methods: Reads blueprints or machining instructions to determine machine settings, fixtures and cutterheads to use, and gear dimensions and tolerances. Presses gear on arbor and mounts it between centers, using handtools. Mounts cutter on cutterhead. Moves controls to set feed rates, cutting speeds, reciprocating action, and angles of cutter and gear. Turns handwheel to feed gear to cutter. Verifies conformance to specifications, using micrometers, *measuring wires*, and *involute checker*. May compute gear dimensions and machine settings, applying knowledge of shop mathematics and gear formulas. May work on nonmetallic gears. May be required to have experience with custom or production work, or with particular material, kind of gear, or machine of particular type or trade name.
GOE: 06.01.03 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 77

602.382-034 GRINDER, GEAR (machine shop) alternate titles: gear-grinding-machine operator; gear-tooth-grinding-machine operator

Sets up and operates one or more gear grinding machines to grind surfaces of splines or gear teeth, following machining instructions and applying knowledge of gear grinding techniques: Reads blueprint or machining instructions to determine fixtures and grinding wheel to use, machine settings, and gear dimensions and tolerances. Clamps workpiece in chuck or fixture, or presses it on arbor and mounts between centers. Positions and secures wheel on arbor in relation to workpiece, using wrenches. Moves levers or mounts gears in machine to set feed rates and rotation speeds of wheel and workpiece in relation to each other. Turns handwheels to feed wheel to workpiece or vice versa, and to index workpiece, and engages automatic feeding and *indexing* device. Turns valve and directs flow of coolant against wheel and workpiece. Sets up and operates wheel dressing device to dress and true abrasive wheel. Verifies conformance to specifications, using micrometers, gear *measuring wires, and involute checker*. May compute data, such as gear dimensions and machine settings, applying knowledge of shop mathematics. May work on nonmetallic materials. May be required to have experience with custom or production work or with particular material, gear type, or size, type, or trade name of machine.
GOE: 06.02.02 STRENGTH: M GED: R3 M3 L3 SVP: 5 DLU: 77

602.482-010 GEAR-LAPPING-MACHINE OPERATOR (machine shop) alternate titles: gear finisher; gear nicker; gear-tooth-lapping-machine operator

Sets up and operates gear-lapping machine to lap gears according to specifications, machining instructions, standard charts, and knowledge of gear *lapping* procedures: Reads blueprint or instructions to determine gear dimensions, tolerances, and number of gears to be lapped, and machining instructions for lapping speeds and pressures, work-holding fixtures, and spindle angles to be used. Positions and secures pairs or trains of gears on spindles, using fixture and wrenches. Moves controls to set spindle angles, lapping speeds, tool pressure, and length of cycle. Brushes or sprays *lapping compound* on gears. Starts machine, examines gear contact area, and moves handwheels to adjust action of gears. Inspects lapped gears for conformance to specifications, using knowledge of gear design and surface finishing. May inspect finish and mechanical action of gears with gear inspection equipment. May be required to have experience with particular type of gear or machine. May lap gears against each other metal-to-metal without lapping compound and be designated Gear Burnisher (machine shop).
GOE: 06.02.02 STRENGTH: M GED: R3 M3 L3 SVP: 5 DLU: 77

602.685-010 GEAR-CUTTING-MACHINE OPERATOR, PRODUCTION (machine shop) alternate titles: hob mill operator; production-gear cutter

Tends one or more previously set up gear-cutting machines, such as gear shapers, hobbers, finishers, and generators, to machine spline or gear teeth on metal blanks: Positions and secures workpiece on arbor, or in chuck, fixture, or automatic feeding mechanism. Starts machine and flow of coolant and observes operation. Adjusts machine stops and changes worn cutter, using wrenches. Verifies conformance to specifications, using fixed gauges, micrometers, and preset dial indicators. May machine plastics or other nonmetallic materials. May be required to have experience with particular material, product, or size, type, or trade name of machine.
GOE: 06.04.02 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 77

603 ABRADING OCCUPATIONS

This group includes occupations concerned with smoothing, polishing, sharpening, or cutting through or into metal objects by the wearing away action of abrasives. The smoothing, polishing, sharpening, or shaping of nonmetallic materials, except wood, are also included when the methods and machine tools commonly applied to the machining of metal are used.

603.130-010 SUPERVISOR, GRINDING (any industry)

Supervises and coordinates activities of workers engaged in grinding metal objects to specifications, applying knowledge of metal properties, abrasives, and grinding procedures. May set up machines. May train new workers. Performs duties described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

603.137-010 FILING-AND-POLISHING SUPERVISOR (ordnance)

Supervises and coordinates activities of workers engaged in filing, burring, tumbling, sandblasting, and polishing small arms, such as rifles and machine guns. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R4 M4 L4 SVP: 7 DLU: 77

603.260-010 GRINDER SET-UP OPERATOR, THREAD TOOL (machine shop) alternate titles: precision-thread-grinder operator; thread-grinder, tool

Sets up and operates thread-grinding machine to grind internal or external threads on metal objects, such as worm gears and leadscrews, on custom basis, analyzing specifications and selecting tooling according to knowledge of thread grinding procedures: Studies blueprint to visualize grinding to be done and plans sequence of operations. Selects and computes machine settings, such as positioning angles, rotation speeds, feed rates, and gear ratios, using knowledge of shop mathematics. Selects grinding wheel, gears, and cams, using knowledge of thread types, metal properties, and abrasives, and installs them, using wrenches. Positions and secures workpiece between centers or in chuck jaws. Sets trip stops along calibrated rack to limit workpiece travel and activate wheel withdrawal. Adjusts device to dress wheel to computed angles, and to set for automatic dressing during operation. Moves controls to adjust, start, and control operation of machine. Verifies conformance of ground workpieces to specifications, using such measuring devices as thread *measuring wires*, dial indicator, gauge blocks, and optical comparator (shadowgraph). May be required to have experience with particular type of thread, kind of computation, or level of precision, or with machine of particular type or trade name.
GOE: 06.01.03 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

603.280-010 GRINDER OPERATOR, EXTERNAL, TOOL (machine shop) alternate titles: cylindrical grinder, tool; external-cylindrical-grinder operator; external grinder, tool; grinder, hand; outer-diameter grinder, tool; precision grinder, external

Sets up and operates external grinding machines to grind external cylindrical and tapered surfaces of rotating metal workpieces, such as tool, die, and machine parts, usually for limited runs, analyzing blueprints and specifications and selecting tooling according to knowledge of external grinding procedures: Studies blueprint or layout on workpiece to visualize grinding to be done and plans sequence of operations. Selects grinding wheel, according to knowledge of metal properties and abrasives, and mounts wheel on spindle. Dresses wheel manually or with preset dressing device. Moves controls and reads dials to set angle of workpiece to grinding wheel. Positions and secures workpiece between centers, on magnetic chuck, or in chuck jaws, using wrenches. Selects and sets grinding wheel speed, work surface speed, and travel rate of powered table. Positions and tightens stops to set depth of grinding wheel cut and stroke of worktable. Moves controls to feed wheel to workpiece manually or automatically. Turns valve handle and directs flow of coolant against wheel and workpiece. Verifies dimensions of ground workpiece for conformance to specifications, using such measuring instruments as micrometers, dial indicators, and gauge blocks. May dress grinding wheel to specified profile for contour grinding, using special fixtures and tools. May grind nonmetallic materials. May operate tracer attachment to duplicate contours from templates or models. May be required to have experience with particular material, product, or precision level, or with machine of particular size, type, or trade name. May set up machines for other workers. May be designated according to type of machine operated as Roll Grinder Operator (machine shop).
GOE: 06.01.03 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 78

603.280-014 GRINDER OPERATOR, SURFACE, TOOL (machine shop) alternate titles: grinder, hand; precision grinder, surface; rotary-surface grinder; surface grinder; surface-grinding-machine hand

Sets up and operates surface grinding machines with horizontal or vertical spindle and reciprocating or rotating table to grind flat or contoured surfaces of metal workpieces, such as tool, die, and machine parts, usually for limited runs, analyzing specifications and selecting tooling according to knowledge of surface grinding procedures: Studies blueprint or layout on workpiece to visualize grinding to be done and plans sequence of operations. Positions and secures workpiece on magnetic chuck, in holding fixture, or directly to machine table. Selects grinding wheel, grinding speeds, and feed rates for each operation according to knowledge of metal properties and abrasives, and mounts wheel on spindle. Moves device to dress wheel. Moves controls and reads dials to set rotation speeds and feed rates. Positions and tightens stops to limit table travel. Moves controls to feed workpiece to wheel or vice versa. Turns valve handle and directs flow of coolant against wheel and workpiece. Verifies dimensions of ground workpiece for conformance to specifications, using such measuring instruments as micrometers, comparators, dial indicators, gauge blocks, and load test equipment. May dress grinding wheel to specified profile for contour grinding, using special fixtures and tools. May grind nonmetallic materials, such as plastics. May operate tracer attachment to duplicate contours from templates or models. May be required to have experience with particular material, product, or precision level, or with machine of particular size, type, or trade name.
GOE: 06.01.03 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

603.280-018 GRINDER OPERATOR, TOOL (machine shop) alternate titles: precision grinder

Sets up and operates variety of grinding machines, such as external, internal, and surface grinders, to grind metal workpieces, such as machine parts, dies, or tools, according to knowledge of grinding procedures: Studies blueprint or layout on workpiece to visualize grinding to be done, and plans sequence of operations. Selects grinding wheel, applying knowledge of abrasives and metal properties, and secures it on spindle, using wrench. Dresses wheel with dressing device. Lifts workpiece manually or with hoist, and positions and secures workpiece to holding device, using wrenches and clamps. Selects feed rates, grinding speeds, depth of cuts, and grinding wheel of size, shape, and grade for each operation, applying knowledge of metal properties, abrasives, product specifications, and shop mathematics. Positions and tightens stops to limit travel of workpieces or grinding wheel. Moves controls to position wheel and workpiece in relation to each other, and to set feed, speed, and depth of cut. Starts machine, turns handwheel to feed grinding wheel to workpiece or vice

versa, and engages power feeding device. Turns valve handle and directs flow of coolant against wheel and workpiece. Observes operation and adjusts position and action of wheel and workpiece. Verifies dimensions of ground workpieces for conformance to specifications, using measuring instruments, such as templates, micrometers, dial indicators, and gauge blocks. Works to tolerances of plus or minus 0.0001 inch. May measure, mark, and scribe workpiece to lay it out for grinding (LAY-OUT WORKER (machine shop) 600.281-018). May dress grinding wheels to complex profiles, using special fixtures and tools. May grind nonmetallic materials, such as plastics. May operate tracer attachment to duplicate contours from templates or models. May be required to have specialized experience with particular materials, product, or precision level or with machine of particular size, type, or trade name.
GOE: 06.01.03 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

603.280-022 GRINDER SET-UP OPERATOR, INTERNAL (machine shop) alternate titles: grinder, hand; inner-diameter grinder, tool; internal grinder, tool; internal-grinding-machine hand; internal-grinding-machine operator; precision grinder

Sets up and operates internal grinding machines to grind internal cylindrical and tapered surfaces of rotating metal workpieces, such as tool, die, and machine parts, usually for limited runs, analyzing blueprints and specifications and selecting tooling according to knowledge of internal grinding procedures: Studies blueprint or layout on workpiece to visualize grinding to be done and plans sequence of operations. Selects grinding wheel, according to knowledge of metal properties and abrasives, and mounts wheel on spindle. Moves controls and reads dial to set angle of workpiece to grinding wheel, following product specifications. Dresses wheel manually or with preset device. Positions and secures workpiece on faceplate, magnetic chuck, or in chuck jaws, using wrenches. Selects and sets grinding wheel speed, work surface speed, and workpiece table travel rate, according to knowledge of metal properties and abrasives. Positions and tightens stops to set depth of grinding wheel cut and stroke of workpiece table. Moves controls to feed wheel to workpiece manually and automatically. Turns valve handle and directs flow of coolant against wheel and workpiece. Verifies dimensions of ground workpiece for conformance to specifications, using such measuring instruments as micrometers, dial indicators, and gauge blocks. May dress grinding wheel to specified profile for contour grinding, using special fixtures and tools. May grind nonmetallic materials, such as plastics. May operate tracer attachment to duplicate contours from templates or models. May be required to have experience with particular material, product, or precision level, or with machine of particular type or trade name.
GOE: 06.01.03 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 78

603.280-026 GRINDER SET-UP OPERATOR, JIG (machine shop) alternate titles: jig grinder; jig-grinding-machine operator; precision jig grinder

Sets up and operates jig grinding machine to locate and precision-grind holes and contours in metal objects, such as tool, die, and machine parts, on custom basis, analyzing blueprints and specifications and selecting tooling according to knowledge of jig grinding procedures: Studies blueprint, layout on workpiece, or written or oral specifications to visualize grinding to be done and plans sequence of operations. Computes and sketches hole and contour dimensions and locations in relation to base reference points and lines. Positions and secures workpiece on machine table, and turns handwheels to move table and workpiece to computed position under spindle center, verifying each step with dial indicator. Selects grinding wheel, grinding speeds, and feed rates for each operation according to knowledge of metal properties and abrasives, and mounts wheel on spindle. Moves controls and reads dials to set grinding speed, feed rate, spindle angle for taper grinding, diameter of *planetary action*, and limits of automatic reciprocating wheel feed. Dresses wheel manually or with preset dressing device. Moves controls to feed wheel into hole and against surface of workpiece. Verifies hole locations and dimensions for conformance to specifications, using measuring instruments, such as dial indicator, gauge blocks, and *telescoping gauges*. May be required to have experience with particular material, product, precision level, or with machine of particular type or trade name.
GOE: 06.01.03 STRENGTH: L GED: R4 M4 L3 SVP: 7 DLU: 77

603.280-030 GRINDER SET-UP OPERATOR, UNIVERSAL (machine shop) alternate titles: precision grinder, universal; universal grinder, tool

Sets up and operates combination external- and internal- (universal) grinding machine to grind external and internal cylindrical and tapered surface of rotating workpieces, such as tool, die, and machine parts, usually for limited runs, analyzing blueprints and specifications and selecting tooling according to knowledge of external and internal grinding procedures: Studies blueprint or layout on workpiece to visualize grinding to be done and plans sequence of operations. Selects grinding wheel, according to knowledge of metal properties and abrasives, and mounts wheel on spindle. Dresses wheel manually or with preset dressing device. Moves controls and reads dials to set rotation speeds and feed rates. Positions and tightens stops or cams to limit travel of workpiece or wheel. Moves controls to feed grinding wheel to workpiece or vice versa manually or automatically. Turns valve handle and directs flow of coolant against wheel and workpiece. Verifies dimensions of ground workpiece, using such measuring instruments as micrometers, dial indicators, gauge blocks, and optical comparator. May dress grinding wheel to specified profile, using special fixtures and tools. May grind nonmetallic materials, such as plastics. May operate tracer attachment to duplicate contours from templates or models. May be required to have experience with particular material, product, or precision level, or with machine of particular type or trade name.
GOE: 06.01.03 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

603.280-034 JOB SETTER, HONING (machine shop)

Sets up horizontal or vertical honing machines for HONING-MACHINE OPERATORS, PRODUCTION (machine shop) engaged in production honing of metal objects: Reads blueprint to select tooling and plans sequence of operations. Selects and secures tool in spindle, using wrenches. Positions workpiece in fixture or on machine table, securing it with clamps and wrenches, and verifies positions with instruments, such as surface gauges and dial indicators. Selects feed rate, honing tool rotation speed, and depth of cut, according to knowledge of metal properties and abrasives. Moves contros to position tool in relation to workpiece and to set feed rate and spindle speed. Positions and tightens stops, using wrench, to control length of honing tool stroke. Starts machine and turns handwheels to feed tool to workpiece. Measures first-run workpiece for conformance to specifications, using micrometers and fixed gauges. May instruct new workers in machine operation.
GOE: 06.01.02 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

603.280-038 TOOL-GRINDER OPERATOR (machine shop) alternate titles: cutter grinder; cutter-grinder operator; grinder operator; tool dresser; tool grinder; tool-grinding-machine operator; tool sharpener

Sets up and operates grinding machines, such as surface and universal, carbide, drill, and tool-and-cutter grinders, to sharpen cutting tools to specifications, using blueprints, job orders, and knowledge of abrasives and metal properties: Reviews blueprints and job orders to plan production sequence. Selects grinding wheel of shape and grade and attaches to spindle, using wrenches. Positions and secures cutting tool on machine table, using magnetic chuck or holding fixture, or mounts tool on arbor and clamps between centers. Turns handwheels to position table or spindle to obtain specified taper and bevel on edges of cutting tools. Moves controls to set cutting tool rotation speed, feed rate, and grinding wheel rotation speed. Starts machine and turns wheel or engages feed to move workpiece to grinding wheel. Measures sharpened cutting tools to verify conformance to specifications, using fixed gauges, micrometers, calipers, optical comparators, and surface gauges. Dresses abrasive wheel to change cutting action or shape. May grind special *form tools*, involving special setups and wheel dressing. May analyze specifications and select tooling to be used on production jobs. May design, modify, or make special tools according to specifications or tooling requirements. May braze or solder carbide tips to cutting tools. May be required to have specialized experience with particular type of cutting tool sharpened or machine operated and be designated Broach Grinder (machine shop); Drill Sharpener (machine shop); Hob Grinder (machine shop).
GOE: 06.01.03 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

603.360-010 BUFFING-LINE SET-UP WORKER (any industry)

Sets up buffing line to buff metal parts, such as automobile trim or hardware, to specified finish, following work order and using knowledge of metals, abrasives, and finishing techniques: Reads work order to determine part to be buffed. Selects holding fixtures and bolts them to drive mechanism. Selects buffs and positions and attaches them to spindles, using knowledge of buffing operations to determine type of buffs, angle of contact, and pressure against workpiece. Sets timers to control speed of *indexing*, according to size and material of workpiece and to control application of lubricant and abrasive. Examines finish of first piece through buffing line for conformance to specifications. Adjusts setup to achieve specified finish. May change speed of buffing wheels by varying ratio of drive pulleys.
GOE: 06.01.02 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

603.380-010 GRINDER MACHINE SETTER (machine shop)

Sets up metal-grinding machines, such as external, internal, surface, and centerless grinders, for GRINDER OPERATORS, PRODUCTION (machine shop) 603.685-062, according to specifications, tooling instructions, standard charts, and knowledge of grinding procedures, and operates machine to grind first-run workpiece: Reads from blueprint and job order product specifications for dimensions, tolerances, and number of parts to be ground and tooling instructions, such as speeds, feed rates, holding fixtures, and grinding wheels to be used. Mounts grinding wheels on spindles with wrenches. Dresses wheels to specifications, using dressing devices. Moves controls to set specified grinding speeds, feed rates, and angle of grinding wheel to workpiece or vice versa. Positions and tightens cams to control depth of cut and length of stroke. Lifts and positions workpieces manually or with hoist, and secures them on machine tables, faceplates, or magnetic chucks, in chuck jaws, or between centers, using wrenches and clamps. Starts machine, moves controls to adjust machine settings, and observes operation. Verifies first-run products for conformance to specifications, using such measuring instruments as micrometers, calipers, and preset gauges. May feed machine by hand. May direct flow of coolant over cutting area. May measure workpiece prior to grinding to determine amount of material to be removed. May be required to have experience with particular material, product, or precision level, or machine of particular size, type, or trade name.
GOE: 06.01.02 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

603.382-010 BUFFING-MACHINE OPERATOR (any industry)

Sets up and operates semiautomatic buffing machine to buff parts, such as automobile trim or hardware to specified finish: Reads work order to determine

parts to be buffed and setup procedure. Selects holding fixture and bolts it to feed arm. Slides spacers between buffs on spindle to set spacing. Measures and sets angle of feed arm to control position of workpiece against buff, according to specifications or using knowledge of machine operation. Sets length of traverse and stroke of feed arm by adjusting air cylinder and setting stops. Starts buff revolving and clamps workpiece in fixture. Presses button to feed workpiece against buff. Removes buffed part from fixture and examines it to ensure that surface coloration meets specifications. Adjusts angle, feed, or traverse of machine to achieve specified finish.
GOE: 06.02.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

603.382-014 GRINDER SET-UP OPERATOR, CENTERLESS (machine shop) alternate titles: centerless-grinding-machine operator

Sets up and operates one or more centerless grinding machines to grind external or internal cylindrical or tapered surfaces of metal workpieces to blueprint specifications, following tooling instructions and standard charts and applying knowledge of grinding procedures: Reads blueprint and job order for product specifications, such as dimensions, tolerances, and number of parts to be ground, and tooling instructions, such as grinding speeds, feed rates, holding fixtures, and grinding wheels to be used. Mounts grinding wheel and regulating wheel on spindles with wrenches. Dresses wheels to specifications, using dressing device. Moves controls to set specified grinding speeds, feed rates, and spacing between wheel faces. Positions and secures work rest at specified height, using wrenches. Lifts and positions workpiece manually or with hoist, and secures it between wheels and on work rest. Starts machine and observes operation. Verifies dimensions of ground workpiece for conformance to specifications, using measuring instruments, such as micrometers, calipers, and preset gauges. Changes worn grinding wheels, using wrenches. May set up automatic work-feeding device. May grind nonmetallic materials. May be required to have experience with custom or production work or with particular material, product, or precision level, or with machine of particular size, type, or trade name.
GOE: 06.02.02 STRENGTH: M GED: R3 M3 L3 SVP: 5 DLU: 77

603.382-018 HONING-MACHINE SET-UP OPERATOR (machine shop) alternate titles: hone operator; honing-machine operator

Sets up and operates one or more vertical or horizontal honing machines to hone internal or external surfaces of objects, such as cylinders, bearings, and connecting rods to specifications, following tooling instructions, standard charts, and honing procedures: Reads blueprint and job order for product specifications, such as dimensions, tolerances, and number of parts to be honed, speeds, feed rates, work-holding fixtures, and honing tools to be used. Positions and secures fixtures on machine table, using squares, steel rules, micrometers, and wrenches. Lifts workpiece manually or with hoist and positions and secures fixture with clamps and wrenches. Inserts and tightens specified tool in spindle. Moves controls to set tool-feed rate and spindle speed. Sets stops with wrench to control length of stroke and depth of cut. Starts machine and turns handwheels or engages automatic mechanism to feed and oscillate tool along workpiece surface. Turns valve handle to direct flow of coolant against tool and workpiece. Measures honed workpiece for conformance to specifications, using measuring instruments, such as preset gauges, micrometers, calipers, and comparators. May be required to have experience with custom or production work, or with particular material or product, or with machine of particular size, type, or trade name, and be designated accordingly.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

603.382-022 HONING-MACHINE SET-UP OPERATOR, TOOL (machine shop) alternate titles: honing-machine operator, tool;job honer; precision-honing-machine operator

Sets up and operates vertical or horizontal honing machine to hone internal or external surfaces of metal objects, such as prototype cylinders, bearings, or connecting rods, usually on custom basis, analyzing specifications and selecting tooling according to knowledge of honing procedures: Studies blueprint to visualize honing to be done and plans sequence of operations. Positions workpiece in fixture or on machine table, and secures it with clamps and wrenches, verifying positions with instruments, such as surface gauges and dial indicators. Selects feed rate, honing speed, depth of cut, and honing tool for each operation, according to knowledge of metal properties, abrasives, and shop mathematics. Positions and secures tool in spindle. Moves controls to position tool in relation to workpiece and to set feed rate and spindle speed. Turns nut on tool or sets automatic mechanism to expand tool to selected diameter. Positions and tightens stops with wrench to control length of stroke. Starts machine and turns handwheels to feed tool to workpiece. Engages automatic mechanism to feed tool along workpiece with oscillating action. Turns valve handle and directs flow of coolant against tool and workpiece. Measures honed workpiece for conformance to specifications, using electromechanical limit gauges, surface gauges, micrometers, and *telescoping gauges*. May use special optical inspection equipment. May replace worn honing stones. May be required to have experience with particular material or product or with machine of particular size, type, or trade name and be designated accordingly.
GOE: 06.02.02 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

603.382-026 LAPPING-MACHINE SET-UP OPERATOR (machine shop)

Sets up and operates *lapping* machines to lap surfaces of flat, cylindrical, or spherical objects or of adjacent mechanical parts to specified finish or dimensions, following specifications, tooling instructions, and standard charts, applying knowledge of lapping procedures: Reads blueprint or job order for product specifications, such as dimensions, tolerances, and number of parts to be lapped, tooling instructions, such as lapping speeds and pressures, work-holding fixtures, and laps to be used. Mounts laps on spindles with wrenches. Positions and secures workpieces in fixture or on machine table. Moves controls to set lapping speeds, tool pressure, and length of cycle and to guide action of laps against workpieces or workpieces against each other. Starts machine and brushes or sprays *lapping compound* on laps and workpieces. Inspects lapped workpiece for conformance to specifications, using instruments, such as comparator, flatness gauges, and surface plates. May be assisted by MACHINE SETTER (machine shop) 600.360-014 in setting up machine. May operate machine equipped with abrasive wheels instead of metal laps. May be required to have experience with custom or production work, with particular material or product, or with machine of particular type or trade name and be designated accordingly.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

603.382-030 PRINTING-ROLLER POLISHER (machine shop)

Operates polishing lathe to reduce circumference of printing rollers to specifications and remove defects, such as turning and polishing lines, high spots, and scratches: Mounts roller on mandrel of lathe, using hoist. Measures circumference of roller at several points to locate irregular spots, using girth tape. Examines surface of roller for defects. Depresses pedal to raise water vat and starts lathe to rotate roller in vat. Polishes roller by either of following methods: (1) Moves polishing stone back and forth across length of roller, changing from coarse to finer grades of stone to impart acceptably smooth finish. (2) Mounts flat stone on spindle of polishing head, starts oscillation of stone, and lowers stone onto surface of rotating roller. Moves lever to engage gear that moves machine head back and forth over surface of roller. Changes stones on machine head to impart final polish. Examines polished rollers for rough spots, pinholes, and scratches. Rubs scratches and rough spots with burnishing tool to finish roller. Verifies circumference of polished roller, using girth tape. Cleans roller before and after polishing, using cloth, water, and detergents or cleaning solution.
GOE: 06.02.09 STRENGTH: H GED: R3 M2 L2 SVP: 6 DLU: 77

603.382-034 GRINDER SET-UP OPERATOR (machine shop)

Sets up and operates grinding machines to grind threads on metal objects, such as screws, bolts, and micrometer spindles, and to grind internal and external surfaces of metal workpieces to specifications, following tooling instructions, standard charts, blueprints, and job orders, applying knowledge of grinding procedures: Reads blueprint and job order for product specifications, such as dimensions, tolerances, and number of parts to be ground, and tooling instructions, such as grinding speeds, feed rates, holding fixtures, and grinding wheel to be used. Mounts wheel on spindle, using wrenches. Dresses wheel to specifications, using dressing device. Sets machine controls to specified grinding speeds, feed rates, and angle of wheel. Positions and tightens cams and stops to control depth of cut and length of stroke. Lifts and positions workpiece, manually or using hoist, and secures workpiece on faceplate or magnetic chuck, in fixture or chuck, or directly to machine table. Starts machine and activates controls to feed wheel against workpiece or vice versa, or engages automatic feeding device. Verifies dimensions of finished workpiece for conformance to specifications, using measuring instruments, such as micrometers, calipers, preset gauges, load test equipment, thread *measuring wires*, and thread gauges. Changes worn grinding wheel, using wrenches. May place workpiece in hopper or fixture of automatic feeding device. May grind nonmetallic materials. May be required to have experience with custom or production work or with specific type of machine, material, product, or precision level and be designated Grinder Set-Up Operator, External (machine shop); Grinder Set-Up Operator, Internal (machine shop); Grinder Set-Up Operator, Surface (machine shop); Grinder Set-Up Operator, Thread (machine shop).
GOE: 06.02.02 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 86

603.382-038 KNIFE GRINDER (machine shop) alternate titles: cutterhead sharpener; tool grinder

Sets up and operates grinding machines to shape and sharpen planer knives and woodworking machine cutters according to specifications: Positions and secures workpiece or sheet stock, template, and machine accessories onto machine, using handtools. Turns handwheels to set travel and pressure of cutterhead or knife stock across or against grinding wheel to shape or sharpen workpiece. Starts machine and observes grinding operation to verify conformance to specifications. May cut out plastic templates used to fabricate knives and cutterheads. May hone cutting edge of ground knives, using whetstone and oil. May cut and grind silicon carbide jointing stones to match pattern of knives. May select and install grinding wheels on machine, using handtools, applying knowledge of product specifications and abrasives. May manipulate blade across grinding wheel by hand. May turn valve to control flow of coolant. May sharpen or shape knives and saw blades, using handtools. May sharpen bits and boring tool [BIT SHARPENER (any industry) 603.685-026].
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L3 SVP: 5 DLU: 78

603.482-010 DEBURRER, STRIP (clock & watch)

Sets up and operates multiple stage deburring machine to smooth edges and set (establish) width of mainspring strip: Threads strip from feeding roll through deburring cutters to winding roll, aligning cutters and adjusting cutters for specified width. Makes trial run, cuts off piece of deburred strip, examines piece under microscope, and adjusts cutters to correct deficiencies in operation. Adjusts and sharpens cutters on diamond wheel, using mechanic's tools. Works to tolerances of 0.0005 inch.

GOE: 06.02.02 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

603.482-030 GRINDER I (clock & watch) alternate titles: grinder, watch parts

Operates grinding machine to grind blocked watch parts to size: Places blocks on magnetic chuck and regulates feed and depth of grinding wheel cut to grind parts to specified thickness, working to tolerances of 0.0005 to 0.0001 inch. Removes blocks to measure thickness with upright gauge to ensure conformance to specifications. Dresses chuck by running grinding wheel across chuck slowly. Laps part for finish after grinding by putting blocks, parts side down, under pressure pads of *lapping* machine, putting oil and emery on lapping surface, and setting timer for specified time.
GOE: 06.02.02 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

603.482-034 HONING-MACHINE OPERATOR, PRODUCTION (machine shop) alternate titles: cylinder honer; honer; honing-machine operator, semiautomatic; production-honing-machine operator

Operates honing machines to hone internal or external surfaces of metal parts, such as cylinders, bearings, and connecting rods to specifications, usually on production basis: Obtains such information as dimensions, tolerances, and number of parts in run from job order and instructions of MACHINE-SHOP SUPERVISOR, PRODUCTION (machine shop) or JOB SETTER, HONING (machine shop). Lifts workpiece manually or with hoist and secures it in fixture. Starts machine and turns handwheels or engages automatic mechanism to feed tool to workpiece. Moves controls to adjust feed rate, spindle speed, length of stroke, and depth of cut. Measures finished workpiece with instruments, such as calipers, fixed gauges, and micrometers. Changes worn tools, using wrenches. May read blueprints. May assist JOB SETTER, HONING (machine shop) to set up machine. May be required to have experience with particular material, or product, with machine of particular size, type, or trade name, and be designated accordingly.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

603.664-010 TOOL GRINDER II (any industry) alternate titles: tool sharpener

Sharpens and smooths cutting edge of tools, such as axes, chisels, drills, picks, and straight cutting blades, using abrasive wheel: Presses button to start abrasive wheel. Positions and holds cutting edge of tool against machine guide and abrasive wheel to sharpen and smooth tool edge. Immerses tool in oil to cool edge. Repositions and holds tool edge against guide and abrasive wheel to further sharpen and smooth edge. May heat tools and immerse them in brine, oil, or water to harden them. May remove burrs from ground edges of tools, using whetstone. May sharpen and reduce diameter of circular cutting blades. May be designated according to kind of tool sharpened as Ax Sharpener (any industry); Chisel Grinder (any industry); Knife And Spur Grinder (saw. & plan.); Knife Grinder (any industry).
GOE: 06.02.01 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

603.665-010 BUFFING-MACHINE TENDER (any industry)

Tends automatic buffing machine that buffs parts, such as automobile hardware or trim: Loads parts on holding fixture of revolving table that is preset for regular *indexing* and starts machine. Removes buffed parts and examines them for surface defects. Places buffed parts into shallow tray and covers them with cardboard separators. Informs BUFFER (any industry) I or BUFFING-LINE SET-UP WORKER (any industry) of buffing defects. May maintain count of buffed parts and parts which do not meet specifications.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

603.682-010 BUFFING-MACHINE OPERATOR, SILVERWARE (jewelry-silver.)

Sets up and operates battery of machines that automatically buff shells for silver-plated hollowware, such as bowls, tea sets, vegetable dishes, and gravy boats, to remove scratches and pressmarks and impart smooth finish for subsequent plating: Selects buffing wheel of size and shape to match workpiece and bolts it to stationary drive shaft. Selects jig to match exterior or interior shape of workpiece and bolts it to chuck on lathe arbor. Clamps workpiece in jig and turns stop nuts to position assembly against buffing wheel. Turns knobs of timing device to regulate buffing time according to kind and thickness of metal and surface area to be buffed. Starts machine and holds stick of compound to wheel to coat wheel with abrasive. Observes operation and removes workpiece when machine stops at end of timed cycle.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

603.682-018 LINTER-SAW SHARPENER (oils & grease) alternate titles: saw filer; sharpener

Operates machine to sharpen cylinders of circular saws used in linter machines: Removes saw cylinders from linter machine and mounts cylinder in feeding head of sharpening machine. Examines saw blades to determine amount of cut necessary to sharpen them. Turns handwheels to set cutting control to specified depth of cut for saw teeth, and to adjust space between cutting tools. Starts machine and observes operation.
GOE: 06.02.02 STRENGTH: L GED: R3 M3 L2 SVP: 4 DLU: 77

603.682-022 MIRROR-FINISHING-MACHINE OPERATOR (jewelry-silver.) alternate titles: buffing-machine operator, semiautomatic; polishing-machine operator, semiautomatic

Sets up and operates one or more semiautomatic machines to buff silver or stainless steel flatware between cloth or felt rolls to impart mirrorlike finish: Mounts buffing rolls in machine holders, using wrenches. Turns adjustment wheel and observes pressure dial to set distance between rolls. Turns setscrews and stop nuts to adjust motion of machine table. Starts rollers, turns valve, and depresses pedal to spray buffing compound across rolls or pulls bar-mounted stick of compound across them. Squeezes handles to open jaws of holding fixture and grip ends of workpieces racked in position on racking table. Inserts and locks fixture in sleeves of machine table, with blades, tines, bowls, or handles of workpieces inserted between buffing rolls. Starts machine that closes rolls on workpieces, rocks machine bed up and down and side to side to ensure complete buffing, separates rolls, and retracts machine bed after completion of preset time cycle. Inspects luster of workpieces and adjusts pressure of rolls or changes rolls to buff flatware to desired finish. May position workpieces in racks on racking table. May dump buffed flatware from racks onto conveyor for inspection. May dip ends of workpieces in buffing paste.
GOE: 06.02.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

603.682-026 POLISHING-MACHINE OPERATOR (any industry)

Sets up and operates belt sanding machine to polish flat metal surfaces, such as small arms parts and metal strips: Pushes button to lower drive wheel and installs abrasive belt of specified grit, using wrenches. Places metal part on conveyor belt and turns knobs to raise conveyor and bring workpiece into contact with polishing belt. Turns valves to regulate flow of coolant onto polishing belt and starts machine. Examines first run part to determine conformance of finish to specifications and adjusts height of conveyor as indicated to achieve specified finish. Replaces worn polishing belts, fills coolant tank, and cleans collection tank, using handtools, to maintain machine in operating condition.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 88

603.682-030 DRILL-BIT SHARPENER (electron. comp.) alternate titles: drill sharpener

Sets up and operates drill-sharpening machine (sharpener) to sharpen drill bits used in numerically controlled drill for fabricating printed circuit boards (PCBs): Reads work order to determine number and size of drill bits to be sharpened. Inserts drill bits into cleaning machine, point-side down, that automatically starts brushes rotating to clean and remove debris from dull bits. Removes drill bit from cleaning machine and measures bit to verify specified size, using micrometer. Selects corresponding size bushing (brass sleeve) and mounts bushing into chuck of sharpener, using handtools. Inserts drill bit in chuck of sharpener and activates table that moves chuck and bit assembly through rotating abrading wheels to sharpen both sides of drill bit. Flips switch to release chuck and and drill bit and removes bit. Observes sharpened bits under optical microscope to detect defects, such as chips or breaks. Discards defective drill bits. Places sharpened drill bits in box, point-end up. May clean sharpener.
GOE: 06.04.02 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 86

603.685-010 BAND-REAMER-MACHINE OPERATOR (nonfer. metal)

Tends pneumatic reaming machine that removes burrs from inner surface of copper bands: Selects reaming fixture (steel spring having cutting edge around outer surface of each coil) of desired size, and secures it in place. Fastens metal trough in place and aligns copper bands in trough. Opens compressed air line and starts machine that pushes reaming fixture through bands. Removes bands by sliding hooked metal bar through reamed holes.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

603.685-014 BARREL POLISHER, INSIDE (ordnance) alternate titles: inside polisher

Tends single-spindle, horizontal machine that smooths and polishes shotgun barrel bores: Clamps barrel in holding fixture and secures polishing rod in machine headstock. Wraps emery cloth on rod tip to form polishing tool. Starts machine and turns wheel to feed rotating polishing rod through barrel. Varies rate of feed according to resistance sensed through wheel. Pushes tow-tipped cleaning rod through polished barrel and sights through bore to inspect finish for defects.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

603.685-022 BEVEL POLISHER (clock & watch)

Tends single-or-multiple-holder polishing machines that polish beveled edges on rachet and winding wheels or endstone caps: Mounts wheels on rubber heads or endstone caps over pins protruding from holder face. Applies compounds to product or polishing laps. Positions lap over product or vice versa. Starts machine and sets timer for specified polishing period. Loads next set of holders. Inspects products for conformance to specifications. Imparts finish to wheels with cast-iron lap and polishes finish with lead-tin lap.
GOE: 06.02.02 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

603.685-026 BIT SHARPENER (any industry) alternate titles: bit grinder

Sharpens boring tools, such as bits and router cutters, using oilstone, and *bench grinder* with tool-holding adapters: Inserts bit into collet of tool adapter, and turns handwheels to adjust relative angle of bit axis and grinding wheel surface, according to specifications. Starts bench grinder, and turns handwheels to move bit against grinding wheel, and turns bit to sharpen each cutting edge. Rubs bit on oilstone by hand to smooth edges and complete sharpening. May file auger spurs to sharpen them. May sharpen cutlery and small shop tools.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

603.685-030 BIT-SHARPENER OPERATOR (mine & quarry) alternate titles: bit grinder

Tends bit-sharpening machine to shape and sharpen detachable bits of mining equipment: Inserts bits into clamps of power-driven revolving drum and fastens

them in place, using wrench. Turns handwheel to move bit against grinding wheels and to turn bit to sharpen cutting and reduce it to gauge size. Lubricates sharpening machine and changes worn grinding wheels, using handtools.
GOE: 05.12.02 STRENGTH: M GED: R2 MI LI SVP: 2 DLU: 77

603.685-034 BOTTOM POLISHER (elec. equip.)
Tends machine, equipped with power-driven wire brush, that polishes bottoms of metal dry cell battery containers (cans): Dumps box of cans into tray on bed of machine. Presses cans into tray to level bottoms. Start rapidly rotating brush. Grasps handle on tray and slides tray back and forth to bring bottoms into contact with brush. Inspects can bottoms to ensure cleanliness. Withdraws tray and inverts it over box to dump cans.
GOE: 06.04.02 STRENGTH: L GED: R2 MI LI SVP: 2 DLU: 77

603.685-038 BRUSH POLISHER (clock & watch)
Tends machine that bevels watch screwheads or polishes cap jewel plates: Secures watch part, shellacked onto surface of metal blocks, in holding fixture and starts machine that presses block of parts against rotating brush to bevel edges of slot or outside diameter of screwheads. Spreads abrasive mixture over brush and sets automatic timer to polish plates for specified period.
GOE: 06.04.02 STRENGTH: S GED: R2 MI LI SVP: 3 DLU: 77

603.685-042 BURNISHER (clock & watch)
Tends machine that grinds center-pinion pivots, shoulders, and similar watch parts to specifications: Inserts pivots into chuck or collet of machine, using fingers or tweezers, and starts machine. Removes product when machine stops and measures part for conformance to specifications, using gauge. May clean and oil machine and change machine belts as needed.
GOE: 06.04.02 STRENGTH: L GED: R2 MI LI SVP: 2 DLU: 77

603.685-046 BURRER, MACHINE (clock & watch) alternate titles: burring-machine operator
Tends machine that removes burrs from watch pinions and similar timing-device parts: Inserts part in deburring-machine chuck or collet and adjusts levers or depresses pedals to feed part against tool that grinds burrs. Examines parts to ensure removal of burrs.
GOE: 06.04.02 STRENGTH: L GED: R2 MI LI SVP: 2 DLU: 77

603.685-050 DEBURRER (button & notion) alternate titles: wire-brushing-machine operator
Tends battery of automatic deburring machines that remove rough edges from metal slide-fastener links attached to tape: Positions carton of stringer (one side of fastener chain) behind machine and threads end through guides, tension bars, and under wire brushes to pickup drum. Starts machine and observes passage of stringer through rotating brushes onto receiving drum. Examines brushed stringer to verify smoothness of surface. Notifies supervisor of machine malfunctioning.
GOE: 06.04.02 STRENGTH: L GED: R2 MI LI SVP: 2 DLU: 77

603.685-054 FLAT POLISHER (clock & watch) alternate titles: lap polisher
Tends machine that rough and finish polishes flat watch parts in successive operations: Applies polishing agent to *lap I* surface. Positions blocked parts face down on lap under tripod holder, turns on air pressure which forces tripod against blocks, and adjusts machine to polish specified time. When machine automatically stops, removes blocks, cleans polished surfaces with tissue and cleansing agent, and inspects parts for scratches and blemishes. Verifies thickness of parts with micrometer, and reruns substandard parts. Refaces surface of lap on automatic turning machine.
GOE: 06.02.02 STRENGTH: L GED: R2 MI LI SVP: 4 DLU: 77

603.685-058 GRINDER OPERATOR, AUTOMATIC (cutlery-hrdwr.) alternate titles: grinder-and-honer operator, automatic
Tends machine that grinds and hones blades and blade edges of articles, such as razors, knives, and garden tools: Loads blades in machine hopper or positions blades in holding fixture. Starts machine that automatically feeds blades to abrasive wheel or belt. Verifies dimensions of blades and keenness of blade edges, using fixed gauges.
GOE: 06.04.02 STRENGTH: L GED: R2 MI LI SVP: 2 DLU: 77

603.685-062 GRINDING MACHINE TENDER (machine shop) alternate titles: production grinder
Tends grinding machines that grind internal and external surfaces of metal workpieces to specifications: Starts machine, places workpiece in holding fixture or hopper, and engages automatic feeding device. Observes machine operation, and removes and inspects finished workpiece to verify conformance to specifications, using measuring instruments, such as preset gauges, calipers, micrometers, and load test equipment. Replaces worn grinding wheel, using handtools. Dresses wheel, using preset dressing device. May move controls to adjust depth of wheel cut, angle between workpiece and grinding wheel, wheel rotation speed, and feed rate. May grind nonmetallic workpieces. May prepare production records. May be designated Centerless-Grinder Tender (machine shop); Double-Spindle-Disk Grinder Tender, Spring End (metal prod., nec); External-Grinder Tender (machine shop); Internal-Grinder Tender (machine shop); Knife Glazer (jewelry-silver.); Surface-Grinder Tender (machine shop).
GOE: 06.04.02 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 87

603.685-066 GRINDER, LAP (clock & watch)
Tends *lapping* machine that grinds flat watch parts to specified thickness: Secures parts, shellacked onto surface of metal blocks, to holding fixture that rotates blocks on surface of revolving wheel. Spreads oil and abrasive powder over wheel, and adjusts automatic timer to permit grinding for specified period. Tests thickness of parts with micrometer. Removes parts from block, using brush and cleaning solution, and cleans parts by dipping them into series of cleaning solutions. Resurfaces lapping wheel, using automatic turning machine.
GOE: 06.04.02 STRENGTH: L GED: R2 MI LI SVP: 3 DLU: 77

603.685-070 LAPPING-MACHINE OPERATOR, PRODUCTION (machine shop) alternate titles: micromatic-hone operator
Tends one or more *lapping* machines to lap surfaces of metal objects to specifications, usually on production basis: Starts machine and places workpieces in machine or engages automatic feeding mechanism. Measures lapped workpieces for conformance to specifications, using instruments, such as preset comparators and surface plate. May move controls to adjust lapping speeds, tool pressure, and length of machine cycle. May assist MACHINE SETTER (machine shop) in setting up machine. May be required to have experience with particular material or product or with machine of particular type of trade name and be designated Barrel Lapper (ordnance).
GOE: 06.04.02 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 77

603.685-074 SHOT-GRINDER OPERATOR (ordnance)
Tends machine that grinds and polishes steel pellets to specified diameter for use as BB shot in air guns: Scoops pellets into feed hopper and starts machine. Turns valve to control coolant flow and adds scouring powder to hasten abrasive action. Measures ejected shot at machine discharge chute to verify size, using gauges, and turns handwheel to adjust pressure plates that increase or decrease size of shot.
GOE: 06.04.02 STRENGTH: M GED: R2 MI L2 SVP: 2 DLU: 77

603.685-078 SNAILER (clock & watch)
Tends machine that automatically polishes watch crown and ratchet wheels and inscribes decorative snailed (spiral or volute-shaped) lines on them: Places wheel in rotating chuck of machine. Brushes abrasive mixture onto metal lap and starts machine that automatically polishes and snails wheels.
GOE: 06.04.02 STRENGTH: L GED: R2 MI LI SVP: 2 DLU: 77

603.685-082 STONER AND POLISHER, BEVEL FACE (clock & watch) alternate titles: screwhead stoner and polisher
Tends machine that stones and polishes bevel face (outside periphery) of screwheads: Inserts screws in spring chuck. Swings stoning face into position against rotating heads and holds it in place until pilot bulb lights, indicating heads are stoned to size. Turns stoning face away and swings polishing lap into position against rotating heads to impart finish to bevel faces. Removes finished screws from chucks.
GOE: 06.04.02 STRENGTH: L GED: R2 MI LI SVP: 3 DLU: 77

603.686-010 POLISHING-MACHINE-OPERATOR HELPER (any industry)
Feeds metal parts into automatic polishing machine, and transfers polished parts from conveyor to trays. Adds coolant to reservoir of polishing machine, and removes abrasive sludge from collection tank. Assists POLISHING-MACHINE OPERATOR (any industry) 603.682-026 in changing abrasive belts.
GOE: 06.04.02 STRENGTH: M GED: R2 MI LI SVP: 2 DLU: 77

603.686-014 DEBURRER, PRINTED CIRCUIT BOARD PANELS (electron. comp.)
Feeds and off bears machine that automatically cleans and removes burrs from panels for production of printed circuit boards (PCBs): Loads panels into automatic feeder device that conveys panels into deburring machine. Flips switch or presses button to start deburring machine that automatically cleans and deburrs panels. Removes cleaned and deburred panels from machine and examines panels for scratches. Records production data. May turn crank to adjust pressure of steel brushes that deburr panels. May buff scratches on panels, using hand buffer. May replace machine filter, using wrench.
GOE: 06.04.09 STRENGTH: H GED: R1 MI LI SVP: 2 DLU: 86

604 TURNING OCCUPATIONS

This group includes occupations concerned with shaping metal by the paring or chipping action of rigid cutting tools applied to metal rotating in a lathe. The shaping of nonmetallic materials, except wood, is also included when the methods and machine tools commonly applied to the machining of metal are used.

604.130-010 SUPERVISOR, ROLL SHOP (steel & rel.)
Supervises and coordinates activities of workers engaged in grinding, turning, and shot blasting mill rolls to specified surface finish and in repairing roll set bearings of mill rolls used in shaping steel in rolling mills: Reviews job orders, studies blueprint specifications, and inspects rolls to plan shop work. Schedules shop operations and daily work loads, considering such factors as mill rolling schedules, amount of turning, grinding, and shot blasting required to dress rolls, and available workers. Assigns workers to duties, explains work requirements, and issues blueprints and templates for performing work. Inspects work in progress and completed work for conformance to specifications and shop standards. Prepares production and progress reports. Inspects roll shop equipment and arranges for maintenance and repair work. Initiates changes in work methods to improve worker performance and production efficiency. Trains workers in operation of shop machines and equipment. Keeps production and time records. Requisitions materials and supplies.

GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

604.260-010 SCREW-MACHINE SET-UP OPERATOR, SWISS-TYPE (clock & watch) alternate titles: automatic-screw-machine setter, swiss-type

Sets up swiss-type automatic screw-machines to perform series of machining operations, such as boring, threading, and facing metal wire, rod, or bar stock to specifications, to produce small, accurately turned parts for clocks, watches, and other timing devices: Studies blueprint and layout sheet to determine machining to be done, dimensions of parts, and permissible tolerances, and plans sequence of operations. Visualizes movements of machine parts, workpieces, and tools in each operation in relation to others and decides on station and timing of each operation to assure efficient use of tools and time. Selects cutting speeds, feed rates, depth of cuts and cutting tools to be used on basis of experience and knowledge of metal properties and shop mathematics, or by referring to tables, charts, or instructions on layout sheet. Installs stock feed pushers, collets, and bushings, using wrenches. Inserts stock into stock feed mechanism and sets stock stop to control length of stock fed. Installs spindle speed and feed change gears to obtain required spindle speeds and tool feeds. Installs cams that control movement of stock and tools. Mounts cutting tools in toolholders and mounts them on machine, using wrenches, verifying their position with gauges and other measuring instruments. Cranks machine through cycle, stopping machine and adjusting tool positions and machine controls to allow for such factors as timing and clearance between moving parts. Starts machine, observes operation, and verifies conformance of first-run and sample workpieces to specifications, using such instruments as micrometers, calipers, limit gauges, and scales. Replaces worn tools. May operate *bench grinder* or cutter-grinding machine to sharpen tools. May set up and operate machine to machine first-run workpiece only. May be required to have experience with particular product, or machine of particular size, type, or trade name.
GOE: 06.01.03 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

604.280-010 ENGINE-LATHE SET-UP OPERATOR, TOOL (machine shop) alternate titles: precision-lathe operator; tool-room-lathe operator; tracer-lathe set-up operator

Sets up and operates engine lathe to perform machining, such as turning, *facing*, boring, and threading on rotating metal castings, forgings, and bar stock, to machine tool, die, or machine parts, analyzing specifications and deciding on tooling according to knowledge of metal properties and lathe operation: Studies blueprint or layout on workpiece to visualize machining to be done, and plans sequence of operations. Selects method of holding workpiece according to its size and shape and installs holding fixtures, such as chuck jaws, collets, arbors, and mandrels, to headstock or tailstock, using clamps or wrenches. Lifts workpiece manually or with hoist, and positions and secures it in holding fixture or between centers, using clamps and wrenches, and verifying position with measuring instruments, such as calipers, height gauges, and dial indicators. Selects feed rate, cutting speed, depth of cut, and cutting tool for each operation, according to knowledge of metal properties and shop mathematics. Positions and secures cutting tool in tool holder on cross-slide or tailstock. Moves controls to set cutting speed and feed rate and to position tool in relation to workpiece. Starts machine and turns handwheels to feed tool to and along workpiece, or engages automatic feed. Turns valve handle and directs flow of coolant against tool and workpiece. Verifies conformance of machined workpiece to specifications, using measuring instruments, such as micrometer, calipers, and depth gauges. May operate large engine lathe to machine large objects, such as ship propeller shafts, and be designated Lathe Set-Up Operator, Large (machine shop). May offset position of tailstock to machine tapered surfaces. May mount gears, move levers, and engage threading dial to machine threads, using knowledge of thread cutting. May machine teeth on cutting tools, or duplicate contours from templates or models, using *relieving* or tracing attachments. May operate *bench grinder* to sharpen tools. May work on nonmetallic materials, such as plastics. May be required to have specialized experience with particular materials, product, precision level, machining process or size, type, or trade name of machine.
GOE: 06.01.03 STRENGTH: M GED: R4 M4 L4 SVP: 7 DLU: 77

604.280-014 SCREW-MACHINE SET-UP OPERATOR, MULTIPLE SPINDLE (machine shop) alternate titles: automatic-screw-machine operator; bar-machine operator, multiple spindle; screw-machine operator; screw-machine setter

Sets up and operates one or more multiple-spindle lathe-type screw machines equipped with automatic *indexing* and feeding mechanisms to perform turning, boring, threading, and *facing* operations on metal bar stock on custom basis, analyzing specifications and deciding on tooling according to knowledge of screw-machine operations: Studies blueprint, visualizes machining to be done, dimensions of parts and permissible tolerances, and plans sequence of operations. Visualizes movements of machine parts, workpieces, and tools in each operation in relation to others, and decides on station and timing of each operation to assure efficient use of tools and time. Selects cutting speeds, feed rates, depth of cuts, and cutting tools to be used on basis of experience and knowledge of metal properties and shop mathematics. Installs collets, bushings, and stock pushers in stock-feeding mechanism, using wrenches and screwdrivers. Installs and adjusts cams, gears, and stops to control stock and tool movements at each station. Positions and secures tools in tool holders, verifying positions with gauges and other measuring instruments. Moves controls to set cutting speeds and feed rates. Cranks machine through cycle, stopping machine and adjusting tool positions and machine controls to allow for such factors as timing, clearance between moving parts, and chip removal. Starts machine, observes operation, and verifies conformance to specifications of first-run and sample workpieces, using such instruments as plug and ring gauges, calipers, and micrometers. Replaces worn tools. May operate *bench grinder* or cutter-grinding machine to sharpen tools. May machine plastics or other nonmetallic materials. May set up and operate single-spindle screw machine. May be required to have experience with particular material or product or machine of particular size, type, or trade name. May set up machines for other workers.
GOE: 06.01.03 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

604.280-018 SCREW-MACHINE SET-UP OPERATOR, SINGLE SPINDLE (machine shop) alternate titles: automatic-screw-machine operator; bar-machine operator, single spindle

Sets up and operates one or more single-spindle lathe-type screw machines equipped with automatic feeding and tool-indexing mechanisms to perform turning, boring, threading, and *facing* operations on metal bar stock on custom basis, analyzing specifications and deciding on tooling according to knowledge of screw machine operations: Studies blueprint to visualize machining to be done, dimensions of parts and permissable tolerances, and plans sequence of operations. Selects cutting speeds, feed rates, depth of cuts, and cutting tools to be used on basis of knowledge of metal properties and shop mathematics. Installs collets, bushings, and stock pushers in stock-feeding mechanism, using wrenches and screwdrivers, and loads with bar stock manually or with hoist. Installs and adjusts cams, gears, and stops to control stock and tool movements. Positions and secures tools in tool holders, verifying positions with gauges and other measuring instruments. Moves controls to set cutting speeds and feed rates. Starts machine, observes operations, and verifies conformance of first-run and sample workpieces to specifications, using such instruments as plug and ring gauges, calipers, and micrometers. Replaces worn tools. May operate *bench grinder* or cutter-grinding machine to sharpen tools. May machine plastics or other nonmetallic materials. May be required to have experience with particular material or product or machine of particular size, type, or trade name, and be designated accordingly. May set up machines for other workers.
GOE: 06.01.03 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

604.280-022 TURRET-LATHE SET-UP OPERATOR, TOOL (machine shop)

Sets up and operates turret lathe to perform series of machining operations, such as turning, *facing*, boring, and tapping, on metal workpieces, such as machine, tool, or die parts, analyzing specifications and deciding on tooling, applying knowledge of metal properties, shop mathematics, and turret-lathe operations: Studies blueprint to visualize machining to be done, and plans sequence of operations. Selects and installs work-holding fixtures on machine, such as collets, faceplates, two-jaw chuck, or specially-shaped holding devices, and positions and secures workpiece in holding fixture, using wrenches. Selects cutting speed, tool feed rate, depth of cut, and cutting tools for each operation, according to knowledge of metal properties and shop mathematics. Positions and secures tools in toolholders at each station of turret and cross-slide toolpost, and positions tools in relation to workpiece. Moves stops, cams, or levers to control rotation of workpiece and feeding of tools. Turns handwheels to feed tools to and along workpiece and to *indexing* toolholders between operations, or engages feeding and indexing mechanisms. Turns valve to direct flow of coolant, against tool and workpiece. Verifies conformance of machined workpiece to specifications, using measuring instruments, such as gauges, calipers, and micrometer. May sharpen tools with *bench grinder*. May operate tracing attachment to duplicate profile of template or model on workpiece. May work on nonmetallic materials, such as plastics. May be required to have specialized experience with particular material, product, precision level, machining process, or size, type, or trade name of lathe. May be designated according to whether lathe is primarily equipped to machine bar stock fed through headstock of screw machine as Screw-Machine Set-Up Operator, Tool (machine shop); or workpiece held in chuck (chucking machine) as Chucking-Machine Set-Up Operator, Tool (machine shop). May be designated according to type of lathe as Turret-Lathe Set-Up Operator, Tool, Vertical (machine shop).
GOE: 06.01.03 STRENGTH: M GED: R4 M4 L4 SVP: 7 DLU: 77

604.360-010 SETTER, AUTOMATIC-SPINNING LATHE (any industry)

Sets up automatic spinning lathe to spin (form) shaped articles from sheet or plate metal as specified by blueprints and computed from data charts: Bolts specified spinning chuck to headstock spindle and follow block to tailstock, using handtools or power tools. Positions, aligns, and bolts specified circular forming tool on hydraulic carriage according to diameter and thickness of metal disk, using such measuring tools as calipers, micrometers, and vernier. Turns control knobs to set speed of lathe and feed speed of carriage according to chart. Makes trial run and measures dimensions of first piece for conformance to blueprint specifications. May set up automatic spinning lathe equipped with special forming tools to shape, trim, or form knurls or beads on workpiece and be designated Setter, Automatic-Spinning-And-Beading-Lathe (any industry).
GOE: 06.01.02 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

604.362-010 LATHE OPERATOR, NUMERICAL CONTROL (machine shop)

Sets up and operates numerically controlled horizontal lathe to perform machining operations, such as turning, boring, *facing*, and threading parts, such as castings, forgings, and bar stock: Reads process sheets, blueprints, and sketches of part to determine machining to be done, dimensional specifications,

set up, and operating requirements. Inserts beginning point of tape in reading head of control unit. Mounts workpiece between centers, in chuck, or to faceplate, manually or using hoist. Selects and installs preset tooling in tool posts, turrets or *indexing* heads, and automatic-tool-change magazine, in sequence specified on process sheet. Depresses buttons, toggles, or sets tape and starts machining operation. Observes numerical displays on control panel and compares with data on process sheet to verify dimensional adjustments, feed rates, and speeds of machining cuts. Turns dials and switches to override tape control and correct machine performance, applying practical knowledge of lathe operation. Inspects first-run piece and spot-checks succeeding pieces for conformance to specifications, using micrometers and precision *dial* gauges. Studies job packet and organizes materials for next run during automatic tape-controlled cycles to shorten changeover time. May set tools before positioning them in lathe, using precision gauges and instruments. May set up and operate another machine tool during tape-controlled machining cycles. May machine nonmetallic materials. May be designated by type of lathe operated as Engine Lathe Operator, Numerical Control (machine shop); Turret Lathe Operator, Numerical Control (machine shop).

GOE: 06.01.03 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

604.380-010 CHUCKING-MACHINE SET-UP OPERATOR (machine shop) alternate titles: chucking-lathe operator

Sets up and operates one or more single- or multiple-spindle horizontal chucking machines (lathes) to perform series of machining operations, such as turning, boring, threading, and *facing*, on metal workpieces, such as castings, forgings and bar stock, according to specifications, tooling instructions, standard charts, and knowledge of turning procedures: Reads blueprint, job order, tooling instructions, or standard charts to determine product specifications, work-holding arrangement, cutting speeds, feed rates, and cutting tools to be used. Attaches specified chuck or chuck jaws to headstock, using wrenches. Moves controls, cams, and stops to set rotation speeds and feed rates and to control tool and workpiece movement for specified operations. Lifts workpiece manually or using hoist, and positions and secures it in chuck. Turns handwheels to position tools in relation to workpiece. Turns valve handle and directs flow of coolant against tools and workpiece. Starts machine, and moves controls to adjust positions and movements of tools during machine operation. Verifies conformance of turned workpieces to specifications, using measuring instruments, such as micrometers, calipers, and fixed gauges. May be required to decide on station and timing of each operation to assure efficient use of tools and time. May set up automatic device to feed workpieces to machine. May compute such data as dimensions, rotation speeds, and feed rates, using knowledge of shop mathematics and metal properties. Important variations are custom or production work; size or trade name of machine operated; types of metals or products machined; or work site (plant or job shop). May set up machines for other workers.

GOE: 06.01.03 STRENGTH: M GED: R4 M4 L4 SVP: 6 DLU: 77

604.380-014 CHUCKING-MACHINE SET-UP OPERATOR, MULTIPLE SPINDLE, VERTICAL (machine shop)

Sets up and operates one or more multiple-spindle vertical chucking machines (lathes) to perform series of machining operations, such as turning, boring, threading, and *facing* on metal workpieces, such as castings, forgings, and bar stock, according to specifications, tooling instructions, standard charts, and knowledge of turning procedures: Reads blueprint, job order, tooling instructions, and standard charts to determine product specifications, work-holding arrangement, and cutting speeds, feed rates, and cutting tools to be used. Visualizes movements of machine parts, workpieces, and tools in each operation in relation to others, and decides on station and timing of each operation to assure efficient use of tools and time. Installs specified chucks or holding fixtures on headstocks, and places and secures workpiece in holding device. Positions and secures tools and toolholders to toolheads. Moves controls, stops, and cams to set specified rotation speeds and feed rates, and to control timing and action of tools at each station. Starts machine, turns valve handle, and directs flow of coolant against tools and workpieces. Stops machine and verifies conformance of workpiece to specifications after initial machining operation, using fixed gauges, calipers, and micrometers. May compute such data as dimensions, rotation speeds, feed rates, tool setting angles, and machining times, using knowledge of shop mathematics and metal properties. May work on nonmetallic materials, such as plastics. May set up and operate machine to machine first-run workpiece only and be designated Chucking-Machine Setter, Multiple Spindle, Vertical (machine shop). May be required to have experience with particular material or product, or with machine of particular size, type, or trade name and be designated accordingly.

GOE: 06.01.03 STRENGTH: M GED: R4 M4 L4 SVP: 6 DLU: 77

604.380-018 ENGINE-LATHE SET-UP OPERATOR (machine shop) alternate titles: bench-lathe operator

Sets up and operates engine lathes to machine metallic and nonmetallic workpieces according to specifications, tooling instructions, and standard charts, applying knowledge of machining methods: Reads blueprint or job order for specifications, such as dimensions and tolerances, tooling instructions on holding devices, feed rates, cutting speeds, depth of cuts, and cutting tools. Positions and secures tools in holders, using wrenches. Lifts workpiece manually or with hoist, and positions and secures workpiece in holding device, machine table, chuck, centers, or fixture, using clamps and wrenches. Sets specified rotation speed, feed rate, and depth of cut, and positions tool in relation to workpiece. Starts machine, turns handwheels to feed tool to workpiece, and engages feed. Turns valve handle to direct flow of coolant against tool and workpiece. Observes cutting action of machine to detect excessive wear or malfunction. Verifies conformance of machined workpiece to specifications, using micrometers, calipers, and fixed gauges. May scribe reference lines on workpiece, using scale, or template and scriber, to lay out interrelated surfaces, lengths, and depths of cut. May compute unspecified dimensions and machine settings, using knowledge of metal properties and shop mathematics. May set up tracing attachment that guides cutting tool to follow movement of tracing stylus along template to duplicate template profile on turned workpiece and be designated Tracing-Lathe Set-Up Operator (machine shop). May be required to have experience with custom or production work, or with particular material, product, level of precision, or size, type, or trade name of machine.

GOE: 06.01.03 STRENGTH: M GED: R4 M4 L3 SVP: 6 DLU: 86

604.380-022 SCREW-MACHINE SET-UP OPERATOR (machine shop) alternate titles: automatic-screw-machine operator; bar-machine operator; screw-machine operator

Sets up and operates single- or multiple-spindle lathe-type screw machines equipped with automatic *indexing* and feeding mechanisms to machine metal bar stock, following specifications and tooling instructions and applying knowledge of screw machine operations: Reads blueprint or job order for product specifications, such as dimensions, tolerances, number of parts to be machined, and tooling instructions, such as cutting speeds, feed rates, depth of cuts, and cutting tools to be used. Positions and secures specified collets, bushings, and stock pushers onto stock-feeding mechanism, using wrenches and screwdrivers, and loads bar stock into feeding mechanism, manually or using hoist. Installs and adjusts specified cams, gears, and stops to control stock and tool movements at each station. Positions and secures tools in toolholders, verifying positions with gauges and other measuring instruments. Sets cutting speeds and feed rates. Moves controls to cycle machine through settings, stopping machine and adjusting tool positions and machine controls to allow for operating factors, such as timing, clearance between moving parts, and chip removal. Starts machine, observes operation, and inspects first-run and sample workpiece to ensure machining conforms to specifications, using measuring instruments, such as plug and ring gauges, calipers, and micrometers. Replaces worn tools. May operate *bench grinder* to sharpen tools. May machine nonmetallic materials. May be required to have experience with particular material or product or machine of particular size, type, or trade name. May set up machines for other workers.

GOE: 06.01.03 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 88

604.380-026 TURRET-LATHE SET-UP OPERATOR (machine shop)

Sets up and operates turret lathes to perform series of machining operations, such as turning, boring, threading, and *facing*, on metal workpieces, such as castings, forgings, and bar stock, according to specifications, tooling instructions, standard charts, and knowledge of turning procedures: Reads blueprint, job order, tooling instructions, and standard charts for such specifications as dimensions, tolerances, and tooling instructions, such as type of holding fixtures, cutting speeds, feed rates, and cutting tools to be used. Positions and secures tools in toolholders on turret and cross-slide, using wrenches. Moves controls to set specified rotation speeds, feed rates, and depth of cuts. Positions and secures workpiece in chuck or to faceplate, using wrenches. *Indexes* turret and adjusts positions of tools at each station in relation to workpiece to assure clearance between moving parts and machining of specified dimensions and tolerances. Observes operation and indexes turret between operations. Verifies conformance of machined workpieces to specifications, using micrometers, calipers, and fixed gauges. Turns valve and directs flow of coolant against tool and workpiece. May compute such data as dimensions, rotation speeds, feed rates, and machining times, using knowledge of shop mathematics and metal properties. May work on nonmetallic materials, such as plastics. May be required to have experience with custom or production work or with particular material, product, level of precision, or machine of size, type, or trade name.

GOE: 06.01.03 STRENGTH: M GED: R4 M4 L4 SVP: 6 DLU: 77

604.382-010 SCREW-MACHINE OPERATOR, MULTIPLE SPINDLE (machine shop) alternate titles: bar-machine operator, multiple spindle

Operates one or more previously set up multiple-spindle screw machines equipped with automatic *indexing* and feeding mechanism to perform series of machining operations on metal bar stock, following specifications: Reads blueprint and job order for such information as dimensions, tolerances, and number of workpieces to be machined. Examines machine to become familiar with tooling setup. Loads stock into feeding mechanism. Starts machine and observes operation. Verifies conformance of sample workpieces to specifications, using preset gauges, micrometers and dial indicators. Replaces worn tools. Adjusts machine controls and changes tool settings to keep dimensions within specified tolerances. May operate *bench grinder* or cutter-grinding machine to sharpen tools [TOOL-GRINDER OPERATOR (machine shop)]. May machine plastics or other nonmetallic materials. May operate single-spindle screw machine [SCREW-MACHINE OPERATOR, SINGLE SPINDLE (machine shop)]. May be required to have experience with particular material or product or machine of particular size, type, or trade name.

GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

604.382-014 SCREW-MACHINE OPERATOR, SINGLE SPINDLE (machine shop) alternate titles: bar-machine operator, single spindle

Operates one or more previously set up single-spindle screw machines (type of lathe) equipped with automatic *indexing* and feeding mechanisms to perform series of machining operations on metal bar stock, following specifications: Reads blueprint and job order for such information as dimensions, tolerances, and number of workpieces to be machined. Examines machine to become familiar with tooling setup. Loads stock into feeding mechanism manually or with hoist. Starts machine and observes operation. Verifies conformance of sample workpieces to specifications, using preset gauges, micrometers or dial indicators. Adjusts machine controls and changes tool settings to keep dimensions within specified tolerances. Replaces worn tools. May operate *bench grinder* or cutter-grinding machine to sharpen tools [TOOL-GRINDER OPERATOR (machine shop)]. May machine plastics or other nonmetallic materials. May be required to have experience with particular material or product or machine of particular size, type, or trade name. Differs from SCREW-MACHINE OPERATOR, PRODUCTION (machine shop) in that this work is characterized by variety, with shorter runs and less repetition.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

604.666-010 THREADING-MACHINE FEEDER, AUTOMATIC I (machine shop)

Feeds cylindrical stock into one or more threading machines: Shovels, dumps, or inserts material in hopper or feedrack of machine that automatically threads stock. Carries or wheels filled and empty containers, such as buckets and wheelbarrows, to and from machine. Notifies THREADING-MACHINE SETTER (machine shop) of machine malfunctions. May fill tanks of lubricating oil, clean machine and work area.
GOE: 06.04.02 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

604.682-010 SCREW-MACHINE OPERATOR, SWISS-TYPE (clock & watch)

Operates one or more previously set up automatic screw machines to perform series of machining operations, such as boring, threading, and facing metal bar, rod, or wire stock to specifications to produce parts for clocks, watches, and other timing devices: Reads specifications to determine dimensions, tolerances, and number of parts required. Loads specified stock into feeding mechanism. Pushes starting button, and moves clutch lever to start machine and engage gears. Observes machine operation and verifies conformance of workpiece to specifications, using measuring instruments, such as micrometers, calipers, scales, and go-not-go gauges. Makes adjustments to tool and toolholders, stock and guide tensions, and operating speed and lubricant flow to maintain machine setup, using handtools. May operate *bench grinder* to reshape or sharpen edges of cutting tools.
GOE: 06.02.02 STRENGTH: L GED: R3 M3 L2 SVP: 6 DLU: 77

604.682-014 THREADING-MACHINE OPERATOR (machine shop)

Sets up and operates single- or multiple-spindle threading machine to thread and chamfer cylindrical stock according to specifications: Selects, installs, and adjusts threading die, die cutters, chamfering tools, feed grips, pressure tripping mechanism, cams, gears and pulleys, using screwdrivers and wrenches. Lifts precut stock manually or with hoist and positions and secures stock in chuck jaws. Starts machine and moves handwheel or lever to alternately feed stock on each spindle. Verifies dimensions of workpieces with specifications, using fixed gauges and scale. May sharpen die cutters on grinding wheel. May be designated by type of stock threaded as Bolt-Threading-Machine Operator (machine shop); Nipple-Machine Operator (machine shop); Pipe-Threading-Machine Operator (machine shop).
GOE: 06.02.02 STRENGTH: M GED: R3 M3 L3 SVP: 5 DLU: 77

604.685-010 BALANCE RECESSER (clock & watch)

Tends semiautomatic turning machine to cut recess in watch balance wheel: Fits center hole of balance wheel over pin protruding from face of quill (removable headstock), using tweezers. Fits holding ring over wheel and depresses pedal to clamp ring in place. Depresses pedal to start machine. Observes machine operation to detect malfunction. Lifts recessed wheel from pin, using tweezers, when machine automatically stops at end of cycle. Verifies contour of recess, using go-not-go gauge, depth of recess, using upright gauge, and quality of cut, using jeweler's loupe.
GOE: 06.04.24 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

604.685-014 FACING-MACHINE OPERATOR (clock & watch)

Tends one or more single- or multiple-spindle lathe-type machines to cut and finish watch parts, such as watch plates, balance wheels, and bridges to specified thickness and surface finish: Depresses pedal to open chuck or nest to clamp piece in place, or fits hole of piece over pin projecting from face of quill, exercising care to seat parts to prevent damage to diamond cutting edge. Starts machine and turns handwheels to move cutting edge into position and across face of part or move machine controls to start machine and engage cutting tool to automatically face parts to specifications. Removes piece at end of facing cut and checks thickness with precision gauges to determine that dimensions and finish meet specifications and shop standards. Notifies supervisor if parts do not meet specifications, of machine malfunctions, and of need for cutter replacement. May change and adjust cutting tools.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

604.685-018 KNURLING-MACHINE OPERATOR (ordnance)

Tends band-seating machine that roughens grooves (band seats) of artillery shells so that brass or copper bands affixed by BANDING-MACHINE OPERATOR (ordnance) will secure shell and rotate it when fired: Positions shell in chuck of lathe and tightens chuck, using wrench. Moves machine controls to start shell rotating and engage feed of knurling tool. Presses and releases pedal when band seat is sufficiently scored and removes processed shell from chuck.
GOE: 06.04.02 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 77

604.685-022 LAP CUTTER-TRUER OPERATOR (optical goods)

Tends truing machine that *mills* and recuts surfaces of metal lap used in grinding and polishing eyeglass lenses to specified curvature: Holds lap against rotating brush to remove marks indicating number of times lap was used. Set scale indicators of truing machine, according to dioptric power indicated by numbers on lap, and clamps lap in chuck of machine. Starts machine and positions cutting blade against surface of lap, or engages automatic feed mechanism which reciprocates lap against cutting blade to shave and true surface of lap. Removes lap from machine chuck, and measures it for conformance to specifications, using template. Grooves surface of lap to retain abrasive on surface edges of lap, by hand or machine, to remove roughness caused by cutting, *truing I*, and grooving operations. Occasionally sharpens cutting blade, using grinder.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

604.685-026 LATHE TENDER (machine shop) alternate titles: automatic-lathe tender; engine-lathe tender; turret-lathe tender

Tends lathes, such as turret lathes, engine lathes, and chucking machines (lathes) that cut, shape, drill, bore, thread, or face metal workpieces according to specifications: Lifts workpiece, manually or using hoist, and positions and secures workpiece between lathe centers, in chuck, or in holding fixture, using wrenches and clamps, or positions workpiece in automatic loading mechanism. Starts machine and turns handwheels to feed tools to workpiece or engages automatic feed. Turns valve to control flow of coolant against tool and workpiece. Observes machining operation to detect malfunction or excessive tool wear. Verifies that machined workpiece conforms to specifications, using thread, plug, and fixed gauges, dial indicators, calipers, and micrometers. Changes worn tools, using wrenches. May machine plastic or other nonmetallic materials. May be designated by type of machine as Knurling-Machine Tender (pen & pencil); Tapper (clock & watch) I.
GOE: 06.04.02 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 81

604.685-030 RIM-TURNING FINISHER (clock & watch)

Tends semiautomatic lathes that face and chamfer rim, cut diameter to size, and impart finish on watch balance wheels: Places balance wheel on locating pin in nest of quill, heats quill nest, wheel, and shellac stick to melt and apply shellac, using Bunsen burner. Places quill in holder of semiautomatic shellacking machine and presses button to start machine that heats and melts shellac. Presses wheel into nest and cools shellac to secure wheel in position. Places and clamps quill in lathe, exercising care to seat parts to prevent damage to diamond cutters. Presses button to start and run lathe through machining cycle. Removes quill from lathe, heats nest and removes wheel, exercising care to prevent damage to wheel. Places wheel in alcohol to dissolve and remove shellac. Examines finish and gauges outside diameter of wheels to ensure specifications are met, using loupe and micrometer or fine gauge. Removes old shellac from quill, using Bunsen burner and brass wiping tool. Lubricates and cleans quill and machine as needed.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

604.685-034 SCREW-MACHINE TENDER (machine shop) alternate titles: bar-machine operator, production

Tends single- or multiple-spindle screw machines equipped with automatic *indexing* and feeding mechanisms that drill, turn, bore, thread, tap, and face metal bar stock according to specifications: Loads bar stock into feeding mechanism. Starts machine, engages feeds, and observes machine operation. Changes worn cutting tools, using wrenches. Removes sample workpiece from machine and inspects workpiece to verify conformance to specifications, using instruments, such as preset comparator, ring and screw pinch gauges, calipers, and micrometer. Moves controls to adjust machine operation. May sharpen tools, using bench grinder. May machine plastic or other nonmetallic materials.
GOE: 06.04.02 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 81

604.685-038 THREADING-MACHINE OPERATOR (ordnance)

Tends planetary-type, threading-cutting machine that cuts interior and exterior threads in artillery shells, so that fittings, such as fuse caps, can be attached: Turns setscrews to secure position and depth of thread and to adapt compressed-air holding chuck to material. Positions shell in machine and tightens chuck. Closes switch to activate cutting tools. Presses levers to stop cutting tools and release chuck. Inspects shells, using fixed gauges.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L2 SVP: 4 DLU: 77

604.685-042 TURRET-LATHE OPERATOR, TUMBLE TAILSTOCK (clock & watch)

Tends turret lathe to spot, drill, finish-recess, and rough-post watch barrel bridges: Places bridge in nest of quill and turns clamping ring to tighten bridge in place. Depresses pedal to start machine. Feeds spotter, drill, and hollow mill in order against bridge by pressing *indexing* button which clicks each into working position. Loosens clamping ring and removes completed bridges. Verifies dimensions of post and thickness of recess with precision plug and indicator gauges.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

604.686-010 WIRE THREADER (clock & watch)

Threads fine wire on automatic wire-threading machine for further processing into watch screws.

GOE: 06.02.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

605 MILLING, SHAPING, AND PLANING OCCUPATIONS

This group includes occupations concerned with shaping metal by the action of revolving, multiple-tooth cutters, rigid, single-edge cutters; or linear, single-pass, multiple-tooth cutters. Excess material is removed by milling, broaching, shaping, or planing to produce flat or profiled surfaces, grooves, splines, keyways, and slots. Includes shaping, without removal of excess material, by raising burrs, or by shaving strands from stock. The milling, broaching, shaping, or planing of nonmetallic materials, except wood, are also included when the methods and machine tools commonly applied to the machining of metal are used.

605.280-010 MILLING-MACHINE SET-UP OPERATOR I (machine shop)

Sets up and operates variety of milling machines to mill flat or curved surfaces on metal workpieces, such as machine, tool, or die parts, analyzing specifications, and selecting tooling, according to knowledge of milling procedures: Studies blueprints or layout on workpiece to determine sequence of operations and finished dimensions of workpiece. Lifts and positions workpiece on machine table manually or with hoist, and secures it, using clamps, bolts, or fixtures. Selects feed rate, cutting speed, depth of cut, and milling cutter, applying knowledge of metal properties and shop mathematics. Mounts milling cutter in spindle, and positions cutter and workpiece in relation to each other. Verifies alignment of workpiece, using measuring instruments, such as dial indicator and thickness gauge. Turns handwheel to feed workpiece to cutter or vice versa. Turns valve handle to start flow of coolant or lubricant on work area, starts machine, and engages automatic feed. May compute *indexing* ratios and set up and operate dividing head to index workpiece for such operations as milling helical cuts. May mount different tool in place of cutter and perform other operations, such as drilling and boring. May set up and operate attachments, such as *pantograph mechanism* to duplicate contours from models or profiles from templates, or universal head to mill at angles. May mill nonmetallic materials.

GOE: 06.01.03 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

605.280-014 PROFILING-MACHINE SET-UP OPERATOR I (machine shop) alternate titles: cam-milling-machine operator; die-sinking-machine operator; profiler

Sets up and operates milling machine equipped with built-in or attached tracing mechanism that guides cutting tool in parallel relationship to stylus that moves along three-dimensional model or two-dimensional template to mill contour of model or profile of template on metal workpieces: Studies blueprint, layout on workpieces, and template or model to determine tooling, sequence of operations, and finished dimensions of workpiece. Positions and secures workpiece and model or template parallel to each other on machine bed or angle plate, using height gauges, parallel blocks, sine bars, steel rule, wrenches, and clamps. Moves handwheel to position cutting tool on workpiece in specified relation to stylus on model or template. Observes operation and makes adjustments to ensure conformance of milled workpiece to specifications. Verifies conformance of workpiece, using dial and surface gauges, templates, calipers, and micrometers. May turn lever to start flow of coolant on machining area. May mill plastics or other nonmetallic materials.

GOE: 06.02.02 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

605.280-018 PROFILING-MACHINE SET-UP OPERATOR, TOOL (machine shop) alternate titles: duplicating-machine operator; tracer-controlled-milling-machine operator; milling-machine operator; milling-planer operator; slab-miller operator

Sets up and operates various types of tracer-controlled profile milling machines to mill duplicates of template or model contour on metal workpieces, such as cams, metalworking dies, aircraft parts, and automobile prototype parts, determining tooling according to knowledge of profiling procedures: Studies blueprint, dimensioned sketch, or layout on workpiece to visualize milling required and plans sequence of operations. Lifts and positions workpiece on machine bed manually or using hoist. Secures workpiece and template or model on angle plates or machine table, using clamps, wrenches, and such devices as height and *planer gauges*, parallel blocks, shims, and screwjacks. Selects cutting speeds, depth of cut, cutting tool, and corresponding tracing stylus. Positions and secures cutter and stylus in respective spindles. Turns switches or dials to set feed and speed and to position cutter and stylus at reference points on workpiece and template or model allowing for tool pressure, die clearance, and amount of stock to be left for subsequent removal. Engages feeding mechanism. Observes machining operation and adjusts cutter position, cutting speed, and feed rate to ensure that workpiece conforms to specifications. Verifies conformance of milled workpiece to specifications, using gauges, calipers, and micrometers. May work on nonmetallic materials. May make cutters and styluses. May inspect workpiece on *projection (shadow) comparator machine* to determine if profiled cuts align with projected drawing.

GOE: 06.01.03 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

605.282-010 MILLING-MACHINE SET-UP OPERATOR II (machine shop)

Sets up and operates milling machine to mill flat or curved surfaces on metal workpieces, such as machine, tool, or die parts, analyzing specifications and selecting tooling, according to knowledge of milling procedures: Studies blueprints or layout on workpiece to determine sequence of operations and finished dimensions of workpiece. Lifts and positions workpiece on machine table manually or with hoist, and secures it, using clamps, bolts, and fixtures. Selects feed rate, cutting speed, depth of cut, and milling cutter, applying knowledge of metal properties and shop mathematics. Mounts milling cutter in spindle, and positions cutter and workpiece in relation to each other. Verifies alignment of workpiece, using measuring instruments, such as dial indicator and thickness gauge. Turns handwheel to feed workpiece to cutter or vice versa. Turns valve handle to start flow of coolant or lubricant on work area, starts machine, and engages automatic feed. Periodically adjusts machine controls to achieve specified tolerances. May compute *indexing* ratios and set up and operate dividing head to index workpiece for such operations as milling helical cuts. May mount different tool in place of cutter and perform other operations, such as drilling and boring. May set up and operate attachments, such as *pantograph mechanisms* to duplicate contours from models or profiles from templates, or universal head to mill at angles. May work on nonmetallic materials. May set up machines for other workers.

GOE: 06.02.02 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

605.282-014 PLANER SET-UP OPERATOR, TOOL (machine shop)

Sets up and operates planers that reciprocate workpieces against stationary bar tools to plane and groove large metal workpieces, such as castings for metalworking dies and machine ways, analyzing specifications and selecting tooling according to knowledge of machine planing procedures: Studies blueprint or layout on workpiece to visualize planing to be done, or marks layout on workpiece with scribe, and plans sequence of operations. Selects method of holding workpiece so that entire surface to be planed will remain parallel to table during planing operation. Lifts workpiece manually or with hoist, and positions and secures it on table, using shims, parallel blocks, clamps, and wrenches. Verifies workpiece position with gauges, rule, square, or other instrument. Selects and mounts cutting tools on railhead or side head. Selects and sets cutting speed, length of stroke, and depth of cut, according to knowledge of metal properties and shop mathematics. Sets stops to limit length of stroke and to actuate table reversing mechanism. Moves controls to position tool in relation to workpiece. Starts table reciprocation, turns handwheels to feed tool to or across workpiece between cuts, and engages feed. Observes operation and verifies conformance of planed workpiece to specifications within tolerances to plus or minus 0.001 inch, using measuring instruments, such as surface gauge, *planer gauge*, and micrometer. May operate *bench grinder* to sharpen tools. May turn valve handle and direct flow of coolant or lubricant against tool and workpiece. May set up and operate milling attachment instead of rail or side head tool [PLANER-TYPE-MILLING-MACHINE SET-UP OPERATOR (machine shop) 605.282-018]. May plane or mill nonmetallic materials. May set up and operate rotary planer which reciprocates cutting tool against workpiece mounted on rotating machine bed and be designated Rotary Planer Set-Up Operator (machine shop).

GOE: 06.02.02 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 77

605.282-018 PLANER-TYPE-MILLING-MACHINE SET-UP OPERATOR (machine shop)

Sets up and operates planer-type milling machine that moves workpiece back and forth against rigidly held rotating cutters to mill workpieces, such as castings and machine parts, according to knowledge of planer-mill operating procedures: Studies blueprints or layout on workpiece to determine machine set-up, and sequence of machining operations. Lifts workpiece, using hoist, to position on machine bed. Secures workpiece in holding fixture, using wrenches, and verifies position, using gauges, calipers, or square. Selects cutting tool and mounts it in spindle, using handtools. Adjusts controls to set feed rate, speed of cutting tool, and depth of cut. Turns controls to position cutting tool relative to workpiece, starts machine, and engages automatic feed. Observes operation, stops machine to change cutting tool, and adjust controls. Verifies conformance of workpiece to finished specifications, using precision measuring instruments. Removes workpiece from machine bed.

GOE: 06.02.02 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

605.360-010 ROUTER SET-UP OPERATOR, NUMERICAL CONTROL (machine shop)

Sets up and operates multiaxis, numerically controlled routing machine to cut and shape metallic and nonmetallic workpieces: Selects and positions workpiece on machine bed. Threads perforated or magnetic tape through read head. Inserts precision indicator in machine chuck, and depresses switches to jog chuck into contact with workpiece, synchronize tape and tool, and record setup point. Retracts chuck, and loads and secures first preset cutting tool and holder. Starts machine and observes operation. Compares numerical data displays with specifications on operation sheets, and uses scales, gauges, and micrometer to verify machining operations. Removes and replaces cutting tool when worn or damaged or when new cutting tool is specified by operation sheets. Assembles and presets cutting tools at bench during tape-controlled machining to reduce machine downtime. Repositions workpiece for intermediate setups when specified on operation sheets, and removes and replaces workpiece at end of machining cycle. Verifies new tapes by starting machine and observing operation to detect

errors, plotting two-dimensional movement with recording stylus, or by machining sample workpiece and inspecting each cut, using precision gauges.
GOE: 06.01.03 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

605.380-010 MILLING-MACHINE SET-UP OPERATOR, NUMERICAL CONTROL (machine shop)

Sets up and operates multiaxis numerical-control milling machine to mill surfaces of metallic and nonmetallic workpieces according to specifications and tooling instructions, applying knowledge of machining methods: Threads perforated or magnetic tape through read-head in control console, or enters commands into control panel, to retrieve preprogrammed machine data from mainframe computer. Inserts precision indicator in machine spindle, and depresses switches to jog spindle into contact with workpiece, synchronize tape and tool, and record setup point. Retracts spindle and loads and secures first preset tool and holder. Starts machine and observes cutting operation. Compares numerical data display with specifications on operations sheet. Assembles and presets tooling for next operation during automated cycle to reduce machine downtime. Replaces milling tools with drilling and boring tools at specified change points to reduce or eliminate subsequent machining of workpiece on another machine. May operate machine on preliminary dry run before machining first part to detect errors in tape or computer program. May be designated according to make, trademark, or configuration of machine, characteristics of control system, or type of product as Contour-Path Tape-Mill Operator (machine shop); Planer-Type Milling-Machine Operator, Numerical Control (machine shop); Profile-Mill Operator, Tape Control (machine shop); Tape Control Skin-or-Spar-Mill Operator (machine shop); Tape Keller Operator (machine shop).
GOE: 06.01.03 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 87

605.382-010 BROACHING-MACHINE SET-UP OPERATOR (machine shop)

Sets up and operates one or more broaching machines to broach internal or external cylindrical or flat surfaces of metal workpieces according to specifications, tooling instructions, standard charts, and knowledge of broaching: Reads blueprint, job order, or specifications to determine dimensions and tolerances, and tooling instructions, such as holding fixtures, cutting speed, and cutting tools (broaches) to be used. Lifts workpiece manually or with hoist and positions and secures it in fixture. Installs broach or ram, using wrenches. Moves controls to set specified depth of cut and ram speed, and to start ram that pushes or pulls broach along surface of work. Pulls lever to start flow of coolant or lubricant on work area. Verifies conformance of broached workpiece to specifications, using measuring instruments, such as fixed gauges, calipers, and micrometers. May broach nonmetallic materials. May change worn broaches, using handtools.
GOE: 06.02.02 STRENGTH: M GED: R3 M3 L2 SVP: 4 DLU: 77

605.382-014 ENGRAVER, TIRE MOLD (machine shop) alternate titles: skid-machine operator

Sets up and operates cam-controlled tread-engraving (skid) machine to mill tread designs in metal molds for rubber tires, according to specifications: Examines work order or receives verbal instruction to ascertain cams, gearing ratio, and templates to be used. Lifts mold half with hoist and secures it in work-holding fixture on machine. Mounts specified cutting tool in machine spindle. Positions and secures drum cam (grooved cylinder) corresponding to specified tread design number in machine, using wrenches. Rotates mold in fixture to align specified design location on mark with mark and design number on fixture corresponding to mounted cam. Moves controls to position tool in relation to mold and starts machine. Turns handwheel and simultaneously exerts pressure on hand lever to traverse pin against cam and tool against mold to mill (engrave) tread pattern in mold, adjusting action according to movement and resistance sensed by hands on controls. Mounts systematically varied sequence of cams which produce tread pattern of minimum tire noise. Verifies engraved mold for conformance to specifications, using precision measuring instruments such as micrometers, calipers, and dial indicators. May setup and operate engraving machine equipped with template tracing stylus and be designated Tire Mold Engraver, Numerical Control (machine shop).
GOE: 06.02.02 STRENGTH: M GED: R3 M3 L2 SVP: 5 DLU: 77

605.382-018 KEYSEATING-MACHINE SET-UP OPERATOR (machine shop)

Sets up and operates keyseating machine (vertical shaper) to cut keyseats in metal workpieces, such as wheels and gears, according to specifications: Reads blueprint or job order to determine dimensions and tolerances of workpiece, and tooling instructions, such as holding fixtures, cutting speeds, depth of cut, and cutting tools to be used. Measures workpiece and scribes guidelines for cutting keyseat, using steel rule and scriber. Mounts specified tool on ram. Lifts workpiece manually or with hoist, and aligns it with cutting tool. Secures workpiece in fixture or to post on machine table, using clamps and wrenches. Moves controls to set specified ram speed, length of stroke, and feed rate. Turns handwheel to feed reciprocating tool to workpiece until depth of cut conforms to specifications, or engages automatic feeding device. Verifies conformance of machined workpiece to specifications, using fixed gauges, calipers, and micrometers. Turns handwheel or adjustment screw to tilt table to cut tapered keyseats.
GOE: 06.02.02 STRENGTH: M GED: R3 M3 L2 SVP: 4 DLU: 77

605.382-022 PANTOGRAPH-MACHINE SET-UP OPERATOR (machine shop)

Sets up and operates pantograph-milling machine to mill contoured two-dimensional profiles and three-dimensional cavities in metal parts of such products as dies and molds for metal diecasting and plastic molding, duplicating contour of template or model to specified scale: Studies blueprint, workpiece, and template or model, and plans operations. Positions and secures workpiece and model or template in relation to each other on machine, using work aids and handtools, such as clamps, parallel blocks, and wrenches. Selects tracing stylus, cutting tool, and cutting speed, according to operation to be performed and knowledge of metal properties and machining methods. Mounts stylus and tool, using handtools. Turns controls to set cutting speed and dimensional ratio of model to workpiece, and starts machine. Grasps knob and moves stylus back and forth against template or model, causing similar action of tool against workpiece. Watches tool, feels action and resistance of tool through hand on knob, and manually controls cutting action in response to these stimuli. Verifies conformance of machined workpiece to specifications, using templates and measuring instruments, such as micrometers, dial indicators, and gauges. May make templates or cutting tools for own use.
GOE: 06.02.02 STRENGTH: M GED: R3 M3 L3 SVP: 7 DLU: 77

605.382-026 PROFILING-MACHINE SET-UP OPERATOR II (machine shop) alternate titles: cam-milling-machine operator; die-sinking-machine operator; profiler

Sets up and operates profile milling machine equipped with built-in or attached tracing mechanism that guides cutting tool in parallel relationship to stylus to mill two-dimensional scale profiles from models, according to specifications: Examines layout or workpiece, blueprints, and work order to ascertain type of tooling required and finished dimensions of workpiece. Positions and secures workpiece and template or model on machine table, using clamp, vise, blocks, measuring instruments, and wrenches. Selects and inserts specified stylus and cutting tool, using handtools. Starts machine, turns controls to change speed of cutting tool, directional movement of stylus, and automatic feed rate to ensure conformance of milled workpiece to specifications. Verifies conformance of workpiece, using dial and surface gauges, templates, calipers, and micrometers. Removes milled workpiece and template or model from machine table. May mill nonmetallic materials. May turn lever to start flow of coolant or lubricant on machining area. May manually move stylus to mill workpiece.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

605.382-030 ROTARY-HEAD-MILLING-MACHINE SET-UP OPERATOR (machine shop)

Sets up and operates vertical milling machine with spindle mounted within larger rotary head so that rotating cutter can move anywhere within given circle to mill complex shapes, such as arcs and tangents, without changing position of workpiece or machine table. Computes dimensions of shapes to be milled and successive positions of cutter in relation to rotary head, using knowledge of shop mathematics. Moves controls to position and move cutter in computed directions to mill specified shapes.
GOE: 06.02.02 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

605.382-034 ROUTER OPERATOR (any industry)

Sets up and operates routers, such as pin, horizontal, and radial arm, to cut, trim, slot, scarf, chamfer, profile, and shape metallic and nonmetallic materials, parts, castings, and tooling, according to specifications and knowledge of machine routing procedures: Reads work order, tooling instructions, blueprints, sketches, or other specifications to determine machining information, such as material needed, sequence of operations, quantity, tolerances, and dimensions of finished parts. Installs machine accessories, such as pins, collars, cutting tools, blocks, templates, and router boards, using handtools and power tools. Positions and secures parts or materials on machine, using bolts, clamps, or other fasteners. Adjusts controls to regulate speed of cutting tool, depth of cut, and flow of air, coolant, and lubricant. Starts machine and guides material against cutting tool or cutting tool against material. Verifies conformance of finished workpiece to specified tolerances, using precision measuring instruments. Observes machine operation and reports malfunctions to supervisor. May engage automatic feed of material. May record production output. May mark reference points on workpiece. May use milling cutters in router to shape parts. May operate specific type router and be designated Router Operator, Pin (aircraft mfg.) or Router Operator, Radial (aircraft mfg.).
GOE: 06.02.02 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 88

605.382-038 SHAPER SET-UP OPERATOR, TOOL (machine shop) alternate titles: shaper machine hand; shaper operator; shaping-machine operator

Sets up and operates one or more shapers that reciprocate bar tool against stationary workpiece to plane, shape, or groove metal workpieces, such as machine, tool, or die parts, according to specifications and knowledge of shaping operations: Studies blueprint, dimensioned sketch, or layout on workpiece, and plans sequence of operations. Positions and secures workpiece in vise or directly on machine table, manually or with hoist, using clamps or holding fixture. Verifies position with such instruments as dial indicator, thickness gauges, and surface gauge. Selects cutting speed, length of stroke, depth of cut, and cutting tool to be used, according to knowledge of metal properties and shop mathematics. Positions and secures cutting tool in toolpost. Turns handwheels to position tool and workpiece in relation to each other and to feed reciprocating tool to workpiece, or engages automatic feed. Verifies conformance of shaped workpiece to specifications within prescribed tolerances, using micrometers, calipers, and gauge blocks. Turns valve handle to direct flow of coolant against tool and workpiece. May shape contours by intermittently turning handwheel to feed tool to curved layout line while watching cutting action.

May compute angles and manipulate controls to tilt table or toolhead of universal shaper for angular or taper shaping. May sharpen tools, using *bench grinder*. May shape nonmetallic materials. May record production output.
GOE: 06.02.02 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

605.382-042 THREAD-MILLING-MACHINE SET-UP OPERATOR (machine shop)

Sets up and operates thread-milling machine to mill threads on external and internal surfaces of metal workpieces, applying knowledge of thread types and thread-milling methods: Studies blueprints, charts, drawings, and work orders to determine pitch and depth of thread, and type of tooling specified. Lifts workpiece to fixture and bolts or clamps it in place, using handtools. Selects and inserts cutting tool in machine spindle. Sets and adjusts speed of cutting tool and feed rate of workpiece. Positions cutting tool and workpiece to computed angles, and installs gears, cams, and stops to control multiple movements of workpiece and cutting tool. Starts machine and inspects workpiece during and on completion of milling operation, using measuring instruments, such as thread gauge and thread *measuring wires*. Removes milled workpiece from fixture. May compute thread dimensions, using standard formulas.
GOE: 06.02.02 STRENGTH: M GED: R3 M3 L2 SVP: 6 DLU: 77

605.382-046 NUMERICAL-CONTROL ROUTER OPERATOR (aircraft mfg.; electron. comp.)

Sets up and operates numerical control router machine to rout (cut) parts, such as individual printed circuit boards (PCB's) from printed circuit panels or metal workpieces from sheet metal stock: Reviews setup instructions and specifications. Loads control media into computer console or enters commands to retrieve programmed control data. Selects and installs specified cutting tools into machine spindle or magazine. Positions and secures materials onto *indexing* table of machine. Enters commands to activate machine that automatically aligns indexing table and panels or metal stock under tool spindle and routs or notches materials, according to programmed instructions. Monitors machine operation and display readouts to detect malfunction. Measures dimensions of finished parts to verify conformance to specifications, using precision measuring instruments. Notifies supervisor of machine malfunction or when parts do not conform to specifications. Cleans machine, using solvent, rag, and airhose. May perform maintenance and replace worn or damaged cutting tools, using handtools.
GOE: 06.02.09 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 88

605.482-010 STEEL-WOOL-MACHINE OPERATOR (nonmet. min.)

Sets up and operates machine that automatically shaves steel wires to form steel wool: Installs specified cutting tools in machine toolholder, using handtools. Turns controls to adjust speed and depth of cut according to cutting specifications. Starts machine and threads wire stock through automatic feed mechanism. Places cut ribbons of wire (steel wool) on machine rollers which carry them to catch basin. Ties broken ribbons. Replaces worn tools to maintain product quality. May operate steel wool balling, padding, and polyethylene extruding machines to produce soap-impregnated steel wool pads and polyethylene foam-backed, soap-impregnated steel wool pads.
GOE: 06.02.02 STRENGTH: L GED: R3 M3 L3 SVP: 5 DLU: 77

605.682-010 BARREL-RIB MATTING-MACHINE OPERATOR (ordnance)

Sets up and operates planer-type machine to cut matting (knurling) on *sighting ribs* of shotguns to improve appearance and reduce glare: Attaches holding fixtures and matting tools on machine and clamps rib, or barrel with rib attached, in fixture, using handtools. Depresses lever to position cutting tool in relation to rib, and starts machine which moves rib under stationary tool. Maintains even pressure on lever to obtain smooth cut. Turns adjustment knob after each pass to increase depth of cut. Removes rib from holding fixture. May shim fixture to level workpiece. May hone surface of rib to remove burs.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

605.682-014 BROACHING-MACHINE OPERATOR, PRODUCTION (machine shop) alternate titles: broach operator; production broacher

Operates one or more previously setup broaching machines to broach internal or external surfaces of metal workpieces to specifications, on production basis: Examines blueprints or work order to determine finished specifications of workpiece. Lifts workpiece manually or using hoist, and places and secures it in holding fixture, using handtools. Starts machine, observes operation, and verifies conformance of broached workpieces to specifications, using measuring instruments, such as fixed gauges, calipers, and micrometers. Moves controls to adjust cutting speeds. Changes worn broaches. May aid MACHINE SETTER (machine shop) 600.360-014 in setting up machine. May place workpiece on spindle of revolving turntable which automatically feeds broached workpiece to power conveyor.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

605.682-022 SCALPER OPERATOR (nonfer. metal) alternate titles: scalp-machine operator

Sets up and operates scalper (milling) machine to mill defects from surfaces of ingot to prepare it for rolling: Adjusts scalper blades to depth of cut required and positions holding jaws to width of ingot, using handwheel, setscrews, and handtools. Lifts ingot from skid to entry table, using hoist. Starts lifting table that positions ingot in jaws of machine carriage. Starts machine to make first cut. Releases ingot from carriage, inverts ingot, using roller manipulators, and repositions it in carriage for second cut, using button controls. Cleans machine lubricant from scalped ingot with squeegee. Stacks scalped ingots on skid. May record weight of ingot on production form.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

605.682-026 TOOTH CUTTER, ESCAPE WHEEL (clock & watch)

Sets up and operates semiautomatic tooth-cutting machine to shape teeth on watch escape wheels: Positions stack of blanks on arbor, inserts and locks arbor in machine spindle, and starts machine which automatically stops at end of cycle. Removes wheel from machine and verifies dimensions of wheel diameters in ring go-not-go gauge. Examines wheel under toolmaker's microscope and compares its blown-up shadow with scale drawing on projector screen to determine if wheel conforms to specified tolerances. Adjusts machine, using handtools, to correct for size and dimensions until parts are within tolerances, or to accommodate different size wheels. May operate bank of milling machines. May be designated according to type of wheel cut as Tooth Cutter, Contact Wheel (clock & watch).
GOE: 06.02.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

605.682-030 WHEEL CUTTER (clock & watch)

Operates machine to cut teeth in clock and watch wheels: Clamps wheel blank in chuck of dividing head of machine. Mounts and adjusts cutting tools of specified sizes in turret. Starts motor, causing turret to rotate tool that cuts out groove in wheel. Turns turret to successively blank and cut groove to specified depth and width, using different sized tools. Verifies depth and width of cut, using precision gauges, and quality of cut, using jeweler's loupe.
GOE: 06.02.02 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

605.682-034 ROUTER, PRINTED CIRCUIT BOARDS (electron. comp.)

Operates routing machine to cut and shape individual printed circuit boards (PCB's) according to specifications: Positions and secures PCB's between dies or on templates. Positions secured PCB on router platform to align connector edges with machine cutter. Adjusts cutter spindle, using wrenches, and installs cutter of specified size on spindle. Flips switch to activate routing machine. Turns calibrated dials on routing machines to specified markings on dials to adjust milling dimensions of router. Manually guides edges of board against cutter to rout connector edges. Measures dimensions of board, using vernier calipers, to verify that board is routed according to specifications. Separates dies or removes template from PCB. May operate shearing machine to separate PCB from panels. May operate slotting machine to mill slots in PCB's.
GOE: 06.02.02 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 86

605.685-010 BARREL RIFLER (ordnance) alternate titles: barrel-rifler operator

Tends battery of machines that cut spiral grooves into bores of artillery and small arms weapons by either of following methods: (1) Inserts barrel in collet of machine and button in hole of push rod attachment on machine. Starts machine to rotate barrel and feed it over button to impress grooves in bore. (2) Locks broach or hook cutter in drawing head and barrel in *indexing* head of broaching machine, using wrenches. Moves levers to regulate automatic feed and to cut rifling to specified depth and twist. Cleans bore, using cleaning rod and patch, and examines bore for burrs and scratches. Measures rifling for conformance to specifications, using dial and depth gauges. May be designated according to type of rifling tool used as Barrel Rifler, Broach (ordnance); Barrel Rifler, Button (ordnance); Barrel Rifler, Hook (ordnance).
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

605.685-014 FILE CUTTER (cutlery-hrdwr.)

Tends machine that forms burrs (teeth) on surface of file blanks: Adjusts cutting tool in reciprocating arm of machine to obtain burrs of specified height. Positions blank in jig geared to reciprocating arm for automatic burr spacing. Starts machine that automatically feeds blanks to cutting tool.
GOE: 06.04.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

605.685-018 HOOKING-MACHINE OPERATOR (clock & watch)

Tends battery of automatic hooking machines that mill hooks (recess on edge of which end of mainspring is secured) in barrel arbors: Loads sleevelike feeding magazines with arbors, using tweezers. Inserts magazine in machine and engages power. Verifies depth of specified number of hooks by measuring diameter of arbor including hook as well as diameter in recess adjacent to hook. Makes adjustments to machine, such as turning setscrews to change depth of hook.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

605.685-022 JEWEL STRIPPER (clock & watch)

Tends automatic machine that cuts jewel settings to specified thickness and bevels corners. Places hopper in automatic feed. Measures thickness of stripped settings with dial indicator, and inspects finished work for appearance.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

605.685-026 LEVER MILLER (clock & watch)

Tends milling machine that cuts edges of watch levers: Pulls handle to clamp levers in special machine fitting. Turns controls to bring work into contact with cutting tool. Pulls handle to release clamp, and removes milled levers. Verifies conformity of levers to specifications, using gauge.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

605.685-030 MILLING-MACHINE TENDER (machine shop)

Tends milling machines that mill surfaces of metal workpieces according to specifications: Positions and secures workpiece in fixture or feeding device.

Starts machine, and turns handwheel to feed workpiece to cutter or vice versa, or engages automatic feeding mechanism. Turns valve handle to direct flow of coolant against cutter and workpiece. Observes machine operation, and removes and inspects machined workpiece to verify conformance to specifications, using instruments, such as gauges, calipers, micrometers, and templates. May change worn cutters, using wrenches. Records production output. May tend machine that mills workpiece according to programmed cycle. May turn controls to adjust feed rate of workpiece or speed of cutting tool. May mill nonmetallic materials.
GOE: 06.04.02 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 86

605.685-034 PLANING-MACHINE OPERATOR (clock & watch)
Tends semiautomatic planing machine that cuts off excess metal and imparts smooth surface to such watch parts as balance cocks and train bridges: Places single part in chuck of machine, depresses pedal to close chuck, trips starting handle, and observes machine which planes piece and ejects it from chuck at end of cycle. Measures thickness of parts with dial indicator.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

605.685-038 PROFILING-MACHINE OPERATOR (clock & watch) alternate titles: recessing-machine operator
Tends battery of previously set-up profiling machines that trace templates to cut recesses in watch plates and chamfer edges, undercutting metal to form partially hidden recesses, in watch parts, such as pillar plates and train bridges: Blows metal shavings and dust from work plate, using air compressor. Fits blanks over protruding pins of chuck or in nest of work plate and pulls lever to clamp them in place. Starts machine and loads second machine while first is operating. Depresses pedal to eject workpiece or directs air blast to blow workpiece into catch pan after machine stops at end of cycle. Verifies thickness of metal below recess, and contour of recess, using jeweler's loupe and precision gauges. Important variables may be indicated by trade name of machine used.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

605.685-042 SCRIBING-MACHINE OPERATOR (cutlery-hrdwr.)
Tends machine that inscribes graduations in metal surface of measuring tools, such as carpenter's steel squares and rules, and machinist's scales: Slides workpiece into spring clamp on machine carriage. Starts machine that scribes graduations along length of tool by automatic *indexing* of multiple scribing points or cutters. Removes scribed tool at end of cycle and examines and compares it with master scale to verify legibility and accuracy of graduations.
GOE: 06.04.02 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 77

605.685-046 SQUARING-MACHINE OPERATOR (clock & watch)
Tends battery of automatic squaring machines that mill (file) flat round sides of engaging portions of winding stems and barrel arbors: Loads sleevelike feeding magazines with stems or barrels, using tweezers. Inserts magazine in machine and starts machine. Inspects parts, using loupe, to see that square is centered on stem (sides are milled flat leaving rounded corners). Gauges squares in go-not-go gauge.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

605.685-050 TOOTH CUTTER (clock & watch)
Tends battery of semiautomatic milling machines to cut teeth in clock and watch parts, such as barrels, pinions, wheels, and clutches: Slides stack of wheel or pinion blanks on fluted arbor, clamps on holding collar, inserts arbor into machine chuck, and clamps in place, using pedal, or opens work holder and inserts barrel or pinion blanks into holder, using tweezers. Pushes lever to start machine which automatically indexes and cuts teeth around periphery of blanks. Loads remaining machines. Removes arbor or individually machined parts from milling machine which automatically stops at end of cycle. Verifies shapes of tooth and quality of cut, using jeweler's loupe, thickness of tooth, using jaw gauge, outside diameter of part, using go-not-go gauge, and length of part, using upright gauge. May adjust machine when machined product does not conform to standards. May clamp arbor in machine chuck manually. May be designated according to type of machine used as Tooth Cutter, Hobbing Machine (clock & watch); or according to type of tooth cut as Tooth Cutter, Clutch (clock & watch); Tooth Cutter, Pinion (clock & watch); Tooth Cutter, Spur (clock & watch).
GOE: 06.04.02 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

605.685-054 ROUTER MACHINE OPERATOR (plastic prod.)
Tends routing machine that trims edges of plastic drafting scales: Places and secures router tool in chuck. Places and clamps scale on holding pin of routing machine conveyor belt. Starts machine and observes movement of scale under router. Removes trimmed scale from conveyor and inspects completed work to maintain establishment standards. May tend routing machine that re-routes graduation lines removed accidentally during previous operations and be known as Rework Machine Operator (plastic prod.).
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 86

606 BORING OCCUPATIONS

This group includes occupations concerned with piercing metal by means of rotary cutting tools advanced into the material in the direction of the tool's axis to make, enlarge, or thread holes. The piercing of nonmetallic materials, except wood, is also included when the methods and machine tools commonly applied to the machining of metal are used.

606.280-010 BORING-MACHINE SET-UP OPERATOR, JIG (machine shop) alternate titles: jig-borer
Sets up and operates jig borer to perform machining operations, such as boring, drilling, reaming, and *counterboring* holes in metal workpieces, such as jigs, fixtures, gauges, and dies, according to specifications, applying knowledge of metal properties, tooling, and precision machining: Studies machining instructions, such as job order, blueprint, process sheet, or layout on workpiece to determine dimensional and finish specifications, sequence of operation, setup, and tooling requirements. Lifts workpiece either manually or with hoist onto machine table. Positions and secures workpiece on table with bolts, clamps, shims, or other holding devices, using machinist's handtools. Verifies parallelism of reference lines on workpiece to axis of table motion, using dial indicator mounted in spindle. Establishes zero reference point on workpiece, such as at intersection of two edges or over hole location. Turns handwheel to adjust machine table to align spindle over point, using dial indicator. Sets table-position dial at zero; measures all machining locations from this zero point. Selects and sets cutting speeds, feed rates, depth of cut, and cutting tool according to machining instructions or knowledge of metal properties. Installs tool in spindle. Turns handwheels to lower tool to workpiece and engages automatic feed. Turns valve and directs flow of coolant or cutting oil over cutting area. Verifies location and dimensions of holes, using measuring instruments, such as dial indicator, gauge blocks, *telescoping gauge* and internal micrometer. Works to tolerances as close as plus or minus 0.0001 inch. May work only from blueprint. May lay out reference lines and machining locations on workpiece, according to blueprint, using layout tools, such as rule, divider, and scriber, applying knowledge of shop mathematics and layout techniques. May fasten workpiece in holding fixture mounted on machine table or clamp jig or template in position on workpiece. May operate machine manually throughout first piece operation to verify accuracy of setup. May sharpen tools on *bench grinder*.
GOE: 06.01.03 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

606.280-014 BORING-MILL SET-UP OPERATOR, HORIZONTAL (machine shop) alternate titles: horizontal-boring-drilling-and-milling-machine operator; horizontal-boring-mill operator
Sets up and operates horizontal boring, drilling, and milling machine to perform machining operations, such as milling, drilling, boring, and reaming metal workpieces, such as machine, tool, or die parts, analyzing specifications and deciding on tooling according to knowledge of shop mathematics, metal properties, and machining procedures: Studies machining instructions, such as job order, blueprint, process sheet, or layout on workpiece to determine machining required, sequence of operation, tooling, feed, and speed rate, applying knowledge of materials and machining. Lifts workpiece either manually or with crane or hoist onto machine table or directs MONORAIL CRANE OPERATOR (any industry) to put workpiece on machine table. Positions and secures workpiece to table or angle plate, using clamps, shims, and parallel blocks and verifies position with such instruments as dial indicators, gauge blocks, and height gauges. Selects and mounts tool in spindle. Moves controls to set feeds, speeds, and depth of cut, and to position tool and workpiece in relation to each other, verifying position visually, with instruments, such as thickness gauges, and by reading dials. Starts machine and observes operation, making one or more trial passes with manual control before engaging feed. Verifies dimensions of machined workpiece with such measuring instruments as micrometers, *telescoping gauges*, vernier calipers, and dial indicators. Works to tolerance of plus or minus 0.001 inch. May use precision positioning devices, such as dial indicators mounted on machine troughs with standard length rods and work to tolerance as close as plus or minus 0.0001 inch. May operate tracing attachment to duplicate contours from templates or models. May operate machine with automatic positioning controls. May lay out reference lines and machining locations on workpiece, according to blueprints, using layout tools, such as rule, divider, and scriber, applying knowledge of shop mathematics and layout techniques. May operate *bench grinder* to sharpen tools. May set up and operate vertical boring mill and be designated Boring-Mill Set-Up Operator, Vertical (machine shop). Important variations may be indicated by trade names of machine used.
GOE: 06.01.03 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

606.362-010 DRILL-PRESS OPERATOR, NUMERICAL CONTROL (machine shop)
Sets up and operates numerically controlled drill press that automatically performs machining operations such as drilling, reaming, countersinking, *spot-facing*, and tapping of holes in metal workpieces, according to specifications, setup instructions, and knowledge of machining: Studies blueprints or setup instructions to determine dimensional specifications, setup requirements, and work procedure. Installs workpiece holders, such as blocks, risers, and clamps, on *indexing* table of machine, using machinist handtools. Lifts workpiece manually or with hoist and positions and secures it on machine table or in holding fixture with clamps and bolts. Installs cutting tools in tool magazine, turret, or spindle of machine. Inserts programmed tape or punched card in tape or card reader of control unit. Actuates machine that automatically positions indexing table containing workpiece under spindle, selects tool, and machines part according to programmed instructions. Stops machine after trial run and inspects machined workpiece to ensure conformance to blueprint specifications, using fixed gauges, dial indicators, micrometers, and calipers. Monitors machine operation and display panel of control unit for indications of malfunction. Notifies supervisor if machined workpiece does not conform to specifications or if machine malfunctions. May make manual adjustments, such as aligning workpiece on machine table, changing cutting tools, or setting cutting speed, feed rates, and

depth of cut. May occasionally operate machine in semiautomatic mode by setting selector switch and manually dialing in data according to oral or written instructions to machine relatively simple pieces.
GOE: 06.02.02 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 77

606.380-010 DRILL-PRESS SET-UP OPERATOR, MULTIPLE SPINDLE (machine shop) alternate titles: gang-drill-press operator; multiple-spindle-drilling-machine operator

Sets up and operates multiple-spindle drilling machine to perform simultaneously or in sequence machining operations, such as drilling, reaming, countersinking, *spot-facing*, and tapping of holes in metal workpieces, according to specifications, tooling instructions, standard charts, and knowledge of machining procedures: Reads blueprint or job order for product specifications, such as hole locations and dimensions, and tooling instructions, such as drilling jigs, holding fixtures, feed rates, cutting speeds, and cutting tools to be used. Places workpiece in fixture or positions it on machine table, and secures it with clamps. Mounts cutting tools in spindles. Positions and secures specified drilling jig and moves controls and positions spindles to align tools with guide bushings in jig. Sets stops to control depth of cut. Moves controls to set cutting speeds and feed rates, and regulate flow of coolant. Engages power feed and observes machine operation. Periodically verifies conformance of machined work to specifications, using such measuring instruments as calipers, micrometers, and fixed gauges. May machine plastics or other nonmetallic materials. May tilt table or spindles to machine holes at specified angles.
GOE: 06.01.03 STRENGTH: M GED: R4 M4 L3 SVP: 6 DLU: 77

606.380-014 DRILL-PRESS SET-UP OPERATOR, RADIAL (machine shop)

Sets up and operates *radial drill press* to perform drilling and other machining operations, such as boring, reaming, and tapping holes in metal workpieces, such as castings, forgings, and weldments, according to specifications, machining instructions, and knowledge of machining: Studies specifications and machining instructions, such as job order, blueprint, process sheet, or layout on workpiece, to determine hole locations and size and setup requirements, including tooling, feed rates, and cutting speeds. Plans sequence of operation, determines suitable work holding arrangement, and fastens holding fixture or jig on machine base to hold workpiece and guide cutting tool. Lifts workpiece manually or with hoist and positions and secures it on machine base or in fixture or jig with clamps and bolts. Verifies position with surface gauges and height gauges. Selects cutting tool, installs it in machine spindle, and moves controls to set cutting speeds and feed rates, according to machining instructions or knowledge of metal properties. Operates controls to swing radial arm over workpiece, position cutting tool over hole center location, engage power feed, and to advance tool into workpiece. Turns valve handle to start flow of cutting oil and coolant against cutting tool and workpiece. Observes machining operation and periodically verifies conformance of machined workpiece to specifications, using measuring instruments, such as *telescoping gauges*, dial indicators, and micrometers. May measure, mark, and scribe reference lines and hole locations on workpiece, according to blueprint, using layout tools, such as rule, divider, and scriber, applying knowledge of shop mathematics and layout techniques. May operate universal-type machine, computing and setting angles of tilting spindle. May work on nonmetallic materials. May sharpen cutting tools, using *bench grinder*.
GOE: 06.01.03 STRENGTH: M GED: R4 M4 L3 SVP: 6 DLU: 77

606.380-018 DRILL-PRESS SET-UP OPERATOR, RADIAL, TOOL (machine shop)

Sets up and operates *radial drill press* to perform drilling and other machining operations, such as boring, reaming, and tapping of holes in metal workpieces, such as machine, tool, or die parts, usually on custom basis, analyzing specifications and deciding on tooling according to knowledge of machining: Studies blueprint or layout on workpiece and plans sequence of operations. Selects method of holding workpiece. Positions and secures workpiece onto machine table, using such devices as shims, blocks, and *planer gauges*. Verifies position with surface gauges and height gauges. Selects cutting speeds, feed rates, and tool for each operation, according to knowledge of metal properties and shop mathematics. Positions and secures tool in spindle. Swings radial arm and moves controls to position spindle and tool along arm over hole center location, to set feeds and speeds, to feed tool in workpiece, and to engage feed. Turns valve handle to direct flow of coolant or cutting oil against tool and workpiece. Observes operation and regulates tool position and action. Verifies hole location and dimensions, using measuring instruments, such as *telescoping gauges*, micrometers, and dial indicators. May measure, mark, and scribe workpiece. May operate universal-type machine, computing and setting angles of tilting spindle. May work on nonmetallic materials. May operate *bench grinder* to sharpen tools.
GOE: 06.01.03 STRENGTH: M GED: R4 M4 L3 SVP: 6 DLU: 77

606.382-010 DRILLER-AND-REAMER, AUTOMATIC (musical inst.)

Operates automatic reamer to ream and mill drilled holes in clarinet posts: Secures reaming tool in chuck of machine. Positions hole over reamer and reams as specified. Secures mill shaft in machine chuck. Mounts mill on end of mill shaft. Mills clarinet post flat on each side of reamed hole to specified tolerances. Verifies milling with go-not-go gauge.
GOE: 06.02.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

606.382-014 JIG-BORING MACHINE OPERATOR, NUMERICAL CONTROL (machine shop)

Sets up and operates numerically controlled jig-boring machine to perform machining operations, such as boring, drilling and counter-sinking holes in metal workpieces according to specifications and setup instructions, applying knowledge of metal properties and machining methods: Studies blueprints and setup instructions to determine machining required, dimensional specifications, and work procedures and methods. Installs work-holding devices, such as blocks and clamps on *indexing* table of machine, using handtools. Lifts workpiece manually or with hoist and positions and secures it on machine table or in holding device. Inserts cutting tool in spindle of machine. Inserts punched card or loads perforated or magnetic tape containing programmed instructions into reader of control unit. Pushes button to zero indexing table and console at established locating point. Sets conventional cams, stops, and dial-type switches on machine head as indicated on setup instructions if machine spindle is not under numerical control. Actuates machine that automatically positions indexing table containing workpiece under spindle and machines part according to programmed instructions. Inspects and measures dimensions of machined workpiece to verify conformance to specifications and shop standards, using precision measuring instruments, such as precision gauges, dial indicators, micrometers, and calipers. Monitors machine operation and display panel of control unit for indications of malfunctions. Notifies supervisor if machined workpiece does not conform to specifications or if machine malfunctions. May make manual adjustments, such as setting cutting speed, feed rate, and depth of cut. May operate machine in semiautomatic mode by setting selector switch and manually dialing in data according to oral or written instructions to machine relatively simple pieces. May operate machine as inspection machine in manner similar to normal operations by inserting precision measuring instrument in spindle and moving machine through cycle under automatic or manual mode to indicate deviations from prescribed tolerances.
GOE: 06.02.02 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

606.382-018 NUMERICAL-CONTROL DRILL OPERATOR, PRINTED CIRCUIT BOARDS (electron. comp.)

Sets up and operates numerical-control drilling machine to drill holes into printed circuit boards (PCB's): Reviews setup instructions and specifications. Loads control media containing programmed commands into control console of machine or enters commands to retrieve programmed control data. Attaches depth collars to drill bits and measures bit depth, using depth gauge, to verify specified drill bit cutting depth. Measures drill bit sizes, using micrometer, and installs specified drill bits in tool magazine of machine. Positions and secures PCB's to *indexing* table of machine. Enters commands to activate machine that automatically aligns indexing table and printed circuit boards under spindle, selects drill bit, and drills holes of specified dimension, location, and sequence into PCB's. Monitors machine operation and display readouts to detect malfunctions. Compares display data to specifications and notifies supervisor of machine malfunctions. Inspects and measures drilled PCB's to verify conformance to specifications, using measuring devices, such as micrometer, plug gauges, and test board. Performs machine adjustments and maintenance, such as setting speed and feed rates, cleaning machine parts, and replacing worn or damaged drill bits, using handtools.
GOE: 06.02.09 STRENGTH: L GED: R3 M3 L3 SVP: 4 DLU: 88

606.382-022 BORING-MACHINE OPERATOR (machine shop)

Sets up and operates boring machines to bore, drill, tap, spot face, groove, mill, or ream metal workpieces according to specifications, tooling instructions, and standard charts, applying knowledge of boring procedures and machining methods: Reads blueprint or job order for product specifications, such as hole locations and dimensions, and tooling instructions, such as fixtures, feed rates, cutting speeds, and cutting tools to be used. Positions and secures cutting tool in toolholder, and toolholder in spindle. Lifts and positions workpiece, manually or using hoist, and secures workpiece in machine table fixture, using wrenches and clamps. Moves controls to position tool in relation to workpiece, and to set feed rate, cutting speed, and depth of cut. Starts machine, moves controls to feed tool against workpiece, or to engage automatic feeding device. Turns valve handle to direct flow of coolant onto cutting area. Observes machine operation, and removes and inspects machined workpiece to verify conformance to specifications, using instruments, such as fixed and air gauges, calipers, and micrometers. May compute cutting speeds, feed rates, and dimensions, using standard charts and shop mathematics.
GOE: 06.02.02 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 88

606.382-026 ROBOTIC MACHINE OPERATOR (aircraft mfg.) alternate titles: industrial robot operator

Sets up and operates industrial robot to drill, countersink, and counterbore metallic and nonmetallic workpieces used to manufacture aircraft parts or tooling, according to specifications and preprogrammed machine control instructions: Reads work order and specifications to determine prescribed setup and operation. Mounts and positions workpiece on locating pins of holding fixture adjacent to robot, manually or using hoist, and aligns and secures workpiece on holding fixture, using template, bolts, handtools, and power tools. Installs specified type and size drill bits in *end effectors* and places end effectors in holding station adjacent to robot. Loads cassette tape of machine instructions into machine controller or enters commands to retrieve preprogrammed instructions from mainframe computer. Pushes button or enters commands to activate robot that automatically retrieves and secures designated end effector on robot

arm and positions arm for drilling. Operates robot to drill holes in test specimen and measures holes for conformance to specifications, using measuring instruments. Obtains written approval of test specimen from quality control inspector. Enters commands to start robot, observes robotic operation, and monitors screen of machine controller for malfunctions and error messages. Changes worn drill bits or adjusts machine according to error message instructions. Inspects finished workpiece for conformance to specifications. Notifies supervisor of numerical control programming problems. Cleans parts, tools, and fixtures, using solvents and rags. May drill holes in parts manually, using drill motor. May perform machine maintenance. May set up and operate robot to perform additional machine operations, such as sealing and fastener installation, to join component parts into complete assembly and be designated Assembly Line Robot Operator (aircraft mfg.).
GOE: 06.02.08 STRENGTH: M GED: R3 M2 L3 SVP: 5 DLU: 88

606.682-014 DRILL-PRESS OPERATOR (machine shop) alternate titles: production-drilling-machine operator

Operates previously set up drilling machines, such as single- or multiple-spindle drill presses to drill, ream, countersink, spot face, or tap holes in metal or nonmetal workpieces according to specifications: Lifts workpiece manually or with hoist, and positions and secures it on machine table in drilling jig or holding fixture. Moves machine controls to feed tools into workpiece, and engages automatic feed. Observes machine operation, and verifies conformance of drilled workpiece to specifications, using fixed gauges, calipers, and micrometers. Changes worn cutting tools, using wrenches. Moves controls to adjust cutting speeds, feed rates, and depth of cut. May assist MACHINE SETTER (machine shop) 600.360-014 in setting up machine. May sharpen cutting tools, using *bench grinder*. May perform minor assembly, such as fastening parts with nuts, bolts, and screws, using power tools and handtools. May be designated according to product as Barrel Reamer (ordnance); or function of machine as Reamer Operator (machine shop); Tapper Operator (machine shop).
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 77

606.682-018 DRILL-PRESS SET-UP OPERATOR, SINGLE SPINDLE (machine shop)

Sets up and operates single-spindle drill press to perform such machining operations as drilling, countersinking, *spot-facing*, and tapping holes in metal workpieces, according to specifications, tooling instructions, standard charts, and knowledge of machining procedures: Reads blueprint or job order and tooling instructions for specifications, such as hole locations and size, feed rates, cutting speeds, and cutting tools to be used. Secures specified tool in spindle. Lifts workpiece manually or with hoist, places it in fixture or jig or on machine table, and secures it with clamps or holds it in position under spindle. Moves controls to set cutting speed, feed rate, and depth of cut. Engages power or automatic feed or manually operates feed lever to feed tool to specified depth in workpiece. Turns valve handle to start flow of coolant against tool and workpiece or dips tool in cutting oil prior to mounting. Verifies conformance of machined workpieces to specifications, using such measuring instruments as calipers, micrometers, and fixed gauges. May position and secure drilling jig to guide cutting tool. May tilt table or spindle to machine holes at specified angles. May work on nonmetallic materials. May measure, mark, scribe, and center punch workpieces to mark hole locations.
GOE: 06.02.02 STRENGTH: M GED: R3 M3 L2 SVP: 4 DLU: 77

606.682-022 TAPPER OPERATOR (nut & bolt)

Sets up and operates one or more automatic tapping machines to cut internal threads in nut blanks: Installs specified tap in spindle, using wrench and rule. Fills feed hopper with nut blanks and starts machine. Measures threaded nuts with gauge and changes worn taps to maintain specified tolerances. May set up machines for other workers to operate.
GOE: 06.02.02 STRENGTH: M GED: R3 M3 L3 SVP: 4 DLU: 77

606.685-010 BORING-MACHINE OPERATOR, PRODUCTION (machine shop)

Tends previously set up single- or multiple-spindle boring machines to perform machining operations, such as boring, *counterboring*, and *facing* metal workpieces on production basis: Lifts workpiece manually or with hoist and clamps it in holding fixtures. Moves machine controls to feed tool into workpiece and engage feed. Observes machine operation and verifies conformance of bored workpiece to specifications, using measuring instruments, such as fixed gauges, calipers, and micrometers. Changes worn tools, using wrenches. May move controls to adjust cutting speeds, feed rates, and depth of cut. May aid MACHINE SETTER (machine shop) 600.360-014 in setting up machine. May bore or drill plastics or other nonmetallic materials.
GOE: 06.04.02 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 77

606.685-014 CHAMFERING-MACHINE OPERATOR I (ordnance)

Tends battery of machines that flare mouths of shell cases to facilitate insertion of bullets: Lubricates and starts each machine and starts flow of compressed air to cool chamfering tools. Observes cases sliding down feed and discharge tubes, repositioning any that are out of order. Observes cutting tools in operation to ensure proper functioning and replaces, sharpens, and resets them as necessary. Examines samples from each machine for burrs, ragged edges, or scratches and determines that dimensions are within prescribed tolerances, using variety of gauges and measuring tools.
GOE: 06.04.02 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

606.685-018 CHAMFERING-MACHINE OPERATOR II (ordnance)

Tends automatic screw machine that bevels outside edges of mouth of tracer bullets before they are charged with powder. Observes machine in operation for malfunctioning and stops machine when bullets are improperly fed, machined, or ejected.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

606.685-022 CHOKE REAMER (ordnance)

Tends machine to ream muzzle end of shotgun barrels to choke bores that control spread of pellets during firing: Reams to specified distances within barrel bore with rough, finish, and margin (choke) reamers. Visually examines and measures inside of barrel after reaming to ensure that barrel has been reamed to specified length and diameter, using plug and dial gauges.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

606.685-026 DRILL PRESS TENDER (machine shop)

Tends single- or multiple-spindle drill presses that drill, tap, ream, or countersink holes in metal workpieces according to specifications: Lifts workpiece manually, or using hoist, and positions and secures workpiece in drilling jig or fixture on machine table, using clamps and wrenches. Starts machine and feeds workpiece to cutter or vice versa, or engages automatic feeding mechanism. Turns valve to direct flow of coolant and cutting oils over cutting area. Observes operation and releases lever or turns handwheel to raise cutting tool from workpiece when machining is completed. Inspects or measures machined workpiece for conformance to specifications and shop standards, using instruments, such as fixed, plug, depth, and thread gauges, calipers, micrometers, and templates. Changes worn cutting tools, using wrenches. May machine plastics or other nonmetallic materials.
GOE: 06.04.02 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 86

606.685-030 DRILLING-MACHINE OPERATOR, AUTOMATIC (clock & watch)

Tends one or more semiautomatic machines that perform machining operations, such as drilling, boring, tapping, and chamfering holes in clock or watch parts, such as balance wheels, watch plates, and bridges: Positions and clamps part to machine table under cutting tool or inserts part in machine nest, chuck, or over positioning pins in spindle. Depresses pedal or moves controls to start machine that automatically machines part to specifications. Removes part from machine at completion of cycle or activates control that ejects part from machine. Inspects and measures part for conformance to specifications, using loupe and fixed gauges. Changes and replaces worn or broken tools. Cleans metal chips from machine with brush or airhose. Notifies supervisor when machine malfunctions. May tend battery of one kind of machine which may be set up to perform one or several different operations. Workers may be designated according to machine tended or operation performed as Balance-Wheel-Screw-Hole Driller (clock & watch); Boring-Machine Operator (clock & watch); Chamfering-Machine Operator (clock & watch); Reamer (clock & watch); Tapping-Machine Operator, Automatic (clock & watch).
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

606.685-034 REAMING-MACHINE TENDER (nonfer. metal)

Tends machine that reams and chamfers brass and copper tubing and rods to smooth inside edges of tubing and to remove burrs and sharp edges from ends of tubing and rods: Positions and fastens cutting tool in toolholder and installs funnel-shaped sleeve on machine through which tubing or rod is guided. Starts machine and inserts tubing or rod in sleeve to ream part way through tube or chamfer end of tube or rod. Reverses tube or rod to ream or chamfer opposite end. Changes cutting tool as required, using allen wrench. May pack tubing and rods into cartons.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

607 SAWING OCCUPATIONS

This group includes occupations concerned with severing or shaping metal by the reciprocal or rotary cutting action of a serrated or abrasive-edged blade or disk which wears out a kerf. The severing or shaping of nonmetallic materials, except wood, is also included when the methods and machine tools commonly applied to the machining of metal are used.

607.382-010 CONTOUR-BAND-SAW OPERATOR, VERTICAL (machine shop)

Sets up and operates vertical contour-band saw to cut straight, curved, irregular, or internal patterns in metal or plastic stock, according to specifications, utilizing knowledge of sawing techniques: Reads work order or blueprints to locate cutting layout lines on stock, to determine dimensions and tolerances, and to determine metal to be cut, type of blade to be used, blade tension, cutting speed, feed rate, table angle, and positions of table stops and guides. Relieves saw blade support and drive-wheel tension, using handtools. Places saw blade over wheels and resets tension to change blade and adjust tension. Turns controls to set prescribed cutting speed, feed rate, and table angle. Loosens table stops and guides, using handtools, and positions them to align and secure workpiece. Places stock on cutting table, either manually or using hoist, and clamps it into position. Cuts saw blade, threads it through hole drilled in stock, welds blade together, using butt-welding attachment, and files weld smooth to cut internal pattern in stock. Starts saw and manually guides stock along layout lines to cut pattern, or engages automatic feed to cut straight line. Turns control to start airflow to blow metal cuttings away from kerf. Verifies conformance to specifications, using ruler, calipers, fixed gauges, templates, and micrometers. May make precision cuts, using magnifier to see layout lines. May calculate and mark layout lines, according to product specifications. May be re-

quired to have experience with particular product or size, type or trade name of machine.
GOE: 06.02.02 STRENGTH: M GED: R3 M3 L2 SVP: 4 DLU: 77

607.382-014 SAW OPERATOR (aircraft mfg.)
Sets up and operates power saws to cut, slot, groove, miter, and trim metallic and nonmetallic workpieces according to specifications: Selects and installs blade on machine, using handtools. Sets controls to adjust speed, feed rate, and blade tensions. Positions guides, stops, holding blocks, or other fixtures to secure and direct workpiece, using handtools and measuring devices. Scribes reference lines on material as guide for sawing operations, according to blueprints, templates, sample parts, or specifications. Mounts workpiece in holding device, manually or using hoist. Operates saw to cut along scribed lines. Verifies dimensions of finished workpiece, using measuring devices. May weld and anneal saw blades.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 87

607.682-010 CUT-OFF-SAW OPERATOR, METAL (machine shop) alternate titles: band-saw operator; circular-saw operator; hack-saw operator; power-saw operator
Sets up and operates metal-sawing machines, such as hacksaw, bandsaw, circular saw, friction saw, and rubber-disk saw to cut metal stock to dimensions: Reads job order for specifications, such as material, type, and size of stock, and dimensions to be cut. Obtains and transfers stock to machine, manually or with hoist. Installs saw blade and sets blade tension and cutting speed for specified operation. Sets saw blade angle to obtain desired angle cuts, using wrench. Sets stops and guides to control dimension of cut, using steel rule and wrenches. Positions and secures stock against stops or in feeding device. Turns valve to start flow of coolant against cutting area. Starts machine and observes operation. Measures work for conformance to specifications, using rule. Marks identifying data on workpiece. Replaces defective cutting blade or wheel, using handtools. May be required to have experience with custom or production work or with particular material, product, size of workpiece, or type or trade name of machine and be designated accordingly.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

607.682-014 PROFILE TRIMMER (jewelry-silver.)
Operates scroll saw or jigsawing-and-nibbling machine to cut or trim hollowware items, such as trays, platters and vegetable dishes into specified shape, performing any combination of following tasks: Marks guidelines on workpiece by tracing from template or sample hollowware, using pencil or scribe. Selects jigsaw or scroll saw blade according to intricacy of outline and gauge of metal, and mounts in drive spindle, using wrench. Starts machine and manually guides workpiece under blade along cutting line to cut workpiece to specified shape or along edge of ornamentation to trim flash from molded items. Removes saw blade and installs nibbling punches in spindle and bed of machine. Turns thumbscrew to adjust depth of stroke to thickness of metal. Starts machine and guides edge of workpiece between reciprocating punches to smooth and trim along edges of mounts (decorative) trim attached after jigsawing by SILVERWARE ASSEMBLER (jewelry-silver.). May file burrs and rough edges from workpiece.
GOE: 06.02.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

607.685-010 CUT-OFF SAW TENDER, METAL (machine shop)
Tends band or circular saw to cut, miter or groove bar, tube, or sheet metal stock to specified dimensions or shape: Places stock on table or in automatic feed mechanism. Pulls lever or depresses pedal to lower saw blade and cut stock to size or shape. Removes cut stock from table and stacks for removal. May stamp identifying marks on stock, using die and hammer. May work as member of team when cutting structural beams. May assist in changing saw blades and setting table stops and guides.
GOE: 06.04.02 STRENGTH: M GED: R2 M2 L2 SVP: 2 DLU: 77

607.685-014 DEBRIDGING-MACHINE OPERATOR (nonfer. metal)
Tends debridging machine (circular saw) that cuts metal bridge from bottom length of cement-filled aluminum extrusions used in manufacturing windows and doors: Installs cutting blades in machine, using wrenches. Turns controls to set machine cutting speed, blade height, and feed roller position. Places extrusions on intake conveyor and guides extrusions into contact with feed roller for automatic cutting. Removes cut extrusion from off-feed conveyor, and examines exposed cement along cut to detect overlapping metal. Adjusts machine settings to remove metal according to company standards. Stacks extrusions on cart and places cardboard sections between layers.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 86

607.686-010 MAGNESIUM-MILL OPERATOR (nonfer. metal)
Feeds magnesium bar stock into milling machine for grinding into powder: Saws bar stock into sections, places sections in jig of milling machine, and turns handwheel to feed sections to milling cutter. Collects cuttings with air suction hose and dumps them into grinding mill. Cleans magnesium scrap from equipment and work area to eliminate fire hazard.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

609 METAL MACHINING OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with shaping metal parts or products by removing excess material from stock or objects. Removing excess material from nonmetallic materials, except wood, is also included when the methods and machine tools commonly applied to the machining of metal are used.

609.130-010 MACHINE-SHOP SUPERVISOR, PRODUCTION (machine shop)
Supervises and coordinates activities of workers engaged in production machining of metallic or nonmetallic workpieces, applying knowledge of machine shop procedures, machine tool setup and operating techniques, and production machining methods. May repair machine tools. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M4 L3 SVP: 8 DLU: 86

609.130-014 SCREW SUPERVISOR (clock & watch)
Supervises and coordinates activities of workers engaged in fabricating watch screws. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

609.130-018 SUPERVISOR (plumbing-heat.)
Supervises and coordinates activities of workers engaged in polishing, plating, machining, and assembling plumbing fixtures. Sets up and operates machine shop equipment, such as drill press, lathe, and punch press, to fabricate fixtures. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 77

609.130-022 SUPERVISOR, AUTOMATIC MACHINES (clock & watch)
Supervises and coordinates activities of workers engaged in setting up automatic machines to drill, ream, tap, chamfer, knurl, countersink, and perform other operations, to make watch parts, such as balance staffs, pinions, pallet arbors, and winding stems. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

609.130-026 WATCH MANUFACTURING SUPERVISOR (clock & watch)
Supervises and coordinates activities of workers engaged in watch manufacture or assembly, such as hairspring manufacture, balance assembly, or dial manufacture, applying knowledge of watch manufacturing: Computes labor and machine requirements based on work schedules, and assigns work accordingly. Sets up machines [MACHINE SETTER (clock & watch)] and instructs personnel in machine operation. Compares product with blueprint or other specifications, and makes or directs changes in setup to keep product within specified tolerances. Performs duties as described under SUPERVISOR (any industry) Master Title. May supervise workers who are responsible for particular operation or phase of watch assembly or parts manufacture. May be designated according to operations supervised as Watch Balance Assembly Manufacturing Supervisor (clock & watch); Watch Hairspring Manufacturing Supervisor (clock & watch); Watch Metal Dial Manufacturing Supervisor (clock & watch).
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

609.131-010 INSPECTION SUPERVISOR (machine shop) alternate titles: inspector, chief; quality-control supervisor
Supervises and coordinates activities of workers engaged in inspecting materials, tools, workpieces, and products, such as metal stock, cutting tools, gauges, machine parts, and assembled units for conformance to specifications, products, inspection instruments, and procedures. May compute relative production and repair costs to determine salvageability of rejected products. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M4 L4 SVP: 8 DLU: 77

609.131-014 SUPERVISOR, MOLD MAKING (glass mfg.)
Supervises and coordinates activities of workers engaged in making and repairing cast iron molds used to produce bottles and other glass containers: Refers to machine shop blueprints and specification charts in manual to determine maximum allowable dimensions for basic type container specified by customer. Studies bottle design designated by customer and estimates glass shrinkage to calculate loss in capacity due to design. Computes dimensional corrections for molds to retain designated glass distribution and bottle capacity. Examines bottles having such defects as improper glass distribution, ridges, and rough surfaces, to determine if defects are due to mold or faulty production equipment. Receives mold change orders, and issues instructions for delivery of molds to bottle-making machines. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M4 L4 SVP: 8 DLU: 77

609.131-018 SUPERVISOR, MOLD SHOP (glass mfg.)
Supervises and coordinates activities of workers engaged in machining metal castings used in molding glassware: Pours sulfur mix into rough casting to obtain plastic model of object to be molded. Verifies dimensions of model against blueprint, using micrometers and calipers, to determine machining operations required to prepare casting for use as mold. May operate wood lathe to turn patterns for bottle molds. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.07 STRENGTH: L GED: R4 M4 L4 SVP: 8 DLU: 77

609.132-010 SLAB-CONDITIONER SUPERVISOR (nonfer. metal)
Supervises and coordinates activities of workers engaged in scalping, sawing, and surfacing of slabs with aluminum to condition aluminum-alloy slabs for

rolling, utilizing knowledge of machining, and conditioning processes and techniques. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R3 M3 L2 SVP: 6 DLU: 77

609.260-010 GUNSMITH, BALLISTICS LABORATORY (ordnance)
Sets up and operates variety of metalworking machines to repair and alter guns and gun parts, and develops designs for special devices used in testing small arms ammunition: Develops designs and fabricates gauges, reamers, holding fixtures, and testing equipment, such as gun-holding and target-changing devices, cartridge-slicing fixtures, and special test barrels. May measure velocity of projectiles [CHRONOGRAPH OPERATOR (ordnance)].
GOE: 05.05.07 STRENGTH: M GED: R4 M4 L4 SVP: 8 DLU: 77

609.262-010 TOOL PROGRAMMER, NUMERICAL CONTROL (electron. comp.) alternate titles: programmer operator, numerical control; soft tooling technician
Operates optical programming (digitizing) equipment to generate numerical control (NC) tape program used to control NC machine tools that drill, mill, rout, or notch printed circuit boards (PCB's): Analyzes drawings, specifications, and phototool (photographic film copy of printed circuit pattern) to determine program input data, such as hole sizes, tool sizes, reference points, and direction of machine cutting paths, and calculates data, such as starting point coordinates (location), size of panels or boards, and number of boards per panel. Draws machine tool paths on phototool, using colored markers and following guidelines for tool speed and efficiency, to prepare phototool for use as tool programming aid. Aligns and secures phototool on reference table of optical programmer. Observes enlarger scope of programmer that projects image of circuit board pattern from phototool. Moves reference table, following previously marked paths, to align phototool circuit pattern holes with reference marks on enlarger scope. Depresses pedal or pushes button of programmer to enter coordinates of hole locations into program memory. Repeats process for each hole location on phototool to enter NC machine instructions, such as hole locations, machine paths, and reference points. Keys in additional instructions, such as tool size, machine feed and speed rates, and starting point coordinates, basing entries on specifications, calculations, and knowledge of machine capabilities and programming techniques. Types commands on keyboard to generate NC tape. Observes trial run of NC machine to verify tape program accuracy. Revises NC tape program to eliminate instruction errors. May operate NC machine tools on production basis.
GOE: 05.01.06 STRENGTH: S GED: R3 M3 L3 SVP: 5 DLU: 86

609.280-010 TRIM-MACHINE ADJUSTER (ordnance) alternate titles: shell-trim tool setter
Sets up battery of machines that trim small arms cartridge cases and artillery shell cases to specified length: Installs cutters and adjusts stops and cams to regulate machine stroke and synchronize movements of feeding, cutting, and ejection mechanisms, using handtools. Sharpens dulled cutters and polishes scratched punches, using *bench grinder*, speed lathe, and emery cloth. Removes housings, guards, feed tubes, chutes, tool holders, and other accessories to replace worn or broken parts, such as springs, bushings, and push-rods. May straighten bent punches and machine parts, using hammer and anvil.
GOE: 06.01.02 STRENGTH: M GED: R3 M2 L3 SVP: 5 DLU: 77

609.360-010 NUMERICAL CONTROL MACHINE SET-UP OPERATOR (machine shop)
Sets up and operates numerical control machines or machining centers to perform various machine functions, such as cutting, drilling, milling, reaming, boring, and broaching of metallic and nonmetallic workpieces, utilizing knowledge of machine tool capabilities, machinability of materials, and shop math: Reads and interprets blueprints, planning sheets, sketches, and related technical data to determine tooling requirements, setup procedures, control settings, and machining methods and sequences. Mounts, aligns, and secures tooling, attachments, and workpiece on machine. Selects and installs cutting tools in machine spindle. Loads control media, such as tape, card, or disk, in machine controller or enters commands to retrieve preprogrammed instructions from data base. Calculates and sets machine controls to position spindle in relationship to workpiece and to regulate factors, such as cutting depth, speed, feed, and coolant flow. Starts machine and monitors displays and machine operation to detect malfunctions. Stops machine to change cutting tools and setup according to required machining sequence or to measure parts for conformance to blueprint specifications, using precision measuring instruments. Enters commands or manually adjusts machine controls to correct malfunctions or out-of-tolerance machining. Operates machine manually to perform nonautomated functions and when automatic programming is faulty or machine malfunctions. Discusses control media errors with supervisor or programming personnel to resolve problems. May clean machine, tooling, and parts. May perform machine maintenance.
GOE: 06.01.03 STRENGTH: M GED: R4 M4 L3 SVP: 6 DLU: 89

609.361-010 INSPECTOR, FLOOR (machine shop)
Inspects machined workpieces and assemblies at assembly, inspection, or machining station to ensure conformance to specifications: Reads blueprints or engineering specifications to obtain product information, such as specified material, surface finish, and dimensions. Compares surface finish of workpiece to finish on set of standard blocks making fingertip touch comparison to ensure production of specified surface finish. Measures dimensions, such as length, height, and distance, between reference points, using precision instruments, such as micrometers, calipers, dial indicator, and snap gauge, to ensure product meets specifications. Locates reference point on part and measures dimensions, such as angle, arc, and radii, using combinations of aids, such as surface plates, parallel bars, angle plates, gauge blocks, V-blocks, sine bars, and precision measuring instruments. Reports findings to INSPECTION SUPERVISOR (machine shop). May inspect first run parts. May set up and try out inspection equipment to ensure accuracy. May substitute known values, such as dimensions from blueprints into standard formulas and solve for unknown quantities, using knowledge of algebra, trigonometry, or geometry to determine dimensions not specified in blueprints. May test hardness of workpiece surface, using hardness testing machine. May be designated according to type of product inspected as Propeller Inspector (ship-boat mfg.); Turbine Inspector (engine-turbine).
GOE: 05.07.01 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 77

609.362-010 NUMERICAL CONTROL MACHINE OPERATOR (machine shop)
Sets up and operates numerical control machine to cut, shape, or form metal workpieces to specifications: Reviews setup sheet and specifications to determine setup procedure, machining sequence, and dimensions of finished workpiece. Attaches fixture to machine bed and positions and secures workpiece in fixture according to setup instructions, using clamps, bolts, handtools, power tools, and measuring instruments, such as rule and calipers. Assembles cutting tools in toolholders and positions toolholders in machine spindles as specified, using handtools, or inserts cutting tools in specified machine magazines. Loads control media, such as disk, tape, or punch card, in machine control console or enters commands to retrieve preprogrammed machine instructions from data base. Manipulates controls and enters commands to index cutting tool to specified *set point* and to start machine. Observes and listens to machine operation to detect malfunctions, such as worn or damaged cutting tools. Changes cutting tools and location of workpiece during machining process as specified in setup instructions. Measures workpiece for conformance to specifications, using measuring instruments, such as micrometers, dial indicators, and gauges. Notifies supervisor of discrepancies. May adjust machine feed and speed and change cutters to machine parts according to specifications when automatic programming is faulty or machine malfunctions. May machine materials other than metal, such as composites, plastic, and rubber.
GOE: 06.02.02 STRENGTH: M GED: R3 M3 L3 SVP: 5 DLU: 77

609.380-010 ELECTRICAL-DISCHARGE-MACHINE SET-UP OPERATOR (machine shop)
Sets up and operates one or more electrical-discharge machines to shape metal workpieces to specifications, following standard charts and manuals, and applying knowledge of *electrical-discharge machining* processes and methods, electric currents and circuitry, metal properties, and shop mathematics: Examines blueprint of product and plans operations. Positions and secures workpiece on machine table with clamps, vise, or fixture. Positions and secures electrode in holder on surface plate, verifying concentricity, alignment, and depth, using measuring instruments, such as calipers and dial indicators. Mounts electrode and holder on machine spindle, using vernier dials on machine to verify alignment of electrode and workpiece. Positions gauge blocks, dial indicator, and spindle stop on machine so that descending electrode will stop at specified depth when indicator feeler point touches gauge blocks. Turns valve to adjust flow of dielectric coolant over electrode and workpiece or to immerse them in circulating bath. Turns controls to adjust machine setting, such as voltage, current, frequency, and electrode feed rate, according to information on charts or knowledge of electrical discharge machining procedures. Starts machine and observes beginning of operation. May move controls to rotate electrode or workpiece. May inspect completed workpiece visually and with templates and other measuring instruments. May compute settings from specifications and knowledge of machine capacities. May give TOOL MAKER (machine shop) 601.280-042 specifications, such as allowances between blueprint dimensions and dimensions of electrode to be made. Important variables may be indicated by trade names of machine used.
GOE: 06.01.03 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 77

609.380-014 THREADING-MACHINE SETTER (machine shop)
Sets up single- or multiple-spindle threading machines to thread and cut, ream, or chamfer cylindrical stock according to order specifications, threading charts, and knowledge of threading procedures: Compiles dimensions of stock, sequence of machining operations, and type and size of thread from charts and specifications. Installs specified feed grips, rotating dies, die cutters (chasers), cutting and reaming or chamfering tool, using micrometers, gauges, and handtools. Installs cams, gears, pulleys, pressure tripping mechanism, and adjusts speed control knobs to synchronize transfer and ejection of stock with machine action. Operates machine to evaluate its performance. Verifies dimensions of workpieces with specifications, using fixed gauges and scale. Sharpens die cutters on grinding wheel. May set up manually operated threading machine [THREADING-MACHINE OPERATOR (machine shop)].
GOE: 06.01.02 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

609.462-010 BALANCING-MACHINE OPERATOR (any industry)
Operates dynamic balance machine to locate points of imbalance on parts, such as spindles, impeller wheels, armatures, rotors, and steam engine flywheels, and balances parts by removing excess metal, using handtools and power tools, or adding metal, using soldering and welding equipment: Signals crane operator to position workpiece on machine pedestals. Slides drive belt

over shaft of workpiece or moves drive wheel against workpiece to connect power source that rotates workpiece. Starts machine to rotate workpiece at specified speed. Moves controls of machine to locate points of imbalance indicated by light beam from strobe lamp on identification marks of workpiece, position of wave crest of trace pattern on oscilloscope screen, or readings on wattmeter and protractor dial. Computes amount of weight to be added to or removed from workpiece, or changes size and location of test weight until zero reading is indicated on ammeter. Drills, grinds, chips, or files metal from heavy side, or welds, solders, or rivets metal pieces to light side to correct imbalance, using power drills and grinders, hand file, and soldering and welding equipment.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

609.482-010 ELECTRICAL-DISCHARGE-MACHINE OPERATOR, PRODUCTION (machine shop)

Operates one or more electrical-discharge machines to shape metal workpieces to specifications, following standard charts: Obtains from job order or verbal instructions such information as electrode to be used, depth setting, and number of workpieces or cavities to be shaped. Mounts specified electrode in preset holder on spindle. Positions and secures workpiece on machine table or places it in fixture. Moves controls to align electrode and workpiece and to set electrode feed rate, depth limit, and electric current. Starts machine, turns on flow of dielectric coolant, and observes operation. May inspect work visually or with measuring instruments.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

609.482-014 STRAIGHT-PIN-MAKING-MACHINE OPERATOR (button & notion) alternate titles: pinmaker

Operates battery of automatic machines that straighten, cut off, head, and sharpen wire to form straight (common) pins: Places coil of wire on pedestal stand and threads end of wire through machine to heading dies. Adjusts straightening rolls, feeding arm, and stop to diameter and length of wire, using wrenches. Starts machine and measures sampling of first pins for conformance to specifications, such as length, head diameter, and angle of point to shank, using micrometers and fixed gauges. Replaces dull cutters or point-grinding bars, using handtools, such as wrenches, screwdrivers, and pliers. Mounts dies in bench lathe and removes burrs and repolishes head cavity, using stick dipped in polishing paste. Empties pin-filled catch pails into tote trays.
GOE: 06.02.02 STRENGTH: H GED: R3 M3 L3 SVP: 5 DLU: 77

609.682-010 AUTOMATIC-WHEEL-LINE OPERATOR (machine shop)

Controls series of machines to machine cast railroad car wheels to specifications: Changes chucks, boring bar, and cutting tools according to specifications on production orders, using handtools. Pushes buttons on console panel to start machines that perform threading, flanging, boring, inspecting, and other operations to finish wheels. Observes action of machines and transfer stations to detect malfunctions. Examines machined surfaces of wheels at specified stations to detect defective cutting tools.
GOE: 06.02.02 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 77

609.682-014 COLLET MAKER (clock & watch)

Operates three-stage collet making machine to cut and chamfer outside diameters of watch collets, face them to specified thickness, drill hairspring hole, and saw slot in collet: Feeds collet into machine and starts machine. Removes collets by hand, verifies finished collet dimensions, using precision gauges, and makes minor adjustments to machine to keep product within required tolerances.
GOE: 06.02.02 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

609.682-018 CROOK OPERATOR (musical inst.)

Operates machine to cut and deburr brass wind instrument tubes, and controls equipment to anneal tubes: Sets length gauge of saw and pushes tubes into rotating blade to cut tubes to specified length. Inserts burring tool into chuck of turning lathe and holds tube ends against rotating burring tool to remove burs. Places tubes in oven or on sprockets of wheel that revolves between two torches to anneal tubes for ease of bending. May fill tube with pitch to facilitate bending tube manually around forming block. Places tube in oven to melt pitch for removal from tube. May place tube in balling-out mold and push steel balls through tube to size part or remove wrinkles.
GOE: 06.02.02 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 77

609.682-022 MACHINE OPERATOR, CENTRIFUGAL-CONTROL SWITCHES (elec. equip.) alternate titles: governor assembler

Operates machines, such as lathe and drill press, to machine centrifugal switch assemblies for electric motors, performing any combination of following duties: Positions switch bore and hub cylinder in fixture on hydraulic press. Starts press to lower ram and force hub into switch bore. Clamps assembly to bed of drill press and starts press to ream bore of hub cylinder to specified size. Verifies diameter of bore, using plug gauge. Mounts switch assembly to lathe and inserts specified cutting tool in tool holder. Sets cutting tool to specified depth of cut, using micrometer. Starts lathe to cut outside diameter of switch, to cut slot in contact surface, or to remove rivet heads and burs. Verifies diameter of switch or depth of slot, using micrometer or plug gauge. Mounts switch to test motor. Starts motor and turns control spring setscrew, observing tachometer, until switch opens at specified revolutions per minute. Inserts mandrel in bore of switch assembly and mounts assembly in test stand. Rotates mandrel and observes assembly for static balance. Drills metal from rivet heads or solders additional metal onto heads to balance switch assemblies. Mounts assembly to lathe and adjusts dial indicator to specified setting. Starts lathe and observes dial indicator to test balance of assembly.
GOE: 06.02.02 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

609.682-026 NICKING-MACHINE OPERATOR (cutlery-hrdwr.) alternate titles: nick setter

Sets up and operates machine that notches identification nicks in cutting die edge: Grinds burrs from cutting edge of die, using abrasive wheel. Obtains nicking tools specified on template. Bolts tools to machine bed, using wrench. Heats cutting edge of die to soften metal, using acetylene torch. Positions heated die edge between nicking tools. Pulls lever to close tools that notch identification nicks in die edge.
GOE: 06.02.02 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

609.682-030 SCREWMAKER, AUTOMATIC (clock & watch)

Operates machine to automatically shape and cut wire stock to form watch screws: Inserts wire in machine and starts machine that turns head and shank to specified size to form screw, threads and cuts screw to specified length, and slots head. Measures thread and length of finished screw under loupe to determine if it meets specifications, using pitch gauge and upright gauge. Maintains machine adjustment to keep product within specifications.
GOE: 06.02.02 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

609.684-010 INSPECTOR, GENERAL (any industry) alternate titles: bench inspector; parts inspector; gauger

Inspects materials and products, such as sheet stock, auto body or engine parts, dental instruments, machine shop parts, and metal castings, for conformance to specifications, using fixed or preset measuring instruments: Examines material or product for surface defects, such as cracks, pits, and incomplete welds. Compares product with parts list or sample model to ensure completion of assembly. Verifies specified dimensions of product or material, using inspection equipment, such as fixed gauges, templates, and preset micrometer, vernier height gauges, and dial indicator. Rejects defective parts, and marks type of defect on part, container of parts, or inspection tag. May test parts for hardness, using hardness tester [HARDNESS INSPECTOR (heat treating) 504.387-010]. May test products for structural defects, such as leaks and internal cracks, using water pressure tests [HYDRO-PNEUMATIC TESTER (any industry) 862.687-018]. May test mechanisms for clearance and freedom of movement. May be designated Inspector, Filters (auto. mfg.).
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 86

609.684-014 LABORER, GENERAL (machine shop)

Performs any combination of following tasks to assist in machine shop activities: Loads and unloads materials, parts, or products onto or from pallets, skids, conveyors, or trucks manually or using hoist. Delivers metal parts or stock to designated work areas for machining, using electric pallet mover, hoist, or overhead crane. Lifts metal part or stock onto machine, manually or using hoist, and secures it on machine table, in chuck, or holding fixture, using wrenches, to assist in setting up machine. Feeds metal parts or stock into automatic metalworking machines and removes machined part from machine after prescribed period of time or at end of machining cycle. Adds coolant to reservoirs of machines and lubricates machine parts and ways, using grease gun and oilcan. Reclaims cutting and lubricating oils from machines by pumping oil from machine reservoir into barrel, dumping oil from barrel into centrifugal separator that removes metal chips and dirt from oil, and drains clean oil from separator into containers. Removes metal chips and shavings from surfaces of machines, using rag or airhose, and wipes surfaces of machines with rag to remove excess oil. Cleans around work areas, using broom and shovel. Separates metal shavings, chips, and scrap materials from trash and places them in bins for resale. May remove burrs or excess metal from machined parts, using files, sandpaper, emery cloth, or grinding machine. May be designated by specific task performed as Brass Reclaimer (machine shop); Gear Cleaner (machine shop); Oil Extractor (machine shop); Sorter (machine shop); Threading-Machine Feeder, Automatic (machine shop) II; Tool Marker (machine shop).
GOE: 06.04.39 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

609.685-010 BALL SORTER (machinery mfg.)

Tends machine that sorts metal balls according to size, roundness, or surface defects, such as nicks, scratches, or dents: Adjusts settings on control panel, sets graduated opening on gauge slide, or selects and installs gauging screen in barrel of machine through which balls drop into containers according to variation from specified dimensions. Loads balls into feed hopper, and starts machine that automatically sorts standard size, oversize, undersize, and defective balls into separate pockets or containers. May visually examine or measure sample balls from each container, using micrometer or fixed gauge and label containers, according to quality and quantity of sorted balls. May weigh balls on balance scale and record weight and grades on work ticket.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

609.685-014 ENGRAVER, AUTOMATIC (clock & watch)

Tends battery of automatic engraving machines that inscribe numerals and words on watch parts: Loads paddle manually with specified watch parts. Inserts paddle into machine and pulls lever to automatically secure paddle in position for scribing. Presses button to start machine operation and initiate engraving cycle. Inspects finished pieces to detect engraving faults, such as skips, incorrectly located engraving, and irregular cut, using loupe and location gauge.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

609.685-018 PRODUCTION MACHINE TENDER (machine shop) alternate titles: machine shop production worker; robotic machine tender, production

Tends one or more machine tools, special-purpose machines, or industrial robots to machine metal workpieces to specifications on production basis: Lifts workpiece manually or using hoist and secures workpiece in fixture or loads automatic feeding device. Starts machine, engages feed, and observes operation. Inspects and measures machined workpieces to verify conformance to specifications, using instruments, such as preset comparator, fixed gauges, calipers, micrometer, or microscope. May move machine controls and guides to adjust machine. May replace worn machine accessories, such as cutting tools or brushes. May add coolant to machine reservoir and turn valve to start flow of coolant. May file, sand, or shape machined parts, using handtools and power tools. May clean machined parts, using degreasing tank or solvent and rags. May machine plastics or other nonmetals. May tend machines and equipment other than machine tools.
GOE: 06.04.02 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 89

609.685-022 TRANSFER-MACHINE OPERATOR (machine shop)

Tends transfer machine consisting of series of stations connected by transfer mechanisms that transfer, position, and secure workpieces and perform machining operations, such as drilling, boring, tapping, and milling on metal workpieces, such as castings and forgings: Lifts workpiece manually or with hoist, and places on holding device, such as pallet. Pushes pallet along track into clamping station, and starts mechanisms to clamp workpiece on pallet and transfer to first work station. Inspects machined workpieces for surface defects and verifies conformance to specifications, using measuring instruments, such as fixed gauges and checking fixtures. Changes tools when panel lights indicate that tool is worn or broken, using wrenches. Moves bar to lift derailed pallets back into position. Notifies supervisor if panel lights indicate machine failure or serious malfunctioning.
GOE: 06.04.02 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 77

609.685-026 TRIM-MACHINE OPERATOR (ordnance) alternate titles: cut-off-machine operator; shell-trim operator; trim and burr operator

Tends battery of machines that trim small arms cartridge cases, bullet jacket blanks, or artillery shell cases to specified length: Loads small arms cartridge cases or bullet jacket blanks into hopper of automatic machine or positions artillery shell cases by hand in feeding device of trim machine. Turns stop nuts and setscrews, using handtools, to adjust chuck and feed punch to cut blanks to specified length. Starts machine and observes operation of feeding, cutting, and ejection mechanisms to detect malfunction. Extracts jammed pieces, using fingers or wire hook. Examines trimmed pieces for such defects as dents, burrs, or scratches. Verifies conformity to specified dimensions, using fixed gauges. Sharpens cutters on *bench grinder*.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

61 METALWORKING OCCUPATIONS, N.E.C.

This division includes occupations, not elsewhere classified, concerned with shaping and conditioning metal by rolling, forging, extruding, drawing out, punching, shearing, blanking, and pressworking. The punching, shearing, blanking, and pressworking of nonmetallic materials, except wood, are also included when the methods and machine tools commonly applied to the working of metal are used.

610 HAMMER FORGING OCCUPATIONS

This group includes occupations concerned with heating metal in a forge and hammering it into desired shape with a hand or power hammer (includes drop forging).

610.362-010 DROPHAMMER OPERATOR (aircraft mfg.; forging) alternate titles: blacksmith, hammer operator

Sets up and operates closed-die drophammer to forge metal parts according to specifications, using measuring instruments and handtools: Informs HEATER (forging) 619.682-022 of forging specifications, such as specified quantity and temperature setting. Aligns and bolts specified dies to machine ram and anvil, using scale, rule, square, feeler gauges, shims, and handtools. Positions workpiece onto lower die and depresses pedal to activate ram that repeatedly strikes and forces metal workpiece into die impression. Moves workpiece through series of dies to attain specified detail. May plan work procedures, select tooling, and operate drophammer to form experimental or developmental parts. May turn knobs to regulate conveyor speed and feed that automatically carries heated stock from furnace, places stock on anvil, and removes finished workpiece. May forge unheated metal. May set stops or turn handles to set specified striking force of ram. May trim flash from finished forging. May operate hammer to compress finished forgings to specified tolerances and be designated Restrike Hammer Operator (forging). May be designated according to type of hammer operated as Board Drophammer Operator (forging); Impact Hammer Operator (forging); Steam Hammer Operator (forging).
GOE: 06.02.02 STRENGTH: H GED: R3 M3 L3 SVP: 6 DLU: 87

610.381-010 BLACKSMITH (forging) alternate titles: anvil smith

Forges and repairs variety of metal articles, such as tongs, edged tools, hooks, chains, machine and structural components, and agricultural implements as specified by work orders, diagrams, or sample parts: Heats metal stock in blacksmith's forge or furnace [HEATER (forging)]. Hammers stock into specified size and shape on blacksmith's anvil or positions stock on anvil of power hammer and depresses pedal to hammer stock with varying force and rapidity. Forge-welds metal parts by heating and hammering them together. Devises jigs and fixtures, forges special handtools, such as hammers or chisels, and sets up form blocks. Tempers or anneals forged articles [HEAT TREATER (heat treating) I]. May record type of repair or fabrication of tools or machine components performed during work shift to maintain daily activity report and records. May cut, assemble, and weld metal parts, using arc or acetylene welding equipment [WELDER, COMBINATION (welding)]. May repair farm machinery and be designated Blacksmith, Farm (agriculture). May be designated according to articles forged as Special-Trackwork Blacksmith (r.r. trans.); Tool-Dresser (forging).
GOE: 05.05.06 STRENGTH: H GED: R4 M3 L2 SVP: 7 DLU: 77

610.381-014 BLACKSMITH APPRENTICE (forging)

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.06 STRENGTH: H GED: R4 M3 L2 SVP: 7 DLU: 77

610.684-010 BLACKSMITH HELPER (forging) alternate titles: striker

Assists BLACKSMITH (forging) in forging metal articles: Obtains equipment, such as stop blocks and hammer dies from toolroom. Cuts metal to predetermined size, using saw. Lights furnace and turns control valves to regulate temperature. Lifts metal parts from furnace with tongs and places parts on anvil or under power hammer. Strikes parts with sledge as BLACKSMITH (forging) positions parts over forming dies set in anvil. Grinds surfaces of finished parts, using portable and stationary power grinders. May sweep floor and remove debris from work area. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.10 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

610.684-014 SPRING SALVAGE WORKER (metal prod., nec)

Reshapes defective spring leaves, using furnace and power hammer: Places leaf in furnace to heat it to specified color. Removes leaf from furnace and positions it on bed of power hammer. Starts machine to pound leaf into specified shape and verifies shape of leaf, using template. Tempers leaf by immersing it in oil bath for specified time.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

611 PRESS FORGING OCCUPATIONS

This group includes occupations concerned with heating metal in a forge and shaping it by means of a press.

611.482-010 FORGING-PRESS OPERATOR I (forging) alternate titles: die-machine operator; forging-machine operator

Sets up and operates closed-die power press to produce metal forgings, following work order specifications, using measuring instruments and handtools: Aligns and bolts specified dies on ram and anvil of press, using rule, square, shims, feelers, and handtools. Turns knobs to set pressure and depth of ram stroke. Pulls workpiece from furnace, when color of workpiece indicates forging temperature, and positions workpiece on lower die, using tongs. Depresses treadle or pulls lever to lower ram that compresses metal to shape of die impressions. May move workpiece through series of dies for progressively finer detail.
GOE: 06.02.02 STRENGTH: H GED: R3 M2 L2 SVP: 5 DLU: 77

611.482-014 ROLLER-MACHINE OPERATOR (metal prod., nec) alternate titles: roller operator

Operates machine to flatten and taper heated ends of spring leaf blanks to specified dimensions: Installs dies in upper and lower plates of press and adjusts pressure of rollers, using wrenches and gauges. Heats end of spring blank in furnace and places it on stationary die plate. Pulls lever to flatten end to specified width. Holds compressed end between cam-shaped rollers that grip and taper end to specified thickness.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L1 SVP: 4 DLU: 77

611.662-010 UPSETTER (forging)

Sets up and operates closed-die forging machine equipped with horizontal ram and gripping die to expand end of hot metal bar stock: Aligns and bolts specified dies and cams in machine, using rule, square, and wrenches. Pulls stock from furnace when color indicates forging temperature and inserts stock in gripping die against stop gauge, using tongs or hoist. Presses pedal to close gripping die on stock and to advance ram, squeezing end of metal into gripping die cavity. Moves workpiece through series of dies to shape stock progressively to specifications. Verifies dimensions of forged piece, using set gauges. May set up and operate closed-die forging machine to expand end of cold metal.
GOE: 06.02.02 STRENGTH: H GED: R3 M2 L2 SVP: 5 DLU: 78

611.682-010 STEEL-SHOT-HEADER OPERATOR (ordnance)

Sets up and operates battery of machines to cold forge BB shot for air rifles from coils of steel wire: Aligns die halves that form ball on end of wire, using handtools. Turns setscrews and stop nuts to adjust and synchronize cutoff tool, ram stroke, and feeder arm. Threads wire through straightening rollers and feeding mechanism into ram head. Starts machine and observes operation to detect malfunction. Measures shot for conformance to specified tolerances, using micrometer. Sharpens and shapes cutoff tool, using *bench grinder*.

GOE: 06.02.02 STRENGTH: M GED: R3 M1 L2 SVP: 4 DLU: 77

611.682-014 AUTOMATIC CASTING-FORGING MACHINE OPERATOR (forging)

Controls and monitors operation of automatic casting-forging machine to cast, forge, and trim nonferrous molten metal into finished forgings: Starts hydraulic pumps and sets timers and heater controls. Turns automatic controls, such as shot weight and pouring speed, to set sequence of operation. Notifies forklift operator to pour molten metal into container. Pours molten metal into preform mold, using ladle, and starts manual operation for trial run. Activates automatic pouring device to fill mold, and depresses controls to initiate automatic casting and forging operations. Observes indexing mechanism that moves casting through sequence of operations, such as die press, quenching, and trimming. Observes castings and forgings for imperfections, such as discolorations and distortions. Realigns dies, castings, or forgings to correct out-of-tolerance conditions. Observes lights on control panel to detect machine malfunctions and corrects conditions causing malfunctions, such as clogged filters and sticking valves.
GOE: 06.02.10 STRENGTH: L GED: R4 M2 L3 SVP: 5 DLU: 86

611.685-010 FORGING-PRESS OPERATOR II (forging) alternate titles: press hand; press operator

Tends closed-die power press that produces metal forgings: Pulls workpiece from furnace, when color of workpiece indicates forging temperature, and positions it on lower die, using tongs. Moves controls to lower ram that compresses metal to shape of die impressions. May move workpiece through series of dies for progressively finer detail. May tend press to emboss designs on metal or compress and smooth surface of metal blanks or rough forgings and be designated Coining-Press Operator (forging). May tend press that twists forging to form journals and counterweights on crankshafts to specified degree of eccentricity and be designated Twisting-Press Operator (forging).
GOE: 06.04.02 STRENGTH: H GED: R2 M2 L2 SVP: 2 DLU: 77

611.685-014 HYDRAULIC OPERATOR (nonfer. metal) alternate titles: hydraulic-corrugating-machine operator

Tends hydraulic corrugating machine that corrugates metal tubes used in making bellows: Moves controls of machine to expand corrugating plates and position spacers between plates. Places tube in opening of plates. Pulls levers to close cradle, remove spacers, and pump water into tube forcing tube walls to conform to shape of corrugated plates.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

612 FORGING OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with shaping and conditioning metal. Includes shaping without benefit of heat by such means as machines equipped with rollers.

612.130-010 SPIKEMAKING SUPERVISOR (steel & rel.)

Supervises and coordinates activities of workers engaged in forging boat or track spikes from hot steel rods: Coordinates setting up of forge machines with set-up worker to ensure machines forge products of specified size. Installs dies and adjusts guide stops in automatic forging machines, using wrenches, hammer, and pry bar. Verifies dimensions of spikes, using gauges and rule. Observes size, shape, and color of heated spikes and adjusts dies and guide stops to ensure production of spikes to manufacturing standards. Repairs machines and conveyor system and replaces worn or broken parts, using wrenches, sledgehammer, pry bar, and chain hoist. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: M GED: R3 M2 L1 SVP: 7 DLU: 77

612.131-010 FORGE-SHOP SUPERVISOR (forging) alternate titles: blacksmith supervisor

Supervises and coordinates activities of workers engaged in heating, forging, and inspecting metal workpieces and products: Plans and coordinates sequence of operations within forge shop. Inspects dies, machines, and work in process to detect malfunctions, and orders corrective action. Trains new workers in job duties. Performs other duties as described under SUPERVISOR (any industry) Master Title. May set up machines for experimental runs. May be designated according to department as Hammer-Shop Supervisor (forging); Inspection Supervisor (forging).
GOE: 06.01.01 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 78

612.260-010 FASTENER TECHNOLOGIST (nut & bolt)

Sets up and operates variety of machines to head, trim, drill, and tap metal stock to fabricate machine tools and form metal parts and fasteners, such as screws, bolts, and nuts, according to blueprint specifications and using precision measuring devices, machinist manuals, and handtools: Reads and interprets blueprints to determine specified tolerances and sequence of operations to be used in machining metal parts. Selects and installs cutting tools in machines, using handtools. Selects cutting speeds, depth of cut, and adjusts guides, using handtools. Installs workpiece in vise, marks layout, and verifies dimensions, using precision gauges and machinist manuals. Operates machines to tool specified parts and inspects parts to ensure conformity to blueprint specifications, using gauges and applying knowledge of fractions and decimals. Sharpens cutting tools and drill bits, using bench grinders.
GOE: 06.02.02 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 86

612.261-010 INSPECTOR (forging)

Inspects forgings for conformance to specifications, following blueprints and using measuring instruments, and determines cause of defects by applying knowledge of metal characteristics and forging methods: Verifies dimensions of forgings, using measuring instruments, such as calipers, gauges, and rules. Examines forgings to detect surface defects, such as scale, laps, and cracks. Informs supervisor of defects and their probable cause. May stop production and order variations in forging methods, such as change in heating temperature, modification of ram stroke, or realignment of dies to correct defects. May read job order to determine if all specified operations, such as heat-treating, cleaning, and machining have been performed. May straighten warped forgings [STRAIGHTENING-PRESS OPERATOR (any industry) II 617.482-026]. May test hardness of forgings [HARDNESS INSPECTOR (heat treating) 504.387-010]. May inspect metal forgings for internal flaws, using ultrasonic inspection equipment. May inspect raw stock. May inspect hot forgings before completion and be designated Inspector, Hot Forgings (forging).
GOE: 06.01.05 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 78

612.360-010 DIE SETTER (forging)

Sets up forging machines, such as forging presses, coining presses, drophammers, forging rolls, and upsetters, following blueprint, work order, and data-chart specifications, and using handtools and measuring instruments, such as rules, squares, and gauges: Aligns and bolts specified dies to ram and anvil of presses and hammers. Installs impression and gripping dies and synchronizing cams on upsetting machines. Sets and bolts roll dies into self-positioning slots or dogs on roll shafts of forging rolls. Aligns and bolts positioning fixtures and stops, and turns handles or knobs to synchronize conveyor speed with forging-machining action and heating cycle of furnace. Starts machine and inspects work to verify conformance of die setup to specifications. May be designated according to machine set up as Drophammer Setter-Up (forging); Forging Press Setter-Up (forging); Upsetter Setter-Up (forging).
GOE: 06.01.02 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

612.361-010 HEAVY FORGER (forging)

Shapes heated metal stock into forgings on power hammer or press equipped with open dies, applying knowledge of forging techniques and physical properties of metal, following work order, diagrams, or specifications, and using measuring instruments and handtools: Aligns and bolts dies into ram and anvil of machine, using rule, square, gauges, and handtools. Observes color of metal in furnace to determine forging temperature and signals HEATER (forging) to pull metal from furnace. Directs LEVER TENDER (forging) to start machine and regulate action of hammer or press, and directs HEAVY-FORGER HELPER (forging) or MANIPULATOR OPERATOR (forging) to position and turn metal on anvil of machine. Verifies dimensions of forging, using rule and calipers. May forge cold metal. May be designated according to forging equipment as Hammersmith (forging); Press Smith (forging).
GOE: 06.02.02 STRENGTH: M GED: R4 M4 L3 SVP: 8 DLU: 77

612.384-010 INSPECTOR, COLD WORKING (ordnance)

Inspects dimensions of cannon barrels before and after cold-working, following specifications and using measuring instruments: Measures outside and inside diameter of barrel at specified points before and after cold working, using micrometer and star gauge. Examines gun bore for cracks and flaws, using optical device to see down gun barrel. Records inspection data and recommendations for disposition of barrel.
GOE: 06.03.01 STRENGTH: M GED: R3 M3 L3 SVP: 4 DLU: 77

612.462-010 MULTI-OPERATION-MACHINE OPERATOR (any industry)

Sets up and operates machine that automatically performs multioperations, such as roll-threading, heading (upsetting), slotting, slitting, or shearing to form chain or produce fasteners, such as bolts and rivets, from hot or cold metal rod or wire: Selects, installs, and aligns dies, rolls, cutting tools, guides, and stops to set up machine, using handtools and measuring instruments. Sets controls to synchronize machine actions for various operations on workpiece in specified sequence. Positions coil of metal wire or rod on feed spindle and threads it through straightening rolls into feed mechanism; or inserts end of heated rod into feed mechanism. Starts machine to produce sample product and measures for conformance with specifications, using measuring instruments. Adjusts settings of dies on controls, as required, to obtain product meeting specifications and quality standards. Starts machine to begin production and observes machine operations for evidence of malfunction and products for defects. May be designated according to type of product produced, as Bolt-Machine Operator (nut & bolt); Chain-Forming-Machine Operator (forging); Rivet Maker (nut & bolt). May be known according to whether metal is heated or cold forged, as Cold-Header Operator (forging); Hot-Header Operator (forging).
GOE: 06.01.03 STRENGTH: L GED: R3 M3 L2 SVP: 6 DLU: 77

612.462-014 NUT FORMER (nut & bolt)

Sets up and operates one or more automatic machines to shear, form, and punch nut blanks from hot or cold metal bar or coiled stock: Installs punching and shearing dies in machine, using wrenches, rule, hammer, and gauges. Threads end of coiled stock from feeder reel through straightening rolls and against stop in machine, or aligns bar stock between dies by hand or using tongs for hot bar stock. Starts machine and observes feeding operation, or feeds bar stock against dies. Measures nut blanks with gauges and adjusts dies to maintain specified dimensions. May regulate electric induction or gas furnace

to heat stock. May set up machine for PRODUCTION-MACHINE TENDER (nut & bolt).
GOE: 06.02.02 STRENGTH: M GED: R3 M3 L2 SVP: 5 DLU: 77

612.662-010 SPIKE-MACHINE OPERATOR (steel & rel.)
Sets up and operates machine to forge boat and track spikes from heated steel rods: Installs and adjusts forging hammer, squeezing dies, and stop guides, according to specifications, using rule and handtools. Adjusts temperature controls of furnace in which rods are heated depending on color of heated rod. Moves lever or depresses pedal to discharge malformed spikes and waste end of rod into receptacle. Grasps spike with tongs, observes shape of head, and measures spike with gauge to ensure that it conforms to specifications. Directs SPIKE-MACHINE FEEDER (steel & rel.) when setting up equipment. May replace and repair worn and broken parts of machine and conveyor system.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L1 SVP: 7 DLU: 77

612.666-010 SPIKE-MACHINE FEEDER (steel & rel.)
Feeds heated steel rods into machine that forges spikes: Signals SPIKE-MACHINE HEATER (steel & rel.) to shove end of heated rod through open end of furnace. Grasps rod with tongs and shoves it onto feed rollers of machine. Observes color of rods and notifies SPIKE-MACHINE OPERATOR (steel & rel.) if furnace temperature requires adjustment. Assists in installing dies and adjusting guide stops, using handtools.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

612.682-010 BUCKSHOT-SWAGE OPERATOR (ordnance)
Sets up and operates battery of machines to press lead slugs into buckshot for shotgun ammunition: Removes and replaces dies, punches, and die blocks, and adjusts knockout pins, feed fingers, and stops, using handtools. Fills hoppers with lead slugs from scoop or tote box. Starts machines and measures diameters of swaged shot samples, using shot gauge, and weighs them on balance scale to determine conformance to specifications. Rolls shot under dial micrometer to verify roundness. Turns bolts, setscrews, and stop nuts to adjust position of punches and dies by trial and error to produce acceptable shot.
GOE: 06.02.02 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 77

612.682-014 FORGING-ROLL OPERATOR (forging) alternate titles: roll forger; rolling-machine operator
Sets up and operates roll-forging machine to taper, shape, or reduce metal bar stock as specified by work order: Bolts two semicylindrical dies on opposing roll shafts of machine, using wrenches. Positions and bolts limit stops on machine, using rule, scale, and handtools. Pulls workpiece from furnace, when color indicates forging temperature, and places it on worktable, using tongs. Pushes workpiece into open segment of dies and depresses pedal to rotate dies that grasp workpiece in circular grooves and pull it between power-driven rolls bearing contoured dies to shape workpiece. Moves workpiece through progressively smaller grooves on dies to forge it to specified shape. Verifies dimensions, using gauge or scale. May use roll-forging machine that automatically tapers, shapes, or reduces metal bar stock and be designated Rotary-Swaging-Machine Operator (forging).
GOE: 06.02.02 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 77

612.683-010 MANIPULATOR OPERATOR (forging) alternate titles: charging manipulator
Operates manipulator to transport metal stock from furnace and position and turn it on anvil of forging press or hammer: Moves levers and pedals to guide manipulator along floor or on overhead rails to furnace. Moves levers on control box to grasp workpiece with jaws mounted on arm extending from manipulator cab, and transports workpiece to press or hammer. Moves controls of arm to turn and position workpiece on anvil as it is being shaped, following signals of HEAVY FORGER (forging).
GOE: 06.04.02 STRENGTH: L GED: R2 M2 L2 SVP: 5 DLU: 77

612.684-010 UTILITY WORKER, FORGE (forging)
Performs any combination of following tasks in forging plant: Moves workpieces from furnace to hammer anvil, using tongs or hoist. Opens and closes electrically controlled furnace doors to assist steel press crew. Positions and turns workpieces and work aids during forging by HEAVY FORGER (forging). Removes scale from anvil, using broom and airhose. Cleans work area with broom and shovel and cleans machine parts, using rag and solvent. Replaces forge crew tools in specified racks. May assist in installing dies used in forging operations. May cut material to specified size with handsaw, and smooth parts with *bench grinder* to assist BLACKSMITH (forging). May remove cracks in ingots, billets, or forgings, using swing grinder.
GOE: 05.12.10 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

612.685-010 LEVER TENDER (forging)
Tends power hammer or power press that forges metal stock: Moves levers, upon signal from HEAVY FORGER (forging), to control force and frequency of hammer blows, or ram pressure, to shape forging. May be designated according to equipment tended as Forging-Press Lever Tender (forging); Hammer Driver (forging).
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

612.685-014 SPRING TESTER I (metal prod., nec)
Tends power press that tests resiliency of spiral springs and that compresses them to specified length: Positions spring over mandrel of press table and places metal plate over end of spring. Pulls lever that forces plunger of machine against plate to compress spring. Measures compressed length of spring, using micrometers, calipers, and gauges. Releases press and measures uncompressed length of spring. Inserts metal wedge between spring coils and taps spring with mallet to adjust spring to specified length and pitch.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

612.687-010 HEAT READER (forging)
Compares glow inside forge shop furnace with color intensity chart to determine internal temperature of furnace, using pyrometer: Looks through pyrometer into furnace and compares intensity of light generated by furnance with chart depicting color at various temperatures to determine internal furnace temperature. Informs specified forging personnel of observed temperature to permit designated adjustments to furnace controls, maintenance work, and production rescheduling.
GOE: 06.03.02 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

612.687-014 HEAVY-FORGER HELPER (forging)
Assists HEAVY FORGER (forging) in shaping hot metal on power hammer or press equipped with open dies, working as member of crew: Pulls workpiece from furnace with tongs and positions and turns it on hammer anvil. Removes scale from metal and anvil during forging, using compressed air or broom. May assist in forging unheated metal. May be designated according to worker assisted as Hammersmith Helper (forging); Press-Smith Helper (forging). Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.10 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

613 SHEET AND BAR ROLLING OCCUPATIONS

This group includes occupations concerned with shaping, reducing the cross sectional area, and elongating metal pieces by passing them between smooth-surfaced or circumferentially grooved rotating rolls which exert a continuous compressive force. Includes rolling wire from billets and rods.

613.130-010 SUPERVISOR, BLOOMING MILL (steel & rel.)
Supervises and coordinates activities of workers engaged in rolling heated ingots into steel shapes, such as blooms, billets, and slabs, and in shearing shapes to specified lengths. Trains workers in setting up mill. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

613.130-014 SUPERVISOR, MERCHANT-MILL ROLLING AND FINISHING (steel & rel.) alternate titles: roller, merchant mill
Supervises and coordinates activities of workers engaged in operation of merchant mill to roll products, such as bars, flats, and skelp from billets and slabs: Reads rolling order to plan setup of roll stands. Directs workers in building and installing rolling stands and equipment on rolling line, and setting draft (space between rolls) for each roll stand. Observes operation of mill, inspects product during rolling operation, and orders adjustments in mill equipment and changes in conveyor speeds for drawing billets or slabs from furnace. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

613.130-018 SUPERVISOR, STRUCTURAL ROLLING-AND-FINISHING (steel & rel.) alternate titles: roller, structural mill
Supervises and coordinates activities of workers engaged in setting up and operating structural mills to roll slabs, billets, plates, and structural shapes, such as angles, beams, and channels from blooms or beam blanks: Reads production schedule and rolling orders to plan setup of rolls, tables, and beds required for processing product. Directs workers in dismantling and setting up roll stands and auxiliary equipment. Specifies number of passes for each product, regulation of draft, and shaping to be performed during each pass. Inspects rolled product for conformance to specifications, and orders adjustment of roll screws and changes in rolling temperature. Performs other duties as described under SUPERVISOR (any industry) Master Title. May supervise workers engaged in rolling slabs into plates and be designated Roller, Plate Mill (steel & rel.).
GOE: 06.01.01 STRENGTH: M GED: R4 M3 L4 SVP: 8 DLU: 78

613.132-010 SUPERVISOR, HOT-STRIP MILL (steel & rel.)
Supervises and coordinates activities of workers engaged in heating, rolling, coiling, loading, and shipping hot-strip coils: Reads production schedule for type of products to be rolled, and to plan rolling temperature, mill setup, and sequence of charging slabs into furnace. Inspects mill equipment, such as furnaces, run-out tables, conveyors, and pilers for malfunctions. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 78

613.360-010 ROLL-FORMING-MACHINE SET-UP MECHANIC (any industry)
Sets up machine to form longitudinal bends, beads, rolls, or embossed designs into sheet metal strips by drawing strips through one or more sets of roller dies to fabricate such items as molding trim, or weatherstrip: Bolts specified dies onto spindles. Positions spindles to align male and female dies and adjust dies and drive rolls to thickness of metal strip. May turn knobs or install gears to set speed of machine and synchronize action of cutting die or shear blade with action of machine to cut stack to specified length. Directs flow of coolant onto workpiece or fills oilcups. Turns machine over to ROLL-FORMING-MACHINE OPERATOR (any industry) 617.685-034 II.
GOE: 06.01.02 STRENGTH: M GED: R4 M3 L2 SVP: 6 DLU: 77

613.360-014 ROLL-TUBE SETTER (steel & rel.) alternate titles: roll setter; roll setter, pipe mill

Installs and adjusts rolls on sizing, forming, and welding mill to produce pipe or tube of specified outside diameter, following job specifications and using handtools: Reads mill schedule to determine size of product to be produced. Selects rolls and installs rolls on mill, using handtools. Signals OVERHEAD CRANE OPERATOR (any industry) 921.663-010 to remove previous sizing mill from rolling line and position replacement mill on line. Sets and adjusts bolts to position rolls on mill, using wrenches and bars. Sets controls to regulate speed of mill. Measures outside diameter of product to determine conformance to specifications, using calipers. Adjusts rolls on mill to obtain product of specified dimensions, using handtools. Disassembles sizing mills removed from rolling line and stores parts.
GOE: 06.01.02 STRENGTH: M GED: R3 M2 L1 SVP: 6 DLU: 77

613.360-018 TIN ROLLER, HOT MILL (steel & rel.)

Sets up and operates roughing and finishing roll train to reduce steel slabs to strips and sheets, using knowledge of rolling practices and steel properties: Calculates draft for each roll stand and plans rolling sequence from rolling schedule. Installs and adjusts equipment, such as rolls, guides, scale breakers, shears, and coilers, in mill train, using handtools. Observes steel passing through finish rolls for specified straigthness, flatness, and finish. Observes gauges to verify specified electric load and temperature. Moves controls to adjust electric load, speed of mill, and tension between rollers to equalize mill load and obtain product of specified finish and dimensions. Inspects product for defects, using x-ray gauge. Directs crew in roll changes, removal of cobbles from rolling line, and polishing rolls.
GOE: 06.01.03 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

613.361-010 GUIDE SETTER (steel & rel.)

Installs and adjusts rolls, passes, and guides on stands of rolling mill, according to job specifications, using handtools: Determines installation procedure from rolling specifications, product dimensions, and section of mill to be used for rolling product. Assembles roll stands, using hammers, wedges, wrenches, and pry bars. Installs and adjusts guides on stands to control passage of product through roll passes, using handtools. Disassembles previously installed roll stands on mill and installs and aligns new roll stands, using blocks and wedges. Sorts and stores rollers and guides from disassembled stands. Observes guides during rolling to determine if they are functioning according to specifications and adjusts guides to obtain specified performance. May assist other workers in disassembling and removing stands from rolling line. May sort and store rolls, guides, and guards removed from rolling line.
GOE: 06.01.02 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

613.362-010 HEATER I (steel & rel.)

Controls gas or oil fired soaking pit or reheating furnaces to heat sheets, blooms, billets, and slabs to specified rolling temperature: Ignites furnace burners with torch, and turns valves to regulate flow of fuel and air to burners. Signals CHARGER OPERATOR (steel & rel.) 504.665-014 to charge steel into furnace. Reads dials and gauges, observes color of steel in furnace, and adjusts controls to maintain specified temperature in furnace. May assist workers in repairing, replacing, or adjusting furnace equipment and burners, using handtools.
GOE: 06.02.10 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 78

613.362-014 ROLLER, PRIMARY MILL (steel & rel.)

Operates primary mill to roll hot steel ingots into blooms, slabs, billets, or beam blanks, following rolling orders and using knowledge of steel properties and rolling practices: Reads rolling order to determine setup, rolling sequences, number of passes required, and draft (space between rolls) for each pass. Sets clearances on guides and rolls, using wrenches and measuring instruments, and starts mill to roll sample ingot. Measures sample for conformance to dimensional specifications, using calipers, tape, and level. Moves levers to regulate draft, as shown by dial indicator, and to control movement of conveyors, water sprays, and mill tables for each pass. Signals soaking pit personnel for ingots as needed. Observes color of ingot to determine if specified rolling temperature has been attained. Gives directions to workers in duties, such as changing rolls, regulating speed of conveyors, and turning ingot, to obtain product of specified size, shape, and quality. May be designated according to type of mill operated as Roller, Billet Mill (steel & rel.); Roller, Blooming Mill (steel & rel.); Roller, Slabbing Mill (steel & rel.).
GOE: 06.02.10 STRENGTH: M GED: R4 M3 L4 SVP: 7 DLU: 78

613.362-018 ROUGHER (steel & rel.) alternate titles: buildogger

Operates roughing mill roll stands to reduce steel billets, blooms, and slabs to specified dimensions, using knowledge of rolling practices and steel properties: Reads rolling order to determine setup specifications. Installs rolling equipment, such as roll stands, guides, bar turners, and repeaters on rolling line, using handtools, bars, levers, and sledges. Moves controls to set specified draft between rolls at each stand. Observes color of heated steel to determine rolling temperature and starts roughing stands. Examines product passing through mill for surface defects, such as scratches and cracks. Verifies specified gauge of product after each pass, using calipers. Gives directions to mill crew in readjusting roll draft and realigning guides. May set up and monitor computerized roughing roll stands. May be designated according to type of mill operated as Rougher, Bar Mill (steel & rel.); Rougher, Hot-Strip Mill (steel & rel.); Rougher, Merchant Mill (steel & rel.).
GOE: 06.02.02 STRENGTH: L GED: R3 M3 L3 SVP: 7 DLU: 78

613.362-022 SPEED OPERATOR (steel & rel.)

Operates equipment from pulpit of rolling mill to start, stop, and regulate speed of rolls, rollers, conveyors, and edgers to reduce gauge of steel slabs and billets: Turns master switch and motor-breaker switches to build up voltage of mill motors. Moves levers and switches to set specified roll speeds at each roll stand and signals furnace crew to release slab or billet onto entry conveyor. Observes gauges, tachometers, and product being rolled to determine if specified roll speed, motor load, and tension on product is being maintained. Adjusts controls to regulate rolling speed, to prevent looping, warping, or stretching of product as gauge and temperature of product is reduced and roll draft is changed. Stops motors or shut down mill for repairs or roll changes. May assist other workers in making roll changes, and in repairing, replacing, or adjusting roll line equipment, using handtools.
GOE: 06.02.10 STRENGTH: L GED: R3 M3 L2 SVP: 6 DLU: 77

613.382-010 COILER OPERATOR (steel & rel.)

Operates equipment to wind steel strip into coils as strip emerges from rolling mill or continuous annealing, pickling, or tempering lines: Moves controls to synchronize coiling machine speed and action of machine guides, gates, and rolls with feed tables and conveyors. Examines strip surface for scale, weld defects, and specified oil coating. Verifies specified width and gauge of strip, using measuring tape and micrometer. Cuts strip into specified lengths, cuts defects from strip, and cuts excess metal from welds, using power shear and weld notcher. Moves controls to transfer coils onto conveyor for automatic bundling and pili g. May assist mill crew in making roll changes and in adjusting or replacing equipment on rolling line, using handtools.
GOE: 06.02.02 STRENGTH: L GED: R3 M1 L1 SVP: 6 DLU: 78

613.382-014 FINISHER (steel & rel.)

Sets up and operates roll stands in finishing mill to roll steel objects, such as strip, bars, and flats, to specified gauge, shape, and finish: Reads rolling order to determine setup specifications. Installs guides on stands, using wrenches, bars, and sledge. Grinds guides to obtain specified fit, using portable power grinder. Moves controls and observes dial indicators and gauges to set roll draft, adjust guides, and align material with mill rolls. Observes material leaving leading stand and adjusts controls to obtain specified flatness and straightness, and to eliminate defects, such as cracks and scratches. Catches steel as it leaves leaf rolls, t ng hand tongs, and feeds it into finishing stand, or starts carriage that automatically feeds steel into finish rollers. Adjusts roll draft when bell signal indicates material is being rolled off gauge. Assists crew in roll changes and removing cobbles from mill. May remove scratches and polish roll surface, using polishing stone and electric buffer. May be designated according to type of product finished as Finisher, Cold Rolling (steel & rel.); Finisher, Hot Strip (steel & rel.); Finisher, Merchant Products (steel & rel.); Finisher, Plate (steel & rel.).
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

613.382-018 SCREWDOWN OPERATOR (steel & rel.) alternate titles: finisher, screwdown

Operates electric-screwdown mechanism on rolling mill to set draft (space between rolls) for reducing slabs, ingots, or billets to specified dimensions, using knowledge of rolling practices and steel properties: Reads rolling order for dimensions, properties, and temperature of product to be rolled. Determines, from experience, number of passes and amount of reduction on each pass required to reduce product to specifications. Moves controls to set rolls for each pass, according to draft reading on dial indicator. Performs other duties, such as assisting in roll changes and repairing or adjusting mill equipment. May calibrate dial of screwdown setting with x-ray reading.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

613.462-014 FURNACE OPERATOR (nonfer. metal) alternate titles: soaking-pit operator

Operates furnace to heat aluminum slabs and fabricated forms to specified temperature for rolling or processing: Sets furnace controls to regulate temperatures and heating time. Starts conveyors and opens furnace doors to admit slabs, plate, sheet, and coil, or signals OVERHEAD CRANE OPERATOR (any industry) 921.663-010 to uncover soaking pits and lower ingots into them. Observes pyrometer and adjusts rheostat controls to maintain temperature between specified limits. Measures temperature of product to determine necessity for adjusting furnace temperature or timing cycle, using thermal instruments and charts. Removes material from furnace, using crane, or signals OVERHEAD CRANE OPERATOR (any industry) to transfer it to next station. Records time and production data.
GOE: 06.02.10 STRENGTH: L GED: R3 M3 L2 SVP: 5 DLU: 77

613.462-018 ROLLING-MILL OPERATOR (nonfer. metal)

Sets up and operates hot or cold rolling mill to reduce or form nonferrous metal into plate, sheet, foil, flatwire, and rod of specified dimensions: Adjusts rollers, buffs, and guides according to size and dimensions of workpiece, using screwdowns, micrometer, steel tape, and handtools. Turns valves and observes gauges to regulate flow, temperature, and solution of roll lubricants and metal coolants. Starts entry or rolloff tables that feed metal to and from rolls. Threads sheet or rod through rolls for further reduction, or signals ROLLING-MILL-OPERATOR HELPER (nonfer. metal) 613.685-026 to feed separate sheets or rods through rolls. Controls speed of rolling mill and roll tables to synchronize flow of metal with tandem operations, using signals or communications system. Measures width and gauge of rolled metal, using linear tape and depth gauge

and adjusts rolls to form metal to specifications. Observes rolling operation to detect curling, splitting, or buckling of metal. May change rolls on rolling machine, using chain or power hoist. May be designated according to type of mill operated as Tandem-Mill Operator (nonfer. metal); or condition of metal rolled as Cold-Mill Operator (nonfer. metal); Hot-Mill Operator (nonfer. metal).
GOE: 06.01.03 STRENGTH: L GED: R3 M2 L1 SVP: 6 DLU: 77

613.482-014 PIERCING-MACHINE OPERATOR (nonfer. metal) alternate titles: piercer operator

Sets up and operates piercing machine to shape metal tubes from billets or enlarge inside diameter of shells according to job order or blueprints: Selects, positions, and adjusts piercing rolls, which rotate and shape outside of tube, using hoists, wrenches, measuring instruments, and knowledge of metal properties. Attaches specified piercing point to arbor to form and control size of internal diameter of tube. Adjusts feed guides, stops, tailstock, and arbor rings according to size of workpiece, using handtools. Moves levers to control movement of heated billet as it advances through rolls and over piercing point. Measures finished workpiece to verify conformance to specifications, using calipers, fixed gauges, and micrometers. May be specified by employer according to experience with particular material worked or machine operated.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

613.662-010 ROLLING ATTENDANT (steel & rel.)

Controls equipment from central console to operate rolling mill which reduces steel into products of specified size, shape, and gauge: Selects prepunched schedule cards for section to be rolled according to specifications and feeds into card reader. Activates card reader memory bank (push-button) which reads and interprets schedule card information and stores data in storage unit for response to electronic signal in rolling cycle. Sets selector switches of console for automatic operation of electronic equipment, roll stands, and auxiliary equipment. Moves console controls to advance steel from approach table to mill entry table and through complete rolling cycle automatically, to reduce steel products to specified shape, size, and gauge. Observes, from control pulpit, rolling irregularities in ingot, such as pipe, split end, or heat loss, and notifies other worker through intercom system to shear defective parts. Observes rolling operations, dial and colored light indicators, and other gauges, and manipulates control levers and switches to adjust roll draft, alignment, or mill speed to correct rolling and tolerance deviations or drift. Stops automated mill and chages to manual control operations on breakdown or failure of electronic or mill equipment. Assists mill crew in setup, roll change, maintenance, and adjustment of mill and auxiliary equipment during manual operation of rolling mill. May make adjustments or minor repairs to electronic control equipment or devices. May move electrical control levers in pulpit to operate mill tables, scale breakers, and broadsiding mill screwdown when mill operates under manual control.
GOE: 06.01.03 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

613.662-014 ROUGHER OPERATOR (steel & rel.)

Operates roughing mill stands under direction of ROUGHER (steel & rel.) to reduce steel billets, blooms, or slabs to specified dimensions: Starts roughing rolls and auxiliary equipment, such as conveyor tables, scalebreaker, and water sprays. Signals CHARGER OPERATOR (steel & rel.) to discharge metal object from furnace preparatory to rolling. Moves controls to position metal on conveyor and guide it into rolls. Adjusts controls to regulate scalebreaker and water sprays that remove scale from metal. Installs guides in roughing stands and removes cobbles from rolling line. May assist other workers to change rolls, drag scrap, and pull spanners when mill is down.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

613.662-018 COLD-MILL OPERATOR (steel & rel.)

Sets up and operates rolling mill to flatten, temper, and reduce gauge of steel strip, following rolling orders and using measuring instruments: Reads rolling order to determine setup and work sequence. Calculates draft (space between rolls) and roll speed for each mill stand to roll strip to specified dimensions and temper. Turns controls to adjust roll speed, draft, and tension of strip between reels of coiling mechanism. Installs guides, guards, and cooling equipment in stands, using handtools. Starts mill to roll test strip and adjusts roll screws, hydraulic sprays, and mill speeds. Moves controls to start production rolling of steel strip. Examines steel for surface defects, such as cracks and scratches. Verifies dimensions of steel for conformance to specifications, using micrometers, thickness gauges, and measuring tape. Directs other workers in changing rolls, operating mill equipment, removing coils, and banding and loading strip steel. May be designated according to type of mill operated as Reversing-Mill Roller (steel & rel.); Tandem-Mill Roller (steel & rel.). May operate mill to temper steel strip and be designated Temper-Mill Roller (steel & rel.).
GOE: 06.02.10 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 78

613.662-022 STRAIGHTENING-ROLL OPERATOR (any industry) alternate titles: straightening-machine operator

Operates rolling machine to straighten warped or bent metal plates, bars, or sheets: Threads workpiece between rolls of machine manually or with crane. Turns handwheels or nuts to adjust tension between one or more sets of aligned drive and adjustment rolls. Pulls lever to move workpiece through rolls of machine. Hammers or pries workpiece into alignment, using hammer or pry bar. Examines work for straightness, using straightedge and plumb bob. Inserts shims under bulges and repeats process to straighten workpiece to specifications. May be designated by product straightened as Bar-Straightening-Machine Operator (any industry); Plate Roller (any industry); Wire-Straightening-Machine Operator (any industry).
GOE: 06.02.02 STRENGTH: M GED: R3 M1 L1 SVP: 4 DLU: 78

613.667-010 LINER ASSEMBLER (nonfer. metal)

Attaches metal liners to scalped ingots preparatory to rolling into clad sheet or plate: Positions ingot on cladding conveyor, using hoist. Cleans scalped ingot with solvent and rags. Selects specified liners from stack and straps them to both sides of ingot, using wire and banding machine. Tack-welds liners to ingot, using electric or gas welding equipment. Cuts wire straps with wirecutter and signals OVERHEAD CRANE OPERATOR (any industry) 921.663-010 to remove lined ingot. May interlay clad ingots with wood spacers.
GOE: 06.04.31 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

613.667-014 MILL HAND, PLATE MILL (steel & rel.)

Verifies width of first plate rolled on roughing mill, using width gauge: Sets gauge for specified width. Places gauge on first plate rolled to determine conformance to specifications and signals mill operator to continue rolling process. Moves steam-jet controls and throws salt on plates to loosen scale during rolling operation. Removes scale from plates and work area with scraper and shovel.
GOE: 06.04.10 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

613.682-010 MANIPULATOR (steel & rel.)

Operates manipulator and entry guide mechanism from pulpit of rolling mill to position ingots or blooms for entry into rolls of mill: Moves levers to transfer ingot from entrance table onto entrance conveyor, and to align side guards that guide ingot into rolls. Pushes controls that cause fingers of manipulator to turn ingot after each pass. Assists rolling mill crew in roll changes and repairs, using handtools.
GOE: 06.02.10 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 78

613.682-014 REELING-MACHINE OPERATOR (steel & rel.) alternate titles: reeler operator

Sets up and operates reeling machine to round out and burnish inside and outside surfaces of seamless steel tubes: Sets distance betweeen rolls according to size of pipe shell and positions mandrel support bar between rolls. Installs specified plug on mandrel. Moves controls to push tube along conveyor, through stationary guides, and into rotating rolls that force tube over mandrel. Turns handwheel to maintain roll pressure on pipe shell to smooth surfaces and round out tube to specified diameter.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L1 SVP: 5 DLU: 77

613.682-018 ROLLER (jewelry-silver.)

Operates rolling machine to roll ingots into metal strips for use in stamping out jewelry blanks: Positions ingot between pressure rollers. Turns handwheel and observes calibrated scale indicator to set distance between rollers. Moves lever to start machine, and readjusts pressure rollers as needed to reduce ingots to strips of specified thickness. Verifies thickness of strips, using micrometer. May anneal ingot to soften for further rolling.
GOE: 06.02.02 STRENGTH: L GED: R3 M3 L2 SVP: 4 DLU: 77

613.682-022 STRIP ROLLER (metal prod., nec) alternate titles: finish roller

Sets up and operates rolling mill to reduce dimensions of cold strip metal preparatory to processing metal into springs: Clamps roll of strip metal on reel stand and threads end of strip through series of machine guides and pressure rolls. Turns screws to adjust pressure of rollers or presses buttons to regulate reduction of strip to specified gauge. Starts machine, and moves lever to control rate of feed and tension of strip through mill. Stops machine and measures thickness of strip, using micrometer or by observing automatic gauge indicator. Resets roll pressure to reduce strip to specified thickness. May reshape and reduce steel wire.
GOE: 06.02.02 STRENGTH: M GED: R3 M3 L2 SVP: 4 DLU: 77

613.682-026 TABLE OPERATOR (nonfer. metal; steel & rel.)

Operates traveling and stationary tables to feed heated or cold steel or nonferrous blooms, billets, and slabs to rolls for successive passes through roll stands: Moves levers to position tilting and trailing tables in front or rear of roll stand and align steel with roll guides preparatory to feeding steel into rolls. Starts table rollers that feed steel into rolls for specified number of passes. Aids other workers in making roll changes and adjusting equipment. May be designated according to type of table operated as Approach-Table Operator (nonfer. metal; steel & rel.); Delivery-Table Operator (nonfer. metal; steel & rel.); Tilting-Table Operator (steel & rel.); Transfer-Table Operator (steel & rel.).
GOE: 06.04.02 STRENGTH: L GED: R3 M2 L1 SVP: 5 DLU: 78

613.682-030 MILL OPERATOR, ROLLS (any industry)

Sets up and operates rolling mill to form sheet metal sections of various types, gauges, and lengths from coils of sheet steel according to blueprints or other specifications: Verifies gauge and size of raw material against specifications, using tape measure and gauge. Positions and secures stock-coil on payout mandrel and adjusts cone-brake, using handtools. Spaces and adjusts mill rolls and fits shims on shafts according to specifications, using gauges, rules, and handtools. Sets trigger mechanism which actuates cut-off die to specified length by setting and tightening setscrews. Feeds end of coil onto guide table and actuates shear to square end of coil. Actuates controls on panel to thread lead end of coil through mill. Inspects first piece for variation from rolling or

length specifications and makes necessary adjustments to mill. Starts mill for automatic operation and controls speed from control panel. Adjusts valves to control flow of coolant on metal and observes operation of lubrication system. Patrols mill to detect jamming. Inspects raw material or finished product visually or by measurement for variation from specified quality standards. Records mill production on schedule sheet. May train new mill operators.
GOE: 06.02.02 STRENGTH: M GED: R3 M3 L2 SVP: 4 DLU: 78

613.685-010 COILER (nonfer. metal; steel & rel.) alternate titles: coiler operator; slitting-machine coiler

Tends coiler that winds metal strips, sheets, or wire into coils as they emerge from rolling mills, slitters, or other machines: Adjusts coiler guides and rollers according to size of workpiece, using handtools. Starts machine which automatically winds metal onto reels and observes operation to prevent jams, uneven winding, or wrinkles. Regulates tension of coiler to prevent tearing or stretching of metal. Inspects surface of metal for stains, dirt, scratches, and other defects. Binds finished coils to prevent uncoiling. May move controls to activate hydraulic pusher arm and tilt table to transfer coil onto skid or conveyor. May be designated by employer according to experience with particular type of machine, or product coiled.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 78

613.685-014 HEATER HELPER (steel & rel.)

Assists HEATER (steel & rel.) I 613.362-010 in heating steel to specified rolling temperature in soaking-pit furnaces: Ignites furnace burners, using torch. Turns valves and dampers of furnace. Records meter readings of furnace. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.10 STRENGTH: M GED: R2 M2 L2 SVP: 4 DLU: 78

613.685-018 PIERCING-MILL OPERATOR (steel & rel.)

Tends equipment that pierces steel billets lengthwise preparatory to making seamless tubing: Moves levers to drop hot billet from conveyor into trough and ram it along trough into rollers which force center of billet into piercing mandrel. Moves controls to withdraw piercing mandrel from billet and drop billet on conveyor for further processing.
GOE: 06.04.02 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 77

613.685-022 ROLLER-LEVELER OPERATOR (steel & rel.)

Tends machine that removes wrinkles and creases from tinplate or blackplate: Starts machine and feeds sheets of tinplate into rolls. Examines plates for flatness and adjusts rollers as required, using handtools. Cleans equipment and work area.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

613.685-026 ROLLING-MILL-OPERATOR HELPER (nonfer. metal)

Performs following duties in rolling nonferrous metal ingots and bars into plates, sheets, rods, and coils: Guides or turns metal rods or ingots on conveyors or tables to, from, and through rolls of rod rolling machines, using tongs or automatic handling devices. Feeds sheets or plates into carriage or table of rolling machines. Cuts jagged edges from sheet, using hand or machine shears and flattens leading edge of sheet with mallet or machine flattener. Tends equipment to return metal to entry side of mill for rerolling, to feed or off bear coils of metal, to hoist coil on machine spindle, pierce coil to raise end of coil and extend it into rollers of mill, and to remove rolled coil from machine. Clears cobbles (jams), using pry bar, and adjusts guides, using handtools. Observes rolled metal for defects, such as tears and cracks. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 06.04.10 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 78

613.685-030 TUBING-MACHINE OPERATOR (nonfer. metal; steel & rel.)

Tends machine that rolls metal ribbon into coils and solders seams of coils to form conduit tubing: Mounts reel of brass, copper, or steel ribbon and reel of soldering wire on machine. Feeds metal ribbon and soldering wire into machine. Starts machine that pulls metal ribbon through series of dies to form coil, joins flanged edges of coil, and solders seams of tubing. Removes empty reels from machine.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

613.685-034 BED OPERATOR (steel & rel.) alternate titles: hotbed operator; hotbed transfer operator

Tends equipment that transfers rolled steel shapes, such as blooms, billets, rails, and pipe from processing lines to cooling beds: Presses controls to raise roll stop, start conveyor, and position material opposite specified cooling bed. Pulls levers to start pusher straightedge and dog-chain (series of projections) that shoves material off conveyor line onto cooling bed. Moves controls of dog-chain to pull cooled material from bed onto cradle or transfer car. Records number and type of object cooled. May assist other workers in making roll and hot saw blade changes and in repairing, replacing, or adjusting mill equipment.
GOE: 06.02.10 STRENGTH: L GED: R3 M2 L1 SVP: 4 DLU: 78

613.686-010 CATCHER (steel & rel.) alternate titles: strander

Guides hot steel shapes, such as bars, rods, and sheets, from one set of rolls to another: Catches end of hot steel with tongs as it comes through first set of rolls and feeds end into next set of rolls. May set and adjust repeaters, guides, and rollers, using handtools.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

613.687-010 PLUGGER (steel & rel.) alternate titles: rolling-mill plugger

Replaces plugs used to form inside diameter of seamless tubing in rolling mill machines: Screws specified plug on end of rolling-mill mandrel with tongs or positions plug in trough of rolling mill, using hoist, preparatory to forming tube. Removes hot plug with tongs or hoist after tube has been rolled. Immerses hot plug in bosh tank for cooling. Moves controls to charge and discharge pipe shells from reheating furnace.
GOE: 06.04.02 STRENGTH: M GED: R2 M2 L2 SVP: 2 DLU: 77

614 EXTRUDING AND DRAWING OCCUPATIONS

This group includes occupations concerned with producing rods, tubes, and various solid and hollow sections by forcing hot metal through a die by such means as rams.

614.132-010 SUPERVISOR, DRAWING (nonfer. metal; steel & rel.)

Supervises and coordinates activities of workers engaged in drawing wire, rods, and tubes from metal stock, applying knowledge of drawing machines and properties of metal: Examines and verifies dimensions of product to determine if specifications are adhered to during production, using gauges or micrometer. Instructs new workers in machine operations. Performs duties as described under SUPERVISOR (any industry) Master Title. May direct workers in straightening and cutoff processes. May set up or assist workers in setting up machines. May be designated according to product drawn as Rod-Drawing Supervisor (nonfer. metal; steel & rel.); Tube-Drawing Supervisor (nonfer. metal; steel & rel.); Wire-Drawing Supervisor (nonfer. metal; steel & rel.).
GOE: 06.04.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

614.132-014 SUPERVISOR, EXTRUSION (forging) alternate titles: extrusion press supervisor; metal extrusion supervisor

Supervises and coordinates activities of workers engaged in forming nonferrous metal from billets in extrusion presses, applying knowledge of extrusion press operation and properties of metals under heat and pressure. Directs installation of specified dies and other tooling in extrusion presses. Examines sampling of products for adherence to specifications. Trains new workers. Performs duties as described under SUPERVISOR (any industry) Master Title. May set up presses for workers. May be required to have experience with specified products, type of press, or materials, such as radioactive uranium.
GOE: 06.02.02 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

614.380-010 EXTRUSION-PRESS ADJUSTER (elec. equip.)

Sets up extrusion press to extrude carbon rods or welding rods and coat core (wire) with metallic paste: Selects coating (extruding) nozzles, spacers, and wire guides, according to diameter and length of rod. Positions, aligns, and bolts abrasive brush, coating nozzles, spacers, marking wheels, and wire guides to machine, using handtools to set up machine to form rods of specified size and length. Pulls lever or presses button to set conveyor speed and extruding pressure. Starts machine that automatically coats wire to form rod of specified diameter and cuts it to specified length. Examines sample piece for splits in coating or burrs on cut ends. Measures diameter of rod and concentricity of coating with fixed gauges. Turns screws to adjust wire guides, spacers, and brushes to eliminate splits and burrs. Varies extrusion pressure or speed of conveyor, or repositions coating nozzle to vary diameter of rod and maintain concentricity of coating around wire.
GOE: 06.01.02 STRENGTH: M GED: R3 M3 L2 SVP: 5 DLU: 77

614.382-010 WIRE DRAWER (nonfer. metal) alternate titles: wire-draw operator

Sets up and operates one or more wiredrawing machines to draw round or fancy-shaped wire or rod through one or series of dies to reduce its cross-sectional dimension, applying knowledge of working properties of metal and wiredrawing: Studies specifications and determines setup procedures. Positions and secures specified dies in dieholders, using handtools. Lifts coil of wire onto feed reel, tapers end, and threads it through dies. Secures end of wire in jaws of drawing block or onto spool which rotates and pulls wire through dies. Coats wire with lubricant to facilitate drawing and starts machine. Inspects and measures drawn wire to verify conformance to specified shape, size, or electrical resistance, using measuring instruments, such as wire gauges, micrometers, and resistance testers. Cuts defective sections from wire, using wire cutters. Replaces worn dies, using handtools. Records production. May feed wire through electrodes of annealing unit to soften work-hardened wire. May weld ends of separate coils together to increase their length, using welding equipment. May be designated according to experience with particular size and shape of wire drawn or material worked on as Coarse-Wire Drawer (nonfer. metal); Fine-Wire Drawer (nonfer. metal). Important variations may also be indicated by trade name of machine used.
GOE: 06.02.02 STRENGTH: H GED: R3 M2 L1 SVP: 4 DLU: 77

614.382-014 WIRE DRAWER (clock & watch)

Operates wire drawing machine to reduce watch spring wire from round to rectangular cross section and improve its physical properties: Reads job instruction which specifies size, number of passes, and amount of reduction on each pass of wire through series of wire drawing dies. Sets adjustable (flat) die for first pass by turning setscrews on which divisions are shown. Threads wire from feeding roll through adjustable die and round die (ring-shaped to control wire width) and attaches end to winding roll. Starts machine and observes operation to ascertain if drawing is proceeding as specified and makes adjustments to obtain required wire tension, using handtools. Stops machine when all wire has passed through dies. Switches wound roll to feeding position and bare roll to winding position, adjusts die for next pass, and repeats until wire is drawn

to size specified. Records production. May examine wire for defects, such as scratches or cracks, using eye loupe.
GOE: 06.02.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

614.382-018 WIRE DRAWING MACHINE OPERATOR (inst. & app.; jewelry-silver.)
Operates wire drawing machine to shape or emboss wire used in dental work and costume jewelry: Reviews work orders and selects shaping, reducing, or embossing roller dies according to specifications. Positions roller die in machine that shapes, reduces, or embosses wire, such as gold, silver, or copper, to form dental or jewelry wire. Turns setscrews to secure roller die in machine. Inserts wire into machine feed mechanism, starts machine, and monitors machine operation. Measures wire thickness to verify conformance to specifications, using micrometer. Installs progressively smaller dies in machine and repeats operation until wire diameter meets specifications. May measure physical properties of wire, such as tensile strength and bend set, and calculate elongation data, using test instruments and calculator. May record production information, manually or using computer.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 90

614.482-010 DRAW-BENCH OPERATOR (nonfer. metal; steel & rel.)
Operates drawbench to draw metal rods into specified shape and diameter: Positions and secures specified die in diehead, using handtools. Moves levers to set drawing speed according to type and size of material drawn. Inserts pointed end of rod through die and into holding jaws on dolly. Moves control to pull rod through die. Examines surface of finished workpiece for defects, such as pits and scratches. Measures rod to verify conformance to specifications, using template and rule. Replaces worn dies when rod varies from specifications, using handtools. May coat workpiece with lubricant, or engage automatic lubricating mechanism to facilitate drawing. May actuate shearing mechanism to cut rods to specified length. May be specified by employer according to experience with particular type or trade name of machine, or by type of material drawn.
GOE: 06.02.02 STRENGTH: H GED: R3 M1 L2 SVP: 4 DLU: 77

614.482-014 EXTRUDER OPERATOR (forging) alternate titles: extrusion-press operator
Sets up and operates extrusion press to shape hot billets into products, such as bars, tubing, structural shapes, and rods: Installs dies, mandrels, containers, heating coils, press tools, extrusion heads, and run-out bridging in press, according to size and type of product, using handtools. Removes billet from furnace when color indicates specified temperature and guides it along extrusion press conveyor onto press bed, and into billet container, using tongs. Starts ram that spreads billet into container and forces it through press. Regulates rate of extrusion to prevent metal rupture and adherence of metal to container walls. Starts press run-out table and butt shears to guide extrusion from press, and to trim flash. Pulls extrusion along conveyor to racking table. Sprays die with lubricant and caustic, and oils blocks and mandrels. Records data, such as crew time, number of billets used, and items processed. May operate extrusion press equipped with furnace that ejects hot billets into press chamber for ram to force through die. May set up and operate extrusion press to shape hot, radioactive uranium fuel elements.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

614.482-018 EXTRUSION-PRESS OPERATOR I (elec. equip.)
Sets up and operates extrusion press and equipment to extrude and apply flux to wire and to brake, mark, and cut coated wire to form welding rods: Selects, positions, aligns, and bolts specified coating (extruding) nozzle, spacers, wire guides, abrasive brushes, cutters, and marking wheels, to machine, using handtools. Places slugs of compressed flux into feeding chamber on welding rod extrusion head. Places boxes of specified wire core on tilter and pulls lever to dump wire into feeder. Starts machine and observes movement of wire through machine to detect malfunctions. Examines completed welding rods for cracks, voids, scores, or scuffs, and measures rods with fixed gauges to determine diameter and concentricity of flux coating. Presses buttons to alter pressure of ram in feed action or speed wire feeder and turns screws to adjust coating nozzle or to position wire guides, spacers, and brushes to eliminate splits, scores, and burs. May adjust controls to maintain specified temperature in ovens. May assist in repair of machine and equipment. May sort rods according to length.
GOE: 06.02.18 STRENGTH: L GED: R3 M3 L2 SVP: 5 DLU: 77

614.586-010 WIRE CHARGER (elec. equip.)
Feeds wire and slugs of fluxing material into extrusion press that coats welding electrodes: Selects wire cores of specified size, places box of cores on tilter, and pulls lever to dump cores in wire feeder hopper, or selects spool of specified size wire and places spool on mandrel for threading through extrusion machine. Removes crustations or trims slugs (compressed flux) to size of extrusion machine cylinder, using knife. Places slugs into feeding chamber of machine. Assists other workers to clear machine of jammed rods. Records production data.
GOE: 06.04.21 STRENGTH: H GED: R2 M2 L2 SVP: 2 DLU: 77

614.682-010 DRAW-BENCH OPERATOR (any industry)
Operates extrusion machine to form flat metal strips into tubular, channel, angular, or other shapes. Positions and bolts or clamps single or multiple dies on bed of press, using handtools. Loads coil of strip metal on spindle of machine. Feeds strip between dies, and locks front end of strip in gripping jaws or dog of power carriage. Turns handwheels to close and tighten dies on metal strip and starts machine. Stops machine after metal is formed and removes piece from between dies. Cuts formed piece into specified lengths, using electric saw, and verifies conformity of piece to specifications, using micrometers and calipers. Clears dies of loose burrs with blast of compressed air. May straighten sheet metal parts.
GOE: 06.02.02 STRENGTH: M GED: R4 M3 L3 SVP: 5 DLU: 77

614.684-010 BILLET ASSEMBLER (chemical)
Assembles uranium fuel elements for subsequent extrusion in atomic fuel plant: Reads production schedule to ascertain number and size of uranium fuel elements to be assembled and percentage of uranium to be used in each fuel element. Places components, such as copper and zirconium sleeves, uranium billets, and end plates in basket, and immerses filled basket in chemical and rinsing solutions to clean grease, dirt, scale, and other foreign matter from components, using crane. Transfers baskets of components to drier, using crane, and starts blower unit that circulates air to remove moisture from components. Conveys components to assembly table, using crane. Positions components together in specified relationship to form fuel element subassembly. Secures subassembly on rotating base of welding equipment, and welds sections to seal assembly, using argon-gas welding equipment. Connects sealed fuel element valve to pump and activates pump to create vacuum in fuel element to prevent oxidation of element during extrusion process. Connects fuel element to helium leak detector and observes dial readings to detect deviations from standards for each element. Rewelds and retests defective fuel elements.
GOE: 06.02.22 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

614.684-014 TESTER OPERATOR (nonfer. metal) alternate titles: breaker operator; nicker and breaker
Breaks extruded tubes and rods by one or more of following methods and inspects exposed surface for defects, such as bubbles beneath skin of metal resulting from too rapid extrusion: (1) Nicks workpiece, using file or saw, and breaks workpiece at nick by bending back and forth. (2) Saws off piece of tube and holds on table under cone-shaped expander of hydraulic breaker. Starts mechanism to raise table, forcing tube over expander to split sides of tube. (3) Loads coiled rod onto coil tester and pulls end of rod to straighten it. Places end of rod in channel of tester and starts mechanism oscillating to fracture rod. (4) Places rod in machine and actuates wedge to partially cut rod. Twists and bends rod to break off test piece. Examines ends or interior of rods and tubes for bubbles and cuts off defective sections, using circular saw or automatic shears. Gathers and sorts scrap materials according to type of metal. Positions rods and tubes on table of circular saw or shearing machine and cuts them to length. Important variables may be indicated by trade names of machines used or workpiece tested.
GOE: 06.03.02 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 77

614.685-010 EXTRUDING-PRESS OPERATOR (ordnance)
Tends machine that presses lead ingots or billets through extrusion die to form slugs or lead wire for processing into bullets or cores used in jacketed bullets: Swabs mouth of press with grease and positions ingot or billet beneath ram. Starts motor and presses lever to lower ram that forces lead through die and between wheels that cut lead wire into slugs or wraps extruded wire on spool. Removes catch box when full of slugs or filled spool. May verify weight of slug on scales to ascertain that production specifications are maintained.
GOE: 06.04.02 STRENGTH: H GED: R2 M2 L2 SVP: 4 DLU: 77

614.685-014 EXTRUSION-PRESS OPERATOR II (elec. equip.)
Tends machine that coats wire with flux and marks and cuts wire into specified lengths to produce welding electrodes: Starts machine and observes as cores are automatically conveyed through wire feeder, coating nozzle in extrusion head, and past abrasive brushes, cutters, and marking wheels. Examines welding rods for cracks, voids, scores, or scuffs. Presses buttons to alter pressure of ram in feeding cylinder or speed of wire feeder to correct defects in formation of rods. May measure welding rods with fixed gauge and turn screws to adjust coating nozzle to obtain specified diameter and concentricity of rod. May adjust abrasive brushes that remove flux from ends and center of coated rod at cutting point. May adjust controls to maintain specified temperature when extruding carbon rods.
GOE: 06.04.21 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 77

614.685-018 REDUCING-MACHINE OPERATOR (optical goods)
Tends machine that reduces diameter of temple wire (used in eye glass frames) and temple soldered joints. Inserts wire between dies mounted in chuck. Starts machine that hammers wire in dies to uniform size as chuck revolves.
GOE: 06.04.02 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

614.685-022 TUBE DRAWER (nonfer. metal; steel & rel.) alternate titles: draw-bench operator; seamless-tube drawer
Tends tube drawing machine that shapes and forms metal tubing of specified internal and external diameters: Positions and fastens specified drawing die in diehead and plug die on plug rod, using handtools. Centers plug die in opening of drawing die. Loads tube over plug rod manually, or activates automatic loading mechanism. Places tapered end of tube in contact with dies of machine that automatically pulls tube through dies. Examines finished tubing for defects, such as scratches, pits, and cracks, and measures cross-sectional dimensions with fixed gauges and micrometers to verify conformance to specifications. May taper end of tubing [LATHE TENDER (machine shop) 604.685-026]. May operate controls to start machine carriage that grips and pulls tubing through

die. May be required to have experience with particular metal, or type and trade name of machine.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

614.685-026 WIRE-DRAWING-MACHINE TENDER (nonfer. metal)
Tends machines that weld ends of wire together to form continuous coil and draw wire through dies to reduce wire to specified diameter: Lifts reels of wire onto spindle of floor stand, manually, or using hoist. Welds ends of wire together, using welding machine. Smooths weld to diameter of wire, using abrasive cloth. Threads wire around tension rollers, and through reducing dies, and fastens end of wire to spindle. Starts machine that draws wire through dies and around takeup reel. May verify diameter of drawn wire, using micrometer. May record production.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

614.686-010 DRAW-BENCH-OPERATOR HELPER (nonfer. metal; steel & rel.) alternate titles: push-bench-operator helper; tube-draw helper
Assists DRAW-BENCH OPERATOR (nonfer. metal; steel & rel.) in drawing metal tubes or rods by performing various duties according to set procedure: Lifts die and plug onto machine. Rolls or lifts workpieces onto machine table manually or using hoist. Swabs or brushes lubricant on workpiece to facilitate drawing. Piles drawn workpieces according to specified procedure, and attaches tubes to crane, using straps and hooks. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 06.04.40 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

614.686-014 TESTER-OPERATOR HELPER (nonfer. metal)
Assists TESTER OPERATOR (nonfer. metal) in cutting and breaking ends of rods and tubes to expose cross-sectional surface for inspection: Feeds end of workpiece into cutting mechanism, manually or with hoist. Piles workpieces in designated areas. Salvages scrap materials and examines surface of workpiece for defects, such as pits and scratches, and bubbles beneath surface of workpiece. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 06.04.02 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

615 PUNCHING AND SHEARING OCCUPATIONS

This group includes occupations concerned with perforating (punching) metal by means of dies and punches; and cutting or shearing metal by the action of keen-edged cutting tools. Punching and shearing of nonmetallic materials, except wood, are also included when the methods and machine tools commonly applied to the working of metal are used.

615.130-010 PRESS-HAND SUPERVISOR (jewelry-silver.) alternate titles: power-press supervisor; tool setter
Supervises and coordinates activities of workers engaged in shaping and cutting rings, ring blanks, and jewelry findings, utilizing knowledge of power-press setup and product specifications. Sets up tools and machines. Examines fabricated articles for defects. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.02 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

615.130-014 SUPERVISOR (cutlery-hrdwr.)
Supervises and coordinates activities of workers engaged in manufacturing tools, such as chisels, screwdrivers, planes, levels, miter boxes, bit braces, and garden shears: Sets up and adjusts machines, such as punch press, riveting machine, lathe, grinders, milling machines, and welding machines based on knowledge of machine capacities and properties of materials, such as metal, wood, plastic, and glass. Verifies dimensions of parts, using micrometers, vernier calipers, height gauges, thread gauges, depth gauges, and fixed gauges. Adjusts machines when parts fail to meet specifications. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 77

615.132-010 SUPERVISOR, SHEARING (any industry)
Supervises and coordinates activities of workers engaged in cutting, punching, shearing, and slitting metal sheets or metal strips: Plans and coordinates sequence of operations. Directs workers in machine setup. Observes workers and machines to detect errors or malfunctions and orders corrective actions. Examines sample products for adherence to specifications. Trains new workers. Performs duties as described under SUPERVISOR (any industry) Master Title. May verify weight and quantity of items produced.
GOE: 06.01.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

615.280-010 SLITTER SERVICE AND SETTER (tinware)
Sets up and repairs machines that automatically cut tinplate sheets into specified size: Installs and aligns disc cutters on machine spindle, following blueprints or work orders and using handtools. Tests and adjusts feed mechanism and synchronizes feeder with machine cutting speed, using gauge and handtools. Diagnoses cause of machine malfunction and dismantles machine to gain access to and remove defective parts, using handtools and power tools. Examines parts for defects, such as excessive wear, cracks, and broken gears. Repairs or replaces defective parts, adjusts, and aligns parts to specified tolerances, using gauges, handtools, and power tools. Starts machine to test performance and examines first run products to ensure they conform to specifications. Removes jammed metal, using tongs and probes. Lubricates and cleans machine.
GOE: 06.01.02 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

615.380-010 SHEAR SETTER (any industry)
Sets up power shear to cut metal sheet, plate, or bar stock according to work card or blueprint specifications: Lays out cutting lines on metal stock according to work order, using ruler and square, to obtain maximum number of pieces from stock. Sets stops, guides, rake (angle) and pressure of blade on machine, using wrenches, rule, built-in gauge, or template. Measures dimensions of first piece for conformance to specifications, using rule and square, or has piece approved by inspector. Turns machine over to SHEAR OPERATOR (any industry) II. May install fixtures to shear, trim, or bevel workpiece.
GOE: 06.01.02 STRENGTH: M GED: R4 M3 L4 SVP: 6 DLU: 77

615.382-010 PUNCH-PRESS OPERATOR I (any industry)
Sets up and operates power press to trim, punch, shape, notch, draw, or crimp metal, composite, or plastic stock: Assembles, installs, and aligns dies in press according to specifications, using feelers, shims, templates, bolts, clamps, and wrenches. Adjusts ram stroke to specified length. Positions workpiece against fixtures or stops on machine bed or on die. Starts press and observes operation to detect misalignment or malfunction. Inspects workpieces for conformance to specifications, visually or using gauges or templates, and adjusts machine to correct errors. May clean and lubricate machines. May be designated according to type of machine as Multiple-Punch-Press Operator (any industry) I; or by function of machine as Draw-Press Operator (any industry); Forming-Press Operator (any industry) I; Straightening-Press Operator (any industry) I; Stretching-Press Operator (any industry).
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 88

615.482-010 ANGLE SHEAR OPERATOR (any industry)
Sets up and operates shearing machine equipped with sets of cutting dies or blades to shear structural shapes, such as angles, channels, and Z-bars to specified length or bevel: Aligns and locks selected blades into opening of machine, using rule, gauge, shims, feelers, and wrench. Sets guide stop to specified distance from shearing die, using tape measure and wrench. Positions workpiece on shearing die and against guide stop. Starts machine to activate cams which force blades to shear metal, or depresses pedal, causing shearing die ram to descend and cut workpiece to specified length. May set up shear with single set of blades to cut bars or rounds.
GOE: 06.02.02 STRENGTH: H GED: R3 M2 L2 SVP: 3 DLU: 77

615.482-014 DUPLICATOR-PUNCH OPERATOR (any industry)
Sets up and operates duplicator punch which follows tracer track on template and punches, blanks, and notches metal plates, sheets, and structural shapes: Positions and clamps track template onto template table of machine. Inserts, aligns, and locks specified punches and dies in ram and bed of machine, using hammer, shims, feelers, micrometers, and setscrews. Places workpiece on carriage of machine manually or by using jib or crane. Aligns workpiece to scale on machine and clamps it to carriage. Sets end and side stops to position successive pieces. Positions tracer arm onto track templates and turns handwheels to move carriage along track to punching stations. Pulls lever to activate punch. Positions punch or die over layout marks on jobs for which no template has been made. Inspects work to verify location of holes, using scale, compass, and plug gauges.
GOE: 06.02.02 STRENGTH: H GED: R4 M3 L3 SVP: 5 DLU: 77

615.482-018 IRONWORKER-MACHINE OPERATOR (any industry)
Sets up and operates machine equipped with separate sections that cut-to-length, punch, and notch or trim structural shapes and plates: Positions specified punch and die set and turns pressure screws to lock them into ram and bed of machine to set up punching section. Positions specified cutting blades into cutting slot, and notching dies or shear blades into ram and bed of machine, and turns pressure or clamp screws to lock them in place to set up cut-off, and trimming-and-notching sections of machine. Measures workpiece with rule or tape, or traces from template to locate holes or cutting lines as specified by work order, and marks them with scribe, soapstone, or centerpunch. Pulls lever to engage power to section used. Positions workpiece into cutting slot, or under punch, die, or trim blade, and aligns punch or blade with layout marks. Pulls lever or depresses pedal to activate machine. Sets stops or positions guide jigs to specified point on built-in scale when several pieces are worked. May tend different sections of machine.
GOE: 06.02.02 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 77

615.482-026 PUNCH-PRESS OPERATOR, AUTOMATIC (any industry)
Sets up and operates power press that automatically feeds bars, structural metal, blanks, or continuous roll of sheet metal into position under ram: Installs specified dies in press, using gauges and handtools. Adjusts ram stroke of press, using handtools. Turns knobs or installs gears to synchronize action of feed bar or pinch rollers with feed and takeoff conveyor and automatic action of ram. Positions and clamps feed guides. Threads metal strip from play-out reel through pinch rollers, or loads hopper or conveyor with metal blanks. May operate machine to crimp, punch, and cut metal foil used in fabricating radiator cores.
GOE: 06.02.02 STRENGTH: H GED: R3 M3 L2 SVP: 5 DLU: 77

615.482-030 ROTARY-SHEAR OPERATOR (any industry) alternate titles: circular-shear operator; ring-shear operator
Operates machine equipped with opposing circular blades (one mounted above other) to shear metal plates and sheets to specified circular and curved

dimensions: Turns thumbscrew to adjust distance between cutters to thickness of metal, using feeler gauge, scale, or pattern. Positions and clamps workpiece to turntable and sets specified distance between center point of workpiece and cutting blades, using template or sliding scale on machine. Starts rotating action of cutters and turntable to cut metal. Lifts and aligns workpiece between cutting blades manually or by hoist and guides it along layout lines to cut irregular shapes. May lay out lines onto workpiece, using compass, or trace from template. May turn handwheel which tilts machine table or install fixture to cut specified bevel on workpiece.
GOE: 06.02.02 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 77

615.482-038 TURRET-PUNCH-PRESS OPERATOR (any industry) alternate titles: multi-punch operator

Operates turret punch press to punch holes or layout marks in metal sheets, plates, strips, or bars, following charts which list machine settings for each cut: Inserts, aligns, and locks punches and dies in turret, using hammer, shims, feelers, micrometers, and setscrews. Places workpiece on table manually or by using crane. Aligns workpiece to scale and end gauge on machine and clamps it to machine table. Pushes button to turn turret to specified punch and die. Turns cranks to set indicator to specified dimension on forward and lateral machine scale. Presses pedal to activate punch. Repeats operation for each machine setting specified on charts. Positions center punch from turret to touch plate and turns crank to scratch layout lines. May compute punch charts from blueprints, using square, scale, and applying knowledge of shop mathematics. May punch holes in nonmetallic materials.
GOE: 06.02.02 STRENGTH: H GED: R4 M3 L3 SVP: 5 DLU: 77

615.662-010 SLITTING-MACHINE OPERATOR II (any industry)

Sets up and operates slitting machine to cut sheet metal into strips of specified widths: Selects, cleans, and installs spacers and cutters on arbors, and hones cutters with oilstone to remove nicks. Presses button to lower arbor until cutters mesh, and measures clearance with feeler gauge. Inserts spacers to adjust spacing to specified tolerance. Signals OVERHEAD CRANE OPERATOR (any industry) 921.663-010 to lift metal roll to play-out reel or places roll on reel, using overhead chain hoist. Threads sheeting through slitter and verifies dimensions of cut to specifications, using rule. Secures strips on recoiler, adjusts guides and roller tension with handcrank, and starts machine. Observes slitting and rewinding operation and examines cut strips for flatness, holes, burrs on edges, and surface defects. May oil and clean machine. May feed sheet metal between rotating shear rolls. May install rubber sleeves over spacers to provide gripping surface for rollers and to facilitate movement of material being slit. May operate panel to control specific units of equipment, such as feeder unit.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 78

615.682-010 FLYING-SHEAR OPERATOR (steel & rel.)

Sets up and operates mill equipment, such as flying shear, guides, and crop or entry gates, to cut steel products to specified lengths: Reads production schedule to determine setup or adjustment of equipment. Installs knives in shear and guides on roll stands, using handtools and sledge. Turns rheostats to adjust cutting action of shear according to specified length of product. Starts shear and moves controls to raise and lower pinch rolls, adjusts guides, and opens and closes shear gates. Assists other workers in roll changes and in removing cobbles (waste steel) from rolling line.
GOE: 06.02.02 STRENGTH: M GED: R3 M3 L2 SVP: 5 DLU: 78

615.682-014 PUNCH-PRESS OPERATOR III (any industry)

Operates power press equipped with punch to notch or punch metal or plastic plates, sheets, or structural shapes: Positions, aligns, and clamps specified punch and die set into ram and bed of machine, using feelers, gauges, shims, rule, or template. Turns handwheel or installs shims to set depth of stroke. Lifts workpiece onto machine bed or roller table, manually or by using jib or crane. Positions layout marks on workpiece between punch and die. Positions and clamps guide stops to run successive pieces. Starts ram to drive punch through workpiece. May operate machine equipped with two or more punch and die sets. May trace layout marks or workpiece from emplate. May be designated according to function of machine as Notching-Press Operator (any industry).
GOE: 06.02.02 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 78

615.682-018 SHEAR OPERATOR I (any industry) alternate titles: plate-shear operator; power-shear operator

Sets up and operates power shear to cut metal objects, such as plates, sheets, slabs, billets, or bars to specified dimensions and angle: Turns handwheels to adjust rake (angle) and pressure of blade. Positions and clamps stops and side guides to set length and angle of cut, using rule, built-in gauges, or template. Lifts workpiece manually or by hoist or crane to machine bed or roller table and positions it against side guide and end stops. Starts machine which clamps workpiece and lowers blade to cut metal. Lays out cutting lines on metal, using rule, square, or template when shearing single pieces. May tilt bed, blade, or install fixtures to shear, bevel, or trim fabricated items. May set up and operate shear on production line in which shear is fed by conveyor, such as automobile frame line or rolling mill. May operate portable shear to cut sheet metal. May inspect work, using tape, compass, gauge, template, or micrometer to verify dimensions. May be designated by type of shear as Gate-Shear Operator (any industry) II; or by application of shear as Square-Shear Operator (any industry) I; Staple-Shear Operator (steel & rel.). May operate shear that automatically shears to uniform length metal sheets, plates, or structural shapes fed into machine by continuous coil or conveyor and be designated Shear Operator, Automatic (any industry) I.
GOE: 06.02.02 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 78

615.685-010 BURRING-MACHINE OPERATOR (nut & bolt)

Tends semiautomatic machine that removes burrs from hot-forged nut blanks: Shovels nuts into tray that feeds machine. Starts machine. Picks up nut blanks discharged from hopper onto table and positions nuts, burr side up, in channel that gravity feeds nuts into burring cutters. Inspects nut blanks for burrs and readjusts cutters to ensure that burrs are removed.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 77

615.685-014 CLEARANCE CUTTER (clock & watch)

Threads wire through rollers of automatic press that punches out clearances (excess metal) from flat steel wire leaving continuous strip of watch hands. May punch out feed holes (holes in wire strip that permit feeding of wire into machines at a fixed rate).
GOE: 06.04.02 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

615.685-018 CUP-TRIMMING-MACHINE OPERATOR (ordnance)

Tends speed lathe to perform cutting-off operation on aluminum cups to be used as component parts of projectile and bomb fuses: Inserts blank cup into revolving spring collet in headstock of machine, using jig. Removes jig, causing collet to secure cup. Depresses pedal to bring cutting tool in contact with revolving cup and cut it to specified length. Removes cup from machine.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

615.685-022 CUT-OFF-MACHINE OPERATOR (ordnance)

Tends battery of automatic machines that cut lead wire into slugs to be swaged into bullets or bullet cores for small arms ammunition: Positions drum of wire at rear of machine and threads wire over pulleys and through guides and pull rollers to cutter. Adjusts stroke of cutoff knife to vary length of slugs, using screwdriver and wrench. Starts machine and observes operation for malfunction. Weighs sample slugs on scales to verify conformance to specifications. Empties and replaces slug catch box.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

615.685-026 NIBBLER OPERATOR (any industry)

Tends machine that cuts metal plates, sheets, or structural shapes into specified radial or irregular shapes by action of reciprocating cutting knives or punches: Positions and clamps specified cutter or punch into ram and bed of machine. Turns thumbscrews to adjust depth of stroke to thickness of metal. Turns handwheel to set specified distance between cutter or punch and center point of turntable or fixtures, using built-in scale or rule. Clamps guide and drive rollers over workpiece. Depresses pedal which activates ram and feed rollers to cut or punch along radius. Guides workpiece manually along cutting lines or template to cut irregular shapes. May lay out guidelines onto workpiece by tracing from template. Mat drill center hole into workpiece, using portable drill. May bevel edges of steel plates, using portable pneumatic nibbler.
GOE: 06.04.02 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 77

615.685-030 PUNCH-PRESS OPERATOR II (any industry)

Tends one or more power presses that trim, punch, shape, notch, draw, or crimp metal, composite materials, or plastic stock between preset dies: Places workpiece against fixtures or stops on machine bed and under machine die, or threads roll of metal into jig. Starts press and monitors machine operation to detect misalignment or malfunction. Inspects parts visually, or with fixed gauges to verify conformance to specifications or to detect fabrication defects. May be designated according to product machined as Sprue-Cutting-Press Operator (foundry); or function of machine as Forming-Press Operator (any industry) II; Trimming-Press Operator (forging); or according to type of press operated as Multiple-Punch-Press Operator (any industry) II.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 86

615.685-034 SHEAR OPERATOR II (any industry) alternate titles: power-shear operator

Tends power shear that cuts metal objects, such as sheets, plates, billets or bars, to specified length: Lifts workpiece manually, or by hoist or crane, to machine bed or roller table. Positions workpiece against side guides and end stops or aligns layout lines under shear blade. Starts machine that clamps workpiece and lowers blade to cut metal. May tend shear on production line where shear is fed by conveyor, such as automobile frame line or rolling mill. May position stops according to calibrated gauge on machine to shear to length such items as scrap, billets, or reinforcing rods. May verify size of sheared items, using tape measurer, caliper, or template. May shear metal to specified circular or curved dimensions. May be designated by type of shear as Alligator-Shear Operator (any industry); Gate-Shear Operator (any industry) I; or by application of shear as Hot-Billet-Shear Operator (smelt. & refin.; steel & rel.); Scrap-Shear Operator (any industry); Square-Shear Operator (any industry) II.
GOE: 06.04.02 STRENGTH: H GED: R2 M2 L2 SVP: 4 DLU: 79

615.685-038 STRIP-METAL-PUNCH-AND-STRAIGHTENER OPERATOR (wood. container)

Tends machine that straightens coiled strip metal, cuts it into strips of specified length, and punches holes in strips: Hangs coiled metal on spindle between guides of machine. Inserts end of metal between feed rolls of machine. Starts machine that feeds strip through straightening rolls under punching and trimming dies that cut strip to specified length and punch holes in it.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

615.685-042 TURRET-PUNCH-PRESS OPERATOR, TAPE-CONTROL (any industry)

Tends tape-controlled turret or hydraulic-powered punch press that automatically positions *indexing* table, selects punch, and punches holes, or layout marks in metal sheets, plates, strips, or bars: Positions and clamps workpiece against fixtures or to specified point on built-in scale. Threads tape through electronic reader to specified position. Starts machine and observes operation. May verify first piece, using rule and plug gauges. May open chucks, using wrench to replace worn or broken punches and dies.
GOE: 06.04.02 STRENGTH: H GED: R2 M2 L2 SVP: 3 DLU: 77

615.685-046 CUTTER-MACHINE TENDER (electron. comp.) alternate titles: shearer, printed circuit boards

Tends machine that cuts copper or aluminum laminated fiberglass sheets, hardboard, and cardboard backers for production of printed circuit boards (PCBs): Reads work orders to determine type, size, and quantity of PCB materials to be cut. Adjusts guides on machine to regulate width of cut, using ruler or following calibrated scale on machine bed. Positions and aligns sheets against guides, and depresses pedal to activate blade that cuts material. Adjusts guides and repositions material to trim or square edges to specifications. Records production data. May mount material on spindle of machine that automatically feeds material onto bed of machine for cutting. May tend pinning machine that inserts metal pins into laminated boards and related backing material prior to drilling operation. May replace machine blades, using handtools. May bake cut boards in oven to remove excess moisture. May clean machines.
GOE: 06.04.09 STRENGTH: M GED: R2 M2 L2 SVP: 2 DLU: 86

615.687-010 HELPER, SHEAR OPERATOR (steel & rel.) alternate titles: sidehand

Assists side shear crew to move, position, and hold hot-rolled steel plate for shearing operations, using push bar and plate wrench: Pushes steel plate over caster bed equipped with goose neck rollers to align plate under knife blade, using long handle push bar. Positions and holds steel plate on shear block to prevent movement during shearing operation, using plate wrench. Assists crew in charging shear knife blade, using handtools. May lubricate knife blade and shear table, using oilcan.
GOE: 06.04.24 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 86

616 FABRICATING MACHINE OCCUPATIONS

This group includes occupations concerned with shaping, fitting, and assembling metal parts. Shaping, fitting, and assembling of nonmetallic parts, except wooden, are also included when the methods and machine tools commonly applied to the fabrication of metal are used.

616.130-010 SUPERVISOR (nut & bolt)

Supervises and coordinates activities of workers engaged in forging, trimming, thread rolling, and tapping of metal stock to produce nuts, bolts, screws, or other fasteners. Trains workers in machine operations. Performs duties as described under SUPERVISOR (any industry) Master Title. May design tools. May set up and repair machines. May inspect finished products for conformance to specifications.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

616.130-014 SUPERVISOR, SPECIALTY MANUFACTURING (steel & rel.)

Supervises and coordinates activities of workers engaged in cutting, leveling, shearing, threading, and punching steel products, such as bars, rounds, pipe, plate, and strip to specified patterns or shapes. Trains workers in operation of shears, and pipe cutting and threading machines. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

616.130-018 SUPERVISOR, SPRING PRODUCTION (metal prod., nec)

Supervises and coordinates activities of workers engaged in shearing, punching, forming, tempering, assembling, coiling, peening, and painting springs. Trains workers in operation of equipment. Performs duties as described under SUPERVISOR (any industry) Master Title. May be designated according to activities of workers supervised as Supervisor, Forming And Tempering (metal prod., nec); Supervisor, Leaf-Spring Fabrication (metal prod., nec); Supervisor, Leaf-Spring Repair (metal prod., nec).
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

616.130-022 SUPERVISOR, STEEL DIVISION (furniture)

Supervises and coordinates activities of workers engaged in spinning and assembling wire coils to form mattress innersprings and bedspring units. Directs production workers and machine maintenance personnel in setting up and adjusting equipment, such as coiling, crimping, and wire-border forming machines. Performs other duties as described under SUPERVISOR (any industry) Master Title. May set up machines. May be designated by department as Coil-Machine Supervisor (furniture); Spring-Assembler Supervisor (furniture).
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

616.260-010 EMBOSSING TOOLSETTER (ordnance)

Sets up and adjusts machines that roll grooves or knurls into shotgun shell caps preparatory to joining cap to shell body.
GOE: 06.01.02 STRENGTH: L GED: R4 M3 L2 SVP: 6 DLU: 77

616.260-014 MULTI-OPERATION-FORMING-MACHINE SETTER (any industry)

Sets up automatic multiple-operation machines to perform any combination of bending, punching, roll forming, beading, cutting, flanging, shearing, seaming and welding, soldering, or clinching to fabricate metal parts, such as rims, molding, cans, tubing, and housing: Sets stops and guides. Installs and aligns forming and drive rolls, roller dies, punching, notching, and cutting dies and rams, shears, or saw blades. Installs electrodes and adjusts voltage to set up welding or soldering unit. Installs coil of tinplate for presses. Adjusts speed controls to synchronize action of rolls, cutoff, welding unit, drive rolls, conveyor, or transfer machine. Greases and oils machinery, using grease gun, oilcan and brush. Operates machines for test run to verify setup. Turns machine over to MULTI-OPERATION-FORMING-MACHINE OPERATOR (any industry) II. May set up mechanized line of machines which operate in tandem. May repair malfunctioning machines. May be designated by function of machines as Production Mechanic, Tin Cans (tinware); Rim-Roller Setter (auto. mfg.); Tubing-Mill Setter (any industry).
GOE: 06.01.02 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

616.260-018 SPRING COILING MACHINE SETTER (metal prod., nec)

Sets up automatic spring coiling machines to fabricate compression and extension springs from steel wire, according to blueprints and setup charts: Reviews blueprint to determine setup procedures to follow, machine attachments required, and stock to use, or obtains details from setup charts. Selects machine attachments, such as taper cams, wire size block, coiling point, pitch tool, and cutting tool, according to blueprint or setup chart, and installs them on machine. Verifies wire diameter with micrometer caliper and threads wire through drive rollers and machine guides. Sets cams, turnbuckle, and pitch tool to control spring dimensions. Makes trial run and measures sample product for conformance to specifications, using gauges and micrometers. Adjusts machine to attain specified tolerances and releases machine to SPRING COILER (metal prod., nec) with oral instructions concerning its operation. Grinds cams and pitch tool to maintain their dimensions. May recommend blueprint changes. May make tool attachments, such as coiling point, cams, forming tools, and cut-off tools if not in stock.
GOE: 06.01.02 STRENGTH: L GED: R4 M4 L3 SVP: 7 DLU: 77

616.260-022 TORSION SPRING COILING MACHINE SETTER (metal prod., nec)

Sets up torsion spring coiling machines, according to blueprints and setup charts, to fabricate torsion springs from round wire: Reviews blueprint to determine setup procedures to follow, machine attachments required, and material specifications for new part, or obtains details from setup chart for repeat orders. Requests delivery of specified stock from stockroom to work area. Selects machine attachments, such as arbors, cams, and feed mechanism, according to blueprint or setup chart, and installs them on machine. Verifies wire diameter, using micrometer caliper, and mounts wire on reel stand and threads end through feed mechanism. Sets arbor cam to control pitch of spring. Makes trial run and measures sample for conformance to specifications, using micrometers and gauges. Adjusts machine to attain specified tolerances and releases machine to SPRING COILER (metal prod., nec) with oral instructions concerning its operation. Grinds machine parts, such as cams and arbor, to maintain dimensions. Recommends blueprint changes to resolve production problems.
GOE: 06.01.02 STRENGTH: L GED: R4 M4 L3 SVP: 7 DLU: 77

616.280-010 SPRING MAKER (metal prod., nec)

Sets up and operates variety of machines to fabricate small lots or samples of coiled compression, extension, and torsion springs, and other wire forms from steel wire or strip, following blueprints, drawings, and setup charts: Selects machine tools, such as arbor, grooved tool, and pitch tool, and installs them on lathe winder. Operates lathe winders to form coiled flat and wire springs [LATHE WINDER (metal prod., nec)]. Crimps and trues coiled springs and bends wire and flat forms to specified shape, using handtools, vise, and forming plates. Operates forming presses to form spring washers and flat metal products from flat stock. Measures products for conformance to specifications, using calipers, micrometers, and other gauges. Places pan of springs in gas-fired oven or places individual springs in molten lead bath for heat treating and removes springs after specified period of time to air or water cool. Recommends changes in blueprints, in machine setup, type of metal, and methods and procedures operations for making products. Makes spring-machine attachments and tools not in stock [TOOL MAKER (machine shop)].
GOE: 06.01.03 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

616.360-010 BODY-MAKER-MACHINE SETTER (tinware)

Sets up battery of automatic machines that form tin-can bodies: Lights and tends gas burners under soldering vats and adjusts thermostats to regulate temperature of molten solder in machines. Tests air pressure of vacuum feed cups with gauge. Starts machine and observes operation to detect malfunctioning. Inspects can bodies and adjusts machine action until bodies conform with specifications. Adjusts machines for change to different sizes of can bodies. Maintains supply of bar solder in melting reservoirs and adjusts thermostat regulators to regulate flow of molten solder into machine. Adjusts equipment and replaces defective regulator units, using handtools. May repair malfunctioning machines.
GOE: 06.01.02 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

616.360-014 LOOM SETTER, WIRE WEAVING (metal prod., nec)

Sets up power looms to weave wire into screening and cloth to size, mesh, and weave patterns specified by work orders, diagrams, and data charts, apply-

ing knowledge of machine function, principles of mechanics and shop mathematics: Selects functional machine parts, such as reeds, heddles, and shuttle, according to wire specified and aligns and bolts them to machine. Selects, positions, and installs cams, shuttle thrower, and gears and turns speed control knobs to synchronize action of machine to produce size and pattern of weave specified, using precision measuring instruments and handtools. Turn knobs to adjust electric eye control which automatically stops machine when specified run is completed, shuttle or warp wire runs out, or wire breaks. Threads wire from back beam through heddles and reeds to cloth roll, and install bobbins in shuttle. Starts machine and makes trial runs. Inspects sample, visually and using gauges and readjusts machine to correct malfunction. May replace or repair broken parts of machine. May tend bobbin-winding machine to wind bobbins for installation in loom. May be designated by product specialty as Loom Setter, Fourdrinier (metal prod., nec).
GOE: 06.01.02 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

616.360-022 MACHINE SETTER (any industry)

Sets up various metal fabricating machines, such as brakes, shears, punch presses, bending and straightening machines, to cut, bend, and straighten metal as specified by layout, work order blueprints, and templates: Positions, aligns, and bolts dies, blades, bedplates, cushion pins, and stops, using shims and measuring tools, such as squares, straightedges, rules, micrometers, gauges, feelers, templates, and handtools. Adjusts flow of lubricants, pressure and depth of stroke, or feed of material, applying knowledge of thickness and properties of metal or according to standard specifications. Makes trial runs and measures workpiece for conformance to specifications. Instructs operator in special handling techniques. Clears jams and corrects malfunction of machines. Reports need for machine repairs to supervisor. Dismantles setups. May sharpen shear blades, drills, or cutting tools. May set up drill presses, flame cutting, and welding machines. May set up automatic or multipurpose machines. May specialize in setup of single type of machine and be designated accordingly as Brake Machine Setter (any industry). May set up machines common to sheet metal operations and be designated Machine Setter, Sheet Metal (any industry).
GOE: 06.01.02 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

616.360-026 MULTI-OPERATION-FORMING-MACHINE OPERATOR I (any industry)

Sets up and operates automatic multiple-operation machine to perform any combination of bending, punching, roll forming, beading, cutting and welding, soldering, or clinching of metal to fabricate items, such as rims, molding, cams, tubing, and housings specified by blueprint or work orders: Installs and aligns roller dies, drive and forming rolls, punch, notching or forming dies, shear or saw blades, and electrodes, using rules, vernier gauges, square, shims, and handtools. Sets side guides and stops. Turns knobs to regulate voltage of resistance welding equipment and synchronize speed of feed rolls, conveyor, or transfer machine with action of roller dies, forming rolls, punch or shear rams, and welding unit. Places roll of sheet or strip metal or wire onto feedrack and threads end through machine or into drive rolls, or metal blanks or bars onto conveyor, into hopper, or against guides to feed machine. Starts machine. Verifies dimension of finished product visually or using micrometers, calipers, or gauges. May remove finished parts from machine. May operate mechanized line of machines working in tandem. May be designated by function of machine as Tubing-Mill Operator (any industry) II. May set up and operate multioperation forming machine to make pipe from continuous steel coil and be designated Welder, Pipe Making (steel & rel.).
GOE: 06.01.03 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

616.360-030 SHOTGUN-SHELL-ASSEMBLY-MACHINE ADJUSTER (ordnance) alternate titles: assembly-machine tool setter; heading-and-priming tool setter

Sets up automatic machines to assemble shotgun shells for loading with powder and shot: Removes, replaces, and adjusts tools and parts, such as punches, dies, pins, dials, spindles, plungers, and hoppers, using handtools and gauges. Turns setscrews and stop nuts to adjust machine coiling and pressing mechanisms. Dismantles hoppers, feed tubes, and feed and press mechanisms to extract jammed components. Notifies MAINTENANCE MECHANIC (any industry) to make major replacements or repairs.
GOE: 06.01.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

616.360-034 STRAIGHT-LINE-PRESS SETTER (ordnance) alternate titles: assembly-machine tool setter; tracer-bullet assembly-machine tool setter

Sets up machines to shape noses of brass or steel bullet jackets and assemble jacketed bullets for small arms cartridges: Installs punches and dies, feed pipes, magazines, guides, pins, and bushings to accommodate size bullets to be processed, using handtools. Turns setscrews and stop nuts to regulate automatic feeding, transporting, pressing, and ejecting mechanisms, and to adjust machine switches. Operates machine and examines assembled bullets for defects, such as dents, scratches, or malformations, and verifies conformance to specified dimensions, using gauges. Operates speed lathe and *bench grinder* to reshape or polish punches and dies. Replaces worn or broken machine parts, such as springs, pins, die bolts, screws, and washers. Gives instructions to new worker in machine operation and use of gauges.
GOE: 06.01.02 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

616.361-010 SPRING INSPECTOR I (metal prod., nec)

Inspects and tests leaf-springs for conformance to specifications: Verifies curvature of leaf, using template. Tests leaf in load tester by inserting springs into apparatus equipped with gauge that registers amount of leaf distortion to determine if springs meet load requirements. Discards defective leaves. Tends machine that bombards steel shot against leaf spring and measures indentations in leaf, using curvature gauge. Records test results for quality control purposes. Observes spring assembly operations to ensure parts are assembled according to specifications. Discusses with supervisor changes in machine setup or assembly operations to improve product or simplify operations. Stops machine to inspect and test faulty productions and changes or aligns dies, using machinist's tools.
GOE: 06.01.05 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

616.362-010 FABRIC-MACHINE OPERATOR I (furniture) alternate titles: link-wire-fabric-machine operator

Sets up and operates link wire fabric machine to form linked wire mesh for flat bedsprings from stock wire, using work orders, knowledge of machine operation, and bending characteristics of wire: Studies work orders to determine dimensions and type of wire mesh required. Selects tool and die elements from standardized stock or requests TOOL-AND-DIE MAKER (machine shop) to fabricate necessary elements. Positions and fastens tool and die elements and cams into required arrangement in machine to cut and bend stock wire by action of sliding rams in coordinated sequence. Places coils of wire on two reels, using forklift. Feeds wire through drive wheels and between dies of slides, using handtools. Starts machine to form and link together lengthwise and crosswise lengths to produce fabric of specified dimensions. Inspects sample, using template and rule. Adjusts setup to correct dimensions of wire fabric. Gives directions to FABRIC-MACHINE OPERATORS (furniture) II.
GOE: 06.02.02 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 77

616.380-010 FOUR-SLIDE-MACHINE SETTER (any industry)

Sets up various sizes and types of multiple-operation slide forming machines to automatically punch, cut, and bend metal strips or wire to fabricate parts, such as clips, brackets, and hairpins, as specified by blueprints and setup charts: Selects and installs cams, center post, and ram slide, and computes feed length position of cams and dies, applying knowledge of geometry and product dimensions. Aligns and bolts cams to shaft, slides to machine bed, and progressive dies to stationary shoes and cam actuated slides, using micrometers, gauges, feelers, rules, and handtools. Adjusts position of cams to synchronize action of rams, cutters, and drive rolls that feed stock. Turns flywheel by hand to produce sample part, and compares part with specifications, using fixed gauges, micrometer, and calipers. Readjusts position of dies and cams to achieve specified shape and dimension. Turns machine over to FOUR-SLIDE-MACHINE OPERATOR (any industry) II. May sharpen and repair dies, using engine lathes, milling machines, precision grinders, hand files, and scrapers.
GOE: 06.01.02 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 77

616.380-014 JOB SETTER (electron. comp.)

Sets up and adjusts machines, such as grid formers or spade-winding machines, used to fabricate parts for electron tubes: Reads work order or receives verbal instructions regarding machine setup. Installs specified parts, such as gears, cams, ratchets, cutters, and guides in machine. Sets control mechanisms that regulate functions, such as feed rate, spindle speed, air pressure, and wire tension. Loads, positions, and aligns wire or other fabrication material on feed mechanisms. Starts machine and observes operation to detect malfunction. Examines and measures sample part, using magnifying device and measuring instruments, such as balance scale, ruler, and micrometer, to ensure part meets specifications or to determine cause of defect. May maintain and repair machinery. May sharpen tools, using grinder or polishing equipment.
GOE: 06.01.02 STRENGTH: L GED: R3 M3 L3 SVP: 5 DLU: 88

616.380-018 MACHINE OPERATOR I (any industry) alternate titles: fabricating-machine operator

Sets up and operates metal fabricating machines, such as brakes, rolls, shears, saws, and presses, to cut, bend, straighten, and form metal plates, sheets, and structural shapes according to blueprints and specifications: Reads and interprets blueprints, engineering specifications, and shop orders to determine machine setup, production methods, and sequence of operation. Selects, positions, and secures dies, blades, cutters, and fixtures onto machine, using rule, square, shims, templates, handtools, and built-in gauges. Positions and clamps stops, guides, and turntables. Adjusts controls to set and regulate machining factors, such as pressure and depth of ram stroke, adjustment rolls, blade angle, and machine speed. Locates and marks bending or cutting lines and reference points on workpiece, using instruments, such as rule and compass, or by tracing from templates. Positions workpiece against stops and guides or aligns layout marks with dies or cutting blades manually or using hoist. Starts machine and observes machine operation to reposition workpiece, change dies, or adjust machine settings for multiple or successive passes. Inspects or measures work, using rule, gauges, and templates. May operate machines to fabricate nonmetallic materials, such as composites or plastics. May set up and operate sheet-metal fabricating machines only and be designated Sheet-Metal-Fabricating-Machine Operator (any industry).
GOE: 06.01.03 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 87

616.382-010 BARBED-WIRE-MACHINE OPERATOR (metal prod., nec)

Operates machine that automatically twists sharp barbs between strands of wire to form barbed-wire fencing materials: Mounts reels of smooth wire on feedrack of machine, using hoist. Butt-welds end of feed wire to wire in machines, and to repair breaks in wire. Starts machine and observes counter on

machine to verify required length of barbed wire on roll. Stops machine and removes pin to drop roll of barbed wire to floor. Cuts wire with cutter. Attaches name tag to roll and places it on pallet. Adjusts machine.
GOE: 06.02.02 STRENGTH: M GED: R3 M1 L1 SVP: 5 DLU: 77

616.382-014 WIRE WEAVER, CLOTH (metal prod., nec) alternate titles: wire weaver

Sets up and operates power loom to weave wire cloth for products, such as industrial cloths, filters, sieves, or strainers: Reviews specifications to determine quantity, type, and size wire required. Lifts spools of wire, and places them on spindles of creel. Verifies specified size of wire, using micrometer. Fastens wire ends to back beam of loom. Starts beam motor to wind and transfer wire from creel to beam. Threads warp wires individually through heddles, between teeth of comb, and fastens ends to roller. Adjusts spring of loom to required tension, using wrench. Inserts bobbin in shuttle, fastens shoot wire end to roller and pushes switch to start loom. Observes loom operation to detect faulty weaving and wire breaks. Reweaves and ties broken wires, using pick and magnifying glass. Counts mesh of woven cloth to ensure that specifications are met, using pick and counting glass. Removes roll of finished cloth from loom, using electric powered lift. May wind bobbins while loom is in operation. May cut off strip of wire cloth, using scissors or shears for quality control inspection prior to start of production. May maintain records of production and non-repairable cloth defects.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 7 DLU: 77

616.382-018 TYPING-ELEMENT-MACHINE OPERATOR (office machines)

Sets up, controls, and monitors machine that automatically assembles component parts, such as caps, shims, levers, and springs, to fabricate *typing elements* used in electric typewriters: Reads work order and engineering specifications to determine components needed for assembly. Loads parts into hoppers of automatic feed mechanism of machine. Flips switches on control panel to start machine. Observes panel lights and machine operation to detect malfunctions and ensure prescribed sequence of operation. Fills grease containers on machine and maintains supply of parts in feed mechanism. Inspects assembled typing element to detect defects, such as mislocated springs, chipped characters, and insufficient grease. Adjusts and calibrates machine to adapt machine to processing requirements, following specified procedures and using handtools.
GOE: 06.01.03 STRENGTH: L GED: R3 M3 L3 SVP: 6 DLU: 86

616.460-010 NAIL-MAKING-MACHINE SETTER (steel & rel.) alternate titles: nail-machine operator

Sets up battery of machines that automatically cut and shape coiled wire to make nails of specified sizes: Installs and secures die plates and nail-point cutting knives, and positions feeding mechanism, according to work order specifications, using handtools. Mounts coil of wire on rod and threads wire through straightening rollers, feeding mechanism, and into slots of die plates. Tightens roller bolts to secure wire, using wrench, and turns flywheel to produce sample nail. Measures nail with split gauge or micrometer, and inspects nail for flaws, such as chips and distortions. Starts machine and observes operation to ensure product meets specifications. May set up and maintain battery of machines that automatically cut coiled wire and simultaneously attach nailheads to cut wire to form tacks of specified size. May supervise NAIL-MAKING-MACHINE TENDERS (steel & rel.).
GOE: 06.01.02 STRENGTH: M GED: R3 M2 L3 SVP: 6 DLU: 77

616.482-010 SAFETY-PIN-ASSEMBLING-MACHINE OPERATOR (button & notion)

Operates battery of automatic machines to twist coil in pointed length of wire and form and attach caps and guards to wire to form safety pins: Installs cutting and forming dies in machine according to size of pin specified, using handtools. Lifts reels of cap and guard metal strip onto feed-reel holders, and locks spring clamps to secure reels. Scoops pointed wires into gravity feed hopper and starts machine. Observes operation to detect jamming of mechanisms and extracts jammed pin parts, using pick, screwdriver, and pliers. Measures sample of completed pins for conformance to specifications, such as length, diameter of wire, size of spring coil, and width of pin, using micrometers and fixed gauges. Examines pins for malformation of caps or guards and opens and closes pins to test operation. Adjusts guides, tension bars, cams, feeder arms, and stops, and synchronizes moving parts of machine to correct malfunctions. Replaces broken or worn cutting and forming dies, using machinist's handtools.
GOE: 06.02.02 STRENGTH: H GED: R3 M2 L2 SVP: 5 DLU: 77

616.484-010 TRUER (metal prod., nec)

Trues coiled precision springs and tests springs for conformance to specifications: Places set of springs over mandrel, places metal bar over springs, and pushes against bar to compress springs to specified length. Positions spring over template or between poles of electronic spring checker to detect variation from standard spring length. Places spring on flat surface, and measures squareness of end, using gauge. Inserts wedge between coils and taps wedge with mallet to even pitch between coils and adjust length of spring.
GOE: 06.03.02 STRENGTH: L GED: R2 M2 L2 SVP: 4 DLU: 77

616.485-010 BENCH WORKER (metal prod., nec)

Tends machines that wind, shape, or finish coiled and flat springs or wire forms to specifications: Positions metal or wire blanks or coiled spring on jig press. Depresses pedal to lower shaping die that stamps out spring forms, or crimps, hooks, or loops ends of coiled springs. Presses and turns spring ends against rotating abrasive wheel to remove burs. Drills and taps holes in flat springs, using single-spindle drill press. Feeds wire through guides and onto mandrel of lathe-type automatic coil-winding machine that coils series of springs on mandrel. Cuts lead-in wire, using handcutters, and removes mandrel. Slides loop of flat metal stock over arbor of power-driven spring winder and starts machine to wind metal around arbor to form coiled-flat springs. Places retaining ring over wound spring to prevent unwinding. Measures springs for conformance to specifications, using gauges and micrometers. Inserts springs into holding device of double-disk grinder and places holding device between grinding wheels. Starts machine that automatically grinds spring ends. Removes springs. May be designated according to task performed as Automatic-Coil-Winding-Machine Operator (metal prod., nec); Double-End-Production Grinder (metal prod., nec).
GOE: 06.04.02 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

616.485-014 SPRING COILER (metal prod., nec) alternate titles: coil-machine operator

Tends machine that automatically coils compression, extension, and torsion springs from round and flat wire, following verbal instructions: Examines wire stock with micrometer to ensure conformance to specifications. Threads end of stock through feed rollers, around arbor, and under cutting tool. Starts machine that automatically winds, cuts, and ejects springs. Measures springs for conformance to specifications, using micrometers and gauges. Verifies action of springs under pressure by compressing springs under specified load in spring testing machine. Notifies machine setter when machine malfunctions. May sharpen cut-off tool and remove coiling marks from coiling point and pitch tool, using *bench grinder*.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 5 DLU: 77

616.582-010 FENCE-MAKING MACHINE OPERATOR (metal prod., nec)

Operates machine that forms wire mesh fencing: Places rolls of wire onto spools and joins wire ends, using acetylene torch. Selects mesh die, according to wire size. Bolts die on weaving spindle of machine and draws wire through die to specified height, according to work ticket specifications. Turns setscrew to adjust automatic wirecutter, using wrench. Pushes buttons on control panel to start oil pump, machine motor, and automatic shutoff device. Pulls lever to start machine. Observes machine counter and removes rolls of fencing following length specifications on work ticket. Records number of fabricated rolls on work card. May move rolls to galvanizing department, using handtruck. May use electric butt welder to join wire ends.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L1 SVP: 4 DLU: 77

616.662-010 HYDRAULIC PRESS OPERATOR (construction)

Operates horizontal arbor press to disassemble and assemble press-fitted crawler track links for construction equipment, such as cranes, power shovels, and tractors: Hooks hoist line in sling and directs other workers engaged in placing and removing crawler tracks on conveyor. Removes or tightens bolts fastening track pads to track links, using pneumatic or electric impact wrench. Examines chart to select specified insert jaws (holding fixture for pins and bushings) and disassembly and assembly rams. Inserts rams in press sockets, using wrench. Moves levers to position track over insert jaws, and to advance or retract rams that press pins and bushing into sockets on track links. Directs other workers engaged in removing or positioning track pads, track links, pins, and bushings in press insert jaws. Operates press to disassemble and reassemble track, and to replace worn or damaged pins and bushings.
GOE: 06.02.20 STRENGTH: M GED: R3 M1 L1 SVP: 4 DLU: 77

616.665-010 TENSIONING-MACHINE OPERATOR (concrete prod.)

Tends machine that pulls and spaces reinforcing wire as it is wound around steel cylinder to make prestressed core for fabricating concrete pipe: Pulls wire through machine rollers and clamps it to end of cylinder for subsequent welding. Signals WINDING-MACHINE OPERATOR (concrete prod.) to start machine that rotates cylinder. Observes dial indicator and pulls lever on tensioning machine to apply specified tension to wire during winding. Signals WINDING-MACHINE OPERATOR (concrete prod.) to stop rotation of cylinder after specified number of turns of wire. Maintains tension on wire until WELDER, ARC (welding) welds it to cylinder. May tend machine that pulls and spaces reinforcing wire by hydraulic power to make prestressed core for fabricating concrete beams.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

616.681-010 WEAVER, BENCH LOOM (metal prod., nec)

Forms wire screens used for partitions, draining racks, and window guards, using bench loom: Reviews specifications to determine quantity, type and size wire required, and obtains wire from storage area. Measures and cuts wire to specified lengths, using ruler and wire cutters. Inserts ends of warp wires in heddles and positions and secures opposite ends on bench with heavy iron bar. Depresses pedal to raise and lower alternate warp wires. Slides *shoot wire* between warp wires and pulls it into position manually. Measures position of shoot wire with ruler to ensure specified and even spacing. Depresses pedal to reverse warp wires, secure inserted shoot wire, and prepare for next shoot wire. Removes finished screen from bench loom and stacks it for pickup. May measure diameter of wire, using micrometer, to verify size of wire. May operate machine that cuts and crimps wires used in weaving wire screens. May trim edges of finished flat wire screens, using power shears.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

616.682-010 ARBOR-PRESS OPERATOR I (any industry) alternate titles: floor-press operator

Sets up and operates arbor press to press-fit parts, such as bearings, linings, armatures, or wheels to housings or shafts: Installs specified holding fixtures and dies on press, using rule, gauges, and handtools. Positions workpiece on press bed under ram, manually or using hoist. Moves controls to lower ram that presses part onto shaft or into housing. May mix white lead and apply it to parts as necessary, using brush, and remove scale, rust, burrs, and excess white lead, using files, wire brush, and rags. May be designated according to parts assembled as Bearing-Press-Machine Operator (railroad equip.); Cylinder-Block-Hole Reliner (automotive ser.); Wheel-Press Operator (railroad equip.).
GOE: 06.02.20 STRENGTH: M GED: R3 M1 L1 SVP: 3 DLU: 77

616.682-014 BALE-TIE-MACHINE OPERATOR (metal prod., nec) alternate titles: wire-loop-machine operator

Sets up and operates wirecutting and straightening machine, equipped with forming attachment, to form wire ties for tying bales of paper, hay, or other material: Adjusts driving and straightening rollers, forming attachment, and jaws of holding device, using handtools. Turns crank to adjust feed of driving rollers for specified length of bale tie. Inserts wire between driving and straightening rollers and starts machine that automatically cuts, forms, and ejects specified number of bale ties in bundle onto rack for wrapping. Wraps bundle by hand or uses machine wrapping device. May set counter that records number of ties formed. May stack finished ties in storage area.
GOE: 06.02.02 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

616.682-018 CAGE MAKER, MACHINE (concrete prod.)

Sets up and operates machine to fabricate steel cages used for reinforcing concrete pipe: Bolts lagging plates of specified size to expandable mandrel of machine to form drum for shaping and sizing cage. Threads wire from spindle through tensioning rollers and feeder arm of machine. Tack-welds ends of wire to bell-end of lagging plate and pulls lever to expand mandrel. Turns wheel on tensioner to regulate pressure on wire. Starts mandrel rotating as wire is fed through tensioning rollers on carriage which moves along track to space wire as it winds. Tack-welds wire to end of drum on completion of run and cuts wire with welding torch. Pulls lever to move welding and grounding wheels into position to hold rod in place and to form circuit for welding. Starts welding wheel to weld rod and wire at points of intersection. Breaks tack weld at ends of wire, using hammer and pulls lever to retract mandrel and loosen cage. Pulls cage from shaft by hand or aid of pneumatic winch.
GOE: 06.02.02 STRENGTH: L GED: R3 M1 L1 SVP: 6 DLU: 77

616.682-022 CRIMPING-MACHINE OPERATOR (any industry)

Sets up and operates machine to crimp wire to specified shape: Bolts specified crimping wheels into machine jaws, using wrench. Threads end of coiled wire through straightening and feed rollers into wire shaping machine. Starts machine and crimps sample wire of specified type. Measures sample, using micrometers and gauges, and changes crimping wheels or adjusts tension of machine until crimp meets specifications. May place shaped wire in rack. May be designated according to product worked on as Zig-Zag-Spring-Machine Operator (metal prod., nec).
GOE: 06.02.02 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

616.682-026 KICK-PRESS OPERATOR I (any industry) alternate titles: assembler, press operator; bench-press operator

Sets up and operates power press to assemble metal, plastic, rubber, or glass products by crimping, shaping, locking, staking, or press fitting: Installs specified dies on machine bed and ram, using measuring instruments and handtools. Positions and clamps holding fixtures to machine bed, using sample workpiece, template, rule, and gauge. Adjusts setscrews to regulate stroke of ram. Aligns parts between dies or positions them against fixtures on machine. Moves controls to lower ram that bends, clinches, or forces parts together. May operate machine to separate parts. May set up and operate machine to punch, cut, face, chamfer, or compress parts preparatory to assembly. May install gears and cams to synchronize action of multiple ram, feed, and positioning action of automatic presses.
GOE: 06.02.20 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

616.682-030 NAIL-ASSEMBLY-MACHINE OPERATOR (steel & rel.)

Operates machine to assemble and weld loose nails to pierced metal ribbon: Transports loose nails and metal ribbon from storage areas to machine. Threads pierced strip of metal through machine. Adjusts mechanical and electrical parts of machine to obtain specified feeds and speeds. Starts machine that assembles and welds nails to metal ribbon. Fills cooling tank with rust inhibitor and other liquids. Closes nail assembly cartons, using stapling gun. May operate machine to assemble and weld loose nails to wire.
GOE: 06.02.20 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

616.682-034 STRANDING-MACHINE OPERATOR (elec. equip.; light. fix.; metal prod., nec; nonfer. metal) alternates titles: cable-machine operator; cabling-machine operator; strander operator; strand-machine operator

Sets up and operates rotating cylindrical-shaped stranding machine to fabricate wire rope or electric cable: Places spools of wire of specified gauges into cradles, using electric hoist, and locks spool in place, using metal pin. Positions takeup spool onto shaft and adjusts travel of distributor to width of spool. Threads wires through holes on inside edge of machine and through twisting head and coils it around capstan, using blueprints or stranded wire as guide. Nails or hooks stranded wire onto takeup spool. Adjusts gears for specified direction of twist and speed of capstan, using wrenches. Starts machine. Pours grease into grease pot, and opens valve to lubricate strands. Adjusts clutch to regulate speed of makeup spool shaft. Observes machine to detect malfunctioning. Cuts wire when specified footage has been wound and wraps end with wire, by hand or using mechanical wrapping tool. May butt-weld ends of disjointed wires. When operating stranding machine equipped with closing (finishing) attachments to prevent unraveling when rope is cut, is known as Closer (metal prod., nec). May work with fine wire to produce twisted electric-light cord and be designated Strand Buncher, Fine Wire (light. fix.).
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

616.685-010 CHAIN-TESTING-MACHINE OPERATOR (forging)

Tends machine that tests strength of chains: Adjusts chain-holding jaws on machine to accommodate size of chain. Sets scale dial to specified pounds to regulate pulling power of machine. Positions chain in machine jaws and starts machine. Examines and gauges chain to detect broken or stretched links. May check chain for free operation, roll chain into coil, and place chain in crate.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 4 DLU: 77

616.685-014 CLINCHING-MACHINE OPERATOR (elec. equip.)

Tends reel-fed machine that clinches (crimps) metal terminals or solderless connectors to electrical wires: Positions wire ends in fixture. Steps on switch to start machine that automatically cuts off terminal from continuous strip and clinches terminal to wires. May strip rubber insulation off wire cord to expose wire, using pliers or pedal-operated stripping machine. May take wires to shelves and distribute them in sections according to wire and terminal types.
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

616.685-018 COIL ASSEMBLER, MACHINE (furniture) alternate titles: automatic-coil-machine operator; coil tier; finisher

Tends machine that joins coil with helical springs to form assemblies for innerspring mattresses, chairs, sofas, and automobile seats: Places coil springs in channels on machine table. Inserts end of helical spring in feeder that rotates and moves spring toward coils. Depresses pedal to start feeder and guides helical spring so that spring joins top edges of coils. Inserts spring in feeder and positions spring to secure bottom edges of coils. Pushes index bar against row of joined coils, or moves button or lever to activate bar that moves coils forward. Inserts coils in channels to form additional row. Removes completed spring assembly from machine or pulls release lever to eject assembly. Adjusts machine and relieves snagging or jamming, using handtools.
GOE: 06.04.20 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

616.685-022 FABRIC-MACHINE OPERATOR II (furniture) alternate titles: link-fabric-machine operator; link-wire-fabric-machine tender

Tends automatic machines that cut, bend, and couple wire links to form mesh mattress supports (fabrics) for cots, folding beds, and other furniture: Mounts two spools of wire on machine racks and threads ends into feed rollers that form lengthwise and crosswise spring links. Starts machine and allows machine to operate until desired length of wire mesh has been fabricated. Inspects emerging fabric and replaces missing or defective links, using wire snippers and pliers. Adjusts cams and setscrews of machine to correct malfunctions, using handtools.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

616.685-026 HEDDLE-MACHINE OPERATOR (machinery mfg.)

Tends machine that cuts and shapes wire to form metal heddles for textile machinery: Mounts roll of wire on feeder mechanism and threads wire end through guides into machine. Starts machine and observes feed of wire into machine where wire is cut, swaged, and polished. Inspects finished heddles for specified dimensions, using gauges.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

616.685-030 KNITTER, WIRE MESH (metal prod., nec) alternate titles: knitting-machine operator

Tends bank of machines that automatically knit strands of wire to form mesh tubing: Places spool of wire on frame of machine and inserts flyer spindle in top hole of spool. Threads wire through guide on flyer, through pulley of rotating frame, around and under hooks of knitting needles and fastens end to tube roller. Slides guide of belt sideways to engage pulley and start machine. Observes machine to detect faulty knitting and wire breaks. Measures width of mesh tube with ruler to ensure conformance to specifications. Stops machine to rethread and tie broken wires, replace spools of wire and remove rolls of mesh tubing. Notifies supervisor of repairs or adjustments needed. Obtains specified size and type of wire from storeroom. Stacks rolls of mesh tubing for pickup. Sprays wire with oil, soap suds or other lubricant to reduce friction.
GOE: 06.04.02 STRENGTH: M GED: R2 M2 L2 SVP: 2 DLU: 77

616.685-034 LOAD TESTER (metal prod., nec)

Tends load-testing machine to test coiled or leaf springs for conformance with load requirements: Positions spring on bed of machine. Turns hand gauges or positions block gauges to regulate travel of flattening ram. Pulls lever to lower ram and compress spring under specified load. Measures contraction of spring, using gauges. Rejects springs which do not contract specified distance. May measure spring dimensions, using micrometers, calipers, protractor, and plug gauges.
GOE: 06.03.02 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

616.685-038 METAL-SPONGE-MAKING-MACHINE OPERATOR (nonfer. metal)

Tends machine that makes metal sponges (scouring pads): Places spool of wire on spindle and threads end of wire around tension rollers and around winding spindle. Installs and threads additional spools of wire according to type of sponge to be made. Presses button to start machine that twists, curls, and winds wire around spindle to form sponge. Cuts wire when sponge has been formed. Removes sponge from spindle and pulls and pats sponge to specified shape. Packs sponges in cartons or bags.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

616.685-042 MULTI-OPERATION-FORMING-MACHINE OPERATOR II (any industry) alternate titles: forming-mill operator; roll-mill operator

Tends automatic multiple-operation machine that performs any combination of bending, punching, roll forming, beading, cutting and welding, soldering, or clinching of metal to fabricate items, such as rims, molding, panels, cans, tubing, and housings: Places roll of metal sheet, strip, or wire onto feedrack and threads end into drive rolls or through machine. Positions metal blanks manually into feed rolls, or feeds blanks into hopper or onto feed conveyor. Starts machine, observes operation, and verifies finished product visually or by using fixed gauges. May tighten bolts or turn knobs or handwheels to specified points on scale or dial to reset and maintain original setup of machine. May tend one or more work stations of mechanized line of machines operating in tandem. May tend slitting machine to cut body blanks from sheet metal and form seam cans. May be designated by function of machine as Body Maker (tinware); Tubing-Mill Operator (any industry) I.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

616.685-046 PAPERBACK-MACHINE OPERATOR (metal prod., nec) alternate titles: weaving-machine operator

Tends machine that stitches paperbacking to wire fabric used as floor and wall plaster lath: Loads paper roll and roll of wire fabric onto unreeling stand, using hoist. Threads paper and wire fabric through guides, feed rollers, machine, and rewinder. Loads stitch wire of specified gauge onto reel and threads end into feed rollers. Adjusts machine to regulate length of stitch on fabric, using handtools. Adjusts cutters and crimping bar of machine to cut and bend protruding end of thread so that wire hooks on to fabric edge. Starts machine to stitch paperbacking to wire fabric. Removes reinforced wire fabric from rewinder, using hoist. Splices wire fabric rolls to specified length, using handtools.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

616.685-050 POCKET-MACHINE OPERATOR (furniture) alternate titles: pocketed-spring-machine operator

Tends one or more machines that automatically spin wire coils and sew them into cloth pockets to form units for mattress innersprings: Mounts spools of wire, fabric, and cotton thread on machine spindles. Inserts wire and fabric ends into machine guides and lead rollers, and threads machine needles. Starts machine and folds chain of pocketed coils as it emerges on conveyor. Removes springs at regular intervals and places under plunger of stationary dial gauge to ensure uniformity. Turns regulating wheel to adjust wire cutter for specified coil length. Turns setscrew on sewing machine to regulate thread tension.
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

616.685-054 RIVETER (light. fix.)

Tends machine that joins flexible upright arms of desk lamps to metal bases: Clamps flexible arm in vise of machine and positions hole in lamp base over flexible arm. Depresses pedal, causing hammer of machine to repeatedly strike flexible arm to flatten and expand arm, securing arm to lamp base.
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

616.685-058 RIVETING-MACHINE OPERATOR (furniture) alternate titles: machine riveter; rivet-hammer-machine operator

Tends machine that rivets metal furniture parts together: Aligns predrilled holes in parts and inserts rivets into holes. Positions and holds parts on die in machine bed. Depresses pedal or pulls lever to lower ram and die hammer that flattens shank, expanding shank and joining parts. May rivet together slide and cross bars to form cradles for holding file drawers in cabinets and be designated Cradle-Slide Maker (furniture).
GOE: 06.04.20 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

616.685-062 SCROLL-MACHINE OPERATOR (struct. metal)

Tends machine that forms metal stock, such as bars, rods, squares, tubing, and wire, into coils or ornamental scrolls: Positions and clamps specified scroll (die) into bed of machine. Threads workpiece through drag roll and clamps roll to center of die. Starts machine that turns die to draw workpiece along contour of die as vertical rod pushes workpiece into center of die, forming scroll or coil. May tend power shear or cutoff saw to cut stock to specified length. May insert leather strip along edge of die to protect finish of workpiece. May bend workpieces along edge of die manually.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

616.685-066 SLAT TWISTER (furniture)

Tends machine that shapes right-angle twist in ends of metal bed slats: Starts motor and places end of slat in machine. Depresses pedal that causes machine to twist slat and automatically stop when cycle is completed. Removes twisted end of slat from machine, reverses it, and twists other end.
GOE: 06.04.02 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

616.685-070 SPIRAL SPRING WINDER (metal prod., nec) alternate titles: recoil spring winder

Tends machine which coils light gauge metal strips or wire around rotating spindle to form springs used in clocks, watches, and instruments: Threads end of specified length of wire or strip along fixed peg or between guide blocks or rolls and through slot of spindle. Starts machine to rotate spindle that winds wire into coil. Examines coil for conformance with specifications. May tend machine that automatically threads wire through guides and into slot of spindle. May feed automatic shear or punch cutter to cut wire or strip to specified length. May record number of springs wound. May specialize in coiling hairsprings and be designated Hairspring Winder (metal prod., nec).
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

616.685-074 SPIRAL WEAVER (metal prod., nec)

Tends automatic machines that coil, cut, and interlace wire into spiral-weave screen: Threads and pulls wire through pulling and coiling dies of machines and secures end around coiling die, using pliers. Adjusts distance between dies and speeds of wire feed and pulling-die rotation, according to size of wire and length of spiral weave, using handtools. Starts machines, monitors automatic operation and wire supply, and occasionally measures length of weave to verify conformance to specifications, using gauge. Stops machines when screens of specified length are woven.
GOE: 06.04.02 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

616.685-078 SWAGER OPERATOR (pen & pencil)

Tends machine that shapes tubular metal stock to form points or magazines for mechanical pencils: Positions precut stock into holding device of machine and flips switch to start machine that rotates stock. Flips another switch to move rotating holding device horizontally into set of forging dies to shape tube into points or magazines for mechanical pencils.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

616.685-082 SWEEP-PRESS OPERATOR (clock & watch)

Tends sweep press that cuts recesses, smooths rough spots, and rounds corners on watch plates and bridges: Positions plate or bridge over protruding pins of chuck. Moves controls that feed cutting head to plate or bridge. May verify dimensions of specified number of parts, using precision plug and indicator gauge. May replace worn or dull bits.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

616.685-086 WIRE COINER (button & notion)

Tends battery of machines that make scoop (slider-fastener chain part) impressions on roll of wire: Mounts roll of wire on spindle, threads wire end through machine and around spindle, and starts machine. Examines processed wire with microscope and micrometer to verify that impressions are aligned and pitched to specifications. Notifies supervisor of machine malfunctioning. Splices together ends of wire when breaks occur.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

616.685-090 ZIPPER CUTTER (button & notion)

Tends machine that cuts zippers of specified length from continuous strip and removes chain links from end of zipper to accommodate attachment of stops: Positions zipper strip against guide on machine bed or threads end of chain through guides and under blade and punch. Adjusts stop on calibrated scale to obtain specified length and aligns end of strip with stop. Depresses pedal that lowers blade and punch onto strip, cutting zippers for garments to specified length and removing chain links from end of zipper for attachment of stops. May tend machine that cuts zippers to specified length only.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

616.687-010 STRANDING-MACHINE-OPERATOR HELPER (nonfer. metal) alternate titles: cable-mill helper

Performs following duties to fabricate wire into cable: Positions spools of wire on spindle of winding reel, using hoist. Turns handwheel or manually removes release rod to release shaft preparatory to installing takeup spool onto reel jack. May remove unused wire from spools with spool stripper. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 06.04.02 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

616.687-014 WIRE-WEAVER HELPER (metal prod., nec) alternate titles: loom helper

Assists WIRE WEAVER, CLOTH (metal prod., nec) in weaving wire cloth or screening: Transports beams, magazines, wire stock, and machine parts to looms. Attaches wire from spools to warp beam, threads *warp wire* through heddles and reeds of machine, and ties sections of warp wire together. Removes beams of finished screen or cloth from looms and transports them to stockroom or finishing department, using hoist, truck, conveyor, or dolly. Removes spools and bobbins from automatic spooling machines and racks them onto magazines. May thread warp wires individually through heddles, between teeth of reed, and fasten ends to roller. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 06.04.02 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

617 FORMING OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with shaping metal by the application of machine pressure.

617.130-010 SUPERVISOR (struct. metal)

Supervises and coordinates activities of workers engaged in coating, embossing, roll forming, and packaging aluminum house siding: Determines material and personnel requirements to meet specified production and coordinates work schedules to ensure efficient operations. Patrols work area to observe workers and machinery to ensure compliance with established work procedures. Examines sample workpieces to determine conformance with specifications, using blueprints and charts. Establishes quality standards for evaluation of products by inspectors. Assists workers in adjustment or repair of machines or equipment. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L4 SVP: 6 DLU: 77

617.130-014 SUPERVISOR, FENCE MANUFACTURE (metal prod., nec)

Supervises and coordinates activities of workers engaged in operating machines that form steel wire into chain link fence mesh: Reads work ticket to determine material required to fill job orders. Patrols work area to ensure workers and machines meet production goals and product specifications. Confers with other supervisors to coordinate production. Trains new workers to operate, adjust, and lubricate fence making machines. Assists workers by setting up machines to meet production requirements. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M2 L2 SVP: 6 DLU: 77

617.260-010 PRESS OPERATOR, HEAVY DUTY (any industry) alternate titles: bending-press operator; hydraulic-press operator; toggle-press operator

Sets up and operates heavy-duty power press to bend, form, stretch, and straighten metal plates, metal extrusions, formed sheet metal, structural shapes, forgings, and weldments as specified by blueprints, layout, and templates: Plans sequence of operations, applying knowledge of physical properties of metal. Measures and sights along workpiece, using tape, rule, straightedge, and transit, to mark reference lines. Selects and positions flat, V-block, radius, or special purpose die sets into ram and bed of machine, using jib or crane. Aligns and bolts dies to ram and bed of machine, using gauges, templates, feelers, shims, and wrenches. Turns handwheel or levers to set depth and pressure of ram stroke. Preheats workpiece in furnace, using hand torch. Lifts and positions workpiece between dies of machine, using jib or crane and sledge. Starts machine to lower ram which bends or straightens workpiece between dies. Repositions workpiece and changes dies when making multiple or successive passes. Hand forms or finishes workpiece, using hand sledge and anvil. Grinds out burrs and sharp edges, using portable grinder. Inspects and marks job number on finished workpiece. May bend or straighten cold metal. May set dies to punch and blank heavy metal. May operate horizontal power press to bend or straighten long pieces of bar stock or structural shapes. May operate press equipped with two or more rams to bend angles or flanges or bend to radius by successive passes; or operate multiple acting hydraulic press to perform deep progressive and reverse draw operations of sheet metal. May be designated according to type press operated as Bulldozer Operator (any industry) II; Stretch-Press Operator (any industry); or according to shape product produced as Dishing-Machine Operator (any industry).
GOE: 06.02.02 STRENGTH: H GED: R3 M2 L2 SVP: 7 DLU: 77

617.280-010 SHOT-PEENING OPERATOR (aircraft mfg.)

Sets up and operates shot-peening equipment to shallow form and improve stress tolerance of flight vehicle metal surfaces, according to specifications: Reads and interprets blueprints, sketches, work orders, and other documentation to determine layout of specific areas to be shot-peened, sequence of operations, and finish specifications. Lays out and marks areas to be shot-peened on test specimen or part, using measuring and marking instruments, or fits template over part. scribes pattern, and peels away masking compound to expose areas to be treated. Mounts part on jig, rotary table, or in shot-peening cabinet. Fills hopper with specific size and type shot. Sets up, operates, and adjusts shot-peening equipment to achieve specified contour on test specimen or part. Measures and checks test specimen or part to verify conformance to specifications and to determine required equipment adjustments, using measuring instruments, templates, and fixtures. Records data on equipment settings and adjustments, such as feed rate, nozzle angles and oscillation, number and size of nozzles required, shot size, and air or vacuum pressure settings, to be used for subsequent operation and to develop numerical control programming data. Loads control media, such as computer tape, in control console of equipment, or enters commands to retrieve control instructions from computer data base to operate equipment automatically. Observes operation of equipment to detect malfunctions. Peels masking material from completed part, and cleans part with solutions to remove adhering scale and particles.
GOE: 06.02.02 STRENGTH: M GED: R4 M3 L4 SVP: 6 DLU: 87

617.360-010 BRAKE OPERATOR I (any industry) alternate titles: power-brake operator; press-brake operator

Sets up and operates power brake to bend, notch, punch, form rolls, arc, or straighten metal plates or sheet metal and structural shapes to blueprint or sketch specifications: Selects, positions, and aligns dies in machine ram and bed, using shims, rule, square, or templates. Turns setscrews or bolts to fasten clamp bar that holds dies in position. Turns adjustment screws to set specified pressure of ram and clearance between dies to thickness of metal, as indicated by calibrated scale or feelers. Lays out or details layout on work stock from blueprints or templates. Positions workpiece manually or with crane, to align layout marks to dies. Starts machine to lower ram or depresses pedal to activate ram that bends or cuts metal. Sets stops on machine bed and repositions stock to run successive pieces, or to perform multiple operations. Verifies dimensions of workpiece, using template or scale. May preheat metal in furnace or by using oxyacetylene torch. May grind laps or burrs from edges of workpiece, using portable grinder. May devise and build temporary dies. May operate apron brake which bends metal by forcing metal between movable apron and horizontal bending bar. May be designated according to type material processed as Brake Operator, Sheet Metal (any industry) I; or according to special operations required to process thick metal as Brake Operator, Heavy Duty (any industry).
GOE: 06.02.02 STRENGTH: H GED: R3 M3 L3 SVP: 6 DLU: 80

617.360-014 SWAGING-MACHINE ADJUSTER (ordnance) alternate titles: bullet-swaging-machine adjuster; swage toolsetter

Sets up automatic swaging machines that press lead wire or lead slugs into bullets or into cores for jacketed bullets: Positions and aligns forming die and punch in machine. Changes length and rate of punch and adjusts automatic feed and ejection mechanisms, using handtools and gauges. Starts machine to obtain sample bullets or cores. Examines finished product for defects, such as malformed nose or heel, nicks, and scratches, and determines cause. Verifies profile and dimensions, using fixed gauges. Weighs samples on balance scale to ascertain conformance to specifications. Operates speed lathe and polishing jack to reshape and polish worn punches and polishes dies by hand, using emery cloth. Gives instructions to new workers in machine operation and inspection.
GOE: 06.01.02 STRENGTH: M GED: R3 M2 L3 SVP: 6 DLU: 77

617.380-010 KICK PRESS SETTER (button & notion) alternate titles: tool setter

Sets up and adjusts battery of foot-powered presses that shape and assemble metal buckles, buttons, and parts: Obtains specified die and punch from rack according to size and shape of product. Installs die and punch in machine and adjusts stroke of press ram, using wrenches. Test-operates machine, and examines test-run product for defects, such as malformation, misalignment, dents, burrs, and scratches. Measures product to verify dimensions, using micrometer.
GOE: 06.01.02 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

617.382-010 TUBE BENDER, BRASS-WIND INSTRUMENTS (musical inst.)

Sets up and operates hydraulic press to bend tubes used in making brass-wind instruments: Fastens bending die onto press, using wrenches and screwdriver. Fits tube into revolving lateral die, using gauge to align center of tube under descending die. Starts press to lower overhead die and bend tube. Verifies accuracy of bend, using template. May cut tube to specified length, using table saw. May fill tube with lead to prevent wrinkling during bending. May bend tube around forming blocks manually. May press steel balls through tube or hammer pitch-filled tube to remove wrinkles.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

617.382-014 HAMMER OPERATOR (aircraft mfg.) alternate titles: planishing-hammer operator; power-hammer operator

Operates reciprocating power hammer to smooth and shape sheet metal used in manufacturing aircraft and aerospace products according to specifications: Reads blueprints and work orders to determine machine setup. Installs dies in machine according to surface contours, size, and thickness and hardness of metal to be shaped. Adjusts drive arm to regulate striking force of hammer. Applies lubricants to surfaces of metal and dies to prevent marring. Starts machine motor and depresses pedal to start action of hammer. Moves metal under hammer to attain specified shape. Observes metal during shaping to detect wrinkles and other defects. Compares finished part with template or sample part to verify conformance to specifications. Shapes part partially formed by machine to specified dimensions, using handtools. Trims excess materials from edges of parts, using shears. May push weighted roller over metal to smooth surfaces.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 87

617.480-010 JOB SETTER, SPLINE-ROLLING MACHINE (machine shop)

Sets up automatic spline roll-forming machines to cold-form splines on gear shafts according to machine setup instructions and knowledge of operational capabilities of machine, using handtools and gauges: Places shims to position die-racks (used to form teeth on splines by pressure-rolling action) at specified height and verifies position with micrometer. Turns knob to adjust vernier gauges and obtain specified spacing of die mounts. Places die-racks in mounts and clamps racks in position. Places spline blank between machine centers and positions machine tailstock to accommodate length of workpiece. Starts and cycles machine to verify operation specified. Inspects trial run splines for conformance to specifications, using micrometer and gauges. Adjusts machine to correct faulty setup if splines do not meet specifications. May set up roll-forming machines to cold-form threads on gear shaft and be designated Job Setter, Thread-Rolling Machine (machine shop).
GOE: 06.01.02 STRENGTH: M GED: R3 M2 L3 SVP: 5 DLU: 77

617.480-014 PRESS SETTER (nonfer. metal; steel & rel.)

Sets up mechanical and hydraulic presses to produce powdered-metal parts, such as bearings, gears, filters, and rings according to blueprints and specifications, using handtools: Installs, positions, and aligns dies in press bed. Adjusts stroke of ram and punches to specified depth of fill and injection stroke, using handtools, and opens supply hopper valves to regulate flow of powder. Starts

machine to produce sample parts for inspection. Measures dimensions of and weighs parts to ensure parts meet specifications, using micrometer and balance scale. May set up sintering furnace. May mix powders [MIXER (nonfer. metal; steel & rel.)].
GOE: 06.01.02 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

617.482-010 BENDING-MACHINE OPERATOR I (any industry)
Sets up and operates machine to bend metal structural shapes, such as bars, rods, angles, pipes, and tubes, to angle or contour specified by work order, drawings, templates, or layout: Selects and bolts holding clamp, die block, and guide clamp to machine. Positions and clamps end stops on machine to set specified location of bend. Inserts or screws plug stops into guide wheel to set specified degree of bend. Positions workpiece against end stop. Locks holding clamp and guide clamp onto workpiece. Lubricates workpiece with oil. Starts turntable that draws workpiece through guide clamp around die block until stopped by plug stops or until dial indicator points to specified degree of bend. May slide mandrel into tubing instead of using guide clamp. May preheat workpiece, using hand torch or heating furnace. May use hand-powered bending machine for short runs. May fill tubes or pipe with sand, resin, or lead to prevent wrinkling or collapsing during bending operation. May heat tube, using torch, and manually bend tube or pipe around forming blocks. May flare tube ends, using tube flarer and cut or trim metal stock to length, using power shears or saws. May be designated according to type of stock bent as Pipe-Bending-Machine Operator (construction); Rod-Bending-Machine Operator (any industry) I; Tube-Bending-Machine Operator (any industry) I.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

617.482-014 FORMING-ROLL OPERATOR I (any industry)
Sets up and operates rolling machine to straighten, knurl, or form contours in surfaces of metal cylinders and rings as specified by blueprints, templates, and work orders: Selects male and female rolling dies or rolling dies and *forming chuck* from data charts to form specified contour. Positions, aligns, and bolts dies or die and forming chuck onto parallel spindles of machine. Positions workpiece over inner dies or forming chuck. Positions and clamps end guides or clamps workpiece to forming chuck. Starts machine to activate inner drive roll or chuck. Moves lever to press outer roll on workpiece to shape workpiece to specified contour. Verifies contour, using rule or template. May operate machine equipped with vertical table to tilt and force workpiece at angle to plane of opposing rolls to expand outer edge or form flanges to specified shape. May operate machine equipped with multiple sets of opposing rolls which expand and shrink diameter of workpiece to form contours. May move lever to position slitting knife to trim edge of workpiece. May be designated according to type of rolling machine operated as Beading-Machine Operator (any industry) I; Forming-Roll Operator, Heavy Duty (any industry).
GOE: 06.02.02 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 77

617.482-018 ROLL-FORMING-MACHINE OPERATOR I (any industry)
Sets up and operates machine to form longitudinal bends, rolls, beads, or embossed design onto sheet metal strips by action of two or more roller dies to fabricate items, such as molding, trim, weatherstrip, and structural shapes specified by work order or diagram: Bolts specified roller dies and drives rolls onto spindles. Positions spindles to align male and female roller dies and adjusts rolls to thickness of metal, using feelers, rule, shims, gauges, and handtools. Sets side guides. Turns knobs to set footage meter and control which stops machine or activates automatic shear when specified length of strips has been run. Lifts coils of metal onto feedrack, manually or by hoist, and threads end into feed roll. Directs flow of coolant onto rolls or fills oilcups. Starts machine, observes operation, and verifies dimensions of finished products, using micrometers, gauges, and rule. Threads end of formed stock onto rewind spindle and cuts it to specified length, using hand shears, or removes finished pieces from machine bed. May butt-weld ends of coil together to form continuous feed. May feed precut strips of metal into machine. May turn knobs or install gears to adjust speed of machine. May verify coolant levels in machine and oil and grease moving parts as specified.
GOE: 06.02.02 STRENGTH: M GED: R3 M3 L3 SVP: 5 DLU: 77

617.482-022 SPRING FORMER, MACHINE (metal prod., nec) alternate titles: spring bender; submarine operator
Sets up and operates machine to form leaf-type spring leaves: Installs upper and lower dies in machine, following leaf spring, using handtools. Positions heated leaf blank onto lower die, using tongs. Depresses pedal or pulls lever to force dies together, forming curved leaf. Immerses leaf in quenching oil for cooling and hardening if machine does not perform this function automatically. May heat leaf blanks in furnace and form them by hand.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L1 SVP: 4 DLU: 77

617.482-026 STRAIGHTENING-PRESS OPERATOR II (any industry) alternate titles: straightener
Operates power press equipped with pressure blocks or dies to straighten warped or bent metal objects, such as plates, structural castings, shapes, forgings, and shafts to specified dimensions: Examines workpiece to locate defects, using such devices as straightedge, deflection gauge, template, and square. Positions and locks specified pressure blocks, or die, into ram of machine, or positions shims under high spots of workpiece. Lifts and positions workpiece into bed of machine manually or using jib or crane. Starts ram which presses out bent or high spots of workpiece. Reexamines and repositions workpiece, changing shims for each pass until workpiece conforms with specifications. May turn levers or handwheels to adjust depth and pressure of ram. May preheat metal, using heating furnace or hand torch and clean dies between pressings, using compressed air, oil, and brush. May tend machine equipped with preset dies to bend metal to specified shapes. May grind rough edges from finished workpiece, using portable hand grinder. May be designated according to part straightened as Barrel Straightener (ordnance) II; Crankshaft Straightener (auto. mfg.); Gear Straightener (auto. mfg.); or according to type press operated as Gag-Press Straightener (steel & rel.).
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L1 SVP: 5 DLU: 77

617.585-010 SWAGING-MACHINE OPERATOR (ordnance) alternate titles: bullet-swaging-machine operator; forming-machine operator
Tends battery of automatic swaging machines that form lead wire or slugs into bullets or cores for jacketed bullets: Threads lead wire from reel over take-up pulleys and through feed mechanism and between forming wheels, or fills machine hopper with cylindrical lead slugs. Starts machine and observes feeding, forming, and ejecting mechanisms to detect malfunction. Examines finished pieces for malformation and scratches. Verifies weight, contour, and dimensions, using balance scale and fixed gauges. Mixes oil and kerosene in prescribed proportion and fills machine wells to lubricate lead wire or slugs. Notifies SWAGING-MACHINE ADJUSTER (ordnance) of machine malfunction. May make minor adjustments, such as replacing worn dies, using handtools.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

617.665-010 NAIL-MAKING-MACHINE TENDER (steel & rel.)
Tends machines that automatically cut and shape wire to make nails of specified size: Mounts coil of wire on rod, and threads wire through straightening rollers and feeding mechanism into slots of die plates. Tightens roller bolts to regulate feed of wire, using wrench. Starts machine. Inspects nails for such flaws as chips and distortions. Measures sample nail, using split gauge or micrometer, and notifies NAIL-MAKING-MACHINE SETTER (steel & rel.) of deviations from specifications. Records production data. May tend machines that automatically cut coiled wire and attach tackheads to form tacks of specified size. May tend machine that bends and cuts wire to form spokes for tricycle wheels and be designated Spoke Maker (toy-sport equip.).
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

617.682-010 BARREL-DEDENTING-MACHINE OPERATOR (beverage) alternate titles: dedenter
Operates machine to remove dents from metal barrels: Positions barrel on lower die of machine, aligning bunghole under water spout of machine. Turns side dies of machine to align contour of dies with contour of barrel ends. Presses switch that closes side, top, and bottom dies around barrel. Pumps water into barrel, forcing walls of barrel against dies and removing dents. Stops pump and opens dies after specified water pressure has been attained. Examines surfaces of barrel to verify smoothness. Pushes barrel from lower die onto conveyor. May drain de-dented barrels, pressurize barrels with air, and place barrel in water tank to detect leaks.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

617.682-018 HOBBING-PRESS OPERATOR (any industry)
Operates hydraulic press that forces hard steel hob into soft steel block to form molding die: Receives premarked soft steel block and specified hob from set-up worker. Places block in retainer ring of press and positions hob on block. Places plug block over hob to hold hob in alignment. Turns handwheel to raise ram which holds block and hob in place. Starts pumps to build up prescribed hydraulic pressure. Pulls lever to exert pressure on ram which embeds hob in soft block to specified depth, forming impression die. Removes block manually and clamps it in vise. Taps block with hammer to loosen hob and removes it from block. Inspects die for defects, such as rips or flaws, using magnifying glasses.
GOE: 06.02.02 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

617.682-022 SETTER, COLD-ROLLING MACHINE (machine shop)
Sets up and operates single- or double-die gear roll-forming machines to rough and finish roll-forming of gears, according to design information and machine operating instructions: Mounts and centers forming dies on opposing die spindle heads, using handtools. Sets stops to control traversing of die spindle head to predetermined operating position. Adjusts each die spindle to form gears as specified and adjusts and locks phase adjustor to obtain designated rotational timing of dies with gear teeth on workpiece. Positions arbor on machine to form gears of specified diameter. Adjusts speed of arbor motor with speed of dies to ensure clash-free engagement of dies with workpiece. Mounts gear blank on arbor and starts machine to produce trial run gear to verify setup of machine. Feels and inspects gear to detect defects, such as burrs, using gauges and micrometers. Adjusts machine to correct faulty machine setup if gears do not meet specifications. Pushes buttons to start automatic operation of machine and monitors forming of gears.
GOE: 06.02.02 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

617.685-010 BENDING-MACHINE OPERATOR II (any industry)
Tends machine that bends metal structural shapes, such as bars, strips, rods, angles, and tubes to specified angle or contour: Positions workpiece against end stops. Locks holding clamp and guide clamp onto workpiece. Lubricates workpiece with oil. Pulls lever or depresses pedal to activate turntable which draws workpiece through guide clamp and around die block until stopped by plug stops. May slide mandrel into tubing instead of using guide clamp. May

use hand-powered bending machine. May perform such fabricating tasks as flaring tube ends, using tube flarer, or cutting metal stock to length, using power shears or saws. May attach specified die to machine, using wrench. May be designated according to type of stock bent as Rod-Bending-Machine Operator (any industry) II; Tube-Bending-Machine Operator (any industry) II; or type of machine tended as Two-Stage, Steel-Bender Annealer (toy-sport equip.).
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 78

617.685-014 CORNER FORMER (wood. container)
Tends machine that forms angle iron used in making wood boxes: Shifts lever to start machine. Positions and holds metal strip on die of machine as V-shaped periphery of roller attached to ram passes over metal, pressing metal into shape of angle iron. Removes angle iron from machine.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

617.685-018 EMBOSSING-MACHINE OPERATOR (nonfer. metal)
Tends machine that embosses designs on sheet metal: Positions embossing roll of specified design and size in machine and adjusts roll clearance and tension, width of feed table, and roll guides according to dimensions of sheet metal, using hoist, gauges, and handtools. Starts machine and feeds sheets into roll or places coil of metal on unwind spindle and threads coil end through machine onto rewinder. Measures depth of embossed design, using micrometer and adjusts machine roll to meet specifications.
GOE: 06.04.02 STRENGTH: M GED: R2 M2 L2 SVP: 4 DLU: 77

617.685-022 EXPANDING MACHINE OPERATOR (steel & rel.) alternate titles: belling machine operator
Tends machine that expands pipe ends to specified diameter by one of following methods: (1) Starts machine that rotates pipe against die to expand end of pipe. (2) Places pipe in expanding machine and starts machine that forces mandrels into end to expand pipe to specified diameter. (3) Starts machine that inserts and expands cylindrical element within pipe to enlarge pipe to specified diameter. Pushes pipe along conveyor rolls to expander block. Verifies dimensions of pipe end with ring or plug gauge. Important variables may be indicated by trade names of machine used.
GOE: 06.04.02 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 77

617.685-026 POWER-PRESS TENDER (any industry)
Tends power press that cuts, punches, or stamps various size articles from sheets or blocks of materials: Bolts or clamps specified die to machine. Positions or clamps sheet or block of material on machine bed or in holding fixture to obtain maximum cuts from each sheet. Starts machine and depresses pedal or moves lever that rotates or forces cutting die through sheet or block to obtain article of specified size and shape. May tend machine that automatically feeds and positions material under die for cutting. May examine parts for defects, visually or using measuring gauges, and discards parts not meeting specifications. May be designated according to type of machine tended as Blanking-Machine Operator (any industry); Punch-Press Operator (any industry) IV; Stamping-Press Operator (any industry).
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 89

617.685-030 RIPPER (furniture)
Tends flaring machine that assembles display stands consisting of tube with disk attached to either end: Inserts end of tube through hole in disk, sets tube in jig on machine table, and starts machine. Depresses pedal to raise table and force upper end of tube against rotating flaring tool to hold disk on tube. May glue felt over outside faces of disks.
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

617.685-034 ROLL-FORMING-MACHINE OPERATOR II (any industry)
Tends machine that forms longitudinal bends, rolls, beads, or embosses designs onto sheet metal strips to form items, such as molding, structural shapes, and weatherstripping: Bolts specified roller dies onto prepositioned spindles. Loads coils of strip onto feedrack. Turns knob to set footage meter and control which stops machine, or activates automatic shear. Threads end of coil into feed rolls. Starts machine to form and cut strip to specified length. Removes bundles of cut and finished pieces from machine bed. Inspects finished pieces visually or using fixed gauge. May weld together ends of feed coils to form continuous feed, using automatic butt welder.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

617.685-038 SINTERING-PRESS OPERATOR (nonfer. metal; steel & rel.) alternate titles: briquette-press operator; coining-press operator; compact-press operator
Tends mechanical or hydraulic presses which compress metal powders into parts, such as bearings, gears, filters, and rings, and coin them to specified size: Pours metal powder into hopper. Starts press, observes operation, and notifies PRESS SETTER (nonfer. metal; steel & rel.) of malfunctions. Examines finished part for nicks, burrs, and cracks. Weighs parts on scale and measures dimensions, using micrometers or fixed gauges, to ensure conformance to specifications. May adjust shuttle mechanism to regulate amount of powder in part. Places finished parts on tray or in stock pan. May write identifying information, such as mix number, number of parts, and date, on tag and attach it to tray or pan. Feeds parts into coining press to correct distortions created in sinking process. Removes parts from press and inspects them for burrs or other imperfections. Places parts on tray or in stock pan. May tend forming presses that fabricate clockwork parts from powdered metal.
GOE: 06.04.10 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 77

617.685-042 SWAGE TENDER (ordnance)
Tends swage machine that chokes (reduces) inside diameter of muzzle end of shotgun barrel to enable pellets or shot to concentrate when gun is fired: Inserts and clamps shotgun barrel into holding device and starts machine that exerts contraction pressure on end of barrel to reduce inside diameter of barrel. Measures diameter of barrel bore, using dial gauge to verify that choke of barrel meets specification.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

617.686-010 HOOP COILER (wood. container) alternate titles: hoop-rolls operator
Feeds flat strips of hoop steel, in which rivet holes have been punched, into rolls of machine to form barrel hoops.
GOE: 06.04.02 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

619 MISCELLANEOUS METALWORKING OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with shaping and conditioning metal by such means as rolling, forging, extruding, blanking, and pressworking. The blanking and pressworking of nonmetallic materials, except wooden, are also included when the methods and machine tools commonly applied to the working of metal are used.

619.130-010 HYDRAULIC-PRESSURE-AUTO-FRETTAGE-MACHINE-OPERATOR SUPERVISOR (ordnance) alternate titles: cold-working supervisor
Supervises and coordinates activities of workers engaged in setting up and operating hydraulic-pressure-auto-frettage machines to cold-work interior of artillery barrels. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.02 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

619.130-014 SUPERVISOR, ALUMINUM FABRICATION (ship-boat mfg.)
Supervises and coordinates activities of workers engaged in fabricating aluminum sheets in preparation for assembly into boats: Trains new workers in performance of tasks, such as stretching, shearing, and trimming aluminum sheets. Inspects work in progress to ensure adherance to company standards. Confers with other supervisors to coordinate interdepartmental workflow. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

619.130-018 SUPERVISOR, COLD ROLLING (steel & rel.)
Supervises and coordinates activities of workers engaged in pickling, annealing, cold and temper rolling, and slitting and shearing steel strip or plate: Reads rolling order and production schedule for processing specifications for each unit. Inspects material from each unit for conformance to metallurgical and customer specifications. Determines adjustments required to correct defects noted and directs workers in adjusting machines and equipment to fabricate items meeting specifications. Trains new workers. Performs other duties as described under SUPERVISOR (any industry) Master Title. May supervise pickling and annealing operations only and be designated Supervisor, Cleaning And Annealing (steel & rel.).
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 78

619.130-022 SUPERVISOR, CONTINUOUS-WELD-PIPE MILL (steel & rel.) alternate titles: rolling supervisor, continuous-pipe mill
Supervises and coordinates activities of workers engaged in heating, forming, and welding flat steel strips (skelp) to produce butt-welded pipe by continuous welding process. Examines pipe for conformance to dimensional specifications, using gauge and measuring tape. Records production. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

619.130-026 SUPERVISOR, HOT-WOUND SPRING PRODUCTION (metal prod., nec) alternate titles: supervisor, coil springs
Supervises and coordinates activities of workers engaged in pointing, coiling, and load testing hot-wound springs. Trains workers in operation of equipment. Inspects springs for conformance to specified tension and dimensions, using tension-testing machine and gauges. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

619.130-030 SUPERVISOR, LINE (any industry) alternate titles: machine supervisor
Supervises workers engaged in layout and machine operating to fabricate structural, wire, or sheet metal products, applying knowledge of layout, product design, machine functions, capacities, and output potential: Requisitions material required to meet production goals. Examines items produced to determine if items meet specifications. Trains new workers. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated by department or operation as Lay-Out Supervisor (any industry); Machine-Operations Supervisor (any industry); Metal-Spinning Supervisor (any industry); Punch-Press Supervisor (any industry); Roll-Forming Supervisor (any industry); or product produced as Supervisor, Metal Furniture Fabrication (furniture).

GOE: 06.02.01 STRENGTH: L GED: R4 M2 L3 SVP: 8 DLU: 77

619.130-034 SUPERVISOR, MACHINE SETTER (any industry)

Supervises and coordinates activities of workers engaged in fabrication of structural metal products, applying knowledge of layout, product design, machine setup, capacities and output, fitting, and welding procedures: Analyzes work orders, workpiece, and blueprints to determine process, materials, machines, tooling, and sequence of operation. Assigns tasks to workers, and specifies methods of coordinating workflow to meet production schedules. Sets up machines, such as bending machines, spot welders, punch presses, drill presses, and brakes. Instructs workers in operation of machines. Inspects finished pieces visually and using precision measuring devices as rules, gauges, squares, and micrometers. Supervises such processes as fabricating, welding, stock handling, and assembling. Investigates malfunction of machines and equipment to determine need for repair. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.06 STRENGTH: L GED: R4 M3 L4 SVP: 8 DLU: 77

619.130-038 SUPERVISOR, PIPE FINISHING (steel & rel.) alternate titles: finishing supervisor, weld-pipe continuous

Supervises and coordinates activities of workers engaged in straightening, facing, testing, cutting, and threading steel pipe, and in coating and bundling pipe for shipment. Inspects finished pipe for conformance to specifications, using micrometer, calipers, and gauges. Directs changes in machine set-ups when product fails to meet specifications. Trains new workers. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

619.130-042 SUPERVISOR, PUNCH-AND-ASSEMBLY DEPARTMENT (elec. equip.) alternate titles: core-assembly supervisor

Supervises and coordinates activities of workers engaged in fabricating and assembling laminations for rotor and stator cores. Trains workers in operation of slitting machines, power shear, punch press, and welding and brazing equipment. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

619.130-046 SUPERVISOR (comm. equip.)

Supervises and coordinates activities of workers engaged in fabrication of sheet metal chassis, cabinet components, and assemblies in television manufacturing facility: Reviews work orders to ascertain production goals and sequence of operations. Confers with members of management staff to arrange for assignment of workers required to meet production demands. Observes workers performing duties, reviews production reports, and confers with quality control personnel to evaluate work performance. Explains and demonstrates machine setup and inspection procedures to new workers. Assigns experienced workers to assist in training new workers. Conducts periodic inventories, and directs preparation of purchase orders according to company policy. Performs duties described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 86

619.131-010 MACHINING-AND-ASSEMBLY SUPERVISOR (elec. equip.) alternate titles: supervisor, floor assembly

Supervises and coordinates activities of workers engaged in machining and assembling electric motors, generators, and control and switch gear apparatus: Directs placement of parts, such as stator core, rotor core, field yoke, or panelboard on machining or assembly floor to coordinate machine operation and assembly. Inspects machined parts and assembled units for conformance to specifications, using micrometers and other measuring instruments. May supervise workers engaged only in assembling or in machining electric motors, generators, and control and switch gear apparatus. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M2 L3 SVP: 5 DLU: 77

619.131-014 SHOP SUPERVISOR (struct. metal)

Supervises and coordinates activities of workers engaged in fabricating of products from pipe, such as trellises, playground equipment, cattle truck frames, hunting stands, and wire fence gates: Studies assembly diagrams to lay out work for pipe products. Measures and cuts pipe to length on pipe-cutting machine. Bends pipe around blocks and forms to shape it according to specification. Clamps pipe in position, and welds joints to assemble products [WELDER, COMBINATION (welding)]. Instructs workers to chip and paint pipe joints. Supervises workers engaged in fabricating and assembling gates. Counts and records quantities of fence building material, supplies, and tools taken from yard. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

619.131-018 SHRINK-PIT SUPERVISOR (ordnance)

Supervises and coordinates activities of workers engaged in shrinking hoops, liners, breech rings, and tubes of heavy cannons. Calculates heating time required to shrink object according to diameter of parts and composition of steel. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M4 L3 SVP: 7 DLU: 77

619.132-010 LEAD-SECTION SUPERVISOR (ordnance)

Supervises and coordinates activities of workers engaged in extruding lead ingots into wire, swaging wire into cartridge components, such as bullet slugs and point fillers, and recasting scrap into ingots. Assists workers in adjusting equipment. Trains new workers. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.10 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

619.132-014 SHEET-MILL SUPERVISOR (nonfer. metal)

Supervises and coordinates activities of workers engaged in rolling nonferrous ingots into sheets and in stretching, cutting, and coiling sheets to specifications: Verifies dimensions of sheets and coils, using gauge, calipers, and tape measure. Examines sheets for defects, such as scratches, dents, and wrinkles. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to process as Cold-Mill Supervisor (nonfer. metal); Hot-Mill Supervisor (nonfer. metal).
GOE: 06.02.01 STRENGTH: L GED: R3 M2 L2 SVP: 7 DLU: 77

619.132-018 SHELL-SHOP SUPERVISOR (ordnance)

Supervises and coordinates activities of workers engaged in machining metal into finished shell cases. Organizes production line, determines placing of machines, and plans flow of materials. Oversees workers engaged in maintenance of equipment. Trains new workers. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L2 SVP: 8 DLU: 77

619.132-022 STRUCTURAL-MILL SUPERVISOR (nonfer. metal)

Supervises and coordinates activities of workers engaged in tempering, sawing, and cleaning metal preparatory to production of aluminum-alloy structural forms, performing duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M2 L3 SVP: 6 DLU: 77

619.132-026 SUPERVISOR, FINISHING-AND-SHIPPING (steel & rel.)

Supervises and coordinates activities of workers engaged in shearing, inspecting, and leveling steel sheet and plate to specified dimensions, and in storing and shipping finished sheet and plate. Gives workers directions in setting up machines to fabricate material meeting customer requirements and examines material for conformance to specifications. Trains new employees. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

619.132-030 SUPERVISOR, PLATE HEATING, ROLLING, AND FINISHING (steel & rel.)

Supervises and coordinates activities of workers engaged in charging and heating slabs in reheating furnaces, rolling slabs into plates, and in laying out and cutting plates to specified sizes. Trains workers in operation of furnace. Inspects finished plates for conformance to job order specifications. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

619.134-010 SUPERVISOR, CONDITIONING YARD (steel & rel.)

Supervises and coordinates activities of workers engaged in grinding, scarfing, or chipping defects from blooms, billets, or slabs preparatory to rolling. Directs crane operators in moving steel to and from conditioning yard. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.04.01 STRENGTH: M GED: R3 M2 L2 SVP: 8 DLU: 77

619.137-010 MACHINE-ADJUSTER LEADER (ordnance) alternate titles: adjuster leader

Supervises and coordinates activities of workers engaged in one phase of producing cartridges and shells. Performs duties as described under SUPERVISOR (any industry) Master Title. May be designated according to process supervised as Machine-Adjuster Leader, Bullet Assembly (ordnance); Machine-Adjuster Leader, Cannelure And Finish (ordnance); Machine-Adjuster Leader, Case Trim (ordnance); Machine-Adjuster Leader, Primer Assembly (ordnance).
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

619.260-010 ORNAMENTAL-METAL-WORKER APPRENTICE (metal prod., nec) alternate titles: art-metal-worker apprentice; ornamental-metal-fabricator apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.06 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

619.260-014 ORNAMENTAL-METAL WORKER (metal prod., nec) alternate titles: art-metal worker

Sets up and operates variety of machines and equipment to fabricate ornamental metal products, such as light fixtures, church statuary, lamps, plaques, and metal artwork, following sketches, artistic and architectural drawings, models, written descriptions, and photographs: Interprets data to select materials, lay out reference points, and develop sequence of operations. Operates metal fabricating machines, such as shears, saws, brakes, bending machines, and punch and forming presses, to cut stock to size and bend stock to shape. Heats pieces in forge to working temperature, as indicated by color. Bends, twists, and hammers hot or cold workpieces to achieve specified shape and ornamental imprints, using jigs, scroll iron, twisting fork, vise, and selected peening hammers. Operates machine tools to turn, drill, and mill metal to specified dimensions. Hammers and peens sheets of metal to form designs, such as flowers or leaves. Chases castings to finish metal statuary and plaques. Welds, forge welds, brazes, solders, rivets, or bolts components together to assemble workpiece. Grinds, buffs, and polishes surface to desired finish. Fabricates or forges special

jigs, tools, and peening hammers. May sculpture plaster patterns for ornamental castings. May hand paint finished items. May install finished product. May specialize in fabricating religious artwork and be known as Ecclesiastical-Art-Metal Worker (jewelry-silver.; metal prod., nec).
GOE: 05.05.06 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

619.261-010 INSPECTOR, METAL FABRICATING (any industry) alternate titles: plate-and-weld inspector; plate-shop inspector; structural inspector

Inspects materials received, finished products, and work in process of fabrication into metal products to ensure conformance with work orders and diagrammatic and template specifications: Measures centerlines and reference points to verify initial and assembly layout and machine setup, using layout plate, templates, squares, straightedge, feelers, tape, transit, and plumblines. Verifies physical properties and size of materials, such as plates, sheets, structural shapes, castings, forgings, dies, fixtures, and work produced by fabricating machines, using magnaflux machine, surface plate, hardness testing equipment, gauges, and micrometers. Verifies hole size, using plug gauge. Examines finished products for rough edges, cracks, and appearance. Marks parts for acceptance or rejection. Makes reports to suggest changes in dies, fixtures, and materials used. Reports inspection results. Makes sketches and recommends procedure for special salvage or scrapping operations. May inspect material for internal defects, using x-ray and ultrasonic test equipment. May specialize in single phase of inspection and be designated Lay-Out Inspector (any industry); Machine-Operations Inspector (any industry); Template Inspector (any industry).
GOE: 06.01.05 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 77

619.280-010 NEEDLEMAKER (button & notion)

Sets up and operates variety of machines to make latch and spring needles for use in manufacture of knitted or sewn goods: Selects dies, jigs, and fixtures working from blueprints. Machines hook, shank (holding device), and slot in needle, grinds needle including point, and mills jack to hold spring needle in place. May grind rivet to contour designed to lock latch of needle in place.
GOE: 06.01.03 STRENGTH: M GED: R4 M4 L3 SVP: 6 DLU: 77

619.280-018 SPRING-MANUFACTURING SET-UP TECHNICIAN (clock & watch)

Sets up and operates variety of metalworking machines to fabricate special-alloy spring wire for watches: Prepares and melts charge of molten metal in vessel (converter) to change form of metal. Sets up equipment and casts, rolls, draws, heattreats, and performs allied metalworking operations, using equipment, such as forging hammer, rolling mill, butt welder, strip-grinding machine, and heat-treating furnace. Diagnoses and corrects malfunctioning of equipment and machinery and makes replacement parts, using machinist's tools and equipment. Works to close metallurgical and dimensional tolerances.
GOE: 06.01.03 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 77

619.281-010 CASTING REPAIRER (any industry)

Repairs broken or cracked castings and forgings, using special cold process requiring no welding: Calculates factors, such as size, depth, and position of fracture, and tensile strength and distribution of stress and strain in material. Employs combination of holding and locking devices to make repair, using air-hammers, air drills, air grinders, punches, and strippers to insert holding and locking devices in casting and to smooth finish. May fabricate special angle heads for airhammer, air grinder, and air drill, using blacksmith tools and anvil.
GOE: 05.10.01 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 77

619.361-010 FORMER, HAND (any industry)

Bends and straightens cold and hot metal plates, bars, structural shapes, and weldments to angles, curves, or flanges as specified by drawings, layouts, and templates, using form blocks, fixtures forming bars, sledge, power hammer and portable grinders: Lays out reference points onto workpiece and form blocks, using tape, compass, radius bar and applying knowledge of geometry, effects of heat, and physical properties of metal. Sets up and bolts or clamps fixtures, dies, and forming bars to form block to outline specified contour. Heats metal, using furnace or hand torch. Lifts, positions, aligns, and clamps or bolts workpiece to form block of fixture, using tongs or hoist. Bends workpiece, using bar or by hammering with sledge or mallet. Straightens out warps or bumps by hammering against face block or by heating with hand torch. Chips, trims, and grinds edges to specified contour, using chipping hammer and portable and stand grinder. Verifies size of workpiece, using ruler or template. May operate hand-powered machines, such as roll, brake, or bender. May be designated by product formed as Tool Bender, Hand (any industry).
GOE: 05.05.06 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

619.361-014 METAL FABRICATOR (any industry)

Fabricates and assembles structural metal products, such as framework or shells for machinery, ovens, tanks, stacks, and metal parts for buildings and bridges according to job order, verbal instructions, and blueprints: Develops layout and plans sequence of operations, applying knowledge of trigonometry, stock allowances for thickness, machine and welding shrinkage, and physical properties of metal. Locates and marks bending and cutting lines onto workpiece. Sets up and operates fabricating machines, such as brakes, rolls, shears, flame cutters, and drill presses [MACHINE OPERATOR (any industry) I 616.380-018]. Hammers, chips, and grinds workpiece to cut, bend, and straighten metal. Preheats workpieces, using hand torch or furnace. Positions, aligns, fits, and welds together parts [WELDER-FITTER (welding) 819.361-010]. Designs and constructs templates and fixtures. Verifies conformance of workpiece to specifications, using square, ruler, and measuring tape. May fabricate and assemble sheet metal products. May set up and operate machine tools associated with fabricating shops, such as radial drill press, end mill, and edge planer.
GOE: 05.05.06 STRENGTH: H GED: R4 M4 L3 SVP: 7 DLU: 77

619.361-018 METAL-FABRICATOR APPRENTICE (any industry) alternate titles: ironworker apprentice, shop; structural-metal-fabricator apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.06 STRENGTH: H GED: R4 M4 L3 SVP: 7 DLU: 77

619.362-010 FLANGING-ROLL OPERATOR (any industry)

Operates machine to roll specified flanges on metal disks and dished heads: Selects and bolts fixture onto free moving ram and powered turntable. Lifts and centers workpiece onto block or fixture on turntable, using hoist, sledge, rule, and tape. Pulls lever to lower ram onto workpiece, clamping it onto turntable. Selects and bolts rollers to spindles of machine, with edge of workpiece between rollers. Turns handwheel to adjust rollers to thickness and curvature of metal and to exert bending pressure. Starts machine which rotates edge of workpiece through rollers. Readjusts curvature and bending pressure to form specified flange on workpiece. Verifies curve of flange, using template.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

619.362-014 ROLL OPERATOR I (any industry) alternate titles: bending-roll operator; roll former

Operates rolling machine to bend metal plates, sheets, or bars into arcs, cylinders, or cones, using blueprints, templates, and knowledge of geometry and physical properties of metal to set up machine and plan sequence of operations: Pulls lever to lift upper roll, and positions workpiece into machine manually, or using crane. Lowers rolls and turns nuts or handwheel to lock roll into machine, and to adjust to thickness of metal if operating block (pinch) roll. Turns handwheel to adjust roll to set degree of curvature of initial pass. Starts machine and sets feed speed of workpiece back and forth between rolls. Adjusts roll between each pass to form workpiece into specified shape. Hammers workpiece to align it between rolls. Measures arcs with template. May set adjustment roll at angle to form conical shapes. May adjust roll to straighten warped or bent bars or plates [STRAIGHTENING-ROLL OPERATOR (any industry)]. May preheat metal, using hand torch or heating furnace. May prebend heavy metal or bars, using bull press or bulldozer [BULLDOZER OPERATOR (any industry) I]. May operate horizontal or vertical roll-forming machine to straighten or bend angles, bars, or channels into rings or arcs and be designated Angle-Roll Operator (any industry). May operate rolling machine to bend sheet metal to specified curvature and be designated Roll Operator, Sheet Metal (any industry). May operate vertical roll machine and adjust elevation of roller tables to support workpiece and be designated Vertical-Roll Operator (any industry).
GOE: 05.05.06 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

619.362-018 SPINNER, HAND (any industry) alternate titles: spinning-lathe operator

Sets up and operates spinning lathe to spin (form) shaped articles from sheet or plate metal, using blueprints and knowledge of physical properties of metal: Bolts specified spinning chuck to headstock spindle and follow block to tailstock, using handtools or power tools. Clamps metal disk to chuck by turning handwheel that forces follow block against disk. Secures steady rest fixture on cross-slide. Starts machine and coats outside of rotating disk with spinning compound. Positions, holds, and moves long-handled compound lever tool against disk, using steady rest as fulcrum point, to apply required pressure to form disk over and into shape of spinning chuck. Varies amount and location of pressure on disk according to type of metal, shape of spinning chuck, speed of lathe, and temperature and thickness of metal disk. Replaces steady rest with bar tool attachment, turns handwheel to set bar tool and cut off excess metal from workpiece. Verifies dimension of finished article with steel rule and diameter tape. May form wood spinning chucks by turning on lathe.
GOE: 06.02.02 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

619.362-022 SPINNER, HYDRAULIC (any industry) alternate titles: spinning-lathe-operator, hydraulic

Sets up and operates spinning lathe equipped with hydraulically controlled forming tools to spin (form) shaped articles from sheet or plate metal, compiling specifications from blueprints and knowledge of physical properties of metal: Lifts specified spinning chuck to machine spindle, manually or with power hoist, and bolts chuck in place, using handtools or power tools. Clamps metal disk to spinning chuck. Starts machine and coats rotating disk with spinning compound. Turns valve to set pressure applied to disk according to type of metal, shape of spinning chuck, speed of lathe, and thickness of metal disk. Moves feed pump levers that hydraulically control pressure applied by forming tool, reads pressure gauges to determine amount of pressure applied, and guides tool against disk to form disk over and into shape of spinning chuck. Resets position of forming tool on steady rest to form disk into shape. Replaces forming tool with cutting tool to trim excess metal from shaped part. Verifies dimension of finished article with verniers.
GOE: 06.02.02 STRENGTH: H GED: R4 M3 L3 SVP: 6 DLU: 77

619.364-010 INSPECTOR I (nonfer. metal)

Inspects nonferrous metals and products, such as ingots, rods, sheets, plates, extrusions, and forgings, and records variations from standards and customer

specifications: Verifies dimensions, using measuring instruments, such as ruler, micrometer, and vernier calipers. Examines metal for defects, such as scratches, wrinkles, inclusions, and discolorations, and outlines defective areas, using chalk. Tests hardness of metal [HARDNESS INSPECTOR (heat treating)]. Records variations from dimensional specifications, type of defect, and test results. Reports inspection results to machine operators or supervisor. Inspects packaged material and products for conformance with packing, labeling, and shipping procedures. May band and stencil containers as specified by shipping documents. May obtain samples of metal for laboratory analysis.
GOE: 06.03.01 STRENGTH: L GED: R3 M3 L3 SVP: 6 DLU: 77

619.365-010 PRODUCTION-MACHINE TENDER (nut & bolt)

Tends one or more automatic machines to head, trim, roll-thread, slot, or tap metal stock to produce nuts, bolts, or other fasteners: Feeds machine by filling hoppers or loading coiled steel on reel and threading end of coil through feed rolls. Starts machine and observes operation. Measures parts, using rule or fixed gauge, to determine conformance to specifications. Frees stock jammed in feed mechanism, using rod. Stops machine and notifies supervisor when machine malfunctions or parts do not conform to specifications. Installs and adjusts cutting tools on machine, using wrench and rule. May be designated according to type of machine tended as Tapping-Machine Operator, Automatic (nut & bolt).
GOE: 06.04.02 STRENGTH: M GED: R2 M2 L2 SVP: 2 DLU: 77

619.380-010 HIGH-ENERGY-FORMING EQUIPMENT OPERATOR (aircraft mfg.)

Sets up and operates high energy (explosion) forming machine and associated equipment to shape metallic materials and parts used in manufacturing aeronautical and aerospace products, following operational procedures, blueprints, sketches, and specifications: Reviews instructions to plan work procedure. Trims or assists other workers in trimming preformed part to approximate shape of specified die, using handtools and power tools. Positions part against die and seals edges, using sealing compound. Evacuates air between part and die, using vacuum pump, and submerges part and die into water of forming tank. Prepares and assembles explosive charge and positions charge in forming tank. Detonates charge which forces part into shape of die. Removes part from tank, and examines part for defects.
GOE: 06.01.03 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 87

619.380-014 PUNCH-PRESS SETTER (any industry)

Sets up and installs dies into power presses to punch, notch, cut blanks, form or draw metal plates, strips, sheets, or blanks: Positions, aligns, and locks specified dies into machine ram and bed. Sets stops, guides, or installs jigs or fixtures for positioning workpiece. Adjusts depth and pressure of stroke. Operates press machine to verify functioning of dies. Examines stamped out metal parts to detect malfunctioning machine and defect in dies. May sharpen dies, using grinding machine. May assemble, align, and install progressive dies. May set up automatic punch presses.
GOE: 06.01.02 STRENGTH: M GED: R3 M2 L3 SVP: 6 DLU: 80

619.380-018 SPRING REPAIRER, HAND (automotive ser.) alternate titles: automobile-spring repairer

Sets up and operates forging and shop equipment to repair leaf-type springs used in automotive vehicles: Raises vehicle body, using jack, and removes defective spring. Removes defective leaves from spring, using handtools. Measures broken leaves and cuts out replacement leaf blanks from steel stock, using flame cutter or power shear. Presses ends of main-leaf blank against disk of *bench grinder* to bevel blank according to size of eyes to be formed. Drills or punches bolt holes in blanks, using drill or punch press. Places ends of main-leaf blank in furnace to soften ends and shapes ends of blank into eyes, using eye-forming tool. Reheats leaves and arches them to required specifications, using peen hammer. Quenches spring leaves in oil to temper them according to specifications. Places graphite-impregnated lining between leaves to prevent friction. Bolts and clips leaves together and forces bushings into spring eyes, using bushing press.
GOE: 05.05.06 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

619.381-010 INSPECTOR (steel & rel.) alternate titles: product inspector; steel inspector

Inspects steel products, such as blooms, bars, sheets, castings, and strips, for conformity to customer specifications, using measuring instruments: Examines product for flatness, straightness, and defects, such as cracks, slivers, or scars. Marks defective areas with chalk or paint. Verifies dimensions of product, using micrometers, gauges, tapes, and templates. Conducts hardness and heat resistance tests, using upset hammers, hardness testing machines, and heating furnaces. Rejects or regrades products not meeting specifications. Prepares reports covering materials scrapped or salvaged. May use ultrasonic equipment to detect internal and surface defects. May be designated by product inspected as Axle Inspector (steel & rel.); Billet Inspector (steel & rel.); Cold-Mill Inspector (steel & rel.); Finishing Inspector (steel & rel.); Hot-Roll Inspector (steel & rel.); Hot-Strip-Mill Inspector (steel & rel.). May be designated: Plate Inspector (steel & rel.); Rail Inspector (steel & rel.); Tubing Inspector (steel & rel.); Wheel Inspector (steel & rel.).
GOE: 06.03.01 STRENGTH: L GED: R3 M3 L3 SVP: 6 DLU: 78

619.381-014 EDDY-CURRENT INSPECTOR (steel & rel.)

Inspects stainless steel tubes for conformance to customer specifications, using eddy current testing equipment: Reads work order to determine tube tolerance specifications required by customer and type of electric inspection coil to use for tube inspecting. Positions and secures specified inspection coil in coil holder, and turns cranks to align rollers on which tubes pass through coil for inspection. Turns knobs to activate testing equipment. Observes pattern on CRT (cathode ray tube) screen and turns knobs to calibrate equipment settings in accordance with customer specifications, using knowledge of equipment operation and experience. Selects sample tube with known defects and passes it through coil to test equipment settings. Listens for defect detection alarm, depresses button to stop rollers, and observes patterns on CRT screen to ensure that equipment signals and reflects known defects in sample tube. Positions tubes to be inspected on rollers, marks locations of detected defects on rejected tubes with marker, and places defective tubes aside. Periodically cycles sample tube through coil to verify standard operation of equipment. Records information, such as control settings and number of tubes tested, on inspection and production reports. Cuts through defective sections of tubing or rubs nicks on tubing to expose internal or remove surface defects, using abrasive saw and paper.
GOE: 06.03.01 STRENGTH: M GED: R3 M2 L3 SVP: 4 DLU: 86

619.382-010 BULLET-GROOVING-SIZING-AND-LUBRICATING-MACHINE OPERATOR (ordnance)

Sets up and operates battery of hopper-fed machines to automatically groove or knurl, die-size, and lubricate bullets for small arms ammunition: Installs and adjusts grooving segments, lubricating and sizing die, feedpipes, and feeding mechanism, using handtools. Turns crank to withdraw plunger from cylinder and inserts wax stick lubricant which is force fed to lubricating die. Adjusts rheostat to heat and soften wax electrically in die box. Fills hopper with bullets and starts machine. Measures work samples to verify location and depth of grooves, and length and diameter of bullets, according to specifications, using fixed gauges. Inspects bullets to ensure that grooves are filled with lubricant. Turns stop nuts and setscrews to adjust machine by trial and error to produce acceptable bullets. Observes grooving and feeding mechanisms for jams. Removes jammed bullets, using fingers or wire pick.
GOE: 06.02.02 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 77

619.382-014 FITTINGS FINISHER (plumbing-heat.) alternate titles: lead fabricator

Operates lathe to form lead plumbing fittings to specified shape and diameter: Mounts lead pipe over mandrel on lathe. Starts lathe and presses special handtool against end of pipe, or turns handwheel to advance turret on which special tools are mounted to stretch and bend pipe against rounded end of mandrel to form traps of various sizes. Reduces or expands diameter of lead pipe openings by holding tool against outside or inside surface of rotating pipe. Inserts iron ring inside of expanded pipe or outside of reduced pipe. Rolls edge of pipe end over ring to hold it in place. May solder brass ferrule over end of lead bend to seal junction. May heat threaded brass ring and press reduced opening of pipe over ring to fuse them.
GOE: 06.02.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

619.382-018 FOUR-SLIDE-MACHINE OPERATOR I (any industry) alternate titles: multiple-slide operator; slide-forming-machine operator

Sets up and operates one or more slide-forming machines to automatically punch, cut, and form metal strips and wire by action of opposing rams to fabricate parts, such as spring washers, brackets, and clips, specified by sketches, blueprints, and setup charts: Selects cams, forming tools, and dies according to setup charts. Aligns and bolts specified cams to shaft, slides to bed, and forming tools and dies to slides using knowledge of machine operations, product dimensions, vernier calipers, micrometers, and gauges. Threads stock through stock straighteners and adjusts cams to synchronize action of slides that feed, cut off, and form part. Turns flywheel by hand to produce sample part and compares sample with specifications, using fixed gauges, micrometer, and calipers. Readjusts machine to achieve specified product dimensions. Starts machine and observes operation periodically gauging parts for conformance to specifications. Removes, replaces, and labels trays of finished parts when specified number have been produced. May inspect parts for defects, using shadowgraph. May weld ends of coils together, using butt-welding machine, to form continuous length of feed.
GOE: 06.02.02 STRENGTH: M GED: R4 M3 L3 SVP: 5 DLU: 77

619.382-022 TYPE-ROLLING-MACHINE OPERATOR (office machines)

Sets up and operates machines to roll and press-forge characters onto steel blanks to form typewriter type: Installs and aligns roller jaws, and blank-holding, letter-forming, and trimming dies, using handtools. Fills hopper with blanks and starts machine. Measures type samples for centrality, curvature, and height of characters, using fixture gauge, eye loupe, and shadowgraph or calibrated microscope. Compares measurements against type on chart and turns setscrews and shims tooling to align dies and type that conform to specifications. May hand feed machine by positioning blank in holding die in rotating table. May pry rolled type from holding die, using knife.
GOE: 06.02.02 STRENGTH: L GED: R3 M2 L1 SVP: 4 DLU: 77

619.387-010 SALVAGE WORKER (nonfer. metal)

Sorts and inspects metal rejected by inspection and mill departments for purpose of salvage: Receives and records numbers of rejected metals. Examines metal for defects, such as surface blemishes, flatness, straighness, or dimensional irregularities according to specifications, using rule, micrometer, and vernier gauges. Identifies and marks portion of metal to be salvaged. Routes salvageable metal to next operation and rejected metal to scrap department. May

inspect other specified steel products, such as bars and sheets, for conformance to dimensional specifications and quality standards.
GOE: 06.03.01 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

619.462-010 ROLL-THREADER OPERATOR (nut & bolt)
Sets up and operates one or more automatic machines to roll-thread hot or cold forged bolt blanks, according to work orders: Installs specified roll-threading dies in machine, using wrenches and rule. Adjusts distance between roll-threading dies to set pressure of threading dies on bolt shank, using rule and following product specifications. Fills feed mechanism with stock, or feeds bolt blanks by hand and starts machine. Measures bolts with micrometer, thread gauge, or rule, and adjusts dies and stops to maintain specified dimensions. May signal operator of crane to fill feed hoppers with stock. May set up machine for PRODUCTION-MACHINE TENDER (nut & bolt).
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

619.462-014 TRIMMER OPERATOR (nut & bolt)
Sets up and operates one or more automatic machines to reduce shanks of forged bolt blanks preparatory to thread rolling, and to trim excess metal from bolt-blank heads: Installs dies in machine, using wrenches, rule, and pry bar. Visually sets ram stroke by turning adjusting screw of ram-stroke-controlling arm. Synchronizes knock-out pin with back stroke of ram by turning knock-out pin adjustment screw. Visually adjusts stock transfer arm to feed blanks to transfer finger. Adjusts transfer finger to accommodate stock and centers transfer finger over die opening by turning adjusting screw. Fills feed hopper with bolt blanks and starts machine. Measures shank and head of trial blanks with micrometer or rule and adjusts dies and stops to maintain specified dimensions. May signal worker to fill feed hopper with stock. May set up machine for PRODUCTION-MACHINE TENDER (nut & bolt).
GOE: 06.02.02 STRENGTH: H GED: R3 M2 L2 SVP: 5 DLU: 77

619.482-010 LATHE WINDER (metal prod., nec) alternate titles: coiler
Operates lathe to wind compression, extension, and torsion springs of specified diameter, pitch, and length from wire or bar stock. Lifts roll of stock onto holding device, threads stock through guides, and clamps wire to arbor. Starts machine to revolve arbor until specified number of coils are wound, guiding coils by hand or using pitch tool. Cuts spring from stock, using shears, and reverses arbor direction to remove spring. Measures spring for conformance to specifications, using micrometers and gauges, and adjusts arbor and pitch tool to obtain specified product. Closes ends of springs, using mallet. Squares and flattens spring ends, using grinding machine. May adjust length and pitch of formed springs, using mallet and wedge. May wind wire springs, using hand-powered lathe, and be designated Spring Coiler, Hand (metal prod., nec). May be designated according to product as Flexible-Shaft Winder (metal prod., nec).
GOE: 06.02.02 STRENGTH: L GED: R3 M3 L2 SVP: 4 DLU: 77

619.484-010 ORNAMENTAL-METAL-WORKER HELPER (metal prod., nec) alternate titles: art-metal-worker helper
Assists ORNAMENTAL-METAL WORKER (metal prod., nec) in performing any combination of following tasks: Cuts metal stock to specified size, using shears and saws. Bends or twists stock into specified shape, using handtools, bending jigs, scroll irons, and power brakes. Welds, brazes, forge welds, or bolts components together at designated points. Cleans and builds fire in heating forge. Heats and hammers metal to shape, using specified peening hammers. Grinds and polishes surface of workpieces to specified finish. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.12 STRENGTH: M GED: R2 M1 L1 SVP: 5 DLU: 77

619.485-010 SPOOL WINDER (nonfer. metal)
Tends machine that winds solder wire onto metal spools: Positions empty spool on machine spindle and secures end of wire to spool. Depresses foot pedal and manually guides wire so that wire winds evenly along revolving spool. Weighs filled spool on scales and adds or removes wire to attain specified weight. Cuts wire with wire snippers and hooks end of wire on rim of spool. Verifies size and type of wire with label on end of spool. May tend machine that winds aluminum wire onto metal spools.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

619.485-014 TWISTING-MACHINE OPERATOR (any industry)
Tends machine that twists metal bars, squares, and blades to specified shape: Clamps end of workpiece into stationary holding fixture. Slides carriage, lowers table, or raises spindle to adjust to length of workpiece and clamps other end of workpiece into chuck or fixture of drive spindle. Starts machine to rotate drive spindle and stops machine after specified number of turns or sets limit switch to stop machine. May install special fixtures and chuck to twist together two or more pieces. Examines finished work for conformance to specifications. May clamp end of workpiece in vise, slide pipe over workpiece to prevent longitudinal warping, and twist workpiece, using pipe wrench or twisting fork.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

619.582-010 STRETCHER-LEVELER OPERATOR (nonfer. metal)
Operates machine to stretch metal sheet, strip, or rod to specified length or flatness, or correct extrusion twis. .nd contour defects: Adjusts stretcher blocks to size of metal, using wrench. Lifts and positions material in stationary vise. Measures metal and compares dimensions to those specified to determine stretch required, using micrometer, tape measure, and tolerance tables. Moves controls to clamp metal in stretcher jaws and starts machine to stretch material. Verifies amount of stretch by visual inspection or meter readings attached to vises. Removes metal and places it on level table to test flatness. Records crew time and production record.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

619.662-010 SHRINK-PIT OPERATOR (ordnance) alternate titles: pyrometer operator
Controls shrink-pit furnace to assemble hoops and liners to tubes to form cannon barrels: Positions steel blocks in shrink-pit to form angle for subsequent positioning of tube so that breech end of tube will be at floor level. Cleans and oils contact surfaces of parts with gasoline, oil, and graphite to facilitate assembly. Lowers hoops into furnace, using hoist. Moves furnace controls and observes thermocouple pyrometer and recording potentiometer to heat furnace to specified temperature. Guides cold tube, lowered by crane, through hot hoops in furnace. Turns water valve on cooling ring and lowers ring into furnace, using hoist, to spray hoops and shrink them onto tube. Reheats hoop and tube assembly, guides liner into tube, and regulates water spray to shrink tube onto liner.
GOE: 06.02.10 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

619.662-014 SKELP PROCESSOR (steel & rel.) alternate titles: pipe processor
Controls operation of machinery and equipment, such as coil car, uncoiler, rollers, power shears, and hoist, using console, from pulpit in welding mill to form skelp (metal coil) into metal pipe: Receives signal through intercom to begin machine operation. Moves levers and presses buttons on control console to position coil car under overhead hoist and receive supply of skelp. Observes operation of car that transports skelp through series of processing operations, such as uncoiling skelp, rolling coil into sheets, and shearing sheets into specified size prior to welding and forming metal into pipe. Observes operation from pulpit to detect camber (curves in skelp sheet) and machine malfunctions, such as jam-ups. Stops machinery when malfunctions occur and removes sections of cobble (damaged or defective skelp), using acetylene torch. Assists workers in setting up and adjusting machines and equipment, using handtools and measuring instruments. Signals OVERHEAD CRANE OPERATOR (any industry) 921.663-010 to restock or remove skelp and cobble from operating pit.
GOE: 06.02.10 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 86

619.665-010 WINDING-MACHINE OPERATOR (concrete prod.)
Tends electrically powered machine that winds wire, under tension, around rotating steel cylinders to form reinforced cores for concrete pipe: Signals OVERHEAD CRANE OPERATOR (any industry) 921.663-010 to position cylinders between chucks of machine. Pulls levers to engage and secure cylinder in chucks. Signals WELDER, ARC (welding) 810.384-010 to weld end of wire to cylinder. Starts machine to wind wire on cylinder when signaled by TENSIONING-MACHINE OPERATOR (concrete prod.) 616.665-010. Signals WELDER, ARC (welding) to weld ends of wire to cylinder. Pushes levers to release from cylinder chucks, and signals INDUSTRIAL-TRUCK OPERATOR (any industry) 921.683-050 to remove cylinder from machine.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

619.682-010 BELL SPINNER (musical inst.)
Operates spinning lathe to spin (form) and clean musical instrument bells: Bolts bell-shaped mandrel onto lathe and positions and locks bell on mandrel. Starts bell rotating and positions forming tool in holding device. Holds and moves forming tool along bell, applying pressure to form bell to shape of mandrel. Holds cutting tool against spinning bell to trim bell to size. Removes tarnish and scale from bell, using file, chisel, and emery cloth. Holds scraping tool against bell head to remove excess solder. Holds bead tool against bell to roll edge back, forming bead cavity. May burnish bell with burnishing tool. May insert wire into bead cavity and close cavity with bead tool. May be designated according to instrument as Bell Spinner, Sousaphones (musical inst.).
GOE: 06.02.02 STRENGTH: H GED: R3 M2 L3 SVP: 7 DLU: 77

619.682-014 COUPLING-MACHINE OPERATOR (steel & rel.)
Operates machine to connect metal couplings to pipes: Sets tightening mechanism on machine to correspond to specified numbers of turns. Puts coupling into machine. Starts machine that connects and tightens coupling to pipe. Stops machine and ejects pipe. May tighten couplings manually when machine malfunctions. May keep production records.
GOE: 06.04.20 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

619.682-018 FISHING ACCESSORIES MAKER (toy-sport equip.)
Sets up and operates machines to form fishing accessories or accessory parts, performing any combination of following tasks: Sets up and operates power press that cuts out parts, such as fish spear frames, barbed spear tines or fish stringer catches [PUNCH-PRESS OPERATOR (any industry) II]. Starts abrasive wheel and guides barbed end of tine against wheel to sharpen barb [BENCH GRINDER (any industry)]. Joins spear frame and tines together to form head of fish spear, using spot welding machine. Operates machine that bends and cuts wire to form stringer parts. Inserts roll of wire on machine spindle, through guides, and into machine feed. Starts machine that bends and cuts wire to form stringer chain or clips (fasteners). Tends crimping machine that folds metal tip inward against chain or rope to form stringer. Positions preformed hollow metal tip in holding device of machine bed. Inserts end of chain or rope into base of tip. Moves lever to lower machine ram against tip, crimping tip against chain or rope to form fish stringer.
GOE: 06.02.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

619.682-022 HEATER (forging) alternate titles: furnace operator; furnace tender; hammer heater; heater, furnace; slug-furnace operator

Controls oil, gas, or electrical furnace to heat stock, such as billets, bars, plates and rods, preparatory to forging, following work order specifications: Reads dials and gauges, and turns knobs to regulate flow of fuel or electric current to verify and maintain specified temperature within furnace. Positions stock in furnace, using tongs or chain hoist. Observes color of metal or reads pyrometer to determine when stock reaches forging temperature. Pulls stock from furnace and delivers it to forging press or hammer, using tongs or chain hoist. Usually works as member of hammer, press, or upsetter crew. May place heated workpiece on conveyor for transporting to work area. May turn knobs to synchronize speed of feed and takeoff conveyors of automatic furnace.
GOE: 06.02.02 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 78

619.682-026 HOOP BENDER, TANK (wood. container) alternate titles: hoop-bending-machine operator

Operates hoop-bending machine to bend and shape iron rods into hoops for wooden tanks: Loosens nut of adjusting block and positions roller to obtain specified diameter of hoop. Starts machine and inserts end of rod through feed rollers of machine and over bending roller. Strikes end of rod with wooden maul to start rod over roll. Turns handcrank of feed roller to force rod through machine, bending rod into semicircular or circular shape. Removes bent rod from machine and stacks rod on floor.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 77

619.682-030 HOOP MAKER, MACHINE (wood. container)

Operates machines to make barrel hoops from strap steel: Installs and adjusts rollers, punches, and shear plates in hoop-punch-and-coiler machines, using wrenches. Places roll of strap steel on spindle, inserts end in feed rollers and starts machine. Removes punched and coiled hoops. Aligns holes in ends of coiled hoops on shank of rivets in guide slots of riveting machine. Slides hoop with protruding rivets under reciprocating hammer that flattens rivet shanks. Places hoop over mandrel of hoop-flaring machine and moves leg control to expand jaws that flare hoop to conform to shape of barrel. May be designated according to machine operated as Hoop-Flaring-Machine Operator (wood. container); Hoop-Punch-And-Coiler Operator (wood. container); Hoop-Riveting Machine Operator (wood. container).
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 78

619.682-034 HOOP-FLARING-AND-COILING-MACHINE OPERATOR (wood. container) alternate titles: coiler; flarer

Operates hoop-flaring-and-coiling machine to coil and flare strips of hoop steel to fit barrel: Turns setscrews that adjust distance between rolls to obtain specified diameter and flare of hoop, using wrench. Starts machine and feeds end of strip into rolls of machine that coil and flare strip. Removes coiled strip from machine and stacks it on floor.
GOE: 06.02.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

619.682-038 SAMPLER, FIRST (smelt. & refin.)

Operates machines to form cut of copper ingot into wire samples for metallurgical testing: Smooths lateral sides of sample with emery wheel. Heats sample in furnace to light-red glow. Rolls sample into rod by passing rod through rolling machine. Coils rod and immerses rod in acid bath to remove scale. Tapers end of rod, using hammer. Inserts tapered end through selected steel-wire die, and fastens it to powered clamp. Depresses pedal to draw rod to specified size through series of dies of decreasing diameters. Coils wire to prepare it for metallurgical analysis.
GOE: 06.02.02 STRENGTH: M GED: R4 M2 L3 SVP: 5 DLU: 77

619.682-042 SEAMLESS-TUBE ROLLER (steel & rel.) alternate titles: rotary-bar operator; seamless-tube-mill operator; tube roller

Sets up and operates machine to form seamless tubing from pierced steel billets: Installs series of rollers to form specified outside diameter of tubing. Installs plug onto mandrel to form specified inside diameter of tubing. Starts machine and moves levers to push billet into first set of rollers that force billet over plug and into following series of rollers to reduce or expand billet to tubing of specified dimensions.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

619.684-010 FORMER HELPER, HAND (any industry)

Assists FORMER, HAND (any industry) to bend and straighten metal bars, plates, structural shapes, and weldments, performing any combination of following tasks: Transports tools, fixtures, stock, and workpieces manually or by truck. Places metal in furnace or heats metal, using hand torch. Bolts, or clamps fixtures, dies, and shims onto forming block, using hand wrench. Lifts, moves, and clamps workpiece onto forming block or fixture manually or using hoist. Bends workpiece to specified shape, using pry bar, hammer, sledge, or mallet. Measures work to ensure conformance to specifications, using template, rule, or straightedge. Marks or tags identifying information onto finished work. Chips or grinds and trims rough or sharp edges from workpiece, using hand grinder, shears, hack saw, or air chisel. Cleans dirt and grease from tools and equipment. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 06.04.24 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

619.685-010 BAND MAKER (agriculture) alternate titles: band splicer

Tends machine that splices pieces of metal banding used to band compressed cotton bales: Overlaps ends of two pieces of banding and positions banding on bed of splicing machine. Starts machine that automatically folds and crimps metal fasteners around overlapped ends of banding. May bend end of each completed band and attach fastening buckle onto bent end.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

619.685-014 BANDING-MACHINE OPERATOR (furniture) alternate titles: bander

Tends machine that presses metal bands into grooved edges of tabletops: Positions tabletop in center of rotary bed of machine. Pushes lever to lower ram that holds tabletop in place. Inserts lip of metal band into grooved edge of tabletop. Starts rotation of machine bed and starts rollers that press band into grooved edges around three sides of tabletop. Lifts tabletop from machine bed and places tabletop in vise. Inserts lip of separate metal band into grooved edge of unbanded side and hammers band into place, using rubber mallet.
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

619.685-018 BANDING-MACHINE OPERATOR (ordnance)

Tends hydraulic band-seating machine that presses brass or copper rifling bands around shells (projectile bodies): Starts motor. Places shell on machine base, and slides band over nose of shell, pushing or hammering band toward band-groove. Pushes lever to converge retractable jaws around band to force band into groove. Releases lever and turns shell slightly, repeating pressing operation until band is seated. Removes shell from machine.
GOE: 06.04.20 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

619.685-022 BOBBIN-WINDER TENDER (glass mfg.)

Tends machine that winds wire onto bobbins, preparatory to formation of wire netting used in reinforcing sheet glass: Threads wire from supply reel through rollers that automatically feed wire to bobbin. Moves lever to start machine and observes operation to ensure uniform winding. Stops machine when wire breaks and splices end to full supply reel, using splicing tool.
GOE: 06.04.02 STRENGTH: H GED: R3 M1 L1 SVP: 2 DLU: 77

619.685-026 BRAKE OPERATOR II (any industry) alternate titles: press-brake operator

Tends power brake that bends, punches, forms, rolls, arcs, or straightens metal sheets, plates, and bars: Positions work manually or with crane against stops, or aligns layout marks to dies. Brushes oil on dies and workpiece. Starts machine to lower ram and shape workpiece. Tightens die nuts to prevent movement of die, using wrenches. Inspects work for conformance to specifications, using rule, square, or templates. Cleans scale or scrap from die with airhose or brush. May depress pedal to lower ram and shape workpiece. May tend furnace to preheat metal to specified temperatures before bending. May be designated according to material shaped as Brake Operator, Sheet Metal (any industry) II.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

619.685-030 COIL-REWIND-MACHINE OPERATOR (nonfer. metal)

Tends machine that rewinds sheet metal coils into compact rolls for shipment: Measures sheet width and thickness, using tape and micrometer. Regulates air valve to raise and lower horizontal and vertical arbor in accordance with width of coil. Places coil on arbor manually or using hoist. Inserts inside end of coil in arbor and starts machine. Observes operation to detect telescoping, or excessive tightness, or coil. Cuts off damaged portions of coil, using shear. Removes and stacks rewound coils. May tend machine that weighs and rewinds sheet metal coils.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

619.685-034 DRUM STRAIGHTENER I (any industry) alternate titles: container repairer; dedenter

Tends machine equipped with rolls that removes dents and reforms bodies and chimes (rims) of metal barrels or drums: Slides open end of barrel over cylinder in machine. Pulls lever to lower rolls against barrel. Starts machine that rotates barrel against rolls to reform or straighten side, bead, or chime. Raises rolls and slides barrel off cylinder.
GOE: 06.04.02 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

619.685-038 EMBOSSING-MACHINE OPERATOR (ordnance)

Tends battery of machines that automatically roll grooves or knurls on brass shotgun shell heads: Places empty trays under delivery chutes. Moves levers to start machines and flow of caps from hoppers. Clears heads jammed in feed and groove mechanisms, using screwdriver and wire picks. Examines caps for defective trimming, splits, dents, and scratches. Verifies inside and outside diameters of embossed heads at specified intervals, using fixed gauges. Calls HOPPER FEEDER (ordnance) to replenish cap supply and notifies machine repairer of machine malfunction.
GOE: 06.04.02 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 77

619.685-042 ETCHER, MACHINE (cutlery-hrdwr.)

Tends equipment that etches trade name on razor blades: Positions roll of blade steel on etching machine reel and threads steel through feed and etching rollers to cutting die. Fills acid and water fountains that feed etching rollers and wash acid from steel after etching. Lights gas burner in drying chamber and starts machine. Observes discharge of blades into hopper, and stops machine when hopper is full.
GOE: 06.04.02 STRENGTH: M GED: R2 M2 L2 SVP: 4 DLU: 77

619.685-046 FORMING-ROLL OPERATOR II (any industry)

Tends rolling machine that straightens and forms contours in metal sheets, trims and beads edges of metal cylinders and rings, or crimps or seams lids

on container: Positions workpiece over lower die or *forming chuck*. Clamps workpiece to forming chuck or positions workpiece against end stop to hold workpiece in place. Pulls lever to press adjustment dies over workpiece to shape workpiece to contour of dies or forming chuck. May pull lever to lower slitter or knife to trim edges of workpiece and manipulate lever which forces dies against edge of workpiece to bend edge to form bead. May tend machines that automatically feed can ends, seam can ends to can bodies, and test cans for leaks. May be designated by work performed as Beading-Machine Operator (any industry) II; Drum Straightener (any industry) II; Seaming-Machine Operator (tinware).
GOE: 06.04.02 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

619.685-050 FOUR-SLIDE-MACHINE OPERATOR II (any industry) alternate titles: multi-slide-machine tender; slide-forming-machine tender

Tends one or more slide-forming machines that automatically feed, punch, cut and form strip metal or wire stock to fabricate parts, such as spring clips, brackets, terminal clips, and hairpins: Threads strip metal or wire through straightening rolls and die sets by turning flywheel by hand and starts machine. Measures sample of finished parts with fixed gauges and examines parts for surface defects or scratches. Shuts off machine and notifies supervisor or machine setter if parts do not meet specifications. May weld ends of two coils together by locking ends in electric-welding device and pulling lever, to form continuous length of stock.
GOE: 06.04.02 STRENGTH: H GED: R2 M2 L2 SVP: 3 DLU: 77

619.685-054 HEAD-GAUGE-UNIT OPERATOR (ordnance)

Tends machines that segregate cartridge cases with oversize and undersize heads: Turns valve to adjust pneumatic conveyor transferring cases from washer-dryer to storage hopper. Raises hopper gate to regulate flow of cases to shaker plate and turns wingnut to adjust spacing of gauge rails. Starts machines to shake cases through specially holed plate that retains cases with oversize heads and feeds cases that pass through holes, nose down, between inclined (gauge) rails to separate cases with undersize heads. Inverts shaker plate periodically to dump cartridge cases with oversize heads. Removes cartridge cases jammed between gauge rails with fingers or wire pick. Lifts barrels of gauged cases from discharge chutes to trucks and pushes barrels to storage.
GOE: 06.04.02 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

619.685-058 HEEL-WASHER-STRINGING-MACHINE OPERATOR (rubber goods)

Tends machine that threads metal washers onto rods for use in machine that molds washers into rubber shoe heels: Fills hopper of machine with washers, using can. Positions rods in machine with one end in slot of revolving disk and other end secured by holder. Starts machine, causing disk to revolve in hopper and magnetically pick up and string washers on rods. Removes filled rods from disk and places rods in box for insertion in washer placing machine. Removes washers facing in wrong direction and reinserts rods in machine for restringing.
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

619.685-062 MACHINE OPERATOR II (any industry)

Tends fabricating machines, such as cutoff saws, shears, rolls, brakes, presses, forming machines, spinning machines, and punch, that cut, shape, and bend metal plates, sheets, tubes, and structures: Reads job specifications to determine machine adjustments and material requirements. Sets stops or guides to specified length as indicated by scale, rule, or template. Positions workpiece against stops, manually or using hoist, or aligns layout marks with die or blade. Pushes button or depresses pedal to activate machine. Observes machine operation to detect workpiece defects or machine malfunction. Measures workpiece dimensions, using rule, template, or other measuring instruments to determine accuracy of machine operation. Removes burrs, sharp edges, rust, or scale from workpiece, using file, hand grinder, or wire brush. Performs minor machine maintenance, such as oiling machines, dies, or workpieces. Assists machine operators to set up machine, and stack, mark, pack, and transport finished workpieces. May rivet and spot-weld workpieces. May tend machines that fabricate and assemble sheet metal products and be designated Sheet-Metal Production Worker (any industry).
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 88

619.685-066 METAL FABRICATOR HELPER (any industry)

Performs any combination of following duties to assist METAL FABRICATOR (any industry) in fabricating and assembling boilers and steel plate vessels, such as tanks and vats: Tends machines, such as drill press, punch press, and boring mill to drill, punch, and ream metal stock for boiler parts. Tends power shears to cut plate to size and shape. Grinds welded joints, seams, and other irregular areas to smooth boiler surfaces, using portable and pedestal grinders. Wraps blanket of spun glass around shell to insulate boiler and tacks blanket to shell surface, using stud welding gun. Operates sandblasting machine to clean tank surfaces prior to painting or coating [SANDBLASTER (any industry)]. Moves and positions materials at work site with help of other workers, using overhead bridge crane or dolly. Removes casing, grates, and grate rigging from boiler prior to repair of boiler and reassembles them after repair, using handtools. Performs other duties described under HELPER (any industry) Master Title.
GOE: 06.04.02 STRENGTH: H GED: R2 M1 L1 SVP: 4 DLU: 77

619.685-070 METALLIC-YARN-SLITTING-MACHINE OPERATOR (nonfer. metal)

Tends machine that slits rolls of metallic yarn material into narrow yarn widths for use in textile manufacture: Positions narrow roll of laminated metallic material on machine arbor and threads end of material through antistatic pad, circular cutters, tension rollers, and around takeup bobbins. Turns valve to drop oil on antistatic pad. Starts machine and observes flow of material through machine to detect wrinkles and splices in material and breaks in yarn. Cuts out defects, using scissors, and ties broken yarn ends. Doffs full bobbins of metallic yarn from takeup spindles.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

619.685-074 REPAIRER, SHOE STICKS (rubber goods)

Tends peening machine to flatten ends of metal pins inserted in holes in shoe sticks (flat iron bars having rows of pins or pegs on which lasts are mounted for carrying): Positions pin in fixture on machine anvil and aligns hole in shoe stick over pin. Depresses pedal to start reciprocating ram that hammers protruding end of pin over securing pin to attach pin to shoe stick. Straightens bent pins in stick by tapping them with hammer, using steel block for backing. Verifies straightness by trial-fitting last onto pins.
GOE: 06.04.02 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

619.685-078 ROD-PULLER AND COILER (nonfer. metal)

Tends coiling device that coils hot rod, wire, or tubing from extrusion press or rolling mill: Adjusts coiler reel according to specified size and coil, using handtools. Inserts end of rod, tube, or wire in automatic coiling rack and moves controls to start coiler. Guides straight lengths of rod or tube along table to avoid stretching or kinking material, using tongs. Sets stops on table, using handtools, and cuts workpiece to specified lengths, using circular saw or power shears. Rolls finished lengths into trough for cooling. May stamp grade, alloy mixture, and batch number on each workpiece.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

619.685-082 SPINNING-LATHE OPERATOR, AUTOMATIC (any industry)

Tends lathe that spins (forms) shaped articles from sheet or plate metal: Pushes lever to move tailstock, forcing disk against chuck of lathe. Slides hydraulic carriage forward to position circular forming tool against metal disk. Starts machine that presses rotating circular tool against disk to form disk into shape of spinning chuck. Removes finished article and verifies dimensions, using fixed gauge. May tend spinning lathe equipped with knife and beading rolls which trims, or trims and bends, shaped article. May tend spinning lathe to bead and iron smooth finish or form knurls onto drawn articles. May be designated according to operation performed as Automatic-Beading-Lathe Operator (any industry); Rolling-Machine Operator, Automatic (any industry).
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

619.685-086 WINDING-LATHE OPERATOR (ordnance)

Tends lathe mounted on rails that coils hot iron rods around bodies of fragmentation bombs to increase demolition properties of bombs: Pulls lever to move lathe to mouth of preheating furnace. Lifts bomb from stockpile and clamps it in machine by tightening chuck and tailstock. Pulls red-hot rod from furnace, attaches end to bomb fixture, and hammers portion of rod around bomb, using pulling bar and hammer. Sets coil-spacing gauge. Pushes button to start rotation of bomb in machine. Stops machine when rod is coiled on bomb. Welds end of coil to bomb. Removes bomb from machine, using hoist.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

619.685-090 WIRE-WINDING-MACHINE OPERATOR (wood. container)

Tends machine that winds wire on spools for use on wire-bound boxes: Slides empty spool over end of shaft and against winding clutch. Places coil of wire over frame and threads loose end over guide pulley, through hole in post of machine, and between guiding wheels, and attaches it to empty spool. Shifts lever to start and stop shaft rotating and winding wire on spool. Removes spool of wire from machine.
GOE: 06.04.02 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

619.685-094 CUT-OFF-MACHINE OPERATOR (steel & rel.)

Tends cutoff machine that automatically cuts sample sections of metal pipes for testing, and bevels, faces, and reams ends of pipes: Reviews pipe specifications to ascertain length of pipes and pressure setting of hydraulic press used for testing pipe sections. Positions pipe stops on machine and beveling, facing, and reaming heads, according to pipe length specified, using handtools. Turns knob on hydraulic press to pressure specified. Pushes button controls to divert pipes to cutoff machine, to cut sample sections of each pipe, and to turn each pipe for beveling, facing, and reaming of pipe ends. Positions sample sections of pipes under hydraulic press, pulls lever to crush pipe sections, and examines sections for broken welds. Cuts additional sample sections of pipes not passing test, repeats test, and either accepts or rejects pipes according to test results. Diverts defective pipes for further processing, and notifies supervisor. Removes pipes that become wedged on conveyor, using cables, chains, and hoist. Maintains tally of work done and oils machine as needed.
GOE: 06.04.02 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 86

619.686-010 AUTOMATIC STACKER (tinware)

Places dollies at discharge end of automatic stacker to catch tin sheets emerging from processing machines. Stops machine and removes sheets jammed in

conveyor. Removes filled dollies. May flip workpieces on opposite side for processing, using mechanical turner. May examine material for defects, grade material, and notify processing machine operator of defects noted.
GOE: 06.04.40 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

619.686-014 HOOP-MAKER HELPER, MACHINE (wood. container)
Assists HOOP MAKER, MACHINE (wood. container) to make hoops, performing any combination of following duties: Moves rollers, punches, mandrels, and shear plates and tightens nuts holding them in position. Threads end of strap steel through rollers. Fills rivet box of machine with rivets. Performs other duties as described under HELPER (any industry) Master Title. May be designated according to specific machine operator assisted as Hoop-Flaring-Machine-Operator Helper (wood. container); Hoop-Punch-And-Coiler-Operator Helper (wood. container); Hoop-Riveting-Machine-Operator Helper (wood. container).
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

619.686-018 HOPPER FEEDER (ordnance)
Feeds brass blanks onto conveyors and into hoppers of machines that form blanks into small arms cartridge cases: Transfers containers of blanks to work area, using handtruck or powered tier-lift truck. Scoops or dumps brass workpieces into feed hoppers of draw presses or onto transfer conveyor leading to other work stations, using hoist. May hoist container to overhead loading platform and along roller conveyor until container is positioned over machine hopper for dumping, using electric hoist or tier-lift truck.
GOE: 06.04.02 STRENGTH: H GED: R1 M1 L1 SVP: 2 DLU: 77

619.686-022 METAL-FABRICATING-SHOP HELPER (any industry) alternate titles: helper, steel fabrication; plate-shop helper; production helper; structural-shop helper
Assists workers engaged in fabrication of structural or sheet metal products, performing any combination of following tasks: Lifts, positions, and removes workpieces from machines to assist in fitting and welding. Holds tape and rods and marks reference points to assist in layout. Loads, stacks, and transports stock, tools, dies, and work in process by hand or truck. Attaches rope or grappling equipment to workpieces to prepare workpiece for moving by crane or jib. Cleans and scrapes metal preparatory to fabricating, welding, painting, or shipping, using scraping tool, abrasive, or placing in solvent bath. Paints metal stocks, using paintbrush. Picks up and trucks scrap from work areas. May be designated by trade as Ironworker Helper, Shop (any industry); Sheet-Metal-Shop Helper (any industry). Performs other duties as described under HELPER (any industry) Master Title.
GOE: 06.04.02 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 78

619.686-026 SPIKE-MACHINE HEATER (steel & rel.)
Heats steel rods in furnace preparatory to forging boat or track spikes: Shoves rods into furnace and spaces them evenly with pry bar to ensure uniform heating. Pushes heated rods from furnace, using cold rod, on signal from SPIKE-MACHINE FEEDER (steel & rel.). May adjust furnace temperature control, clean, and lubricate equipment as specified.
GOE: 06.04.02 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

619.686-030 STRETCHER-LEVELER-OPERATOR HELPER (nonfer. metal)
Assists STRETCHER-LEVELER OPERATOR (nonfer. metal) to stretch, flatten, and straighten metal sheet, strip, rod, and extruded forms: Lifts and positions material in vises and moves lever to close clamps. Removes finished product and loads product on saw table, truck, or pallet. May install and adjust stretcher jaws according to size of metal, using wrench. May determine amount of stretch required, using micrometer and tolerance tables. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

619.686-034 FORGE HELPER (forging) alternate titles: press helper; trim-setter helper
Performs any combination of following tasks to assist workers in forging metal products: Loads bars, billets, or blooms into furnace, using hoist. Transfers workpiece to and from work stations, such as furnace, hammer, and trim press, using tongs or hoist. Removes scale from workpiece and dies, using broom or airhose. Trims excess material from finished parts, using handsaw or bandsaw. Marks material with specified information, using hammer and die. Lifts dies to machine and bolts dies in place, using hoist and wrenches. Loads racks, off bears conveyors, and cleans and lubricates machines. May work as member of crew. Loads radioactive uranium elements into furnace, using hoist. May be designated according to worker assisted as Drop-Hammer-Operator Helper (forging); Extruder-Operator Helper (forging); Heater Helper, Forge (forging); Upsetter Helper (forging); or by work performed as Scale Shooter (forging). Performs other tasks as described under HELPER (any industry) Master Title.
GOE: 06.04.40 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 78

619.687-010 COIL BINDER (nonfer. metal)
Binds coils of sheet aluminum from tandem mill following rolling process: Binds sheet metal coils with steel bands, using hand crimping tools. Pushes controls to tilt coil onto conveyor for removal from mill.
GOE: 06.04.38 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

619.687-014 MACHINE HELPER (any industry)
Assists workers in operating metal fabricating machines, performing any of following tasks: Lifts, moves, clamps, and bolts dies and fixtures on machines, using handtools. Fills tanks and oil cups with lubricants. Helps lift and position workpieces. Brushes or blows dirt from dies, using airhose. Removes workpiece and scrap from machines, using conveyor, pallets or handtruck. Files, grinds, or scrapes sharp edges, burrs, scales, or rust from workpieces, using portable grinder or handtools. Hammers out bent or warped spots in metal. Sorts, marks, or tags finished work. Transports material, using jib or hoist, or signals crane operator to move material. Cleans machine. Compares workpiece with straightedge or template to verify conformance to specifications. May place workpieces into heating furnace or preheat workpieces, using hand torch. May clean dies, using cleaning solution, brushes, and rag. Performs other duties described under HELPER (any industry) Master Title. May be designated according to machine assigned as Bending-Machine-Operator Helper (any industry); Brake-Operator Helper (any industry); Hoop-Punch-Operator Helper (wood. container); Punch-Press-Operator Helper (any industry). May be designated: Roll-Operator Helper (any industry); Shear-Operator Helper (any industry); Slitting-Machine Operator Helper (any industry) II; Straightening-Press-Operator Helper (any industry).
GOE: 06.04.24 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

619.687-018 PITCH FILLER (any industry) alternate titles: tube filler
Fills metal tubes with hot pitch or other material to prevent warping during bending operations: Heats pitch in vat and pours it into tubes, using pitcher or ladle. Hangs tubes in heated oven or on rack and heats them with torch to remove pitch. Dips empty tubes into vats of washing and rinsing solutions.
GOE: 05.12.10 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

62/63 MECHANICS AND MACHINERY REPAIRERS

This division includes occupations concerned with installing, inspecting, testing, repairing, rebuilding, and maintaining in efficient operating condition all types of engines and a wide variety of mechanical equipment designed for general or specific application in domestic, commercial, industrial, and agricultural activities. Occupations in this division typically require knowledge of the structural and functional characteristics of specific machines or types of machines, and include such tasks as locating and drilling holes, aligning structural and moving parts, and occasionally operating machine tools to remove excess material from semifinished or repaired parts. Occupations concerned with assembling new or rebuilt heavy machines, such as turbines and presses, in machine shop or erection shop, involving close tolerance machining and hand finishing of castings and other machine parts, are included in Division 60. Occupations concerned with machine setup and adjustment only are included in groups covering operation of the same machines.

620 MOTORIZED VEHICLE AND ENGINEERING EQUIPMENT MECHANICS AND REPAIRERS

This group includes occupations concerned with repairing engines and accessories, power trains, suspension systems, and other mechanical units of automobiles, trucks, tractors, buses, and trackless trolleys; graders, bulidozers, cranes, power shovels, portable air-compressors, and other gasoline- or diesel-powered engineering equipment; motorized materials-handling equipment, such as forklifts and lumber carriers; and wheeled or tracked military vehicles, including personnel carriers, self-propelled guns, mobile rocket launchers, and tanks. Ordnance mechanics concerned with military armament are included in Group 632.

620.131-010 SUPERVISOR, ENDLESS TRACK VEHICLE (automotive ser.)
Supervises and coordinates activities of MECHANICS, ENDLESS TRACK VEHICLE (automotive ser.): Determines sequence and assignment of work on basis of work priority, quantity of equipment, and skill of personnel. Inspects work performed to ensure compliance with specifications and time schedules. Interprets specifications, drawings, work orders, technical instructions, and layouts. Coordinates department activities with other departments. Recommends or initiates personnel actions, such as promotions, transfers, discharges, and disciplinary action. Trains new workers. May estimate, requisition, and inspect materials. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.09 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 77

620.131-014 SUPERVISOR, GARAGE (automotive ser.) alternate titles: automobile-mechanic supervisor; mechanic, chief; transportation-department supervisor
Supervises and coordinates activities of AUTOMOBILE MECHANICS (automotive ser.) engaged in repairing, adjusting, servicing, and storing motor vehicles in industrial or commercial establishment: Analyzes defective equipment to determine cause of trouble. Inspects and drives repaired vehicles to verify repairs. Trains workers in and demonstrates repair and maintenance of vehicles, using handtools, welding, and grinding equipment. Evaluates performance of workers. Keeps inventory of repair parts and equipment and requisitions replacement stock. Prepares repair reports and vehicle requests. Schedules transporting of passengers or materials to service or storage areas. May supervise workers engaged in inspection and repair of miscellaneous equipment, such as cement mixers and electric trucks. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.09 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

620.137-014 SUPERVISOR, MOTORCYCLE REPAIR SHOP (automotive ser.)

Supervises and coordinates activities of workers engaged in repairing or replacing engine, frame, electrical system, wheels, or other parts of motorcycle: Analyzes defects in motorcycle to determine feasibility of repairing or replacing worn or defective parts. Trains workers in repair procedures and techniques. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.09 STRENGTH: L GED: R4 M3 L4 SVP: 8 DLU: 77

620.137-018 TANK AND AMPHIBIAN TRACTOR OPERATIONS CHIEF (military ser.)

Supervises and coordinates activities of workers engaged in operation and maintenance of tanks or amphibian tractors and equipment in combat or training: Instructs personnel in operation of tanks or amphibian tractors and equipment. Inspects equipment to determine need for servicing or repair and directs workers in servicing or repairing vehicles and equipment. Directs loading of personnel and supplies on vehicle. Directs vehicle driver in movement of vehicle in combat situation on land or water. Prepares vehicle journals and worksheets concerning tactical situation.
GOE: 05.10.02 STRENGTH: L GED: R3 M2 L2 SVP: 7 DLU: 77

620.261-010 AUTOMOBILE MECHANIC (automotive ser.) alternate titles: garage mechanic

Repairs and overhauls automobiles, buses, trucks, and other automotive vehicles: Examines vehicle and discusses with customer or [AUTOMOBILE-REPAIR-SERVICE ESTIMATOR (automotive ser.); AUTOMOBILE TESTER (automotive ser.); or BUS INSPECTOR (automotive ser.)] nature and extent of damage or malfunction. Plans work procedure, using charts, technical manuals, and experience. Raises vehicle, using hydraulic jack or hoist, to gain access to mechanical units bolted to underside of vehicle. Removes unit, such as engine, transmission, or differential, using wrenches and hoist. Disassembles unit and inspects parts for wear, using micrometers, calipers, and thickness gauges. Repairs or replaces parts, such as pistons, rods, gears, valves, and bearings, using mechanic's handtools. Overhauls or replaces carburetors, blowers, generators, distributors, starters, and pumps. Rebuilds parts, such as crankshafts and cylinder blocks, using lathes, shapers, drill presses, and welding equipment. Repairs ignition system, lights, and instrument panel. Relines and adjusts brakes, aligns front end, repairs or replaces shock absorbers, and solders leaks in radiator. Mends damaged body and fenders by hammering out or filling in dents and welding broken parts. Replaces and adjusts headlights, and installs and repairs accessories, such as radios, heaters, mirrors, and windshield wipers. May be designated according to specialty as Automobile Mechanic, Motor (automotive ser.); Bus Mechanic (automotive ser.); Differential Repairer (automotive ser.); Engine-Repair Mechanic, Bus (automotive ser.); Foreign-Car Mechanic (automotive ser.); Truck Mechanic (automotive ser.). May be designated: Compressor Mechanic, Bus (automotive ser.); Drive-Shaft-And-Steering-Post Repairer (automotive ser.); Engine-Head Repairer (automotive ser.); Motor Assembler (automotive ser.).
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

620.261-012 AUTOMOBILE-MECHANIC APPRENTICE (automotive ser.) alternate titles: automobile-and-truck-mechanic apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

620.261-014 AUTOMOBILE TESTER (automotive ser.)

Tests and examines automotive vehicles, such as automobiles, buses, and trucks, to determine repairs required: Starts engine of automotive vehicle and listens for sounds indicative of malfunctions. Drives vehicle, noting performance of parts, such as clutch, gears, and brakes. Tests motor timing, cylinder compression, fuel consumption, wheel alignment, and steering, using testing devices. Examines body and fenders of vehicle for scratches and dents. Reports findings to supervisor or customer and recommends repairs required. May examine disassembled engine, differential, or other parts during repair. May be designated according to specialty as Motor Analyst (automotive ser.).
GOE: 05.07.02 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

620.261-018 AUTOMOBILE-REPAIR-SERVICE ESTIMATOR (automotive ser.) alternate titles: automobile inspector; collision estimator; manager, service; mechanic, trouble-shooting; sales associate, garage service; service writer

Inspects and tests automobiles and trucks to determine need for and cost of repairs: Determines need for repairs by road test [AUTOMOBILE TESTER (automotive ser.) 620.261-014], by use of mechanical testing devices [BRAKE REPAIRER (automotive ser.) 620.281-026; FRONT-END MECHANIC (automotive ser.) 620.281-038], by questioning customer about vehicle's performance, or by visual inspection of vehicle. Estimates cost of repair and prepares itemized work order, listing costs of parts and labor. May make minor adjustments or repairs, such as brake adjustment, battery cable replacement, or hinge lubrication. May supervise AUTOMOBILE-BODY REPAIRER (automotive ser.) 807.381-010; AUTOMOBILE MECHANIC (automotive ser.) 620.261-010; PAINTER, TRANSPORTATION EQUIPMENT (aircraft mfg.; air trans.; automotive ser.) 845.381-014; and other garage workers. May be designated according to specialty as Truck-Repair-Service Estimator (automotive ser.).
GOE: 05.07.02 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 79

620.261-022 CONSTRUCTION-EQUIPMENT MECHANIC (construction) alternate titles: heavy-equipment mechanic

Analyzes malfunctions and repairs, rebuilds, and maintains construction equipment, such as cranes, power shovels, scrapers, paving machines, motor graders, trench-digging machines, conveyors, bulldozers, dredges, pumps, compressors and pneumatic tools: Operates and inspects machines or equipment to diagnose defects. Dismantles and reassembles equipment, using hoists and handtools. Examines parts for damage or excessive wear, using micrometers and gauges. Replaces defective engines and subassemblies, such as transmissions. Tests overhauled equipment to ensure operating efficiency. Welds broken parts and structural members. May direct workers engaged in cleaning parts and assisting with assembly and disassembly of equipment. May repair, adjust, and maintain mining machinery, such as stripping and loading shovels, drilling and cutting machines, and continuous mining machines, and be designated Mine-Machinery Mechanic (mine & quarry).
GOE: 05.05.09 STRENGTH: M GED: R3 M2 L3 SVP: 7 DLU: 80

620.261-026 ELECTRIC-GOLF-CART REPAIRER (amuse. & rec.; automotive ser.) alternate titles: golf-cart mechanic

Repairs and maintains electric golf carts at golf course or in automotive repair shop, using handtools and electrical testing devices: Determines type of repairs required by reading work orders, talking to cart operator, or test-driving cart. Tests operational performance of motor, using voltmeter, ammeter, and wattmeter. Dismantles motor and repairs or replaces defective parts, such as brushes, armatures, and commutator, using wrenches, pliers, and screwdrivers. Rewires electrical systems, and repairs or replaces electrical accessories, such as horn and headlights. Tests and recharges or replaces batteries. Lubricates moving parts and adjusts brakes and belts. May perform structural repairs to body of cart, seats, and fabric tops. May record parts used and labor time on work order.
GOE: 05.10.03 STRENGTH: M GED: R3 M2 L3 SVP: 5 DLU: 77

620.261-030 AUTOMOBILE-SERVICE-STATION MECHANIC (automotive ser.)

Repairs and services vehicles of service station customers through performance of any of following tasks: Examines vehicles and confers with customers to determine malfunction and repairs desired. Refers customer with major vehicle repairs to garage. Removes and replaces parts of ignition system, such as spark plugs, points, coil, or alternator to complete tune-up or replace malfunctioning part of system, using mechanic's handtools, gauges, and test meters. Turns adjustment screws of carburetor to set idle speed of engine, using screwdriver. Replaces defective chassis parts, such as shock absorbers, balljoint suspension, brakeshoes, and wheel bearings. Services vehicles [AUTOMOBILE-SERVICE-STATION ATTENDANT (automotive ser.) 915.467-010].
GOE: 05.05.09 STRENGTH: M GED: R3 M2 L3 SVP: 5 DLU: 86

620.261-034 AUTOMOTIVE-COOLING-SYSTEM DIAGNOSTIC TECHNICIAN (automotive ser.)

Inspects and tests automotive cooling systems to diagnose malfunctions and estimates cost of repairs: Questions customer and examines cooling system, hoses, and connections to determine nature and extent of malfunctions. Tests and analyzes electrical, vacuum, pressure, and related functions of system components to locate cause of malfunctions, using vacuum tester, pressure tester, voltmeter, and other specialized test equipment and handtools. Compiles estimate of system repair costs and secures customer approval to perform repairs. Occasionally assists AUTOMOBILE-RADIATOR MECHANIC (automotive ser.) 620.381-010 in repair of cooling system components, using mechanic's handtools. Computes parts and labor charges and routes customer bill to office.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 86

620.281-010 AIR-CONDITIONING MECHANIC (automotive ser.) alternate titles: automobile-refrigeration mechanic

Installs and repairs automotive air-conditioning units: Bolts compressor to engine block and installs driving pulley on front end of crankshaft. Places fan belt on pulleys, adjusts tension, and tightens bolts. Bolts evaporator unit under dashboard or in trunk. Welds or bolts mounting brackets to automobile frame. Drills holes through interior panels, threads hoses through holes and connects hoses to compressor, evaporator, and cool-air outlet. Fills compressor with refrigerant and starts unit. Measures compressor pressure to determine efficiency of compressor, using gauge. Listens to operating unit for indications of malfunction. Removes faulty units from vehicles, disassembles them, and replaces worn and broken parts and fluid in unit. Makes electrical connections as required. May specialize in installation of automotive air-conditioning units and be designated Automotive Air-Conditioner Installer (automotive ser.).
GOE: 05.05.09 STRENGTH: M GED: R3 M2 L3 SVP: 6 DLU: 77

620.281-014 AUTOMOTIVE TECHNICIAN, EXHAUST EMISSIONS (government ser.) alternate titles: power equipment mechanic

Conducts and evaluates tests on vehicles to check exhaust emissions: Reviews instructions to determine details of test to be performed. Drives vehicle over dynamometer. Records identifying data. Performs dwell, timing and idle speed tests using gauges, evaluates performance and adjusts performance to manufacturer's specifications. Adjusts dynamometer settings to vehicle specifications and connects instrument sensors to exhaust system. Starts and operates vehicle according to test program, compares performance with specifications and records results. Calibrates, cleans and maintains test equipment and record-

ing devices. May diagnose and repair vehicle malfunctions. May install smog-control device on tested vehicle.
GOE: 05.05.09 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 77

620.281-018 AUTOMOTIVE-MAINTENANCE-EQUIPMENT SERVICER (any industry) alternate titles: automotive-maintenance-equipment repairer; equipment-service engineer; pump-and-tank servicer

Adjusts and repairs automotive repairing, servicing, and testing equipment, using handtools and power tools: Disassembles defective equipment, such as gasoline pumps, air compressors, and dynamometers. Replaces defective parts, using pipe fitting and welding tools. Reassembles, adjusts, and tests repaired equipment. May be required to register with government agency to adjust meters and gauges of fuel and oil pumps serving public. May install new equipment. May specialize in repairing gasoline pumps, lubrication equipment, air compressors, or other type of automotive service equipment.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

620.281-026 BRAKE REPAIRER (automotive ser.) alternate titles: brake mechanic; brake-repair mechanic; brakeshoe repairer

Repairs and overhauls brake systems in automobiles, buses, trucks, and other automotive vehicles: Pushes handle of hydraulic jack or pushes hoist control to raise vehicle axle. Removes wheels, using wrenches, wheel puller, and sledgehammer. Replaces defective brakeshoe units or attaches new linings to brakeshoes. Measures brakedrum to determine amount of wear, using feeler gauge. Inserts vacuum gauge into power-brake cylinder, starts engine, and reads gauge to detect brake-line leaks. Repairs or replaces leaky brake cylinders. Repairs or replaces defective air compressor in airbrake systems. Replaces wheel on axle and adjusts drumshoe clearance, using wrench. Fills master brake cylinder with brake fluid, pumps brake pedal, or uses pressure tank, and opens valves on hydraulic brake system to bleed air from brake lines. Closes valves and refills master brake cylinder. May be designated according to specialty as Brake Repairer, Air (automotive ser.); Brake Repairer, Bus (automotive ser.); Brake Repairer, Hydraulic (automotive ser.).
GOE: 05.10.02 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 77

620.281-030 BUS INSPECTOR (automotive ser.) alternate titles: motor-inspection mechanic

Examines and adjusts or repairs engines, chassis, electrical systems, and interior furnishings of buses: Starts engine and listens for indications of malfunctions. Tests engine components, such as carburetors, distributors, radiators, and fuel pumps, to determine causes of malfunctions, using timers, gauges, and other testing devices. Inspects chassis for defects in parts, such as universal joints, drive shaft, and air-suspension units. Inspects electrical systems and equipment [ELECTRICIAN, AUTOMOTIVE (automotive ser.)] and interior furnishings. May be designated according to specialty as Chassis Inspector (automotive ser.); Electrical Inspector (automotive ser.); Engine Inspector (automotive ser.).
GOE: 05.05.09 STRENGTH: M GED: R4 M4 L4 SVP: 7 DLU: 77

620.281-034 CARBURETOR MECHANIC (automotive ser.) alternate titles: carburetor repairer

Repairs and adjusts motor vehicle carburetors: Disassembles carburetors and gasoline filter units, using handtools. Examines parts for defects and tests needle valves with wire gauges and flowmeter. Cleans parts in solvents to remove dirt and gum deposits. Repairs or replaces defective parts. Reassembles carburetor and gasoline filter, and installs them in vehicle. Starts engine and turns adjustment screw to regulate flow of air and gasoline through carburetor, using testing equipment. May operate drill press, lathe, and other power tools to retap jets, ream throttle bodies and chokes, and machine seating surfaces of carburetor housings. May install and repair mechanical devices that convert conventional systems to use of other fuels [VEHICLE-FUEL-SYSTEMS CONVERTER (automotive ser.)].
GOE: 05.10.02 STRENGTH: L GED: R3 M2 L3 SVP: 7 DLU: 77

620.281-038 FRONT-END MECHANIC (automotive ser.) alternate titles: alignment mechanic; axle-and-frame mechanic; chassis mechanic; wheel-alignment mechanic

Aligns wheels, axles, frames, torsion bars, and steering mechanisms of automotive vehicles, such as automobiles, buses, and trucks: Drives automotive vehicle onto wheel alignment rack and tests vehicle for faulty wheel alignment, bent axle, worn ball joints, and bent steering rods, using alignment-testing machine. Straightens axle and steering rods and adjusts shims, tie rods, and joining pins to align wheels, or installs new parts, using handtools. Places wheel on balancing machine to determine where counterweights must be added to balance wheel. Hammers counterweights onto rim of wheel. Installs shock absorbers. Straightens frame, using hydraulic jack, chassis aligner, and acetylene torch.
GOE: 05.10.01 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 79

620.281-042 LOGGING-EQUIPMENT MECHANIC (logging)

Adjusts, maintains, and repairs gasoline-, hydraulic-, and diesel-powered logging equipment and accessories, such as air compressors, cranes, donkey engines, generators, and road graders. May overhaul and repair tractors [TRACTOR MECHANIC (automotive ser.)] and automotive vehicles [AUTOMOBILE MECHANIC (automotive ser.)]. May weld or cut metals, using electric or gas welder [WELDER, COMBINATION (welding)].
GOE: 05.05.09 STRENGTH: V GED: R4 M3 L3 SVP: 7 DLU: 77

620.281-046 MAINTENANCE MECHANIC (construction; petrol. & gas; pipe lines) alternate titles: service engineer; shop mechanic

Inspects, repairs, and maintains functional parts of automotive and mechanical equipment and machinery, such as pumps, compressors, pipe-laying machines, ditchdiggers, trucks, and tractors used in petroleum exploration, on oil fields, in pipeline construction, and in airfield maintenance and pipeline operations, using hoists, handtools, gauges, drills, grinding wheels, and testing devices: Inspects defective equipment and diagnoses malfunctions, using motor analyzers, pressure gauges, chassis charts, and factory manuals. Disassembles and overhauls internal combustion engines, pumps, pump power units, generators, transmissions, clutches, and rear ends, using handtools and hoist. Grinds and reseats valves, using valve-grinding machine. Adjusts brakes, aligns wheels, tightens bolts and screws, and reassembles equipment. Operates equipment to test its functioning. Changes oil, checks batteries, repairs tires and tubes, and lubricates equipment and machinery.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

620.281-050 MECHANIC, INDUSTRIAL TRUCK (any industry) alternate titles: truck repairer

Repairs and maintains electric, diesel, and gasoline industrial trucks, following manuals, and using handtools, power tools, and knowledge of electrical, power transmission, brake, and other automotive systems: Reads job order and observes and listens to truck in operation to determine malfunction and to plan work procedures. Installs new ignition systems, aligns front wheels, changes or recharges batteries, and replaces transmissions and other parts, using handtools. Overhauls gas or diesel engines, using mechanic's handtools, welding equipment, standard charts, and hoists. Examines protective guards, loose bolts, and specified safety devices on trucks, and makes adjustments, using handtools. Lubricates moving parts and drives repaired truck to verify conformance to specifications. May fabricate special lifting or towing attachments, hydraulic systems, shields, or other devices according to blueprints or schematic drawings.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 81

620.281-054 MOTORCYCLE REPAIRER (automotive ser.) alternate titles: motorcycle mechanic

Repairs and overhauls motorcycles, motor scooters, and similar motor vehicles: Listens to engine, examines vehicle's frame, and confers with customer to determine nature and extent of malfunction or damage. Connects test panel to engine and measures generator output, ignition timing, and other engine performance indicators. Dismantles engine and repairs or replaces defective parts, such as magneto, carburetor, and generator. Removes cylinder heads, grinds valves, and scrapes off carbon, and replaces defective valves, pistons, cylinders, and rings, using handtools and power tools. Hammers out dents and bends in frame, welds tears and breaks, and reassembles and reinstalls engine. Repairs and adjusts clutch, brakes, and drive chain. Repairs or replaces other motorcycle and motor scooter parts, such as spring fork, headlight, horn, handlebar controls, valve release, gear lever, gasoline and oil tanks, starter, brake lever, and muffler. May specialize in repair of motor scooters and be designated Motor-Scooter Repairer (automotive ser.).
GOE: 05.05.09 STRENGTH: H GED: R3 M3 L3 SVP: 6 DLU: 77

620.281-058 TRACTOR MECHANIC (automotive ser.)

Diagnoses mechanical failures and repairs tractors and tractor components according to manuals, factory specifications, and knowledge of engine performances, using handtools, power tools, and testing instruments: Attaches compression, ignition, and timing test instruments to certain parts of tractor, using clamps and handtools. Starts engine dials and reads meters and gauges of testing equipment to diagnose engine malfunction. Removes and disassembles engine, transmission, and clutches, using hoists, jacks, and mechanic's handtools. Inspects parts for damage, and verifies dimensions and clearances of parts for conformance to factory specifications, using gauges, such as calipers, and micrometers. Replaces or repairs worn or damaged parts. Grinds valves, relines and adjusts brakes, tightens body bolts, aligns wheels, and tunes engine. May weld defective body or frame parts.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

620.281-062 TRANSMISSION MECHANIC (automotive ser.)

Repairs manual and automatic transmissions in automobiles, buses, trucks, and other automotive vehicles: Raises automotive vehicle, using jacks or hoists, and removes transmission, using mechanic's handtools. Disassembles transmission unit and replaces broken or worn parts, such as bands, gears, seals, and valves. Adjusts pumps, bands, and gears as required, using wrenches. Installs repaired transmission and fills it with specified fluid. Adjusts operating linkage and tests operation on road. May adjust carburetor. May verify idle speed of motor, using equipment, such as tachometer, making required adjustments. May specialize in repair of automatic transmissions and be designated Automatic-Transmission Mechanic (automotive ser.).
GOE: 05.10.02 STRENGTH: M GED: R3 M3 L3 SVP: 7 DLU: 77

620.281-066 TUNE-UP MECHANIC (automotive ser.)

Tunes automotive vehicle engines to ensure efficient operation: Removes spark plugs, using socket wrench, and tests them, using spark-plug tester. Cleans electrodes in sandblasting machine, sets spark gap with feeler gauge, and replaces or installs new plugs. Inspects distributor breaker points for wear and pits, using feeler gauge, and replaces or resets points. Observes ignition timing, using timing light, and adjusts timing, using handtools. Adjusts carburetor needle setting, using handtools, and verifies adjustment, using instruments,

such as fuel analyzer, vacuum gauge, oscilloscope, and tachometer. Sets valve tappets, using feeler gauge or dial indicator. Replaces defective coils, condensers, and electrical connection. Removes and cleans carburetor and fuel pump. Examines battery and connections and electrical charging and starting circuit. Adjusts, and repairs fan belt, and fuel and water pumps. May tune engine while vehicle runs on rollers connected to dynamometer and be designated Dynamometer Tuner (automotive ser.).
GOE: 05.05.09 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

620.281-070 VEHICLE-FUEL-SYSTEMS CONVERTER (automotive ser.)

Converts vehicle fuel systems from gasoline to butane gas operation, using handtools: Dismantles and removes existing gasoline-powered fuel systems from vehicles. Affixes mounting brackets or cradle to rear of vehicle, bolts high pressure butane gas tank to brackets, and installs high pressure vaporizers under hood, using handtools. Attaches butane carburetor and adapter to existing vehicle carburetor, or replaces original carburetor with butane one. Connects water and fuel lines between specified units. Tunes motor to conform to butane performance specifications to obtain maximum power and economy and to meet emission standards. May repair and service operating butane fuel units.
GOE: 05.10.02 STRENGTH: L GED: R3 M2 L3 SVP: 6 DLU: 77

620.364-010 SQUEAK, RATTLE, AND LEAK REPAIRER (automotive ser.)

Drives automobiles of service customers to determine origin of noises and leaks, and repairs or adjusts components to eliminate cause of complaint: Drives vehicle, or accompanies customer on test drive, to listen for rattles, squeaks, or other noises reported by customer, indicating malfunctioning or loose components. Diagnoses cause and determines origin of defect. Makes minor repairs to vehicle, such as tightening muffler and exhaust pipe brackets, loose bolts, and door handles. Reports need for more extensive repairs to AUTOMOBILE MECHANIC (automotive ser.). Sprays site of water leak, identified by customer, using water hose. Repairs leak, using adhesive compound, or replaces faulty rubber or fiber molding on doors and windows, using handtools.
GOE: 05.12.15 STRENGTH: M GED: R2 M2 L2 SVP: 4 DLU: 77

620.381-010 AUTOMOBILE-RADIATOR MECHANIC (automotive ser.) alternate titles: automobile mechanic, radiator; radiator repairer

Repairs cooling systems and fuel tanks in automobiles, buses, trucks, and other automotive vehicles: Pumps water or compressed air through radiator to test it for obstructions or leaks. Flushes radiator with cleaning compound to remove obstructions, such as rust or mineral deposits. Removes radiator core from automobile and cleans it, using rods or boiling water and solvent, or combination of boil out and rod out. Solders leaks in core or tanks, using soldering iron or acetylene torch. Disassembles, repairs, or replaces defective water pump. Replaces faulty thermostats and leaky head gaskets. Installs new cores, hoses, and pumps. Cleans, tests, and repairs fuel tanks.
GOE: 05.10.02 STRENGTH: M GED: R3 M2 L3 SVP: 6 DLU: 77

620.381-014 MECHANIC, ENDLESS TRACK VEHICLE (automotive ser.)

Repairs automotive vehicle chassis assemblies installed on vehicles, such as crawler tractors, half-tracks, scout and reconnaissance cars, and tanks: Removes chassis subassemblies, such as transmissions and crawler treads, using mechanic's handtools, jacks, and cranes. Disassembles units, such as crawler tread blocks and differential unit brake drums. Repairs and replaces worn and damaged parts. Fits parts together and reassembles parts to chassis, making necessary adjustments to ensure proper functioning. Installs parts or subassemblies for special tests as directed. Immerses parts in tanks of solvent or sprays parts with grease solvent to clean parts.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

620.381-018 MECHANICAL-UNIT REPAIRER (automotive ser.; railroad equip.)

Repairs, tests, and installs mechanical units, such as fuel and water pumps, control valves, governors, distributors, windshield wiper motors, and door engines on streetcars, trackless trolleys, and buses: Disconnects and removes unit from vehicle, using handtools. Disassembles unit and cleans parts with chemical solution. Inspects parts for wear or damage. Removes foreign particles from unit, using compressed air blower. Repairs, replaces, or adjusts components, such as needles, springs, bolts, relays, and airhoses. Tests air-control valve, air pipes, and airhoses for air leaks. Tests magnetic, hydraulic, and pneumatic control valves that are used to open and close doors and inspects radiator shutters, and other mechanical units on vehicle. Reassembles and installs unit in vehicle. May be designated according to type of mechanical unit repaired as Door-Engine Repairer (automotive ser.; railroad equip.); Windshield-Wiper Repairer (railroad equip.).
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

620.381-022 REPAIRER, HEAVY (auto. mfg.)

Repairs defective automotive units, such as engines, transmissions, or differentials, in assembled vehicles, using handtools and power tools and applying knowledge of mechanical systems: Reads inspection cards to determine defects in vehicle components. Disassembles and repairs defective units on assembled vehicles or replaces them with different units, using mechanic's handtools and portable power tools. Routes repaired vehicles to testing area for final inspection. May remove and repair defective units of completed automotive vehicles. May place malfunctioning units on repair stand, using hoist. May be designated according to type of unit repaired as Differential Repairer (auto. mfg.); Engine Repairer (auto. mfg.); Transmission Repairer (auto. mfg.).
GOE: 05.05.09 STRENGTH: H GED: R3 M2 L3 SVP: 6 DLU: 90

620.384-010 MOTORCYCLE TESTER (motor-bicycles)

Inspects and tests motorcycles, performing any combination of following tasks according to standard procedures, using handtools and testing instruments: Mounts motorcycle on test stand. Attaches lead wires of test panel to ignition system of motor and runs motor at various speeds to measure generator output, oil pressure, revolution per minute, and other specified operating characteristics. Compares test instrument readings with operational charts to detect malfunctions. Engages clutch and transmission of motorcycle and listens for sounds denoting malfunction. Records findings on worksheet. Turns adjustment screw on carburetor to regulate idling speed of motor, using screwdriver. Inspects frame and fenders for dents and scratches. Tightens frame nuts and bolts, using handtools. Tests operation of horn and lights. Verifies identification number and optional equipment against data on work order.
GOE: 06.03.01 STRENGTH: M GED: R3 M3 L3 SVP: 5 DLU: 77

620.584-010 SPRING-REPAIRER HELPER, HAND (automotive ser.) alternate titles: spring-fitter helper; spring-maker helper, hand; tear-up worker, spring

Disassembles defective vehicle leaf springs preparatory to repair and assembles repaired leaf springs: Removes center bolt from leaf spring and loosens clips, using handtools. Removes rivets from leaf spring, using punch press or drill. Drills hole in replacement blank for leaf spring, using drill, or punches hole in blank, using punch press. Reassembles leaves for leaf spring, fits keeper on leaves, and fastens with bolts. Records number of leaves in spring, dimensions of leaves, size of connecting bolt, and repairs made.
GOE: 05.12.12 STRENGTH: H GED: R2 M1 L2 SVP: 4 DLU: 77

620.664-010 CONSTRUCTION-EQUIPMENT-MECHANIC HELPER (construction)

Assists CONSTRUCTION-EQUIPMENT MECHANIC (construction) in repairing, assembling, and adjusting construction equipment, such as internal combustion engines, lighting plants, pumps, air compressors, concrete and mortar mixers, concrete vibrators, generators, pneumatic tools, and portable winches. Disassembles and assembles equipment, using mechanic's handtools. Washes parts and tools with cleaning fluids, such as gasoline or naptha. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.15 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

620.664-014 MAINTENANCE MECHANIC HELPER (construction; petrol. & gas; pipe lines) alternate titles: mechanic helper; shop-mechanic helper

Assists MAINTENANCE MECHANIC (construction; petrol. & gas; pipe lines) in repairing and maintaining automotive and mechanical machinery and equipment, such as pumps, compressors, pipelaying machines, ditch-diggers, trucks, and tractors, using jacks, hoists, and handtools: Installs jacks and hoists to raise equipment. Disassembles and assembles equipment, using handtools. Cleans tools and parts with naphtha, gasoline, and other cleaning compounds. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.10.02 STRENGTH: H GED: R3 M2 L2 SVP: 5 DLU: 77

620.682-010 BRAKE-DRUM-LATHE OPERATOR (automotive ser.) alternate titles: machinist, brake

Sets up and operates brakedrum lathe to resurface automotive brakedrums, and operates grinding machine to grind brakeshoe linings: Clamps hub and drum on lathe spindle and adjusts cutting tool to machine drum surface. Starts spindle and feeds tool into drum by hand, or adjusts automatic feed mechanism. Measures drum to verify specified dimensions, using calipers, drum gauge, or micrometer. Clamps brakeshoe on grinder and grinds lining to specified arc as determined by new diameter of drum. May replace defective brake cylinders and fill master brake cylinder with brake fluid. May mount wheel on axle and adjust drumshoe clearance.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

620.684-010 AUTOMOBILE WRECKER (wholesale tr.) alternate titles: wrecking mechanic

Salvages usable parts from wrecked cars and trucks in auto salvage yard: Dismantles vehicles, using handtools, bolt cutters, and oxyacetylene torch. Cleans parts, using solvents and brush, or vapor-degreasing machine, and stores parts in bins according to condition and part number. Sorts, piles, and loads scrap on railroad cars or trucks. May drive tow-truck. May sell automobile glass, tires, and parts.
GOE: 05.12.15 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 77

620.684-014 AUTOMOBILE-MECHANIC HELPER (automotive ser.) alternate titles: automobile-mechanic assistant; mechanic helper

Assists AUTOMOBILE MECHANIC (automotive ser.) 620.261-010 in repairing automobiles, buses, trucks, and other automotive vehicles: Raises vehicle to specified level, using hydraulic jack. Removes and disassembles unit, such as engine, transmission, or differential, to be repaired, using handtools and power tools. Cleans unit, using prescribed solvent. Lubricates and washes vehicle. Performs other duties as described under HELPER (any industry) Master

Title. May be designated according to specialty of worker assisted as Truck-Mechanic Helper (automotive ser.).
GOE: 05.12.15 STRENGTH: H GED: R2 M1 L2 SVP: 3 DLU: 81

620.684-018 BRAKE ADJUSTER (automotive ser.)
Adjusts hydraulic brakes on automotive vehicles, such as automobiles, buses, and trucks: Observes level of brake fluid in master cylinder of braking system and adds brake fluid to prescribed level. Raises vehicle, using power hoist or jack. Turns toothed wheel on brakeshoe adjustment turnbuckle to set specified distance between brakeshoes and brakedrum, using handtool.
GOE: 05.12.15 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 77

620.684-022 CLUTCH REBUILDER (automotive ser.)
Rebuilds automobile and truck clutches, using handtools and power tools: Immerses clutch assembly in solvent to remove grease and residue. Places assembly into machine that tumbles assembly in abrasive chips to remove rust. Disassembles clutch, using handtools. Grinds and buffs clutch plates and facing, using portable abrasive wheel. Replaces facing on clutch plates, using riveting gun or riveting press. Replaces worn or damaged clutch parts. Reassembles clutch and replaces cover, using handtools.
GOE: 05.10.02 STRENGTH: M GED: R3 M2 L3 SVP: 4 DLU: 77

620.684-026 MOTORCYCLE SUBASSEMBLY REPAIRER (motor-bicycles)
Repairs motorcycle forks, transmissions, or other subassemblies according to specifications, using handtools and power tools: Disassembles unit and examines condition, movement or alignment of parts visually or using gauges. Replaces defective parts, using handtools, arbor press, flexible power press, or power tools. Reassembles and tests unit. May be designated according to place of work as Repairer, Assembly Line (motor-bicycles); or part of motorcycle repaired as Fork Repairer (motor-bicycles); Transmission Repairer (motor-bicycles).
GOE: 05.10.02 STRENGTH: H GED: R3 M2 L2 SVP: 5 DLU: 77

620.684-030 TRACTOR-MECHANIC HELPER (automotive ser.)
Assists TRACTOR MECHANIC (automotive ser.) in repairing tractors and tractor components, using handtools: Installs jacks and hoists to raise equipment and lift dismantled assemblies. Disassembles and assembles tractor parts, using handtools. Cleans tools and parts with naphtha, gasoline, or other cleaning compounds. May wash and lubricate equipment. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.15 STRENGTH: H GED: R2 M1 L2 SVP: 4 DLU: 77

620.684-034 USED-CAR RENOVATOR (retail trade) alternate titles: used-car conditioner
Renovates used cars for resale at used car lot: Inspects cars for noticeable defects, such as dents, scratches, torn upholstery, and poor mechanical operation. Hammers out dents. Polishes scratches and retouches with enamel. Sews rips and tears in upholstery. Cleans and vacuums interiors. Washes and polishes exteriors. Replaces missing or defective small parts. Performs minor mechanical repairs and adjustments. May inspect cars for compliance with state safety regulations.
GOE: 05.10.04 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

620.685-010 BONDER, AUTOMOBILE BRAKES (automotive ser.)
Tends machines that apply adhesive and bond asbestos lining to automobile brakeshoes for installation by BRAKE REPAIRER (automotive ser.): Selects stock lining to fit brakeshoes removed from vehicle. Feeds lining between rollers of machine that applies bonding adhesive. Secures brakeshoes in bonding press after adhesive has set. Positions coated lining on shoe and locks press. Moves lever to activate press that heats and bonds lining to shoe and automatically releases after specified time. Removes bonded shoe from press, using asbestos gloves. May rivet linings to brakeshoes and be designated Riveter, Automobile Brakes (automotive ser.).
GOE: 05.12.10 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

621 AIRCRAFT MECHANICS AND REPAIRERS

This group includes occupations concerned with repairing and maintaining aircraft engines and mechanical, pneumatic, hydraulic, and related systems and components of aircraft and missiles.

621.131-010 SUPERCHARGER-REPAIR SUPERVISOR (air trans.)
Supervises and coordinates activities of workers engaged in assembling and repairing aircraft engine and cabin superchargers. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.09 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 77

621.131-014 SUPERVISOR, AIRCRAFT MAINTENANCE (air trans.)
Supervises and coordinates activities of AIRFRAME-AND-POWER-PLANT MECHANICS (aircraft mfg.; air trans.) 621.281-014 engaged in maintaining and repairing aircraft and aircraft engines: Trains employees in work methods and procedures. Inspects work to maintain specified standards and quality. Requisitions materials and supplies. Must be licensed by Federal Aviation Administration in job occurring in air transportation. May supervise workers engaged in servicing aircraft with fuel, lubricants, and coolants. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.09 STRENGTH: L GED: R4 M4 L4 SVP: 8 DLU: 77

621.137-010 SUPERVISOR, RECLAMATION (wholesale tr.)
Supervises and coordinates activities of RECLAMATION WORKERS (wholesale tr.) engaged in dismantling wrecked and other decommissioned aircraft: Directs removal of wings, engines, tail assemblies, landing gears, and other aircraft parts. Inspects parts, routing repairable units to repair shops and nonrepairable units to salvage. Compiles reports of reclamation work. May negotiate for sale of aircraft parts reclaimed. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.09 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

621.221-010 FIELD-SERVICE REPRESENTATIVE (aircraft mfg.) alternate titles: technical specialist, aircraft systems
Advises and trains customer or other personnel in operation, overhaul, and maintenance of company aircraft, applying knowledge of aircraft systems, company specifications, and Federal Aviation Administration inspection procedures and specifications: Conducts investigations to determine source of technical problems. Evaluates results of investigations and recommends corrective action to customer and manufacturing plant. Trains customer or other personnel in operation, overhaul, and maintenance of aircraft. May oversee mechanical and structural repairs. May compile technical data pertaining to changes and improvements. May be required to work in field at permanent station. May be required to be licensed by Federal Aviation Administration in job occurring in air transportation.
GOE: 05.05.09 STRENGTH: L GED: R5 M4 L4 SVP: 7 DLU: 88

621.261-010 AIRPLANE INSPECTOR (air trans.) alternate titles: airplane-and-engine inspector
Examines airframe, engines, and operating equipment to ensure that repairs are made according to specifications, and certifies airworthiness of aircraft: Tests tightness of airframe connections with handtools and employs flashlight and mirror to inspect fit of parts. Signals AIRFRAME-AND-POWER-PLANT MECHANIC (air trans.; aircraft mfg.) to start engine and manipulate aircraft controls. Collects data, such as engine revolutions per minute and fuel and oil pressures, to evaluate engine performance, using tachometer and pressure gauges. Examines assembly, installation, and adjustment of ailerons and rudders to ensure that workmanship and materials conform with Civil Air Regulations, company specifications, and manual procedures. Determines accuracy of installation of components in power plant and hydraulic system with protractor, micrometer, calipers, and gauge to ensure that specified tolerances are met. Signs inspection tag to approve unit, or records reasons for rejecting unit. Logs inspections performed on aircraft. Must hold Airframe and Power Plant Mechanic's License and Inspection Authorization, issued by Federal Aviation Administration. May prepare dismantling schedules for airplanes to be overhauled. May service, repair, and replace airframe components, engines, and operating equipment [AIRFRAME-AND-POWER-PLANT MECHANIC (air trans.; aircraft mfg.)].
GOE: 05.07.02 STRENGTH: L GED: R4 M4 L4 SVP: 8 DLU: 77

621.261-014 ENGINE TESTER (aircraft mfg.; air trans.)
Tests performance of new and overhauled aircraft engines, such as turboprop, turbofan, turbojet, and cylinder-type, and interprets test data: Positions or directs other workers in positioning engine on test stand, using hoist or overhead crane. Connects oil and fuel lines, instruments, controls, and engine accessories, such as generators, magnetos, and fuel injectors, using handtools. Connects testing instruments, such as dynamometers and manometers, to engine. Starts and operates engine for specified time at various speeds. Reads and records test data, such as speed, temperature, oil pressure, fuel consumption, and exhaust pressure. Calculates performance of engine at various speeds, using test data, standard formulas, computer or calculator. Signs off tested engines as ready for service or indicates reasons for rejection based on analysis of test data. Must be licensed by or perform work under licensure of Federal Aviation Administration. May operate computerized test equipment to enter, retrieve, and compute test data and be designated Test Cell Technician (aircraft mfg.).
GOE: 06.01.05 STRENGTH: M GED: R4 M4 L4 SVP: 7 DLU: 88

621.261-018 FLIGHT ENGINEER (air trans.) alternate titles: flight mechanic
Makes preflight, inflight, and postflight inspections, adjustments, and minor repairs to ensure safe and efficient operation of aircraft: Inspects aircraft prior to takeoff for defects, such as fuel or oil leaks and malfunctions in electrical, hydraulic, or pressurization systems, according to preflight checklist. Verifies passenger and cargo distribution and amount of fuel to ensure that weight and balance specifications are met. Monitors control panel to verify aircraft performance, and regulates engine speed according to instructions of AIRPLANE PILOT, COMMERCIAL (air trans.). Makes inflight repairs, such as replacing fuses, adjusting instruments, and freeing jammed flight control cables, using handtools, or takes emergency measures to compensate for failure of equipment, such as autopilot, wing heaters, and electrical and hydraulic systems. Monitors fuel gauges and computes rate of fuel consumption. Keeps log of fuel consumption and engine performance. Records malfunctions which were not corrected during flight and reports needed repairs to ground maintenance personnel. May perform repairs upon completion of flight. Must be licensed by Federal Aviation Administration. May be required to be licensed AIRFRAME-AND-POWER-PLANT MECHANIC (air trans.; aircraft mfg.) or AIRPLANE PILOT, COMMERCIAL (air trans.).
GOE: 05.03.06 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 77

621.261-022 EXPERIMENTAL AIRCRAFT MECHANIC (aircraft mfg.) alternate titles: experimental aircraft and engine mechanic, field and hangar; experimental flight test mechanic; experimental preflight mechanic

Inspects, tests, repairs, maintains, services, and modifies experimental and prototype aircraft, engines, accessories, and components according to governmental, company, and customer requirements. Assembles and installs aircraft electrical, plumbing, mechanical, and structural accessories and components, such as ejection seats, hatch mechanisms, and safety belts, using handtools and power tools. Installs, operates, and adjusts test apparatus, such as recorders, oscillographs, limit switches, inverters, thermocouples, instruments, cameras, timing devices, and photo recorders. Operates aircraft engines and systems, such as hydraulic, air-conditioning, pressurization, fuel, controls, and landing gear, to diagnose malfunctions, using test equipment, such as hydraulic test bench, pressure ratio bench, water injection test cart, and ground power unit. Repairs, adjusts, aligns, and calibrates aircraft systems. Modifies aircraft structure or components following drawings, engineering orders, and other technical publications, as required. Services and maintains gaseous, liquid oxygen, pneumatic, and hydraulic systems on aircraft. May specialize in testing and modifying spacecraft systems and be designated Experimental Mechanic, Spacecraft (aircraft mfg.).
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L4 SVP: 7 DLU: 89

621.281-014 AIRFRAME-AND-POWER-PLANT MECHANIC (aircraft mfg.; air trans.) alternate titles: aircraft mechanic; airplane mechanic

Services, repairs, and overhauls aircraft and aircraft engines to ensure airworthiness: Repairs, replaces, and rebuilds aircraft structures, such as wings and fuselage, and functional components including: rigging, surface controls, and plumbing and hydraulic units, using handtools, power tools, machines, and equipment such as shears, sheet metal brakes, welding equipment, rivet gun, and drills. Reads and interprets manufacturers' and airline's maintenance manuals, service bulletins, and other specifications to determine feasibility and method of repairing or replacing malfunctioning or damaged components. Examines engines for cracked cylinders and oil leaks, and listens to operating engine to detect and diagnose malfunctions, such as sticking or burned valves. Inspects turbine blades to detect cracks or breaks. Tests engine operation, using testing equipment such as ignition analyzer, compression checker, distributor timer, and ammeter, to locate source of malfunction. Replaces or repairs worn or damaged components, such as carburetors, alternators, and magnetos, using handtools, gauges, and testing equipment. Removes engine from aircraft, using hoist or forklift truck. Disassembles and inspects parts for wear, warping, or other defects. Repairs or replaces defective engine parts and reassembles and installs engine in aircraft. Adjusts, repairs, or replaces electrical wiring system and aircraft accessories. Performs miscellaneous duties to service aircraft, including flushing crankcase, cleaning screens, greasing moving parts, and checking brakes. May be required to be licensed by Federal Aviation Administration. May service engines and airframe components at line station making repairs, short of overhaul, required to keep aircraft in safe operating condition and be designated Airframe-And-Power-Plant Mechanic, Line Service (air trans.). May service and repair aircraft and engines prior to, during, or after flight to ensure airworthiness, working on flight line of aircraft manufacturing facility, and be designated Aircraft-And-Engine Mechanic, Field-And-Hangar (aircraft mfg.); Flight-Line Mechanic (aircraft mfg.); Mechanic, Field-Service (aircraft mfg.). May specialize in rework, repair, and modification of structural, precision, and functional spare parts and assemblies at manufacturing facility and be designated Spares Rework Mechanic (aircraft mfg.). May specialize in engine repair and be designated Aircraft-Engine Assembler (air trans.); Aircraft-Engine-Cylinder Mechanic (air trans.); Aircraft-Engine Dismantler (air trans.); Aircraft-Engine Installer (air trans.); Aircraft-Engine Mechanic (air trans.); Aircraft-Engine Mechanic, Overhaul (air trans.). May be designated: Carburetor Mechanic (air trans.); Helicopter Mechanic (air trans.); Hydraulic Tester (air trans.); Ignition Specialist (air trans.); Overhaul And Repair Mechanic (aircraft mfg.); Supercharger Mechanic (air trans.).
GOE: 05.05.09 STRENGTH: M GED: R4 M4 L4 SVP: 7 DLU: 88

621.281-018 AIRFRAME-AND-POWER-PLANT-MECHANIC APPRENTICE (air trans.) alternate titles: airplane-mechanic apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.09 STRENGTH: M GED: R4 M4 L4 SVP: 7 DLU: 77

621.281-030 ROCKET-ENGINE-COMPONENT MECHANIC (aircraft mfg.)

Assembles, tests, and repairs pneumatic, hydraulic, and mechanical components of rocket motors or rocket engines, according to specifications, using handtools, power tools, and precision measuring and testing instruments: Positions parts in jigs and holding fixtures to facilitate assembly. Fits and assembles interrelating precision parts, using handtools. Inspects configuration and dimensions of assemblies, using instruments, such as optical flats, micrometers, calipers, dial indicators, and monolight instruments. Tests assemblies to determine conditions, such as internal leakage, pressure differentials, and cycles of operation, using gauges, meters, and chemicals. Conducts functional tests to determine mechanical performance. Analyzes malfunctions to determine causes, and repairs, adjusts, synchronizes, and calibrates assemblies. May perform welding and acid etching on various materials. May operate computer to record, analyze, and interpret test data.
GOE: 05.05.09 STRENGTH: M GED: R4 M4 L4 SVP: 7 DLU: 88

621.684-010 AIRFRAME-AND-POWER-PLANT-MECHANIC HELPER (aircraft mfg.; air trans.) alternate titles: airplane-mechanic helper

Assists other workers engaged in servicing, repairing, and overhauling aircraft and aircraft engines, performing any combination of following duties: Replaces batteries, filters, and similar accessories, using mechanic's handbooks. Removes inspection plates, cowling, engine covers, floor boards, and related items, to permit access for repair or inspection, and replaces items upon completion of work. Assists AIRFRAME-AND-POWER-PLANT MECHANIC (aircraft mfg.; air trans.) 621.281-014 in dismantling, repairing, overhauling, or replacing parts and assemblies, such as engines, plumbing and hydraulic systems, and aircraft structural sections. Cleans aircraft interior and exterior parts and assemblies with solvents or other cleaning solutions. Inflates tires, fills gasoline tanks and oil reservoirs, and greases aircraft, using grease gun. May assist manufacturing facility flight line personnel in servicing and repairing aircraft prior to flight or customer acceptance and be designated Flight Line Service Attendant (aircraft mfg.). Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.10.02 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 88

621.684-014 RECLAMATION WORKER (wholesale tr.)

Dismantles wrecked and other decommissioned aircraft and salvages parts and equipment: Removes wings, tails, engines, landing gear, instruments and other repairable parts, using handtools. Dismantles condemned equipment, retaining usable parts. Cleans salvaged parts in solvent and coats with grease or other preservative, using swab, brush, or spray gun.
GOE: 05.12.12 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

622 RAIL EQUIPMENT MECHANICS AND REPAIRERS

This group includes occupations concerned with inspecting and repairing surface and subsurface railway equipment.

622.131-010 SUPERVISOR, RAILROAD CAR REPAIR (railroad equip.)

Supervises and coordinates activities of workers engaged in inspecting, dismantling, welding, carpentering, painting, riveting, and testing parts, units, and damaged wood or steel sections of railway cars. May inspect damaged cars and prepare estimate of repair costs. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.06 STRENGTH: L GED: R4 M3 L4 SVP: 8 DLU: 77

622.131-014 SUPERVISOR, ROUNDHOUSE (railroad equip.)

Supervises and coordinates activities of workers engaged in inspecting, servicing, and repairing railway locomotives such as diesel-electric locomotives and gasoline-powered speeders. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.09 STRENGTH: L GED: R4 M3 L4 SVP: 8 DLU: 77

622.131-018 SUPERVISOR, WHEEL SHOP (railroad equip.)

Supervises and coordinates activities of workers engaged in repairing, reboring, mounting, dismounting, and turning down railroad car wheel and axle assemblies, according to Federal and American Railroad Association safety specifications. Trains workers. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.07 STRENGTH: M GED: R4 M3 L4 SVP: 8 DLU: 77

622.137-010 SUPERVISOR, BRAKE REPAIR (r.r. trans.)

Supervises and coordinates activities of workers engaged in maintenance and repair of braking devices on railroad tracks in classification yard: Patrols work area to observe operation and condition of braking device and to note and record defects, such as loose bolts, escaping air, and worn brake shoes. Assigns tasks and plans and coordinates activities of BRAKE REPAIRER, RAILROAD (r.r. trans.) 622.261-010 to maximize work performed and utilization of work force, based on knowledge of worker ability and experience and tasks to be performed. Patrols work sites to resolve problems relative to work and to suggest changes in work procedure to improve efficiency. Examines completed repair of maintenance to ensure conformance to company standards, applying knowledge of operation of braking device and of railroad regulations. Walks throughout yard to detect unsafe conditions or violations of safety rules. Apprises workers of violations to instruct workers in safe work methods and records repeated violations or commendable work methods on specified forms. Maintains records, such as employee timecards, materials used for maintenance and repair of braking device, and summaries of work performed. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.02.02 STRENGTH: L GED: R3 M2 L2 SVP: 7 DLU: 86

622.137-014 SUPERVISOR, CAR AND YARD (r.r. trans.)

Supervises and coordinates activities of workers engaged in repair and maintenance of railroad cars in freight yard, and workers engaged in inspecting incoming and outbound freight cars for malfunctions: Inspects railroad cars and reviews worksheet to determine type and priority of repairs to be performed on cars, such as replacing handholds, couplers, or wheels. Marks side of car, using chalk, to inform workers of work to be performed, such as type of repair,

servicing, or inspection. Requests parts from stockroom needed by workers to repair cars. Assigns workers to repair cars in shop, to perform minor repairs in yard, such as bent grab irons, and to inspect incoming and outbound trains for defects, such as worn brake pads and broken doors. Examines work in progress and completed work to correct faulty work procedures and to ensure that repairs meet specified standards. Patrols work area to observe work methods and ensure compliance with safety regulations. Instructs workers in safe use of equipment in shop and yard. Prepares forms that detail work performed, such as car number, number of staff-hours spent on work, and type of maintenance or repairs performed. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.06 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 86

622.261-010 BRAKE REPAIRER, RAILROAD (r.r. trans.)

Repairs and maintains braking devices on railroad tracks leading into yard of terminal to ensure specified performance of braking device, using handtools. Gathers specified tools, such as gauges, grease gun, and handtools, required to complete work assignment, such as greasing fittings or replacing brake shoes. Adjusts and measures distances between brake shoes to specified standards, using handtools, gauge, and steel rule. Removes bolts, screws, and metal plates to access parts of braking device, following blueprints. Examines broken device to isolate defect or verify repairs needed. Removes designated part, places new part in braking device and adjusts fit to ensure accurate placement, working as member of team. Replaces bolts, screws, and metal plates, using hand and pneumatic tools. Inspects braking device for conformance to standards. Greases fittings of braking device to maintain and prevent excessive wear of parts. Loosens and lifts braking device from rail, using handtools and crane, and replaces broken or deteriorated track beams, working as member of team.
GOE: 05.05.09 STRENGTH: V GED: R4 M2 L2 SVP: 6 DLU: 86

622.281-010 LOCOMOTIVE INSPECTOR (railroad equip.) alternate titles: pit inspector

Inspects railroad locomotives in roundhouse or shop to determine extent of wear and needed repairs, using handtools and measuring instruments: Examines firebox, journal boxes, and bearings to detect wear. Taps parts, such as rods, wheels, and bolts with hammer or rawhide mallet and listens to sound to detect ruptures or cracks. Measures wheel flanges with calipers and depth gauge to detect excessive wear or flat spots. Reports defects to SUPERVISOR, ROUNDHOUSE (railroad equip.) or prepares inspection report form.
GOE: 05.07.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

622.381-010 AIR-VALVE REPAIRER (railroad equip.)

Repairs compressed-air valves, such as triple-air valves, cutoff valves, and retainer valves, using handtools, power tools, and measuring instruments according to specifications: Disassembles valves, using power wrench, and cleans parts with gasoline and airhose. Measures parts, such as gaskets, valve seats, pistons, and slides for conformance to federal and company specifications, using gauges. Scrapes, grinds, and polishes metal contacting surfaces to make surfaces airtight, using rasps and emery polishing cloths. Replaces defective parts and reassembles valves.
GOE: 05.10.02 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

622.381-014 CAR REPAIRER (railroad equip.) alternate titles: drop-pit worker; machinist

Repairs and rebuilds railway freight cars, tank cars, or locomotives, following federal and company regulations and specifications and using handtools, power tools, welding equipment, and measuring instruments: Removes and inspects locomotive or car units, such as wheels, truck and brake assemblies, side posts, air cylinders, reservoirs and valves, side and roof sections, and coupler assemblies, using pneumatic hoist and jack, pinch bar, handtools, and cutting torch. Disassembles roller bearings, using jacks, blocks, and frames. Examines bearings, gaskets, and seals for defects, such as scratches, chips, and excessive wear. Replaces defective parts and reassembles roller bearings. Measures diameter of axle wheel seats, using micrometer, and marks dimensions on axle for subsequent boring of wheels to specified press fit dimensions. Repairs wooden sections, such as flooring and interior walls [CARPENTER (construction)]. Repairs or replaces steel sections, such as side posts, rafters, crossties, panels, underframing, and piping, using welding torch, power wrench, and plumber's tools. Assembles repaired or replaced units to rebuild locomotive or car. Positions width gauge between car sides, clamps turnbuckle ends to top of each side, and twists turnbuckle, using wrench, until sides are pressed against gauge to align sides for installation of car ends and crossties. May be designated according to type of car repaired as Tank-Car Repairer (railroad equip.). May be known according to specific tasks performed as Car Straightener (railroad equip.); Wheel Fitter (railroad equip.).
GOE: 05.05.06 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 77

622.381-018 CAR REPAIRER, PULLMAN (r.r. trans.)

Installs and repairs railroad sleeping car equipment, such as plumbing, interior fixtures, windows, steps, and platforms: Fabricates and installs cabinets and other wood fixtures, using carpentry tools. Replaces window glass, using handtools. Repairs damage to metal surfaces and parts, using arc or acetylene welding equipment. Removes mechanical equipment, such as compressors and generators from beneath car for bench repair by other workers.
GOE: 05.10.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

622.381-022 CAR-REPAIRER APPRENTICE (railroad equip.) alternate titles: machinist apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.06 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 77

622.381-026 FLOOR-COVERING LAYER (railroad equip.)

Removes worn floor covering from floors of streetcars and lays new floor covering. Sets felt on floor and cuts it around obstructions to fit floor. Applies coat of liquid cement to floor with brush and replaces felt on floor. Sets covering on floor and cuts off correct lengths and shapes. Applies coat of cement to felt and sets floor covering over cemented felt. Tacks edges of covering. Patches linoleum floors in same manner. Heats asphalt with blow torch and applies asphalt to cracks or openings and smooths it to match level of floor, using trowel, to patch asphaltic floors.
GOE: 05.10.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

622.381-030 MINE-CAR REPAIRER (mine & quarry) alternate titles: pit car repairer; shop blacksmith

Repairs or replaces damaged parts of underground mine cars: Welds, straightens, bolts, rivets, and refits parts, such as axles, wheels, bodies, and couplings, using hoists, jacks, handtools, power tools, and machine shop equipment. Makes new parts, such as body framework and undercarriages, using welding equipment. May examine mine car for defects and be designated Car Inspector (mine & quarry).
GOE: 05.05.06 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 77

622.381-034 RAILROAD WHEELS AND AXLE INSPECTOR (railroad equip.) alternate titles: wheel and axle inspector

Inspects railway car axle and wheel assemblies to determine conformance to Federal and American Railroad Association specifications, using measuring instruments: Verifies diameter of wheel and journal seats on axle, using calipers and micrometers. Measures space between wheels and from center of axle to each wheel, using needle-pointed space gauge, to verify conformance to specifications. Observes hydraulograph pressure-gauge indicator on wheel-pressing machine, as wheels are pressed onto axles, to ensure conformity to ton-pressure tolerances.
GOE: 06.01.05 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

622.381-038 SALVAGE INSPECTOR (railroad equip.)

Inspects new and used metal car parts for conformance to company's specifications, using measuring instruments and following blueprints: Examines used metal parts to determine parts salvageable for repair or scrap. Examines broken parts to determine nature and cause of defects. Measures new and used parts to verify specified dimensions and hardness, using micrometer, calipers, scales, and gauges. Forwards parts to laboratory for analysis, shop for repair, or to weighmaster for sale as scrap. Records inspection data, such as parts inspected, types of defects, and disposition of material.
GOE: 06.01.05 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

622.382-010 TRIPLE-AIR-VALVE TESTER (railroad equip.) alternate titles: test rack operator

Operates equipment to test various types of triple air valves for conformance to federal and company safety standards: Mounts valve on test frame and connects air supply hoses to valve, using portable power wrench. Moves test panel control levers singly or in combination to open or block air passages into different chambers of valve. Turns lever to inject air into unblocked chambers, reads gauges to determine specified pressure differentials, and to detect leaks, weak springs, and poor fits. Applies soapy water to valve with brush to pinpoint air leaks. Replaces defective parts. Rejects valves that do not meet specifications.
GOE: 05.07.02 STRENGTH: M GED: R3 M3 L3 SVP: 7 DLU: 77

622.684-010 AIR-COMPRESSOR MECHANIC (railroad equip.) alternate titles: compressor repairer

Repairs railroad-car air compressors and compressor motors, following wiring diagrams and using handtools: Disassembles compressor and examines parts for wear or breakage. Cleans parts and installs new piston rings and wrist pins. Replaces worn bearings, armatures, field coils, gears, and pinions in electric motors, following wiring diagram. Reassembles compressor and connects compressor to compressed air and electrical outlets to test operation.
GOE: 05.10.02 STRENGTH: L GED: R3 M3 L3 SVP: 6 DLU: 77

622.684-014 CAR-REPAIRER HELPER (railroad equip.) alternate titles: machinist helper

Assists CAR REPAIRER (railroad equip.) in repairing and rebuilding freight cars, tank cars, or locomotives, performing any combination of following tasks: Threads nuts and bolts and drills metal stock, using hand taps, dies, and drill press. Shears metal sheet and bar stock to specified dimensions. Straightens metal parts, using hammer and sledge. Bolts steel top frames to side frames of car, using power wrench. Rolls axle and wheel assemblies into hydraulic wheel-dismounting machine. Pulls levers to position ram against end of axle and force wheel from wheel seat. Rolls wheel to storage area. Caulks seams of car and fills car with water to detect leaks. Polishes brass trim on car. Repairs or replaces steam and airhoses. Lubricates car. May be known according to specific task performed as Car Tester (railroad equip.); Car-Top Bolter (railroad equip.). Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.12 STRENGTH: M GED: R2 M1 L2 SVP: 4 DLU: 77

622.684-018 SWITCH REPAIRER (r.r. trans.)

Repairs mechanical portion of railway-track switches: Sweeps dirt from switch with broom, and oils parts. Examines switches for worn or broken parts.

Adjusts mechanical parts of pull-chain switches, using handtools. Replaces defective parts, using handtools. May work as member of emergency work crew.
GOE: 05.10.02 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

622.684-022 TANK-CAR INSPECTOR (chemical)

Inspects, services, and tests railway tank cars used to transport compressed and liquefied gases: Connects flexible hose from suction line to car and opens valves on car and in blowoff line to facilitate removal of residual gas from used tank cars. Removes safety and flow control valves from car with wrenches, replacing valves with reconditioned ones. Examines car interior for defects and cleanliness, passing light beam into car and viewing it through valve openings or entering car through dome. Washes interior with water and dries with steam. Routes defective cars for repair. Tests tanks for leaks [HYDRO-PNEUMATIC TESTER (any industry)].
GOE: 05.12.12 STRENGTH: M GED: R2 M1 L2 SVP: 4 DLU: 77

623 MARINE MECHANICS AND REPAIRERS

This group includes occupations concerned with repairing mechanical equipment aboard fresh-water and sea-going ships, tugboats, barges, lighters, floating drydocks, and other marine craft and floating structures, and repairing related harbor and dock machinery.

623.131-010 MACHINIST SUPERVISOR, OUTSIDE (ship-boat mfg.)

Supervises and coordinates activities of workers engaged in installation of ship machinery, such as propelling machinery, auxiliary motors and pumps, and steering gear, performing duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

623.131-014 SUPERVISOR, GEAR REPAIR (water trans.)

Supervises and coordinates activities of workers engaged in fabricating, repairing, and supplying equipment used in loading and unloading ships' cargoes: Reviews work orders, inventory and other reports and assigns workers to activities, such as repairing equipment, fabricating special gear, and supplying cargo-handling equipment required for stevedoring operations. Inspects gear for quality of work and conformance to standards. Requisitions materials. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.02 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

623.261-010 EXPERIMENTAL MECHANIC, OUTBOARD MOTORS (engine-turbine) alternate titles: river tester

Tests, repairs, and rebuilds experimental outboard motors and parts to specified operating efficiency, using machine tools, precision measuring instruments, jigs, and fixtures: Mounts motor to boat and operates boat at various speeds on waterway to conduct operational tests. Observes and records readings on instruments, such as tachometers, monometers, voltmeters, ammeter, and vibration analyzer to measure boat speeds and thrust forces. Analyzes test records and disassembles motor to remove parts needing modification. Operates machine tools, such as lathes, mills, drills, and grinders, to repair or rework parts, such as cams, rods, crankshaft, and propeller.
GOE: 05.05.09 STRENGTH: M GED: R4 M4 L4 SVP: 7 DLU: 77

623.261-014 OUTBOARD-MOTOR TESTER (engine-turbine)

Tests operation of outboard motor in tank and repairs, adjusts, or replaces parts according to specifications and engineering requirements, using measuring instruments and handtools: Lowers motor on test frame into water tank, using chain hoist, and inspects wiring, screws, plugs, and assemblies for missing or broken parts. Starts motor and listens to and inspects it for signs of malfunctioning, such as smoke, excessive vibration, and misfiring. Holds tachometer against turning shaft and reads revolutions per minute. Verifies timing of cam gears, idle gear, and flywheel, using stroboscope. Turns regulating screws on carburetor to adjust idle speed, choke, and high-low speed. Sets starter lock and aligns shift lever shaft with indicated marks for speeds, using gauges, screwdrivers, and wrenches. Measures voltage, amperage, and polarity, using ammeter, voltmeter, and polarity gauge. Idles motor and observes thermometer to determine effectiveness of cooling system. Writes test report to indicate acceptance or reason for rejection of motor. Oils carburetor. Stamps identification number on motor, using hammer and metal stamping equipment. May test specific aspects of engine performance, such as fuel consumption, compression, and power output, and recommend modifications to improve engine performance and be designated Life Tester, Outboard Motors (engine-turbine).
GOE: 06.01.05 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

623.281-010 DECK ENGINEER (water trans.)

Repairs and maintains deck machinery, such as cargo winches and anchor windlasses: Operates machinery to determine causes of malfunctioning. Dismantles, repairs, or replaces defective parts, and reassembles machinery, using machinist's handtools, chain hoists, and steel rollers. May maintain ship's plumbing system. May change fuses and lights and overhaul electric motors. Rating must be endorsed by U.S. Coast Guard.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

623.281-014 DEEP SUBMERGENCE VEHICLE CREWMEMBER (military ser.)

Services, repairs, and maintains deep submergence vehicle (small noncombatant submarine) and assists DEEP SUBMERGENCE VEHICLE OPERATOR (military ser.) in predive and postdive inspection and operation of vehicle. Connects high pressure air and oxygen hoses from land based equipment to vehicle. Services vehicle with oil and hydraulic fluid. Connects cables to and charges vehicle's battery. Inspects and replaces seals, gaskets, hoses, tubing, hydraulic motors, pumps, valves, filters, and other specified equipment and components aboard vehicle. Conducts detailed predive and postdive tests of mechanical, life supporting, electrical, and hydraulic systems. May drive vehicle and supervise subordinates.
GOE: 05.10.02 STRENGTH: M GED: R4 M3 L3 SVP: 5 DLU: 77

623.281-018 MACHINIST APPRENTICE, MARINE ENGINE (ship-boat mfg.) alternate titles: marine-engine-installation-and-repairer apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

623.281-022 MACHINIST APPRENTICE, OUTSIDE (ship-boat mfg.) alternate titles: marine-machinist apprentice; outside-installer apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

623.281-026 MACHINIST, MARINE ENGINE (ship-boat mfg.) alternate titles: marine-engine mechanic

Installs and repairs gasoline and diesel engines in boats, such as yachts, tugs, and trawlers, following specifications: Positions engine over mounting holes, using chain hoist. Bolts engine to mount and straps fuel tank to cradle, using handtools. Connects fuel, oil, and waterlines to engine. Installs engine controls, propeller shaft, and propeller. Attaches test instruments, such as tachometer and voltmeter to engine. Starts engine and records operating data, such as revolutions per minute, and voltage output. Disassembles defective engines and repairs or replaces damaged parts, using handtools.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

623.281-030 MACHINIST, OUTSIDE (ship-boat mfg.) alternate titles: engineer, steam; machinist, installation; marine erector; marine machinist; outfitter; outside-installation machinist

Installs ship machinery, such as propelling machinery, auxiliary motors, pumps, ventilating equipment, and steering gear, working from blueprints and using handtools, calipers, and micrometers. Lays out passage holes on bulkheads, decks, and other surfaces for connections, such as shafting and steam lines. Installs below-deck auxiliaries, such as evaporators, stills, heaters, pumps, condensers, and boilers and connects them to steampipe systems. Tests and inspects installed machinery and equipment during dock and sea trials. May set up and operate such machine shop tools as lathe, boring mill, planer, shaper, slotter, and milling machine to fabricate replacement parts.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

623.281-034 MAINTENANCE MECHANIC, ENGINE (water trans.) alternate titles: second assistant engineer; third assistant engineer

Repairs and maintains propulsion engines and other engines and engine parts aboard ship: Examines engine equipment, such as pumps, circulators, condensers, and steering engines to locate malfunctions, and dismantles and repairs defective equipment, using handtools and power tools. Makes engine replacement parts, such as slide valves, stay rods, and bolts, using metalworking machinery. Stands engineroom watch during specified periods, observing gauges to determine that operating conditions, such as temperatures, steam pressure, water and oil levels, and revolutions per minute are within specified ranges. Adjusts controls to maintain specified operating conditions. Records gauge readings in engineering log. Must be licensed by U.S. Coast Guard.
GOE: 05.05.09 STRENGTH: M GED: R3 M3 L3 SVP: 7 DLU: 77

623.281-038 MOTORBOAT MECHANIC (engine-turbine; ship-boat mfg.) alternate titles: boat mechanic

Repairs and adjusts electrical and mechanical equipment of gasoline- or diesel-powered inboard or inboard-outboard boat engines, using handtools, power tools, and electrical testing meters: Starts motor and listens to its sound to determine causes of trouble. Tests motor for conformance to manufacturer's specifications, using electrical testing meters. Dismantles motors, using handtools, and examines parts for defects. Adjusts generator and replaces faulty wiring, using handtools and soldering iron. Installs piston rings, adjusts carburetor, grinds valves, and repairs or replaces reduction gears, and other parts, using lathe, drill press, handtools, and power tools. Examines propeller and propeller shafts and repairs defective parts. Aligns engine to propeller shaft. May operate boat on water to test repairs. May repair only mechanical equipment of engines, such as power-tilt, bilge pumps, or power take-offs. May be designated according to type of engine repaired as Motorboat Mechanic, Inboard (ship-boat mfg.); Motorboat Mechanic, Inboard/Outboard (ship-boat mfg.).
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

623.281-042 OUTBOARD-MOTOR MECHANIC (engine-turbine; ship-boat mfg.)

Analyzes defects, and adjusts or repairs electrical and mechanical systems of outboard motors: Disassembles and inspects motor for defective parts, using mechanic's handtools and gauges. Replaces parts, such as gears, magneto points, piston rings, and spark plugs, and reassembles engine. Adjusts carbu-

retor mixture and electrical point settings while motor is running in water-filled test tank. May change propeller to increase motor efficiency, based on size and shape of boat hull. May install or repair steering and throttle controls.
GOE: 05.05.09 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 77

623.381-010 GEAR REPAIRER (water trans.)
Fabricates and repairs equipment used in loading and unloading ships' cargoes: Operates power sewing machine to patch and seam canvas hatch tents. Inserts grommets into and attaches ropes to tent. Cuts lumber into specified lengths and constructs cargo boards, using carpenter's handtools and power tools. Splices ropes and cables to make and repair slings and spreaders, using marlin spike and splicing vise. Replaces defective parts of scrapers and clamshells, using wrenches, punches, hammers, and chainfalls. Gathers information as to type of cargo, terminal facilities, and loading and unloading schedule to determine what gear is necessary to perform work. Transports gear to dock by truck. Installs cargo-handling equipment on deck of vessel. Transfers gear from vessel to vessel to obtain greater utilization.
GOE: 05.10.02 STRENGTH: H GED: R3 M2 L3 SVP: 6 DLU: 77

623.684-010 MOTORBOAT-MECHANIC HELPER (engine-turbine; ship-boat mfg.)
Assists MOTORBOAT MECHANIC (engine-turbine; ship-boat mfg.) in repairing gasoline- or diesel-powered motorboats: Removes pumps, generators, and other engine accessories, using handtools. Removes engine head and oil pan to dismantle engine. Removes covers of gear and clutch units or removes entire assemblies as instructed. Washes and cleans disassembled parts. Assists in reassembly of repaired engines. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.15 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

623.687-010 MACHINIST HELPER, OUTSIDE (ship-boat mfg.) alternate titles: machinist helper, marine
Assists MACHINIST, OUTSIDE (ship-boat mfg.) in installing ship machinery, such as motors, pumps, ventilating equipment and steering gear: Drills holes in foundations in specified places for anchoring machinery, using portable, powered drills. Assists in moving and leveling machinery, using portable jacks, as directed. Bolts equipment to deck and attaches fuel, cooling, or lubricating lines as directed, using handtools. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.15 STRENGTH: H GED: R2 M1 L2 SVP: 3 DLU: 77

624 FARM MECHANICS AND REPAIRERS

This group includes occupations concerned with repairing machinery, equipment, and vehicles used in planting, cultivating, harvesting, moving, processing, and storing plant and animal farm products.

624.131-010 SUPERVISOR, FARM-EQUIPMENT MAINTENANCE (agric. equip.)
Supervises and coordinates activities of workers engaged in repairing and overhauling farm equipment, machinery, and vehicles on farms or in farm-equipment repair shops: Trains workers in vehicle maintenance and repair procedures. Inspects work for compliance with standards. Requisitions replacements parts and supplies. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L4 SVP: 7 DLU: 77

624.281-010 FARM-EQUIPMENT MECHANIC I (agric. equip.) alternate titles: farm mechanic
Maintains, repairs, and overhauls farm machinery, equipment, and vehicles, such as tractors, harvesters, pumps, tilling equipment, trucks, and other mechanized, electrically powered, or motor-driven equipment, on farms or in farm-equipment repair shops: Examines and listens to machines, motors, gasoline and diesel engines, and equipment for operational defects and dismantles defective units, using handtools. Repairs or replaces defective parts, using handtools and machine tools, such as drill press, lathe, milling machine, woodworking machines, welding equipment, grinders, and saws. Reassembles, adjusts, and lubricates machines and equipment to ensure efficient operation. May install and repair wiring and motors to maintain farm electrical system. May install and repair plumbing systems on farm. May construct and repair buildings and other farm structures. May assemble and erect new farm machinery and equipment. May be designated according to equipment maintained as Viner Mechanic (agric. equip.).
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

624.281-014 FARM-EQUIPMENT-MECHANIC APPRENTICE (agric. equip.) alternate titles: farm-mechanic apprentice
Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

624.361-010 INSPECTOR AND TESTER (agric. equip.) alternate titles: mechanical inspector; tester
Inspects agricultural equipment, such as tractors, combines, and balers for missing, defective, or improperly installed parts and operational malfunctions: Observes operation of equipment being driven around test area or on treadmill to detect defects, such as loose fittings, improper assembly, malfunctioning parts, or faulty controls, as indicated by noise, leaks, or irregularities in braking, steering, or transmission mechanisms. Aligns power-driven wheels of unit over dynamometer and connects electrical test leads to output terminals. Compares dynamometer readings with specification charts to check unit output. Assigns ASSEMBLY REPAIRER (agric. equip.) to defective equipment, explains defects, and suggests method of repair. Examines equipment for paint defects, incorrect decal application, missing tools, and faulty lights. Records cause and type of defect and repair work performed. May be designated according to type of inspection as Treadmill Inspector (agric. equip.); or type of equipment inspected as Combine Inspector (agric. equip.).
GOE: 06.01.05 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

624.361-014 SPRINKLER-IRRIGATION-EQUIPMENT MECHANIC (agric. equip.)
Installs and maintains self-propelled circle-irrigation system on farms according to specifications: Reads work order to ascertain type system to be installed, installation location, and operating specifications. Drives truck to haul tools and equipment to work site. Raises prefabricated sections of irrigator into position, using truck-mounted crane, and connects sections together with precut structural aluminum and bolts. Installs water pipe and sprinkler heads along framework, using pipe-wrenches and couplings. Positions, seals, and secures irrigator to pivot of water supply, using crane, wrenches, and packing compound. Activates irrigator and observes operation to verify synchronization of drive-wheels, and specified distribution and volume of water. Replaces defective water lines, sprinkler heads, and structural members, using pipe threader, tube cutters, welding equipment, and handtools. Tests and replaces electrical wiring and components, using test meter, soldering equipment, and wire strippers. Periodically repacks pivot and lubricates moving parts.
GOE: 05.10.01 STRENGTH: H GED: R4 M2 L3 SVP: 6 DLU: 77

624.381-010 ASSEMBLY REPAIRER (agric. equip.)
Repairs assembly defects of agricultural equipment, such as tractors, hay balers, and combines, using handtools and power tools: Reads inspection reports and examines equipment to determine type and extent of defect. Aligns, adjusts, or replaces parts, such as drive chains, sprockets, housings, and springs, using handtools and pneumatic grinder. Records type and cause of defect.
GOE: 06.02.24 STRENGTH: M GED: R3 M3 L3 SVP: 5 DLU: 77

624.381-014 FARM-EQUIPMENT MECHANIC II (agric. equip.) alternate titles: farm mechanic; field-equipment-maintenance mechanic, farm
Services, adjusts, and makes minor repairs on farm vehicles, machinery, and equipment, such as tractors, trucks, automobiles, harvesters, combines, silo fillers, plows, and similar equipment, using handtools: Observes and examines machinery and parts in operation to detect malfunctioning or defective units. Replaces components, such as carburetors, fuel pumps, generators, ignition points, and spark plugs. Adjusts timing of motors, lubricates, washes, paints, and cleans vehicles and attachments, using handtools. May assist other workers in more complex maintenance tasks, such as overhaul of machinery and equipment, repair and erection of buildings and structures, plumbing repair, and electrical work on farm.
GOE: 05.10.02 STRENGTH: M GED: R3 M2 L3 SVP: 6 DLU: 77

624.381-018 FARM-MACHINERY SET-UP MECHANIC (agric. equip.)
Erects and assembles farm machinery for use in field: Uncrates components at freight station or dealer's warehouse, using crowbar and hammer. Assembles and adjusts machinery according to specifications, using handtools. Oils and greases moving parts. May deliver farm machinery to purchasers.
GOE: 05.05.09 STRENGTH: H GED: R4 M4 L4 SVP: 6 DLU: 77

624.684-010 GREASER (agric. equip.)
Services and maintains farm machinery and equipment: Lubricates and greases tractors and other powered farm machinery and attachments. Fills gasoline tanks and radiators. Changes and inflates tires. Repairs tubes. Couples attachments, such as cultivators and stalk cutter to tractors, and adjusts attachments to till soil at prescribed depth or to perform other operations as indicated.
GOE: 05.12.08 STRENGTH: H GED: R2 M1 L2 SVP: 4 DLU: 77

625 ENGINE, POWER TRANSMISSION, AND RELATED MECHANICS

This group includes occupations concerned with repairing steam engines, except locomotives; reciprocating internal combustion engines; and auxiliary equipment.

625.131-010 ENGINE-TESTING SUPERVISOR (engine-turbine)
Supervises and coordinates activities of workers engaged in final testing of internal combustion engines: Plans and directs training of workers in engine testing procedures. Assigns workers to test engines of different sizes. Specifies type of test to perform, such as dynamometer, full power, variable speed, and variable load. Reviews test results and compares them with specifications. Records engine repairs needed on test rejection tag. Discusses grievances with workers or representatives and prepares report for use by management in resolving problems. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M4 L4 SVP: 8 DLU: 77

625.131-014 SUPERVISOR, ENGINE-REPAIR (engine-turbine)
Supervises and coordinates activities of ENGINE REPAIRER, SERVICE (engine-turbine) engaged in repairing gasoline and diesel engines in service or

production repair department: Analyzes data on service repair order or test rejection tag to determine nature of repair required. May inspect and test repaired engines. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.09 STRENGTH: L GED: R4 M4 L4 SVP: 8 DLU: 77

625.137-010 SUPERVISOR, LOCOMOTIVE (r.r. trans.)
Supervises and coordinates activities of workers engaged in repair and maintenance of railroad locomotives: Reads management and engineering reports of locomotive problems or malfunctions to determine repairs to be made. Assigns duties to workers based on worker abilities and nature of required repairs. Observes progress of work to ensure adherence to prescribed procedures and adherence to company and governmental standards. Directs workers to perform preventive maintenance of locomotive components, such as diesel engine, frame and housing, electrical system, and air brakes. Monitors stock of replacement parts to detect shortages of parts needed for future repair and maintenance, and requisitions needed parts. Examines shop equipment, such as welding machine and engine simulators, to verify that equipment meets safety and performance standards. Notifies specified personnel of shop equipment malfunctions. Patrols work sites to observe methods, to inspect safety equipment, and to ensure compliance with company, union, and governmental regulations. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.09 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 86

625.261-010 DIESEL-ENGINE TESTER (engine-turbine)
Analyzes operation of diesel engines and components, such as blowers and compressors to determine performance using engineering specifications and test equipment: Aligns and connects engine to test equipment, such as generator and motor control panel. Connects oil, fuel, and waterlines to engine. Attaches thermocouple wires to various parts of engine and records temperature readings of oil, water, and bearings from pyrometer. Holds tachometer to turning shaft to determine engine revolutions per minute at various governor settings. Measures pressures on compressors and blowers. Replaces defective parts and adjusts settings on injection pumps, timing, fuel racks, and governor, using dial indicator, micrometer, feeler gauges, and handtools. Logs information for engineering and inspection department. May disassemble and repair powerplant engines and perform field service work [ENGINE REPAIRER, SERVICE (engine-turbine)].
GOE: 06.01.05 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

625.281-010 DIESEL MECHANIC (any industry)
Repairs and maintains diesel engines used to power machines, such as buses, ships, trucks, railroad trains, electric generators, and construction machinery, using handtools, precision measuring instruments, and machine tools: Diagnoses trouble, disassembles engines, and examines parts for defects and excessive wear. Reconditions and replaces parts, such as pistons, bearings, gears, valves, and bushings, using engine lathes, boring machines, handtools, and precision measuring instruments. May weld and cut parts, using arc-welding and flame cutting equipment. May be designated according to type of diesel engine or equipment repaired as Diesel-Engine Mechanic, Automobile (automotive ser.); Diesel-Engine Mechanic, Bus (automotive ser.); Diesel-Engine Mechanic, Marine (ship-boat mfg.); Diesel-Engine Mechanic, Truck (automotive ser.); Diesel-Mechanic, Construction (construction); Diesel-Mechanic, Farm (agric. equip.); Locomotive Repairer, Diesel (railroad equip.).
GOE: 05.05.09 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 81

625.281-014 DIESEL-MECHANIC APPRENTICE (any industry) alternate titles: diesel-engine-mechanic apprentice
Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.09 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 77

625.281-018 ENGINE REPAIRER, SERVICE (engine-turbine)
Repairs internal combustion engines in factory service departments or repair establishments, according to company specification charts, using machine tools, handtools, and measuring instruments: Positions and bolts engine to test stand. Tests engine to determine malfunctions, using instruments, such as vacuum gauge, compression gauge, and exhaust gas analyzer. Disassembles engine and cleans parts, such as cylinder heads, pistons, ring grooves, piston domes, and cylinder sleeves, using cleaning solvent, sand blasting equipment, grinders, and wire brushes. Rebores and hones cylinders, and turns and undercuts armatures according to chart tolerances, using lathes, grinders, boring and honing machines. Repairs, replaces, or adjusts parts, such as valves, valve guides, and tappets, using valve grinding machine, screwdrivers, wrenches, and feeler gauges. Assembles and starts engine and adjusts carburetor and distributor to ensure smooth performance. May test and repair turbo-superchargers [AIRFRAME-AND-POWER-PLANT MECHANIC (aircraft mfg.; air trans.) 621.281-014].
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

625.281-022 FUEL-INJECTION SERVICER (any industry)
Rebuilds, tests, and calibrates fuel injection units as used on diesel engines, railroad locomotives, trucks, construction equipment, tractors, and power plants: Studies repair order and disassembles unit to determine cause of malfunction. Refinishes defective parts, using lapping machine to grind and smooth nozzle point and seat. Replaces parts which cannot be refinished. Assembles and calibrates injection pumps, using test equipment. Assembles and tests nozzle assemblies, using test equipment.
GOE: 05.05.09 STRENGTH: M GED: R4 M4 L4 SVP: 6 DLU: 77

625.281-026 GAS-ENGINE REPAIRER (any industry)
Repairs and maintains gas-driven, internal-combustion engines that power electric generators, compressors, and similar equipment, using handtools and precision-measuring devices: Reads operating reports and diagnoses causes of trouble. Disassembles engines and adjusts or replaces parts, using handtools. Verifies clearances and adjustments, using precision-measuring devices. Reassembles engines and listens to engines in action to detect operational difficulties. May repair air or gas compressors.
GOE: 05.05.09 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 77

625.281-030 POWER-SAW MECHANIC (any industry) alternate titles: chain-saw mechanic
Repairs and maintains portable saws powered by internal combustion engines, following manufacturer's repair manuals and using handtools. Disassembles engine and replaces defective parts, such as piston rings, bearings, and timing mechanism. Cleans or replaces fuel lines and adjusts carburetors. Replaces broken links in chain saw or installs new chain. Replaces rotary or reciprocating blades in other saws as indicated.
GOE: 05.05.09 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 77

625.281-034 SMALL-ENGINE MECHANIC (any industry)
Repairs fractional-horsepower gasoline engines used to power lawnmowers, garden tractors, and similar machines, using handtools: Locates causes of trouble, dismantles engines, using handtools, and examines parts for defects. Replaces or repairs parts, such as rings and bearings, using handtools. Cleans and adjusts carburetor and magneto. Starts repaired engines and listens to sounds to test performance. Replaces engines on machine. May be designated according to type of engine repaired as Lawnmower Mechanic (any industry).
GOE: 05.05.09 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 77

625.361-010 DIESEL-ENGINE ERECTOR (engine-turbine) alternate titles: diesel-engine fitter
Positions, fits, and secures engine parts to erect in-line, V-type, or radial diesel engines according to specifications, using machinist's handtools, surface plate, torque wrench, parallel supports, and measuring instruments: Aligns vertical columns over bedplate between A-frames, using transit and levels and secures columns with tie rods to form frame of engine. Positions engine parts and assemblies, such as valve lever assembly, pistons, connecting rods, cylinder liners, cylinder heads, camshaft housing, crankshaft, journals, fuel injection pump, fuel nozzles, and blowers with help of other workers or overhead crane. Reams or hones holes for fitted bolts. Files, scrapes, drills, taps, dowels, and shims parts, such as cylinder liners, keys, and matching parts. Measures clearances and dimensions, using scales, micrometers, combination square, feeler gauge, and dial indicator. Turns screws to adjust fuel rack and governor, using wrenches and screwdriver, and aligns timing marks on crankshaft, camshaft, and flywheel. Installs and connects fuel, lubrication, and cooling piping, using pipe benders, cutters, and threaders. Connects engine to test equipment, such as dynamometer, and runs engine for specified time to test horsepower at designated revolutions per minute. May disassemble engine for shipping.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

625.381-010 ENGINE REPAIRER, PRODUCTION (engine-turbine)
Repairs or replaces defective parts of internal combustion engines indicated on test rejection tag, using power tools and handtools: Positions motor in fixture and inspects engine for cracks and missing parts, such as electrical wires and screws. Disassembles motor and repairs or replaces defective parts, such as water pump, carburetor, thermostat, gears, solenoids, magneto, pistons, piston rings, and crankshaft, using wrenches, screwdrivers, and wheel puller. Scrapes, grinds, reams, and retaps parts to obtain specified clearance between parts, using scrapers, stand grinder, taps, reamer, and micrometer. Adjusts points, valves, and spark plugs and verifies gaps, using feeler gauges. Reassembles motor for retest. Records motor number and repairs made.
GOE: 06.01.04 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

625.684-010 DIESEL-MECHANIC HELPER (any industry)
Assists DIESEL MECHANIC (any industry) in overhauling and maintaining diesel motors used to operate trucks, generators, and other equipment: Disassembles motor and cleans parts. Obtains parts from stock and hands tools to mechanic. Assists in reassembly, and cleans tools and working area. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.15 STRENGTH: M GED: R2 M2 L2 SVP: 4 DLU: 77

626 METALWORKING MACHINERY MECHANICS

This group includes occupations concerned with repairing general purpose and specialized metal-cutting, welding, and metal-forming machines, accessories, and related equipment. The repair of general purpose and specialized nonmetallic cutting, welding, and forming machines, accessories, and related equipment is also included when the machines and machine tools repaired are those commonly applied to the working of metal.

626.137-010 SUPERVISOR, WELDING EQUIPMENT REPAIRER (welding)
Supervises and coordinates activities of workers engaged in repairing, maintaining, and programming automated and manual welding machines and equipment in industrial establishment: Confers with engineering, quality control, and supervisory personnel and SUPERINTENDENT, MAINTENANCE (any indus-

try) 189.167-046 to analyze and resolve scheduling, production, and quality control problems. Trains and assists workers in trouble-shooting, maintenance, and repair of robots and automated and manual welding equipment. Directs workers engaged in programming welding robots, *programmable controllers*, and other automated equipment. Maintains parts inventory. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.10 STRENGTH: L GED: R4 M4 L4 SVP: 8 DLU: 86

626.261-010 FORGE-SHOP-MACHINE REPAIRER (forging) alternate titles: hammer repairer; power hammer repairer

Repairs and maintains forge shop machinery, such as hammers, forging presses, rolls, upsetters, and furnaces, following blueprints, manufacturer's catalogs, and data chart specifications, using handtools, power tools, and precision measuring instruments, such as micrometer, calipers, rule, square, and gauges. Observes machine in operation to determine malfunction. Disassembles machine, using handtools, and examines parts for defects. Obtains replacement parts from stock or prepares sketches of parts for fabrication in forge shop or machine shop. Welds broken or cracked metal parts. Replaces drophammer boards and adjusts steam, pneumatic, hydraulic, fuel, and blower controls of presses, hammers, and furnaces, using handtools. Fits parts together to reassemble machine, using measuring instruments, files, handtools, and power tools, such as portable drills and grinders. Examines and repairs auxiliary equipment, such as pumps, valves, hoses, and compressors [PUMP SERVICER (any industry)]. Starts machine and observes operation to verify performance. May repair electrical components, such as switches and circuits. May set up machine for other workers. May be designated according to type of machine repaired as Load-Chain Welding-Machine Repairer (forging). May rebuild forging machinery and be designated Machine Rebuilder (forging).
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

626.261-014 REPAIRER, WELDING SYSTEMS AND EQUIPMENT (welding)

Programs, maintains, and repairs production welding systems and equipment, using handtools, power tools, and test instruments, applying knowledge of welding technology and equipment operation, and following blueprints, specifications, and manufacturers' manuals: Analyzes welding diagrams, blueprints, templates, or other specifications and inspects components to be welded to determine weld program requirements for production welding robots. Presses buttons on *teach pendant* to program travel speeds and positions of robot arm, applying knowledge of robot programming. Presses buttons on *weld controller* to program amperage, pressure, and dwell time of welding gun attached to robot arm, following specifications and applying knowledge of welding technology. Presses buttons on *programmable controller* to coordinate and sequence operations of robots with production line. Inspects welded components and tests strength of welds to verify accuracy of programming, using hammer and applying knowledge gained from experience. Modifies weld program to bring weld quality up to specified standards, using teach pendant and weld controller. Observes and listens to operating robots to detect abnormal movements or sounds. Observes diagnostic lights or codes on video display monitors of programmable controller, *robot controller*, and weld controller to determine nature of malfunction, applying knowledge of diagnostic code and using manufacturers' manuals. Tests electrical and electronic components and circuits of system to determine source of malfunction, using test instruments such as oscilloscopes and voltmeters. Visually inspects printed circuit boards for defects, such as loose or broken pin connections. Replaces defective controller components, such as printed circuit boards, control units, and fuses. Repairs or replaces other system components [REPAIRER, WELDING EQUIPMENT (welding) 626.384-010]. May perform preventive maintenance, such as lubricating parts, changing oil filters, and replenishing fluid levels. May install, set up, adjust, and maintain production welding and brazing machinery, equipment, and devices, such as MIG brazers, press welders, fixtures, shuttles, and safety devices. May rebuild defective parts, such as pressure switches and hydraulic valves. May repair electrical components, such as teach pendants, timers, and control units.
GOE: 05.05.09 STRENGTH: M GED: R4 M4 L4 SVP: 7 DLU: 86

626.361-010 REPAIRER, WELDING, BRAZING, AND BURNING MACHINES (welding)

Repairs and maintains arc, gas, and resistance welding, brazing, and cutting machines, according to blueprints, catalogs, and data charts, applying knowledge of machine repair and welding: Inspects machine and observes operation to detect cause of malfunction. Disassembles machine, using handtools. Selects replacement parts from parts lists and catalogs, or repairs parts, such as hoses, electrode holders, valves, regulators, tubes, transformers, photoelectric cells, automatic wire feeds, bushings, bearings, conveyor links, and gears. Solders loose connections. Rewires electrical circuits. Replaces or repairs worn shafts and cams. Welds cracked or broken frames and housings. Reassembles machine, using handtools, welding and brazing equipment, and measuring instruments. Sets up and starts repaired machine to verify operation. May repair welding equipment [REPAIRER, WELDING EQUIPMENT (welding)]. May be designated by specialty as Repairer, Resistance-Welding Machines (welding).
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

626.381-010 CASE-FINISHING-MACHINE ADJUSTER (ordnance)

Adjusts and makes minor repairs to lathes and presses used to finish shell cases: Replaces and adjusts cutting tools, using wrenches. Diagnoses causes of malfunction and removes worn or damaged parts, such as springs, cams, and punches, using handtools. May set up presses and lathes.
GOE: 06.01.04 STRENGTH: L GED: R3 M3 L3 SVP: 5 DLU: 77

626.381-014 GAS-WELDING-EQUIPMENT MECHANIC (any industry) alternate titles: apparatus-repair mechanic

Repairs acetylene gas welding equipment, using handtools and metalworking machines: Disassembles parts, such as worn hose, torch tips, torch valves, pressure gauges and regulators. Examines parts and repairs usable ones, using hand files and metalworking machines, such as lathes, drill presses, and grinding wheels. Replaces defective parts with new or rebuilt ones, using handtools.
GOE: 05.05.09 STRENGTH: L GED: R3 M3 L3 SVP: 7 DLU: 77

626.381-018 HYDRAULIC-PRESS SERVICER (ordnance)

Repairs, services, and adjusts hydraulic presses used to extrude wire for swaging into bullet slugs: Operates press to determine cause of defective operation and replaces parts, using handtools, such as wrenches, pliers, and screwdrivers. Removes dies and sets up and adjusts new dies. Fabricates replacement parts from stock materials, using broken parts as patterns.
GOE: 05.05.09 STRENGTH: L GED: R3 M2 L3 SVP: 6 DLU: 77

626.384-010 REPAIRER, WELDING EQUIPMENT (welding)

Repairs welding, burning, and brazing equipment, according to sketches, catalogs, parts lists, and charts: Examines equipment and observes operation to detect malfunction. Dismantles equipment to remove and replace worn or damaged parts, such as regulator diaphragms, torch tips, pressure springs, gauges, pneumatic cylinders, shunts, hoses, cables, and non-consumable electrodes, using handtools. Selects new parts from stock. Screws, solders, or brazes parts together to reassemble unit. Tests repaired equipment to ensure specified performance. Dresses and replaces non-consumable electrodes, using grinding and lapping wheel or tip dressing machine. May replace or repair worn or damaged parts of welding and flame cutting machines. May issue supplies, such as electrodes, torch tips, weld rods, and fluxes, to welders. May change tubes and electrodes of resistance-welding machines. May monitor weld current to ensure weld quality. May fabricate steel hangers to support manually operated welding guns.
GOE: 05.10.02 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 86

627 PRINTING AND PUBLISHING MECHANICS AND REPAIRERS

This group includes occupations concerned with maintaining and repairing all types of presses, typecasting and typesetting machines, collators, and related apparatus used in job shops and commercial printing and publishing houses and book binderies, and establishments engaged in printing textiles or plastics.

627.261-010 COMPOSING-ROOM MACHINIST (print. & pub.) alternate titles: printing-equipment mechanic

Maintains in efficient operating condition mechanical, electromechanical, optical, and electronic equipment in newspaper composing room, such as line-and-character-type-casting machines, photographic typesetters, copy cameras and reproduction units, teletypesetter-keyboard converter, proof presses, type-cutting saws, and conveyors. Repairs, cleans, lubricates, and replaces mechanical components and replaces electronic, electromechanical, and optical components, using handtools, power tools, circuit diagrams, and repair manuals. Reports extensive failures in electronics components to supervisor or local service representative of equipment.
GOE: 05.05.09 STRENGTH: H GED: R4 M3 L3 SVP: 8 DLU: 77

627.261-014 MACHINIST APPRENTICE, COMPOSING ROOM (print. & pub.) alternate titles: printing-equipment-mechanic apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.09 STRENGTH: H GED: R4 M3 L3 SVP: 8 DLU: 77

627.261-018 MACHINIST APPRENTICE, LINOTYPE (print. & pub.) alternate titles: linotype-maintenance-mechanic apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.09 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 77

627.261-022 MACHINIST, LINOTYPE (print. & pub.)

Adjusts and repairs linotype machines and related equipment, according to maintenance schedule, diagnosis of machine malfunctioning, and manufacturer's service manuals: Inspects machines and operates keyboard to detect potential malfunctions, listening to machine operation for evidence of excessive wear and need for adjustment. Confers with operators of faulty machines to determine nature of malfunction and dismantles suspected components, using handtools. Repairs, straightens, files, or machines worn or defective parts, using handtools and machines, such as drill press, lathe, and grinder. Verifies dimensions of new or repaired parts, using micrometer, feeler gauges, and fixed gauges. Replaces repaired parts or installs new parts to restore machine to operating condition. Cleans parts of machine, such as matrices, magazines, plunger, and spaceband, according to prescribed schedule, using brushes, cloth, and cleaning agents. Lubricates grease fittings and moving parts of machine, using grease gun and oilcan. Determines temperature of machine melting pot, using thermometer, to ascertain need for adjustment or repair. May maintain supply of type metal in melting pots. May operate slug-casting machine to form metal bars and strips for securing type during printing. In smaller establishments, may perform duties of LINOTYPE OPERATOR (print. & pub.) 650.582-010.

GOE: 05.05.09 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 77

628 TEXTILE MACHINERY AND EQUIPMENT MECHANICS AND REPAIRERS

This group includes occupations concerned with maintaining and repairing textile machinery used in the preparation of vegetable, animal, or synthetic fibers; producing yarn; weaving or knitting cloth; and producing lace and embroidery; napping, and otherwise finishing fabric; and performing operations, such as slitting or folding preparatory to marketing.

628.261-010 OVERHAULER (textile)

Repairs and rebuilds textile machinery and equipment, using handtools and measuring instruments: Adjusts parts, such as rollers and cylinders, using wrenches and thickness gauges. Aligns and levels spinning, twisting, and *slubber* frames, using straightedge, level, and plumb bob. May install or move machinery. May set up machines. May plumb spindles on spinning or twisting frames.
GOE: 05.05.09 STRENGTH: H GED: R4 M3 L4 SVP: 6 DLU: 78

628.281-010 MACHINE FIXER (carpet & rug) alternate titles: loom fixer

Repairs and maintains fiber-making machinery and equipment, such as slitting, twisting, weaving, and wrapping machines, using handtools, hoists, and precision-measuring instruments: Examines machines and listens to their sounds to locate causes of trouble. Dismantles machines and removes defective parts, using pliers, wrenches, and screwdrivers. Repairs and replaces parts and reassembles machine, using handtools. Affixes special attachments to machines. Sets belts and lubricates machinery and equipment. Moves machine components, using hoists and rollers.
GOE: 06.01.04 STRENGTH: M GED: R4 M3 L4 SVP: 7 DLU: 77

628.381-010 CARD CLOTHIER (textile)

Replaces worn clothing on carding machine cylinders, employing knowledge of machine operation and carding process: Removes worn clothing and aligns, levels, and spaces cylinder evenly on machine frame. Marks cylinder to indicate location of wooden plugs and replaces defective plugs, using handtools. Cleans surface of cylinder with solvent to remove oil and rust. Tapers end of *card clothing fillets* with knife so strips can be wound parallel over circumference of cylinder. Tacks end of fillet to cylinder plugs and guides fillet as fillet is wound onto cylinder, packing each strand tightly against preceding strand. Tacks fillet to cylinder at specified intervals along chalked line. May grind reclothed cylinder.
GOE: 05.10.01 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 77

628.382-010 FLAT CLOTHIER (textile)

Operates machines to replace worn clothing on carding machine flats and to align, grind, and burnish flats: Strips worn clothing from flats, using handtools, and rubs flats with sandpaper to remove rust. Places stripped flat in jig and moves level gauge across length of flat to detect flats that are out of alignment. Straightens bent flats, using lever or hammer. Places flats in milling machine to shape ends of flats to correspond with bends on which flats slide on carding machine. Places flats in jig of rolling press, positions clothing assembly over flats, and starts rolling press that moves over length of flat, shaping and clamping clothing clip to flat. Places clothed flats in bed of grinding machine, lowers grinding head over flats, and starts machine that grinds wire points to uniform length. Removes ground flats from machine after specified length of time, places flats in bed of burnishing machine, and starts burnishing wheel that removes burrs caused by grinding. Dusts rust preventative on reclothed flats, assembles flats in sets, and packs sets in crates. Wraps and seals crates in plastic material and attaches shipping label to crate.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L3 SVP: 5 DLU: 77

628.382-014 SHEAR-GRINDER OPERATOR (textile)

Sets up and operates machines to sharpen ledger (straightedge) and fly (spiral) blades of cloth-shearing machines: Removes blades from shearing machine, using chain hoist. Mounts and squares ledger blade in jig of grinding machine, using straightedge and level. Turns handwheels to set blade at specified angle and to position grinding stone against blade. Starts machine that automatically moves rotating abrasive stone along edge of ledger blade. Measures blade edge, using micrometer, to determine when thickness is within specified tolerances. Resets machine to grind undercut on ledger blade. Mounts spiral blade in brackets of grinding machine. Turns various wheels to set both ends of blade equidistant from grinding head. Starts machine that rotates abrasive stone and fly blade in opposite directions and moves stone along edge of blade, grinding blade until flaws are removed. Measures diameter of blade with calipers at intervals along surface of blade to detect uneven grinding. Replaces damaged spirals on fly blade, using handtools. Mounts fly blade and ledger blade on lapping rig and starts machine that grinds blades against each other, using emery powder and oil, to finish edges. Boils blades in chemical solution to remove oil and abrasive dust. Applies preservative oil to blades.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L3 SVP: 6 DLU: 77

628.484-010 REED REPAIRER (textile) alternate titles: reed cleaner; reed maker; reed polisher

Polishes and repairs loom reeds: Cleans lint and gum from reeds, using brush or airhose [HARNESS CLEANER (textile)]. Examines reeds for alignment of wires, rough edges, and breaks. Verifies dents, using micrometers and feeler gauges. Straightens and aligns bent wires, using handtools, and solders broken wires. Smooths and polishes reeds, using pumice, lime, emery cloth, steel wool, and rotating brush, according to condition of reed. Inspects new reeds and stores them with reconditioned reeds according to size. Records receipt and transfer of reeds for perpetual inventory. May replace defective reeds on loom.
GOE: 05.10.02 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

628.664-010 OVERHAULER HELPER (textile)

Assists OVERHAULER (textile) 628.261-010 in repairing and rebuilding textile machinery and equipment: Carries or trucks tools, equipment,and parts to work area. Removes, disassembles, assembles, and aligns motors and mechanisms. Cleans parts, machines, and work area, using cloth, solvents, and airhose. Lubricates machines, using grease gun and oilcan. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.15 STRENGTH: H GED: R2 M1 L2 SVP: 3 DLU: 79

628.682-010 ROLLER COVERER (textile) alternate titles: roller maker; roller-shop worker

Operates buffing machine to recondition drawing, spinning, or roving frame rollers: Cuts worn cot (rubber, cork, or leather covering) from roller arbor and cleans arbor with solvent. Screws arbor guides to handpress and turns knob to adjust press stroke according to length of roller. Dips new cot into water to soften glue. Positions arbor and cot in press and pulls lever to press cot onto arbor. Positions assembled roller between centers on buffing machine carriage. Turns carriage-stop adjustment screw to adjust machine to reduce cot diameter to specified size. Starts machine and turns handwheel to feed revolving roller against buffing wheel. Measures buffed roller with calipers to verify accuracy of diameter and places roller in gauge to ensure that cot is not tapered. Cuts leather to specified size and glues edges to make leather cots. Presses leather cot onto arbor, using arbor press. Presses wooden tool against ends of leather cot as roller turns in lathe to shrink cot onto arbor. Cuts cloth covering and glues it onto *clearer rollers* that clean lint from drawing rollers.
GOE: 06.02.09 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 79

628.684-010 BINDER AND BOX BUILDER (textile) alternate titles: binder fixer

Replaces worn fiber, felt, leather, cork, or asbestos linings on shuttle box and *shuttle binder*: Removes lining by cutting lining with knife and punching out rivets, using hammer and punch. Smooths surface to be recovered, using file and sandpaper. Punches or drills holes in lining to match those in binder or box front, using hand punch or electric drill. Brushes glue on lining and rivets or screws lining to binder or box front, using riveting machine or screwdriver. Places binders and box fronts in vise or clamps to dry. Removes vise or clamps after glue has dried and trims and smooths lining, using knife and sandpaper. May replace linings on other loom parts, such as clutch plates and brake bands.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

628.684-014 FRAME BANDER (textile) alternate titles: taper

Replaces broken or worn bands that drive spindles on spinning and twisting frames: Cuts worn leather or cotton band from cylinder with knife. Cuts replacement band of specified length from supply roll. Draws band over cylinder drum and around spindles by hand or with wire hook. Sews or bonds ends together, using portable sewing machine or electric bonding device. Places band around flange of spindles and tension pulley to start spindles. Lubricates spinning frames, using oilcan and grease gun.
GOE: 06.04.34 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 78

628.684-018 NEEDLE STRAIGHTENER (knitting) alternate titles: straightener

Replaces, aligns, and spaces needles or points in needle bar, picot bar, and *welt bar* of knitting machines: Secures bar in jig or vise. Loosens and removes clamping plate, holding needles, or point in bar with screwdriver, and removes broken or worn needles. Positions metal gasket under clamping plate, replaces needles or points, and replaces and tightens clamping plate. Aligns and spaces needles or points, using *space gauge* and pliers. May assist mechanic in aligning machine guide bars and sinkers.
GOE: 06.02.24 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

628.684-022 OVERHEAD CLEANER MAINTAINER (textile) alternate titles: traveling cleaner, maintenance

Maintains traveling cleaners that blow dust and lint from production machinery and work area: Examines motor and attachments of cleaner to determine repairs needed. Replaces worn parts, such as blower sleeves. Removes motors requiring major repair and replaces them with new or rebuilt motors, using handtools. Regulates speed of cleaning unit to ensure effective cleaning. Oils and greases parts of cleaner. Cleans motor, blower, sleeves, and monorail, using rags, brushes, and airhose.
GOE: 05.10.01 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

628.684-026 SHUTTLE FIXER (textile) alternate titles: shuttle inspector; shuttle repairer

Inspects and repairs wooden and plastic loom shuttles: Examines shuttles for defects, such as splits, knots, and scratches, or determines defect from reading work ticket. Removes metal tips and shuttle edges, using screwdriver. Cleans and polishes metal parts, using abrasive cloth and grinding machine. Smooths rough places on shuttles by hand or using sanding machine. Realigns metal eyes, using screwdriver. Cuts fur, bristles, nylon cord, or other fabrics, using scissors, and glues them to shuttle walls to increase yarn tension. Removes and

replaces shuttles on looms, using wrenches and screwdriver. Measures shuttle exteriors with gauges and rulers to verify dimensions before placing them on loom.
GOE: 06.02.32 STRENGTH: L GED: R3 M2 L3 SVP: 3 DLU: 77

628.684-030 SPINDLE PLUMBER (textile) alternate titles: spindle setter; spindle tester

Straightens and realigns spindles on ring spinning frames: Loosens and tightens spindle nuts with wrench. Places plumb (hollow block of wood) over spindle, and hammers or moves spindle by hand until clearance between block and circumference of opening in ring bar is equal. Starts machine and observes movement of spindles. Inserts shims under bearing collars of spindles that are off-center. May inspect and adjust spindles for horizontal trueness. May overhaul or repair spinning frames.
GOE: 06.02.24 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

628.684-034 UTILITY WORKER, ROLLER SHOP (textile)

Reconditions drawing rollers, beams, and other textile machinery parts, performing any combination of following tasks: Replaces defective cots on roller arbors, using compressed air device. Removes worn cloth covering from rollers, using knife and winding device. Cuts cloth covering and glues covering onto rollers. Cleans rollers and other parts, using rags and cleaning solution. Sorts rollers for buffing or covering. Replaces worn felt or other covering on *clearer rollers*. Replaces worn or damaged parts on warp beams, using handtools.
GOE: 05.10.04 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 77

628.684-038 WIRE REPAIRER (carpet & rug)

Examines *pile wires* for defective points and worn areas and repairs defective wires for use on carpet looms: Cuts defective ends or worn sections from wire, using metal snips. Welds corresponding length of metal to pile wire, using spot welder. Traces outline of scalloped pile wires on metal strip, following pattern. Holds wire against electric grinding wheel to smooth weld and to shape wire according to tracing. Stores wires according to size and pattern design.
GOE: 06.04.24 STRENGTH: L GED: R3 M2 L3 SVP: 3 DLU: 77

628.684-042 SPINDLE REPAIRER (textile)

Repairs and maintains pin spindles and refills oil containers on yarn texturing machines: Inspects spindles previously removed from machines for wornout pin shafts and cracked or worn eyelet. Discards spindles with wornout pin shaft. Glues eyelet onto bottom of spindle shaft or inserts cleaned or new pinhead on spindle, using allen wrench, to repair or restore spindle. Cleans spindle, spindle shaft, and inside of pinhead, using cloth and cleaning fluid. Removes empty oil container from machine and fills container with oil from barrel, using hand pump. Replaces container on machine when full. Checks oil level in oil box and fills box with oil, using hand pump.
GOE: 05.12.15 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 86

628.684-046 TEXTURING-MACHINE FIXER (textile)

Repairs yarn texturing machine malfunctions, utilizing knowledge of machine operation: Patrols assigned area to observe cards that indicate malfunctions of specific sections of multiunit machine. Slides cover on suction line behind machine sections with malfunction, breaks yarn, and feeds yarn into suction opening to maintain flow of yarn. Removes unevenly wound packages of yarn, places takeup tube in cradle of machine sections, and observes takeup of yarn onto tubes to determine cause of malfunctions. Feels yarn running from creel through machine sections, such as sensors, rollers, friction units, and guides, to detect excess tension on yarn and replaces defective parts, using handtools. Inspects drive belts on feed rollers and replaces worn belts, using handtools. Observes machine for other defects, such as missing guides and oil leaks. Requisitions replacement parts needed for machine repair. Cleans and removes waste from cutter sensors and friction units. Removes yarn wrapper around feed rolls or power shafts of machine.
GOE: 05.10.02 STRENGTH: M GED: R3 M1 L2 SVP: 4 DLU: 86

628.687-010 FLYER REPAIRER (textile) alternate titles: flyer builder

Cleans, disassembles, and reassembles flyers: Collects damaged, dirty, or rusted flyers from boxes near machines and carries them to worktable. Dumps flyers into tumbler containing cork to clean dirt and rust from them, or uses brush moistened with oil. Removes wire arm from flyer with wrench or places hub under press and depresses pedal to open clamps. Inserts new wires into hub and tightens them, using wrench or press. Drops repaired flyer into chute press or into box. May bend wire arms by positioning flyer under press and depressing pedal. May record number and type of flyers repaired.
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

628.687-014 SHEAR-GRINDER-OPERATOR HELPER (textile)

Assists SHEAR-GRINDER OPERATOR (textile) in sharpening cloth-shearing machine blades: Removes blades from shearing machines and transports blades to and from grinding area, using handcart. Positions blades in jig or chuck of grinding machines. Hands SHEAR-GRINDER OPERATOR (textile) tools or supplies as directed. Spreads oil and emery powder on blades as blades are being lapped together. Boils sharpened blades in vats to remove oil and abrasive dust. Applies oil preservatives to blades. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 06.04.02 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

629 SPECIAL INDUSTRY MACHINERY MECHANICS

This group includes occupations concerned with repairing machines and equipment designed to perform specialized functions in the manufacture of specific products, or to perform particular functions commonly found in an industry or in a group of related industries.

629.131-010 BAKERY-MACHINE-MECHANIC SUPERVISOR (bakery products)

Supervises and coordinates activities of workers engaged in repairing and maintaining bakery machines and equipment: Analyzes service requests and assigns workers to activities, such as dismantling machinery and equipment, installing replacement parts, and testing machinery. Monitors operation of machinery and equipment to ensure conformance to specifications. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L4 SVP: 7 DLU: 77

629.131-014 OIL-FIELD EQUIPMENT MECHANIC SUPERVISOR (petrol. & gas)

Supervises and coordinates activities of workers engaged in inspecting, dismantling, testing, rebuilding, and storing oil field tools and equipment: Reviews drilling schedules and assigns worker activities. Inspects repaired equipment for conformance to specifications, using precision measuring instruments. Requisitions replacement parts. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.09 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

629.261-010 LAUNDRY-MACHINE MECHANIC (laundry & rel.)

Repairs and maintains washers, driers, extractors, condensers, pumps, blowers, presses, and other laundry equipment: Operates, examines, and dismantles equipment to diagnose cause of malfunction. Repairs or replaces parts, using handtools and measuring instruments. Replaces components, such as bearings, motors, and microswitches. Replaces faulty sections of pipe, valves, and fittings, using plumbing tools. Dismantles steam traps and removes sediment. Removes faceplate from equipment to clean out dust and lint. Replaces worn or torn aprons, roll covers, and pads on mangles. Lubricates machines and equipment, using grease gun and oilcans. May order spare parts.
GOE: 05.10.02 STRENGTH: M GED: R3 M2 L3 SVP: 6 DLU: 77

629.261-014 MILLER, HEAD, WET PROCESS (grain-feed mills) alternate titles: stonecutter

Analyzes malfunctions, repairs or replaces parts, and dresses buhrstones to maintain grinding mills in operating condition: Aligns and balances stone and grinding wheel, using handtools. Cuts furrows (concentric grooves near center of stone) and *cracks* to sharpen stones, using calipers, dividers, and airhammer chisel. Positions stone horizontally in mill, using chain hoist. Inspects mills to determine malfunction or need for repair or reconditioning. Disassembles mill to gain access to worn or damaged parts, replaces shafts and other parts, and rebabbits bearings, using micrometer, scrapers, and handtools.
GOE: 05.05.01 STRENGTH: M GED: R3 M3 L3 SVP: 7 DLU: 77

629.261-018 POWDER-LINE REPAIRER (chemical)

Repairs and adjusts mixing and packing machines used in production of nitroglycerin and dynamite: Washes machines and parts with sodium carbonate or other neutralizing compound prior to and during dismantling to minimize danger of explosion, using brush and rags. Determines cause of equipment malfunction, according to knowledge of machine operation and report of operator or maintenance workers. Dismantles, repairs, and replaces machine parts, using nonsparking handtools. Observes safety regulations while working in explosive areas.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

629.261-022 ELECTRONIC-PRODUCTION-LINE-MAINTENANCE MECHANIC (electron. comp.)

Repairs and maintains machines and equipment used in processing and assembling electronic components, such as capacitors, resistors, semiconductor devices and assemblies for television, radio communication, and radar systems, following blueprints, schematic drawings, and other specifications, using handtools, power tools, and test equipment: Confers with operators regarding equipment or machine malfunction. Starts equipment or machine, such as diffusion furnace, wave solderer, or ultrasonic welder, and inspects and tests mechanical, electrical, and electronic units and controls to diagnose malfunction, using test equipment. Reads blueprints and schematic drawings to determine repair procedures. Dismantles machine and disconnects controls, using screwdrivers, wrenches, wire cutters, and other handtools. Removes and repairs or replaces defective units. Assembles and installs equipment, such as shafts, conveyors, wires, tubes, and controls, using handtools and power tools. Adjusts electrical, thermal, and timing elements to meet specifications. Starts repaired or newly installed machines and equipment to verify readiness for operation. Records type of malfunction and repair work performed. Prepares requisitions for material and supplies.
GOE: 06.01.04 STRENGTH: M GED: R4 M4 L4 SVP: 7 DLU: 88

629.280-010 MAINTENANCE MECHANIC (leather mfg.) alternate titles: fitter-up

Sets up, repairs, and adjusts equipment and machines to flesh, split, and spray hides: Disassembles malfunctioning equipment, using handtools, and

welds broken parts [WELDER, GAS (welding)], replaces babbitt in bearings [BABBITTER (machine shop)], or repairs or replaces machine drive belts [BELT REPAIRER (any industry)] to repair equipment. May install blades on machine rollers and be designated Roll Filler (leather mfg.).
GOE: 05.05.09 STRENGTH: H GED: R4 M3 L3 SVP: 6 DLU: 77

629.281-010 BAKERY-MACHINE MECHANIC (bakery products)
Repairs and maintains bakery machinery and equipment, such as ovens, conveyors, and slicing and packaging machines: Examines machines and equipment to locate causes of trouble. Dismantles machines, using wrenches, pliers, and other handtools. Replaces defective parts, adjusts timing gears, sets dies according to specifications, and repairs or replaces belts, conveyor sections, and feeding devices, using handtools, portable electric drills and grinders, and gas and electric welding equipment. Cuts and installs pipe and tubing for gas, water, air, and hydraulic lines, using wrench, cutting die, and threading device. Sharpens and installs cutting blades in slicing machine. Assembles machines. Starts machines and observes gauges and other instruments to ensure adherence to processing standards. Cleans and lubricates equipment, using rags, brushes, and grease gun. May operate machine tools to make or repair parts.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 78

629.281-014 CELLOPHANE-CASTING-MACHINE REPAIRER (plastic prod.)
Repairs and maintains cellophane-forming machines, using handtools: Observes machines in operation and listens for sounds to locate causes of trouble. Dismantles machines and removes defective parts, such as gears, belts, and rollers, using handtools. Replaces broken or worn parts. Lubricates machines.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

629.281-018 DAIRY-EQUIPMENT REPAIRER (dairy products)
Repairs and maintains dairy machinery and equipment, such as churns, cream separators and milking machines, using handtools, machine tools, and measuring instruments: Observes and listens to machine in operation to locate causes of trouble. Dismantles machine, using pliers, screwdriver, and wrenches. Replaces or repairs faulty part, using handtools or power tools. Assembles and starts machine to test its operation. Replaces defective wiring, burnt fuses, worn switches, and electric motor parts, and repairs electrical fixtures. Machines worn or new metal parts, using engine lathe, drill press, and other machine tools. Cuts and fuses metals to fabricate metal parts and pipes. Cuts pipe threads and installs and tests gas, steam, water, and air pipes. Fabricates, alters, and installs sheet metal chutes, covers, tubing, containers, and fittings. May affix special attachments, set dies, and repair belts. May operate electric motors, pumps, compressors, and water filters to cool refrigerating rooms.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

629.281-026 FORMING-MACHINE ADJUSTER (glass mfg.) alternate titles: forming fixer
Repairs and adjusts fiberglass sliver forming machines, applying knowledge of machine operation: Examines machine parts to determine type of defect. Turns setscrews and nuts to align machine parts. Removes, replaces, and repairs worn or damaged parts, such as spiral traverses, fin coolers, graphite shoes, and binder applicators (sleeves), using handtools. Mounts graphite shoes on shaft and inserts shaft into chuck of turning lathe. Starts lathe and holds crocus cloth against shoes to remove nicks, dirt, and burs. Holds and turns spiral traverse against buffing wheel to smooth and clean traverse. Cleans glass and binder solution from binder applicators, using crocus cloth. Records and maintains production information, such as inventory of parts, and parts cleaned, changed, and adjusted.
GOE: 06.01.04 STRENGTH: M GED: R4 M3 L3 SVP: 5 DLU: 77

629.281-030 MAINTENANCE MECHANIC (grain-feed mills) alternate titles: machine repairer
Inspects, adjusts, and repairs cleaning, grinding, sifting, packaging, sewing, and tying machines and elevator, conveyor, and scale equipment in grain and feed mill: Replaces broken and worn parts, such as gears, bushings, bolts, and needles, using mechanic's handtools. Relines bearings [BABBITTER (machine shop)].
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

629.281-034 PUMP MECHANIC (paper & pulp)
Repairs pumps of paper making machinery: Examines pumps for malfunctioning and to locate damage or wear, such as blowout packing, misalignment of pump shaft, slippage of drive belt, worn bearings, or need for lubrication. Observes operation of pumps and feels for heat and vibration of parts to detect cause of malfunctioning. Dismantles pumps and performs repairs, such as cleaning impellers, repacking stuffing boxes, tightening glands, and replacing bearings, using handtools.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

629.361-010 MACHINE-CLOTHING REPLACER (paper & pulp)
Replaces paper-making machine clothing (conveyor belts) with material, such as canvas, felt, and wire-mesh: Reviews clothing service records of each machine to determine when replacements should be made. Examines clothing for defects, such as worn spots, tears, holes, and rotted areas, and schedules times for change or repair. Lifts feed, tension, press, and drier rolls from machine frame, using hoist, wrench, and pinchbar, assisted by machine crew. Removes lacing from worn canvas and felt belts and unwinds them from machine rolls. Pulls worn continuous wire mesh belt from machine over end of rolls. Threads canvas and felt belts around rolls and laces ends together or slides and pushes continuous wire mesh belt over end of rolls, into position on machine. Repositions rolls on machine frame and starts machine. Moves levers and turns handwheels to adjust speed and pressure of rolls and tension of clothing. Maintains service record of clothing used. May wash, repair, and store clothing.
GOE: 05.10.02 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

629.381-010 FOILING-MACHINE ADJUSTER (ordnance)
Repairs and adjusts machines that stamp out small disks of shellacked paper and press them over open ends of charged primer cups: Adjusts die-block so that disks are properly pressed in place. Removes and disassembles die-block assembly for cleaning. Replaces defective parts, such as bent punches and worn rollers. Inspects samples of completed primers. May adjust other machines used in assembly of cartridge primers, such as toggle presses and anvil shakers.
GOE: 06.01.04 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

629.381-014 OIL-FIELD EQUIPMENT MECHANIC (petrol. & gas)
Repairs, maintains, and installs oil well drilling machinery and equipment, using handtools and following oral and written work orders: Attaches hoisting cables to pumps, transmissions, diesel engines, and other equipment at drill sites, lashes equipment to trucks for transfer to repair yard, and guides lowering of equipment onto blocks in or near repair shop. Disassembles engines and mechanical units, using hand and power wrenches, screwdrivers, and other handtools. Cleans parts, such as pistons, valves, and parts of transmissions and clutches, using steam hose and detergents. Inspects parts for defects. Installs specified new or reconditioned parts, such as relined brake bands and clutch plates, sprockets, pump cylinders, and other parts of engines and mud pumps. Reassembles complete units. Tests function of pumps and other mechanical units, using auxiliary power. Test-runs engines at various speeds and observes efficiency of operations. Welds broken structures, such as engine mounts, hand rails, machine guards, and pipe racks, using electric and acetylene welding equipment. Paints reconditioned units, using spray gun. Installs repaired equipment at drill sites, observes operations, and readjusts components, as necessary. May maintain, repair, and install machinery and equipment at drill sites and be designated Field Mechanic (petrol. & gas).
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

629.382-010 MACHINE TESTER (machinery mfg.)
Operates grinding, mixing, and sifting machines to test operational conformance to customer specifications: Selects grinding head and attaches part to grinder. Places material to be ground in hopper, sets speed, starts motor, and examines ground material. Adjusts or replaces grinding heads to obtain specified results. Connects liquid inlet hose to mixer, places material in hopper, and starts mixer. Adjusts paddle deflection, flow controls, and speed as necessary. Measures amount of electrical power used, using ampmeter. Writes report of operations.
GOE: 06.03.01 STRENGTH: M GED: R3 M3 L3 SVP: 4 DLU: 77

629.682-010 ROLL GRINDER (rubber reclaim.) alternate titles: roll-contour grinder
Sets up and operates portable electric grinder to resurface damaged or worn mill rolls used to compress reclaim rubber into slabs: Positions and bolts grinder to holding fixture beside mill. Examines sample slab from mill to determine extent of grinding necessary to resurface rolls. Selects and bolts grinding wheel to grinder, and turns setscrews to align it with roll. Starts grinder and turns travel screw to feed rotating grinding wheel horizontally along roll. Repeats grinding until sample slabs are compressed according to standards. Turns adjustment wheel to close rolls of mill, and spreads abrasive compound over ground area of rolls. Starts mill to polish roll surfaces. Wipes abrasive compound from polished rolls.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L3 SVP: 5 DLU: 77

629.684-010 CURING-PRESS MAINTAINER (rubber tire)
Maintains tire curing presses in working order: Replaces defective bladders and steam hoses. Saws copper or flexible tubing to specified lengths and attaches fittings to make steam hose. Cleans plugged vent holes in molds, using power drill. May perform preventive maintenance, such as oiling and cleaning. May be designated according to activity performed as Bladder Changer (rubber tire); Mold Changer (rubber tire).
GOE: 05.12.15 STRENGTH: M GED: R2 M2 L2 SVP: 2 DLU: 77

629.684-014 MILLER, HEAD, ASSISTANT, WET PROCESS (grain-feed mills) alternate titles: stonecutter, assistant
Sharpens buhrstones in grain grinding mills under direction of MILLER, HEAD, WET PROCESS (grain-feed mills): Removes bolts holding buhrstones in mill, using wrench, and places stones on workbench, using hoist. Brushes face of stone with broom. Recuts floors (concentric grooves near center of stone) and *cracks* in stone, following original indentations, using air-hammer chisel. Brushes chips from stone, and replaces it in mill.
GOE: 06.04.30 STRENGTH: H GED: R2 M1 L2 SVP: 5 DLU: 77

630 GENERAL INDUSTRY MECHANICS AND REPAIRERS

This group includes occupations concerned with maintenance and repair of a variety of machines and equipment used in various combinations to perform common or specialized functions in the processing and manufacturing industries.

630.131-010 PUMP-SERVICER SUPERVISOR (any industry)
Supervises and coordinates activities of PUMP SERVICERS (any industry) engaged in installing and repairing pumps, such as centrifugal, plunger, and turbine pumps. Trains employees in work methods and procedures. Orders materials and supplies. Inspects installations and repairs of pumps. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.02 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

630.134-010 ANODE-CREW SUPERVISOR (smelt. & refin.) alternate titles: service-crew supervisor
Supervises and coordinates activities of workers engaged in rebuilding and repairing anodes and cathodes of aluminum-reduction pots. Trains workers in operation of machines and equipment. Observes machine gauges to verify conformance to specifications. Performs duties as described under SUPERVISOR (any industry) Master Title. May supervise workers engaged in adjusting and maintaining electrolytic magnesium refining cells and be designated Supervisor, Cell Maintenance (smelt. & refin.).
GOE: 05.10.02 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

630.261-010 MAINTENANCE MECHANIC, COMPRESSED-GAS PLANT (chemical)
Repairs and maintains machinery and equipment used in compressing and liquefying gases, such as compressors, scrubbers, instrument panels, and electrical equipment, following blueprints, schematics, and maintenance manuals, using handtools, welding equipment, and testing instruments: Tests equipment to locate causes of trouble, using standard test meters. Dismantles equipment, using handtools and power tools. Welds, brazes, burns, and solders parts. Repairs and replaces pipes and equipment, using pipefitting tools. Repairs and adjusts instrument control panels, rectifiers, motors, switches, and other electrical equipment. Repacks compressors and pumps. May operate metalworking tools to make and repair parts.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

630.261-014 OVEN-EQUIPMENT REPAIRER (steel & rel.)
Maintains coke oven machinery and auxiliary equipment in working condition: Examines or listens to equipment, such as pushers, charging larrys, door removers, coke guides, and mud-handling equipment to detect faulty operation, or worn or damaged parts. Dismantles units and adjusts or replaces defective parts, using bars, airhammers, sledges, chisels, and wrenches. Notifies MAINTENANCE-MECHANIC SUPERVISOR (any industry) of major repairs required, such as replacement of defective bearings or gears and shafts.
GOE: 05.10.01 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 77

630.261-018 REPAIRER I (chemical)
Repairs, adjusts, and installs chemical process equipment, according to knowledge of equipment operation and plant specifications: Observes equipment, such as pumps, compressors, generator, reactors, heat exchangers, filters, grinders, and absorbing towers, in operation or confers with operators to detect and diagnose mechanical defects or malfunction, utilizing knowledge of mechanical function and performance characteristics of equipment. Disassembles equipment, using handtools and portable power tools. Examines parts for defects, such as breakage or excessive wear. Verifies dimensions of parts, using calipers, micrometers, and scales. Sends parts to welding or machine shop for repair or for fabrication of replacement parts. Replaces defective parts and reassembles equipment. Adjusts clearance and timing of control devices to specifications, using pliers, screwdriver, and wrenches. Installs new equipment or modifies existing installations, following blueprints and technical advice of engineers. Directs REPAIRER (chemical) II in performing tasks, such as dismantling and assembling equipment. May be designated according to equipment repaired as Repairer, Evaporator (chemical); Repairer, Pump (chemical); Repairer, Still (chemical).
GOE: 05.10.02 STRENGTH: H GED: R3 M3 L3 SVP: 7 DLU: 77

630.281-010 PNEUMATIC-TOOL REPAIRER (any industry) alternate titles: air-motor repairer; drill doctor
Repairs pneumatic tools and air motors, such as pneumatic hammers, chisels, and reamers, using mechanic's tools: Starts motor or tool and listens to sound to locate cause of trouble. Disassembles motor and repairs or replaces defective gears, pistons, connecting rods, and other parts, using taps, files, reamers, wrenches, and other handtools.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

630.281-014 PNEUMATIC-TUBE REPAIRER (any industry)
Repairs and maintains pneumatic-tube carrier system, using handtools and precision-measuring instruments: Locates sources of trouble. Repairs and installs parts, using handtools.
GOE: 05.10.02 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 77

630.281-018 PUMP SERVICER (any industry) alternate titles: pump repairer
Repairs pumps and pump power units, such as centrifugal and plunger-type pumps, and diesel-engine, gasoline-engine, and electric-motor power units, using hoists and handtools: Diagnoses trouble in pumps. Dismantles pumps and repairs or replaces defective parts, using handtools. Reseats and grinds valves. Tests performances of repaired pumps. May wire motor to switchboard and install fuse box. May be designated according to type of pump repaired as Water-Pump Servicer (any industry).
GOE: 05.05.09 STRENGTH: M GED: R3 M3 L3 SVP: 7 DLU: 77

630.281-022 REPAIRER (mine & quarry) alternate titles: mechanic
Lubricates, adjusts, repairs, and inspects machinery used to clean, crush, size, and otherwise prepare coal, limestone, or rock salt for commercial or industrial use, or for further processing. May be designated according to work station as Breaker Repairer (mine & quarry); Preparation-Plant Repairer (mine & quarry); Tipple Repairer (mine & quarry).
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 80

630.281-026 REPAIRER (smelt. & refin.)
Repairs machinery and equipment, such as ball mills, filters, crushers, classifiers, flotation machines, conveyor belt systems, thickener tanks, and vibrating screens, used in transporting and processing ore. May be designated according to machinery repaired as Roll Repairer (smelt. & refin.).
GOE: 05.10.02 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

630.281-030 RUBBERIZING MECHANIC (any industry)
Repairs and maintains rubber-covered and rubber-lined equipment in pulp mill, such as belting, impellors, pipes, pumps, and valves, using knives, handtools, and pressure vulcanizers: Examines exposed rubberized equipment for flaws and excessive wear. Selects rubber stock according to type of materials and manufacturer's specifications. Dismantles equipment and replaces or repairs damaged parts.
GOE: 05.10.02 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

630.281-034 SERVICE MECHANIC, COMPRESSED-GAS EQUIPMENT (chemical)
Inspects, tests, repairs, and installs equipment, such as liquid gas converters and compressors in field installations to supply compressed gas for industrial and therapeutic use: Dismantles, tests, and analyzes malfunctioning equipment, using blueprints, manuals, handtools, and power tools, and tests apparatus to locate defects. Tests, repairs, and adjusts electrical circuits and equipment, such as starters, motors, rectifiers, relays, and heaters, using schematics and handtools and power tools. Solders, brazes, and welds materials to repair and replace copper and steel piping and equipment parts. Records repair work performed and condition of equipment.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

630.281-038 TREATMENT-PLANT MECHANIC (waterworks) alternate titles: filtration-plant mechanic; water-treatment-plant mechanic
Maintains and repairs machines and equipment used to process and distribute water for human consumption and industrial use: Dismantles, or partially dismantles electric motors, turbines, pumps, hydraulic valves, chlorinators, limers, meters, gauges, and other equipment, to gain access to or remove faulty parts, using hand and power tools, such as wrenches, screwdrivers, and hoists. Repairs or replaces defective parts. Inspects machines and equipment periodically, lubricating moving parts, or replacing worn parts to prevent breakdown or malfunctioning. May operate plant equipment to process and distribute water [WATER-TREATMENT-PLANT OPERATOR (waterworks)].
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

630.381-010 CONVEYOR-MAINTENANCE MECHANIC (any industry)
Repairs and adjusts conveyor systems, using handtools: Installs belts in machinery, tightens bolts, adjusts tension rolls, straightens parts, aligns rollers, and replaces defective parts. May install conveyor systems.
GOE: 05.10.02 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 77

630.381-014 DOOR-CLOSER MECHANIC (any industry)
Repairs, services, and installs hydraulic door closers, using machines and handtools: Disassembles closers, using handtools and vise. Immerses parts in solution of caustic soda and water to clean parts. Removes encrusted dirt and rust, using electric rotary wire brush and grinding wheel. Replaces worn or broken parts. Fabricates parts, using lathes, drill presses, shaping and milling machines, and precision measuring instruments, such as micrometers, calipers, and scales. Welds cracked closer casings, using acetylene torch. Fills oil chamber and packs spindle with leather washers. Paints finished door closer.
GOE: 05.10.02 STRENGTH: L GED: R3 M3 L3 SVP: 7 DLU: 77

630.381-018 LEAD OPERATOR (smelt. & refin.)
Tests and repairs ore-crushing and ore-transporting machinery: Starts machines and equipment, such as feeders, jaw crushers, conveyor belts, and suction dust collectors. Observes machines and equipment in operation for defects and malfunctions. Turns valves to regulate flow of water into cooling system. Breaks up clogged ore, using iron bar or pneumatic hammer. Repairs machines and equipment, using handtools.
GOE: 05.05.09 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

630.381-022 LUBRICATION-EQUIPMENT SERVICER (any industry)
Repairs and adjusts hand-or power-operated equipment used to lubricate automobiles, trucks, and industrial equipment, using handtools: Dismantles equipment, such as grease guns, air lines, and lubricating pumps. Examines parts for breaks, wear, and dirt. Replaces defective parts. Cleans and assembles equipment.
GOE: 05.10.02 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

630.381-026 SPRAY-GUN REPAIRER (any industry)
Repairs and adjusts spray-paint guns and paint-mixing machines, using handtools: Disassembles spray gun, using wrenches. Cleans parts in gasoline or other solvent. Wipes parts dry. Replaces valves, jets, and other worn or broken

parts. Attaches new hose to guns. Turns thumbscrews, nuts, and other controls on gun to adjust jets and nozzles. Repairs agitators of paint-mixing equipment. May mix paints and lacquers, using paddle or electric shaker-agitator, scales, and viscosity cups. May order parts and materials to maintain inventory levels.
GOE: 05.10.02 STRENGTH: L GED: R3 M3 L3 SVP: 7 DLU: 77

630.381-030 VALVE REPAIRER (chemical) alternate titles: cylinder-valve repairer; valve inspector-and-assembler; valve inspector

Rebuilds safety and flow valves used on compressed and liquefied gas cylinders, drums, or railway cars: Disassembles valve, using bench vise and handtools. Inspects components for surface flaws, and defects in stem and threads. Reams valve seats with hand reamer and dresses threads with tap and die. Immerses parts in cleaning solution and reassembles valve. Dips valve in molten lead, using tongs, to prevent leakage. Attaches valve and fusible plug to high-pressure gasline, submerges it in water, and observes for bubbles to test valve and plug for leaks. Melts out defective plugs, scrapes hole clean, and pours in new metal. Records number of valves tested and test results. May attach gauge and open air valve to test filled cylinders for pressure. May brush or spray chemical solution around valves to test filled cylinders for leaks. May fill cylinders [CYLINDER FILLER (chemical)].
GOE: 05.10.02 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 77

630.384-010 FIXTURE REPAIRER-FABRICATOR (any industry)

Fabricates and repairs fixtures, rods, baskets, and hooks used to suspend articles in plating, cleansing, and painting vats, using handtools and portable power tools: Cuts metal stock to size, using handsaws or power saws and forming machines and following working sketches. Bends metal, using vise or hammer. Drills and taps holes, using portable power drill. Bolts or screws parts together, using wrenches and screwdrivers. May braze, solder, or weld parts together.
GOE: 05.10.01 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

630.584-010 EQUIPMENT CLEANER-AND-TESTER (smelt. & refin.)

Cleans and repairs aluminum-processing equipment, such as heaters, heat exchangers, evaporators, pipelines, pumps, cooler coils, and filter leaves, using handtools: Removes heads from heaters, evaporators, preheaters, and heat exchangers, using impact wrenches. Mixes acid or caustic with water and inhibiting chemicals to prepare cleaning solutions of specified concentrations. Tests solutions, using acid-testing equipment. Turns valves to circulate cleaning agents through equipment for time indicated by test results. Washes vessels and heaters with water. Removes scale from tubes, using air-powered turbines and drills. Examines vessels or heaters for leaks, and marks defective areas. Reassembles vessels and heaters, using chain falls, block and tackle, impact wrenches, and handtools. Lubricates valves and adjusts packing glands to prevent leaks. May keep records of repairs and test results.
GOE: 06.04.39 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

630.664-010 REPAIRER HELPER (smelt. & refin.)

Assists REPAIRER (smelt. & refin.) in repairing machinery and equipment used in processing ore: Cuts out worn parts of conveyor belts, using shears. Draws ends of belt together, using block and tackle, and splices ends with metal fasteners. Loosens sections of machines and equipment, such as turbogenerators, vibrating screens, air compressors, conveyors, crushers, condensers, and boilers, using handtools and electric hoist. Removes worn pipe sections from air, oil, steam, and waterlines, using wrenches and chain hoist. Cleans soot and scale from steam tubes and water-cooling pipes of pressure boilers, using brush and airhose. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.15 STRENGTH: H GED: R2 M2 L2 SVP: 3 DLU: 77

630.664-014 SCREEN-AND-CYCLONE REPAIRER (mine & quarry)

Repairs sizing screens and cyclones (centrifugal separators) used in processing iron ore, using handtools and chain hoist: Inspects screen panels on vibrating screens and screen cloth on ball mill trommels for wear and damage. Replaces worn screen panels on vibrating screens, using wrenches and hammer. Installs new screen cloth on ball mill trommels, using wrenches and chain hoist. Signals OVERHEAD CRANE OPERATOR (any industry) 921.663-010 to remove and replace cyclones for scheduled maintenance. Measures cyclone parts with rule and tape measure to determine need for replacements. Replaces worn parts, such as feed and shell linings, using wrenches. Cleans spray nozzles and belt scrapers in conveyor belt washing system.
GOE: 05.10.01 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

630.664-018 SERVICE-MECHANIC HELPER, COMPRESSED-GAS EQUIPMENT (chemical)

Assists SERVICE MECHANIC, COMPRESSED-GAS EQUIPMENT (chemical) in installing and repairing pumps, tanks, and vaporizers: Cuts and threads pipes, using pipe cutter and dies. Cleans, polishes, and paints surface of parts, using solvent, rags, and spray guns. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.15 STRENGTH: M GED: R2 M1 L2 SVP: 4 DLU: 77

630.684-010 ANODE REBUILDER (smelt. & refin.)

Rebuilds anodes of aluminum-reduction furnace, performing any combination of following duties: Removes straps (flexible connectors) from bottom channel irons and bolts them onto next level, using wrench. Grinds connector shoes with emery wheel. Pulls pins from anode with hydraulic puller and cleans scale from pins, using sandblast equipment. Replaces studs (pins), using stud driver. Removes bottom set of channel irons, prior to lowering electrode, and installs new irons on top of pot for rebuilding anode, using jacks, hydraulic squeezer, and wrench. May be designated according to work performed as Channel Rebuilder (smelt. & refin.); Pin Puller (smelt. & refin.); Strap Setter (smelt. & refin.); Stud Driver (smelt. & refin.).
GOE: 05.10.01 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

630.684-014 BELT REPAIRER (any industry)

Repairs and replaces canvas, leather, or rubber belts used to drive machinery and convey materials: Examines belts for defects and cuts out defective sections, using knife. Cuts strip of unused belting material, using knife. Clamps metal fasteners to ends of belt, using pincers, or splices ends of belt, using splicing machine. Positions repaired belt on pulleys. Applies dressing compound to belt to prevent slippage. May patch and sew defective areas of belts, using needle and thread. May specialize in repairing conveyor belts and be designated Conveyor-Belt Repairer (any industry).
GOE: 05.12.15 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

630.684-018 PUMP INSTALLER (any industry)

Installs and adjusts electric, gasoline, and diesel-driven pumps and blowers, using handtools, power tools, and diagrams: Cuts and threads pipes, ducts, and fittings, using handtools and power tools. Levels and bolts down pump. Connects ducts and drive couplings, and aligns them to minimize friction, using handtools and gauges. Oils and greases moving parts, and adjusts valves to prevent overloading. May recommend repair or adjustment of driving mechanism to improve operation of pumps.
GOE: 05.10.01 STRENGTH: H GED: R3 M2 L3 SVP: 5 DLU: 77

630.684-022 PUMP-SERVICER HELPER (any industry) alternate titles: mechanic helper

Assists PUMP SERVICER (any industry) in repairing pumps, pump power units, and auxiliary equipment: Dismantles pumps, engines, and other machinery, using power hoists and handtools. Hauls pump and engine parts to and from machine shops, using hoisting device. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.15 STRENGTH: M GED: R2 M1 L2 SVP: 5 DLU: 77

630.684-026 REPAIRER II (chemical)

Maintains, installs, and repairs process equipment in chemical plants, usually working under direction of REPAIRER (chemical) I 630.261-018: Inspects equipment for leaks and defective valves. Tightens flange connections and valves, using wrenches. Replaces driving belts, spray nozzles, gaskets, and packing in equipment and gaskets or seals in pipelines. Lubricates pumps and valves, using grease gun. Grinds and reseals valves, using power grinder. Dismantles and assembles equipment, using wrenches and portable power tools, as directed by REPAIRER (chemical) I to assist in repairs and installations. Cleans dirt and rust from equipment and parts prior to and after repairs are made, using brushes, buffer, and cleaning solutions. May test equipment for leaks, using compressed-nitrogen hose and compressor and vacuum gauge, to detect pressure drops. May assist equipment or process operator in operation or tending of equipment units during emergencies or rest periods.
GOE: 05.10.02 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 81

630.684-030 SCREEN REPAIRER, CRUSHER (mine & quarry)

Repairs rod-screen panels in vibrating screens that divert taconite ore into final crushing stage, using hammers, wrenches, and hydraulic jack: Examines rod-screen panels for worn or damaged rods and liners. Lifts hydraulic jack into place between mounting frame and screen panel. Moves levers on jack to free screen panel from rubber holding flange. Lifts out panel and inserts replacement in holding flange. Taps rod ends with hammer to loosen them from frame and pulls out worn rods. Places frame in alignment jig, inserts new rods in holes, and taps rods with hammer to set them in frame. Replaces worn screen liners, using handtools.
GOE: 05.12.12 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

630.684-034 SPRAY-GUN-REPAIRER HELPER (any industry)

Assists SPRAY-GUN REPAIRER (any industry) in repairing and adjusting spray paint guns. Disassembles and cleans spray guns, using handtools, solvent, and rags. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.15 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

630.684-038 WHEEL-AND-CASTER REPAIRER (any industry)

Repairs and maintains wheels and casters on rolling equipment, such as racks and carts. Replaces parts, such as wheels and bearings, using handtools. Oils moving parts.
GOE: 05.12.15 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 77

630.687-010 PULLEY MAINTAINER (mine & quarry)

Oils, greases, and replaces idler rollers or pulleys which support cable used in mine haulage slope. Oils and greases cable.
GOE: 05.12.08 STRENGTH: M GED: R1 M1 L1 SVP: 3 DLU: 77

631 POWERPLANT MECHANICS AND REPAIRERS

This group includes occupations concerned with maintenance and repair of turbogenerators, steam generators, and auxiliary equipment in powerplants, utilizing organic and atomic fuels or waterpower.

631.131-010 POWERHOUSE-MECHANIC SUPERVISOR (utilities)
Supervises and coordinates activities of workers engaged in installing, adjusting, repairing, and maintaining electrical and mechanical parts of hydroelectric turbines, generators, and auxiliary equipment. Trains workers in repair and maintenance procedures. Performs duties as described under SUPERVISOR (any industry) Master Title. May be designated according to type of powerplant in which maintenance is performed as Diesel-Powerplant Supervisor (utilities); Geothermal-Powerplant Supervisor (utilities); Hydroelectric-Powerplant Supervisor (utilities); Nuclear-Powerplant Supervisor (utilities); Steam-Powerplant Supervisor (utilities).
GOE: 05.05.05 STRENGTH: L GED: R4 M4 L4 SVP: 8 DLU: 77

631.261-010 HYDROELECTRIC-MACHINERY MECHANIC (utilities) alternate titles: plant machinist
Repairs and maintains in operating condition mechanical elements of generators, waterwheels, water-inlet and floodgate controls, valves, and piping in hydroelectric generating station. Sets up and operates machine tools to repair or reproduce machine parts and fittings, working from blueprints or defective part.
GOE: 05.10.02 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 77

631.261-014 POWERHOUSE MECHANIC (utilities) alternate titles: station mechanic
Installs, adjusts, maintains, and repairs electrical and mechanical equipment and parts in power-generating station: Installs equipment. Dismantles and overhauls equipment [MILLWRIGHT (any industry) 638.281-018; BOILERMAKER (struct. metal) I 805.261-014]. Dismantles and repairs auxiliary equipment, such as pumps, compressors, and pipe systems [MAINTENANCE REPAIRER, INDUSTRIAL (any industry) 899.261-014]. Assists in conducting acceptance and performance tests on new or existing equipment. Fabricates special tools, rigging equipment, and replacement parts for equipment. May install wiring between machinery, switchboards, and control panels [ELECTRICIAN, MAINTENANCE (any industry) 829.261-018]. May be designated according to type of plant in which maintenance is performed as Diesel-Powerplant Mechanic (utilities); Gas-Turbine-Powerplant Mechanic (utilities); Geothermal-Powerplant Mechanic (utilities); Nuclear-Powerplant Mechanic (utilities); Steam-Generating-Powerplant Mechanic (utilities).
GOE: 05.05.09 STRENGTH: H GED: R4 M3 L3 SVP: 8 DLU: 85

631.261-018 POWERHOUSE-MECHANIC APPRENTICE (utilities) alternate titles: machinist apprentice; station-mechanic apprentice
Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.09 STRENGTH: H GED: R4 M3 L3 SVP: 8 DLU: 77

631.364-010 HYDROELECTRIC-MACHINERY-MECHANIC HELPER (utilities)
Assists HYDROELECTRIC-MACHINERY MECHANIC (utilities) in repairing and maintaining mechanical equipment in hydroelectric generating station, performing duties as described under HELPER (any industry) Master Title.
GOE: 05.10.02 STRENGTH: H GED: R3 M2 L3 SVP: 3 DLU: 77

631.684-010 POWERHOUSE-MECHANIC HELPER (utilities) alternate titles: generation mechanic helper; station mechanic helper
Assists POWERHOUSE MECHANIC (utilities) in maintaining and repairing power-generating equipment: Lubricates automatic recording instruments, changes recording charts, and refills ink containers. Removes instruments from panelboards for repairs, and reinstalls them when repairs are completed, using handtools. Carries or handtrucks tools and equipment to work areas. Removes nuts and bolts from machinery being disassembled for repairs. Holds parts in place for workers performing repair work. Returns tools to toolroom. Constructs scaffolds. Removes rust and scale from inside of boilers, using wire brush. Performs other duties as described under HELPER (any industry) Master Title. May be designated according to plant in which work is performed as Diesel-Powerplant-Mechanic Helper (utilities); Gas-Turbine-Powerplant-Mechanic Helper (utilities); Geothermal-Powerplant-Mechanic Helper (utilities); Nuclear-Powerplant-Mechanic Helper (utilities); Steam-Generating-Powerplant-Mechanic Helper (utilities).
GOE: 05.12.15 STRENGTH: M GED: R3 M2 L3 SVP: 5 DLU: 77

632 ORDNANCE AND ACCESSORIES MECHANICS AND REPAIRERS

This group includes occupations concerned with repairing, modifying, and maintaining in readiness small arms, field artillery, naval weapons, fire-control apparatus, munitions, and related ordnance. Occupations concerned with ordnance fabrication are covered in Groups 694 and 736. Occupations concerned with instruments are covered in Group 711. Occupations concerned with electronic equipment are covered in Groups 722 and 823.

632.131-010 ARTILLERY-MAINTENANCE SUPERVISOR (ordnance)
Supervises and coordinates activities of workers engaged in inspecting, servicing, and repairing artillery weapons. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.02 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 77

632.261-010 AIRCRAFT-ARMAMENT MECHANIC (government ser.) alternate titles: aircraft armorer
Services armament equipment used on military aircraft: Strips airplanes of removable armament equipment, such as machine guns, synchronizers, and bomb-release apparatus, using handtools. Disassembles, cleans, oils, and repairs dismantled equipment and nonremovable armament, such as machine-gun mounts and bomb hoists. Inspects electric circuits controlling bomb-release and gun-firing mechanisms, following wiring diagrams. Immerses equipment parts not in use in hot cosmoline to protect parts from rust and stores until needed. Reassembles and remounts equipment. May be designated according to specialty as Bombsight Specialist (government ser.).
GOE: 05.05.10 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

632.261-014 FIRE-CONTROL MECHANIC (government ser.) alternate titles: fire-control technician
Services mechanical, electronic, and optical equipment controlling naval guns, following blueprints and diagrams and using handtools and testing devices: Inspects and cleans optical equipment, installing new eyepieces as necessary. Adjusts and lubricates gyroscope. Repairs and replaces parts of motors and remote control equipment, communications equipment, and electronic equipment, using handtools and standard test equipment. Participates in boresighting and aligning guns. Tests wiring circuits, following blueprints and diagrams.
GOE: 05.05.11 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

632.261-018 ORDNANCE ARTIFICER (government ser.)
Inspects, tests, maintains, stores, and prepares for use ordnance material, such as guns, primers, fuses, shells, mines, bombs, rockets and guided missiles, tanks, chemical, biological, and radiological munitions, and fire-control equipment for weapons: Tests and inspects material for functioning and serviceability, using prescribed gauges and test equipment, and by firing or detonating weapons and munitions. Disassembles, repairs, and reassembles ordnance of all types, using handtools, power tools, and material-handling equipment. Assembles and loads explosive and inert elements to prepare ammunition items for use. Cleans, stores, and maintains ordnance material according to technical manuals. May be designated according to ordnance item involved as Munitions Worker (government ser.); Nuclear Weapons Mechanical Specialist (government ser.); Torpedo Specialist (government ser.). May maintain small arms and artillery and be designated Armorer (government ser.). May deactivate unexploded bombs and mines and be designated Bomb-Disposal Specialist (government ser.).
GOE: 05.10.02 STRENGTH: M GED: R4 M4 L4 SVP: 6 DLU: 77

632.281-010 GUNSMITH (any industry) alternate titles: repairer
Repairs and modifies firearms to blueprint and customer specifications, using handtools and machines, such as grinders, planers, and millers: Fits action and barrel into stock and aligns parts. Installs parts, such as metallic or optical sights, pistol grips, recoil pads, and decorative pieces of firearms, using screws and handtools. Rebores barrels on boring machine to enlarge caliber of bore. Operates broaching machine to cut rifling in barrel of small arms. Installs choke device on shotguns to control shot pattern. Operates machine to grind and polish metal parts. Immerses metal parts in bluing salt bath to impart rust resistant surface and blue color to metal. Fires firearms with proof loads to determine strength characteristics, correct alignment, and assembly of piece. Fabricates wooden stock for guns according to customer specifications. Refinishes wooden stocks for rifles and shotguns by hand sanding and rubbing with special finishing oil and quick-drying lacquer. May lay out plans on paper and calculate bullet-flight arcs, sight positions, and other details to design new guns.
GOE: 05.05.07 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

632.360-010 GAUGE-AND-WEIGH-MACHINE ADJUSTER (ordnance)
Sets up machines to measure and weigh loaded cartridges: Turns setscrews and nuts to adjust and synchronize feeding, gauging, weighing, and ejection mechanisms, using handtools, and master cartridge and fixed gauges to verify settings. Starts machine and inspects sample cartridges for conformance to weight and size specifications. Disassembles machine to replace worn or broken parts or to install parts to accommodate specific size or type of cartridge, using handtools. Tags trays of rejected cartridges, indicating reason for rejection, and routes them to other workers for reinspection or salvage. Cleans and lubricates equipment. Gives instructions to new workers for operating machine.
GOE: 06.01.02 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

632.360-014 LOADING-MACHINE ADJUSTER (ordnance) alternate titles: cartridge-assembling-machine adjuster
Sets up automatic machine to fill small arms cartridge cases with powder and insert bullets: Installs machine parts, such as shell and bullet dials, carriers, punches, crimping die, and powder charge regulator, to accommodate designated size and type of cartridge to be filled, using handtools. Turns setscrews or nuts to adjust and synchronize mechanisms. Cleans machine and lubricates moving parts. Polishes punches and dies to remove scratches or adhering brass, using *bench grinder* and emery cloth. Disassembles machine or parts to remove jammed cartridges and to replace worn or broken parts. Tests sample of cartridges for pullout of bullets and weighs powder load, using *pull-test machine* and gram scale. Records test results. Gives instructions to new workers in operation of machines and use of gauges.
GOE: 06.01.02 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 77

632.360-018 PRIMER-INSERTING-MACHINE ADJUSTER (ordnance)
Sets up and maintains in operation automatic machines that insert explosive primers in cartridge cases: Installs and adjusts punches, dies, and feed fingers, and regulates feeding and ejection mechanisms, using handtools and gauges. Frees jams and replaces worn or broken parts. Polishes steel punches and feed

fingers to remove burrs, scratches, or adhering brass, using speed lathe and emery cloth. May feed plates or boards of primers into machine hoppers. May instruct new workers in machine operation and use of gauges.
GOE: 06.01.02 STRENGTH: M GED: R3 M2 L3 SVP: 5 DLU: 77

632.380-010 INSPECTING-MACHINE ADJUSTER (ordnance)
Adjusts roller, chain, or belt conveyors that convey small arms ammunition or components past inspectors: Turns stop nuts and setscrews to align tubes, channels, or fingers which transfer workpieces from hopper to carrier, using handtools. Bends and hammers discharge chutes into position. Turns adjustment knob of drive motor or shifting belt to different pulley to change speed of conveyor. Tightens belts by extending tension wheel. Replaces mirrors that enable inspector to see both ends of cartridges. Removes cartridges jammed in feed or discharge channels, using wire tools.
GOE: 06.01.02 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 77

632.380-014 LOADING-UNIT TOOL-SETTER (ordnance)
Sets up series of machines to load platesful of small arms cartridges with powder and bullets: Changes setting screws on eccentric arm of shakers to adjust length of stroke of shaker table according to caliber and style of cartridge and bullet processed. Installs powder volume plate in loading unit and inserts blocks of punches and collets in presses to seat and crimp bullets, using handtools. Turns setscrews, stop nuts, and turnbuckles to adjust, by trial and error, side guides, backstops, conveyor fingers, and stroke of press gates, using height gauges. Distributes plates to each work station according to work requirements. Empties powder from volume plate into tray and weighs it, dividing by number of cartridges in plate to determine if total load and average per cartridge are within weights specified. Changes volume plate for one with larger or smaller cavities until total and average loads meet specifications. Observes unit in operation to detect malfunctioning. Starts machine to load plate of cartridges and sends samples to ballistics laboratory for approval before releasing unit to operating crew.
GOE: 06.01.02 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

632.380-018 PRIMER-WATERPROOFING-MACHINE ADJUSTER (ordnance) alternate titles: lacquer-press adjuster
Sets up dial-feed machine to daub and spray lacquer to base and mouth of cartridge cases to form waterproof seal around primer and bullet: Aligns and adjusts feeding, lacquering, blotting, and ejecting mechanisms, and installs reels of blotting-paper tape, using handtools. Thins lacquer with acetate to desired consistency and pours it into machine reservoirs. Measures drain time of sample mixture to verify conformance to specified viscosity, using electric timer. Drains and flushes reservoirs and feed tubes to prevent clogging, using thinner.
GOE: 06.01.02 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

632.380-022 RIM-FIRE-PRIMING TOOL SETTER (ordnance)
Sets up automatic machines to fill head cavity of rim-fire cartridge cases with explosive priming mixture: Installs and aligns knockout pins, primer-spreading punches, and shell-holding blocks, using handtools and gauges. Sets stops and cams to synchronize movements of feeding screws and rolls, shell-holding fingers, and ejection mechanism. Starts machine and examines primed cartridge cases for defects, such as dents, scratches, or unfilled head cavities. Cleans priming mixture from tools and machine bed, using air blast or vacuum hose. Dismantles machine to replace worn or broken parts.
GOE: 06.01.02 STRENGTH: M GED: R3 M3 L3 SVP: 4 DLU: 77

632.380-026 VARNISHING-UNIT TOOL SETTER (ordnance)
Sets up machine to waterproof center-fire cartridges with varnish or lacquer: Selects varnishing plates with pins of specified diameter to accommodate caliber of cartridge to be processed and screws into plate holders. Hammers out and replaces broken, bent, or loose pins. Turns setscrews, stop nuts, and limit pins to adjust height and speed of varnishing machine, using handtools. Mixes varnish or lacquer and thinner in reservoir to obtain waterproofing solution of specified viscosity. Examines samples of varnished cartridges to determine whether coating is sufficient to waterproof them.
GOE: 06.01.02 STRENGTH: L GED: R3 M2 L3 SVP: 3 DLU: 77

632.381-010 GUN SYNCHRONIZER (ordnance)
Adjusts interconnecting control mechanisms of gun to synchronize gun with gunners sight (telescope or range finder) and fire control computer: Lifts gun to work stand, using hoist, and connects electrical and hydraulic lines to power sources. Inserts borescope in muzzle of gun, and telescope and level in breech. Moves controls to level position of gun. Adjusts gunners quadrant to synchronize quadrant with gun at level position. Sets eccentrics within control mechanism in position level with gun and quadrant. Bolts control arm of ballistics computer to sighting adjustment controls. Sights through range finder and moves controls to align cross hairs of range finder on specified target. Looks through borescope in gun to verify alignment of gun bore on target. Adjusts eccentrics, and controls to regulate flow of electrical impulse into control instruments, to align gun and sight on specified target.
GOE: 06.01.04 STRENGTH: M GED: R3 M3 L3 SVP: 5 DLU: 77

632.381-014 INSPECTOR, FIREARMS (ordnance)
Examines working parts of guns used in testing ammunition to determine that they are in satisfactory condition to be used for making tests. Examines bore, cartridge chamber, firing-pin hole, and other parts related to functional operation of gun, using precision measuring instruments. Inspects bore of gun for defects, such as scratches, pits, and corrosion, using illuminated periscope. Tests operation of gun for satisfactory action. May assist GUNSMITH (any industry) in adjusting test arms.
GOE: 06.01.05 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

632.684-010 ORDNANCE-ARTIFICER HELPER (government ser.)
Assist ORDNANCE ARTIFICER (government ser.) in inspecting, maintaining, storing, and preparing for use ordnance material, such as guns, primers, fuses, mines, bombs, rockets, guided missiles, tanks, munitions, and fire-control equipment for weapons. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.16 STRENGTH: M GED: R2 M2 L2 SVP: 4 DLU: 77

633 BUSINESS AND COMMERCIAL MACHINE REPAIRERS

This group includes occupations concerned with repairing calculating, bookkeeping, addressing, duplicating, and related machines, including both manual and electric typewriters and cash registers. Sales and service occupations are included in Group 275; and electronic data processing equipment is included in Group 722 and Group 823.

633.131-010 OFFICE-MACHINE-SERVICE SUPERVISOR (any industry)
Supervises and coordinates activities of workers engaged in servicing, repairing, and rebuilding office machines, such as calculating, bookkeeping, duplicating machines, and typewriters, in customer's establishment and in repair shop. Trains workers in repairing and servicing procedures. Performs duties as described under SUPERVISOR (any industry) Master Title. May review reports on unserviceable machines and examine them to determine repairs required and to estimate cost of repair. May compute cost of repaired items. When supervising workers in repair shop, may be designated Office-Machine-Repair-Shop Supervisor (any industry).
GOE: 05.05.09 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

633.261-010 ASSEMBLY TECHNICIAN (office machines)
Inspects, adjusts, and repairs punched-card office machines, such as interpreters, collators, proof machines for banks, and card punches, using handtools and test equipment: Reads machine assembly specifications, such as charts, blueprints, schematic diagrams, and engineering specifications to determine requirements, such as drive speed, timing of card feed and output, and installation of special features ordered by customer. Operates machine, using prepunched cards, to observe and listen to operation of moving parts, to measure clearances and contact gaps, and to measure voltages and continuity, using voltmeter, ohmmeter, and test lights. Adjusts clearance of moving parts, electrical contact gaps, and alignment of printing units and contact brush units to meet specifications, using tools, such as screwdrivers, wrenches, feeler gauges, and special fixtures. Repairs assembly errors noted by quality control personnel. May install hardware, drill holes, and insert pins to complete assembly prior to final testing of machine. May train workers in assembly operations.
GOE: 06.01.04 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

633.261-014 MAIL-PROCESSING-EQUIPMENT MECHANIC (government ser.)
Repairs and maintains mail-processing equipment, such as letter-canceling machines, letter-facing-and-canceling machines, mail-sorting machines, and conveyor systems, following blueprints and schematic diagrams, using handtools, power tools, and electrical testing instruments: Inspects machine to locate causes of trouble, using ammeters, ohmmeters, relay testers, and other testing instruments. Dismantles machine, using handtools and power tools. Repairs wiring circuits and replaces parts, such as relays, resistors, condensers, and rheostats in electrical systems, using handtools. Repairs and replaces parts, such as gears and bearings in mechanical systems, using handtools. Reassembles and starts machines to test performances. Dismantles conveyor systems, using handtools. Repairs or replaces defective parts and reassembles conveyors. May repair hydraulic and pneumatic systems.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

633.281-010 CASH-REGISTER SERVICER (any industry) alternate titles: cash-register repairer
Tests and repairs cash registers, using handtools, power tools, and circuit test meters: Examines mechanical assemblies, such as printing mechanisms, counters, and keyboards, for worn or damaged parts, using precision gauges. Replaces defective parts, or reshapes parts on bench lathe or grinder. Tests electrical control units, wiring, and motors, using circuit test equipment. Replaces defective electrical parts, using handtools and welding and soldering equipment. Cleans and oils moving parts. May service adding machines [OFFICE-MACHINE SERVICER (any industry)].
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

633.281-014 DICTATING-TRANSCRIBING-MACHINE SERVICER (any industry)
Repairs magnetic tape and grooved-tape dictating-transcribing machines, using wiring diagrams, handtools, and electronic testing equipment: Tests machines to isolate defective circuits, using oscilloscope, audioscope, test meters, tube and circuit testers, and referring to wiring diagrams. Replaces faulty parts, such as tubes, transistors, microphones, relays, and resistors, using soldering iron and handtools. Replaces or adjusts mechanical elements, such as playback

mechanisms, remote control switches, and tape reels. Operates repaired machines to test their performances. May operate bench lathe to fabricate shims, bolts, and other similar parts. May be designated according to type of machine repaired as Dictating-Transcribing-Machine Servicer, Grooved Tape (any industry); Dictating-Transcribing-Machine Servicer, Magnetic Tape (any industry). Important variables may be indicated by trade name of machines repaired.
GOE: 05.05.09 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

633.281-018 OFFICE-MACHINE SERVICER (any industry) alternate titles: business-machine mechanic; office-equipment mechanic; office-machine inspector

Repairs and services office machines, such as adding, accounting, and calculating machines, and typewriters, using handtools, power tools, micrometers, and welding equipment: Operates machines to test moving parts and to listen to sounds of machines to locate causes of trouble. Disassembles machine and examines parts, such as gears, guides, rollers, and pinions for wear and defects, using micrometers. Repairs, adjusts, or replaces parts, using handtools, power tools, and soldering and welding equipment. Cleans and oils moving parts. May give instructions in operation and care of machines to machine operators. May assemble new machines. May be designated according to machine repaired or serviced as Accounting-Machine Servicer (any industry); Adding-Machine Servicer (any industry); Calculating-Machine Servicer (any industry); Duplicating-Machine Servicer (any industry); Typewriter Servicer (any industry).
GOE: 05.05.09 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

633.281-022 OFFICE-MACHINE-SERVICER APPRENTICE (any industry) alternate titles: business-machine-mechanic apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.09 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

633.281-026 SCALE MECHANIC (any industry)

Installs, calibrates, and repairs weighing scales, using handtools, power tools, and standard test weights: Moves scale into position, using hoists and rollers. Inserts shims between scale base and foundation to level scale. Secures scale to foundation, using handtools. Tests scale, using certified weights, and adjusts pivots, dial settings, and pendulums to ensure that weight indication meets legal specifications. Turns setscrews to adjust spring scales. Disassembles scales and repairs or replaces worn or damaged parts, such as pivots and bearings, using *bench grinder*, handtools, and power tools. Straightens, cleans, and repaints structural parts of scale. May install, adjust, and repair electronically controlled scales.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

633.281-030 STATISTICAL-MACHINE SERVICER (any industry) alternate titles: customer engineer

Installs and services collators, sorters, and other statistical machines in accordance with graphs and charts, using handtools and precision-measuring instruments: Assembles and installs machines, following timing and wiring charts and using handtools, calipers, micrometers, and other instruments. Starts machines and listens for sounds to locate electrical and mechanical defects. Examines wiring, cards, and printed tape for defects. Dismantles machines and repairs or replaces parts, using handtools. Tightens, loosens, sets, or otherwise adjusts gears, clutches, and electrical connections. May set up machine to obtain particular information by wiring and inserting board in machines and moving switches and levers. May instruct and advise operators of equipment in machine operation and in interpretation of setup charts. May supervise and instruct student servicers.
GOE: 05.05.09 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

637 UTILITIES SERVICE MECHANICS AND REPAIRERS

This group includes occupations concerned with installing, maintaining, and repairing mechanical equipment and appliances used to supply heat, conditioned air, refrigeration, water, and related utilities in homes and commercial or industrial establishments.

637.131-010 SUPERVISOR, COOLER SERVICE (svc. ind. mach.) alternate titles: manager, vending department

Supervises and coordinates activities of workers engaged in installation, maintenance, renovation, and repair of vending machines (coolers) dispensing bottled beverages: Orders delivery of coolers to retail locations. Dispatches repairers on service calls to repair or adjust faulty coolers. Instructs and trains new workers. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.03 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

637.261-010 AIR-CONDITIONING INSTALLER-SERVICER, WINDOW UNIT (construction)

Installs, services, and repairs window air-conditioning units, ranging from 1/2 to 2 tons capacity, in private residences and small establishments: Inspects existing wiring, fuses, or circuit-breaker panels on customer's premises to ensure adequate power supply for operating air-conditioner. Measures window, transom, or other existing openings for air-conditioning unit, using measuring tape or rule, or cuts opening through wall, using mallet and cold chisel. Assembles and positions support brackets in place, using screws, clamps, or other braces, and power tools and handtools. Fills space between window support and edge of opening with caulking compound and filler board. Places air-conditioner on support frame and secures unit in position, leveling unit, using screws, clips, and bolts. Starts unit, adjusts controls, and listens for excessive noise or sounds indicating malfunction. Examines malfunctioning unit for defective parts, utilizing knowledge of mechanical, electrical, and refrigeration theory, to determine cause of malfunction. Dismantles whole or part of unit, as indicated by type of malfunction, and repairs or replaces such parts as switches, relays, fan motors, thermostats, and other components, using handtools and power tools. Replaces filters, lubricates unit, and adjusts controls. Reassembles unit, making necessary adjustments to ensure efficient operation. May give instructions to customer regarding operation and care of unit. May estimate cost of repairs or adjustments. May remove unit from customer's premises for major repairs or overhaul in shop, or for return to manufacturer for extensive repairs. May repair sealed refrigeration units of machines. For installation, service, and repair of central air-conditioning units, see HEATING-AND-AIR-CONDITIONING INSTALLER-SERVICER (construction) 637.261-014.
GOE: 05.05.09 STRENGTH: H GED: R4 M3 L3 SVP: 8 DLU: 77

637.261-014 HEATING-AND-AIR-CONDITIONING INSTALLER-SERVICER (construction) alternate titles: air-conditioning mechanic; environmental-control-system installer-servicer; heating-and-air-conditioning mechanic; heating mechanic

Installs, services, and repairs environmental control systems in residences, department stores, office buildings, and commercial establishments, utilizing knowledge of refrigeration theory, pipefitting, and structural layout: Mounts compressor and condenser units on platform or floor, using handtools, following blueprints or engineering specifications. Fabricates, assembles, and installs ductwork and chassis parts, using portable metalworking tools and welding equipment [DUCT INSTALLER (construction; mfd. bldgs.) 869.664-014]. Installs evaporator unit in chassis or in air duct system, using handtools. Cuts and bends tubing to correct length and shape, using cutting and bending equipment and tools. Cuts and threads pipe, using machine-threading or hand-threading equipment. Joins tubing or pipe to various refrigerating units by means of sleeves, couplings, or unions, and solders joints, using torch, forming complete circuit for refrigerant [PIPE FITTER (construction) 862.281-018]. Installs expansion and discharge valves in circuit. Connects motors, compressors, temperature controls, humidity controls, and circulating-ventilation fans to control panels and connects control panels to power source [ELECTRICIAN (construction) 824.261-010]. Installs air and water filters in completed installation. Injects small amount of refrigerant into compressor to test systems, and adds freon gas to build up prescribed operating pressure. Observes pressure and vacuum gauges and adjusts controls to ensure efficient operation. Tests joints and connections for gas leaks, using gauges or soap-and-water solution. Wraps pipes in insulation batting and secures them in place with cement or wire bands. Replaces defective breaker controls, thermostats, switches, fuses, and electrical wiring to repair installed units, using electrician's handtools and test equipment. May install, repair, and service air-conditioners, ranging from fifteen to twenty tons cooling capacity, in warehouses and factory buildings and be designated Air-Conditioning Mechanic, Industrial (any industry).
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 83

637.261-018 GAS-APPLIANCE SERVICER (any industry) alternate titles: appliance servicer; customer servicer

Installs and repairs gas meters, regulators, ranges, heaters, and refrigerators in customer's establishment, using manometer, voltmeter, handtools, and pipe-threading tools: Measures, cuts, and threads pipe and connects it to feeder line and equipment or appliance, using rule, pipe cutter, threader, and wrench. Tests and examines pipelines and equipment to locate leaks and faulty pipe connections and to determine pressure and flow of gas, using manometer, voltmeter, combustible gas indicator, and soap lather. Dismantles meters and regulators, and replaces defective pipes, thermocouples, thermostats, valves, and indicator spindles, using handtools. May assemble new or reconditioned appliances. May collect for monthly bills or overdue payments. May be designated according to appliance serviced as Gas-Refrigerator Servicer (any industry); Gas-Stove Servicer (any industry).
GOE: 05.10.02 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

637.261-022 INDUSTRIAL-GAS SERVICER (utilities)

Tests, repairs, and adjusts all types of industrial gas equipment, including control mechanisms, such as thermostats, high-temperature-limit controls, solenoid valves, safety pilots, and various other safety controls actuated by bimetallic expansion, fluid expansion, or thermocouple electric energy. May advise customers on proper installation of equipment. May install or remove large industrial meters, regulators, and related equipment. May read meters [METER READER (utilities; waterworks)].
GOE: 05.05.11 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

637.261-026 REFRIGERATION MECHANIC (any industry)

Installs and repairs industrial and commercial refrigerating systems according to blueprints and engineering specifications, using knowledge of refrigeration, structural layout, and function and design of components: Lays out reference points for installation of structural and functional components, using measuring instruments, such as tape, transit, plumb bob, levels, and square. Drills holes and installs mounting brackets and hangers into floor and walls of building. Lifts and aligns components into position, using hoist or block and tackle. Screws, bolts, rivets, welds, and brazes parts to assemble structural and func-

tional components, such as motors, controls, switches, gauges, wiring harnesses, valves, pumps, compressors, condensors, cores, and pipes. Cuts, threads, and connects pipe to functional components and water or power system of premises [PIPE FITTER (construction) 862.281-018]. Pumps specified gas or fluid into system. Starts system, observes operation, reads gauges and instruments, and adjusts mechanisms, such as valves, controls, and pumps to control level of fluid, pressure, and temperature in system. Dismantles malfunctioning systems and tests components, using electrical, mechanical, and pneumatic testing equipment. Replaces or adjusts defective or worn parts to repair systems. May insulate shells and cabinets of systems. May install wiring to connect components to electric power source. May specialize in installing systems and be designated Refrigeration-System Installer (any industry).
GOE: 05.05.09 STRENGTH: H GED: R4 M3 L3 SVP: 8 DLU: 80

637.261-030 SOLAR-ENERGY-SYSTEM INSTALLER (any industry)
Installs and repairs solar-energy systems designed to collect, store, and circulate solar-heated water or other medium for residential, commercial, or industrial use: Locates and marks position of collectors, holding tank, and distribution system on structure, according to specifications and blueprints. Cuts holes in roof, walls, and ceiling to install equipment and plumbing, using power saws and drills. Installs supports and brackets to anchor solar collectors and holding tank, using carpenter's handtools. Cuts, threads, and fits plumbing according to specifications for connecting circulation system, using plumber's handtools. Lays out and connects electrical wiring between controls and pumps according to wiring diagram and knowledge of standard industry practice, using electrician's handtools. Tests electrical circuits and components for continuity, using electrical test equipment. Tests plumbing for leaks, using pressure gauge. Pushes control buttons to activate pumps and observes system to detect malfunctions. Repairs or replaces defective equipment.
GOE: 05.05.09 STRENGTH: H GED: R4 M4 L4 SVP: 7 DLU: 86

637.261-034 AIR AND HYDRONIC BALANCING TECHNICIAN (any industry)
Inspects, tests, adjusts, and *balances* heating, cooling, and ventilating systems in residential, commercial, and industrial buildings, using specialized tools and test equipment, to attain performance standards specified in system design: Studies system blueprints, specifications, and performance data to determine configuration and purpose of system components, such as motors, pumps, fans, switches, ducts, or pipes. Discusses system malfunctions with users to isolate problems. Inspects system to verify system compliance with plans and specifications and to detect malfunctions in system component parts. Adjusts system controls to settings recommended by vendor to prepare to perform tests. Tests performance of air and hydronic systems, using specialized tools and test equipment, such as pitot tube, manometer, anemometer, velometer, tachometer, psychrometer, and thermometer, to isolate problems and determine where adjustments are necessary. Opens or closes louvers in system ductwork or adjusts flow control valves in piping to balance system, using handtools such as pliers, screwdriver, or wrenches. Discusses system operation with users to verify that malfunctions have been corrected.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 86

637.281-010 PUMP ERECTOR (construction) alternate titles: pump installation and servicer
Installs and repairs submerged turbine pumps in waterwells, using rig (truck-mounted hoisting equipment): Drives rig into position adjacent to well. Starts hoisting engine and moves levers and pedals to raise and extend telescoping hoisting mast. Bolts guy wires and struts to mast for support. Threads and tightens pump parts, such as pump bowl, shaft, bearings, tubing, and couplings, using wrenches and chain tongs to assemble pump section. Raises pump section to vertical position and installs section in well casing, using rig loadline and winch. Screws coupling or bolts flange to connect pump base to pipe column. Drives wedges under pump base to align base with pump shaft, centering pump shaft in opening until tube nut or packing container fits without interference, or using dial indicator to verify alignment. Hoists electric motor drive or engine drive gear box into position over pump base and inspects clearance between shaft and hollow spindle of driver to verify alignment of pump shaft. Attaches pressure gauge and orifice meter to pump outlet and pumps air into well to measure static and dynamic water levels and capacity of well. Dismantles pumps to clean, repair, and replace worn or damaged parts. May work in shop to repair various types of pumps, such as centrifugal, plunger, and turbine pumps [PUMP SERVICER (any industry)].
GOE: 05.05.09 STRENGTH: H GED: R4 M3 L3 SVP: 6 DLU: 77

637.281-014 STOKER ERECTOR-AND-SERVICER (any industry) alternate titles: stoker-installation mechanic; cooler servicer
Installs and repairs household, commercial, and industrial automatic coal stokers in furnaces according to specifications, using handtools and welding equipment: Removes plate from side of furnace with screwdriver or wrench or cuts hole in side of furnace with acetylene torch to make opening for entrance of stoker. Places stoker in operating position with feed mechanism projecting through side plate opening or hole in furnace wall and builds up firebrick or clay around it. Installs thermostat in furnace room or other part of building, instrument panel in furnace room, and regulator on boiler or furnace. Connects regulator wires to control panel and stoker wires with control panel wires according to wiring diagram. Replaces fuses, repairs short circuits in wiring, and removes clinkers from furnace bed and pieces of metal from screw conveyor.
GOE: 05.05.09 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 77

637.381-010 EVAPORATIVE-COOLER INSTALLER (any industry)
Repairs and installs cooling units to draw air over moistened pads, using handtools and portable power tools: Disassembles, cleans, and oils parts. Replaces motor bearings, aligns pulleys on motor and blower shafts, and tightens slack in drive belts. Replaces defective wiring. Holds tachometer against revolving centers of blowers and motors to verify specified revolutions per minute. Bolts cooler to window or platform adjacent to window, following layout lines. Cuts and installs plywood or building board to fit vacant window space. Installs electrical outlets and thermostat or humidistat controls. Cuts and connects tubing to cooler and water source. Adjusts rate of water flow. May install cooler on roof and assemble prefabricated sheet metal ducts in attic.
GOE: 05.10.04 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 77

637.381-014 REFRIGERATION UNIT REPAIRER (svc. ind. mach.)
Replaces defective components and reassembles refrigeration units to work orders and blueprint specifications: Studies rejection slips from inspection department or customer's letters and observes functioning of components, such as controls, fan, condenser, evaporator, or compressor to determine need for repair or replacement. Drains oil and pumps gas from unit. Loosens bolts, and melts soldered or brazed seams, to dismantle unit, using handtools and torch. Removes and replaces defective components. Brazes or solders parts to repair defective joints and leaks. Reassembles unit, using measuring instruments, handtools, soldering iron, and hand torch. Routes defective components to salvage department. May adjust unit controls. Records cause of malfunction, repairs, and replacements made.
GOE: 05.10.02 STRENGTH: M GED: R3 M2 L3 SVP: 6 DLU: 77

637.384-010 INDUSTRIAL-GAS-SERVICER HELPER (utilities)
Assists in testing, repairing, and installing gas equipment, domestic gas appliances, and gas meters: Cuts, threads, and joins pipe as directed, using handtools. Brushes soap solution over connections to test for leaks. Positions heavy equipment, using hoist. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.10.02 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

637.664-010 ENVIRONMENTAL-CONTROL-SYSTEM INSTALLER-SERVICER HELPER (any industry) alternate titles: heating-and-air-conditioning-mechanic helper
Assists workers engaged in installing, repairing, and servicing industrial, commercial, and residential environmental-control systems, performing any combination of following duties: Cuts, punches, flanges, shears, and solders sheet metal ducts and parts, using handtools and portable power tools. Cuts threads and packs pipes. Cements insulation in place over finished piping or tubing. Passes electrical wire through conduit, splices wire connections, and tapes wire. Assembles sheet metal components of prefabricated furnaces, using handtools. Replaces exhausted or defective containers of refrigerant with new refrigerant. Lubricates fans, motors, and control units. Installs air and water filters in completed assembly. Performs other duties as described under HELPER (any industry) Master Title. May be designated according to type of equipment serviced as Air-Conditioning-Mechanic Helper, Industrial (any industry).
GOE: 05.10.01 STRENGTH: H GED: R3 M2 L2 SVP: 6 DLU: 77

637.684-010 GAS-APPLIANCE-SERVICER HELPER (any industry) alternate titles: customer-servicer helper; gas-fitter helper
Assists GAS-APPLIANCE SERVICER (any industry) in installing, testing, adjusting, and repairing regulators, ranges, and heaters, in customer's establishments: Transports tools, parts, equipment, and appliances from truck to customer's establishment, using handtruck. Measures, cuts, threads, and connects pipe to feeder line and installed appliance, using pipe cutter, threader, and wrench. Dismantles appliances and replaces defective pipes, thermocouples, thermostats, valves, and spindles, using handtools. Performs other duties as described under HELPER (any industry) Master Title. May be designated according to kind of appliance repaired as Gas-Stove-Servicer Helper (any industry).
GOE: 05.12.15 STRENGTH: H GED: R2 M2 L2 SVP: 4 DLU: 77

637.684-014 QUALITY-CONTROL TECHNICIAN (svc. ind. mach.)
Tests vending, amusement, or other coin-operated machines for operating condition, and adjusts operating components, using handtools: Tests operating cycle of machine, using electrical timer. Tests wiring, using light bulbs to verify circuit continuity. Tests operation of coin-operating-and-return mechanism. Adjusts faulty operating components, using handtools. Rejects units requiring extensive repairs or refinishing. May examine paint finish for blemishes, chips, or other flaws.
GOE: 06.03.02 STRENGTH: L GED: R3 M3 L3 SVP: 3 DLU: 77

637.687-010 AIR-CONDITIONING INSTALLER-SERVICER HELPER, WINDOW UNIT (construction)
Assists AIR-CONDITIONING INSTALLER-SERVICER, WINDOW UNIT (any industry) in repairing, servicing, or installing window-mounted air-conditioning units, performing any combination of following duties: Carries unit from delivery vehicle to work site. Assembles window-support brackets, using handtools. Cuts opening through wall for insertion of unit, using hammer and chisel. Applies caulking compound to excess space between air-conditioner and wall opening. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.12 STRENGTH: H GED: R2 M1 L2 SVP: 3 DLU: 77

637.687-014 REFRIGERATION-MECHANIC HELPER (any industry)
Assists REFRIGERATION MECHANIC (any industry) in installing, maintaining, and repairing industrial and commercial refrigerating systems: Trans-

ports tools, materials, components, and refuse to and from work area. Lifts or holds parts while REFRIGERATION MECHANIC (any industry) fits, aligns, and fastens them into position. Bolts or unbolts parts, using handtools. May cut and thread pipe to specified length, using pipe cutter, stock, and die. May insulate cabinets and systems. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.12 STRENGTH: H GED: R2 M1 L2 SVP: 2 DLU: 77

637.687-018 SOLAR-ENERGY-SYSTEM-INSTALLER HELPER (any industry)

Assists SOLAR-ENERGY-SYSTEM INSTALLER (any industry) 637.261-030 in installing and repairing solar-energy systems for residential, commercial, or industrial use: Saws and drills holes in roof and walls for placement of equipment, plumbing, and wiring as directed. Loads and unloads truck. Attaches plumbing and electrical wiring to structure, using handtools. Cuts pipe threads and wraps insulation around pipes. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.10.01 STRENGTH: H GED: R2 M2 L2 SVP: 4 DLU: 86

638 MISCELLANEOUS OCCUPATIONS IN MACHINE INSTALLATION AND REPAIR

This group includes occupations which are too broad to classify on the basis of a particular machine or type of machinery.

638.131-010 FUEL-SYSTEM-MAINTENANCE SUPERVISOR (any industry)

Supervises, coordinates activities of, and assists FUEL-SYSTEM-MAINTENANCE WORKERS (any industry) in maintenance and inspection of fuel storage, distribution, and dispensing systems. Determines safety, maintenance, and inspection methods and instructs and directs workers in such procedures. Diagnoses difficult maintenance problems and recurring malfunctions. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.06.03 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 77

638.131-014 MACHINE-ASSEMBLER SUPERVISOR (machinery mfg.)

Supervises and coordinates activities of workers engaged in assembly of machines, equipment, and their subassemblies: Analyzes specifications, such as blueprints, diagrams, and schematics, to determine need for supplies and sequence of operations. Requisitions supplies and coordinates flow of material through department. Trains workers in assembly techniques. Inspects work to ensure conformance to specifications. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M4 L4 SVP: 8 DLU: 77

638.131-018 MAINTENANCE SUPERVISOR, FIRE-FIGHTING-EQUIPMENT (government ser.)

Supervises and coordinates activities of workers engaged in maintenance and repair of fire-fighting vehicles, equipment, and buildings: Inspects equipment and facilities to determine repair or malfunctioning units and physical structures. Trains workers in equipment repair and structural maintenance, using operating manuals, work orders, and blueprints. Requisitions materials and supplies. Repairs faulty equipment at fire sites, using mechanic's handtools. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L4 SVP: 8 DLU: 77

638.131-022 MAINTENANCE-MECHANIC SUPERVISOR (any industry) alternate titles: craft supervisor; maintenance advisor; maintenance supervisor

Supervises and coordinates activities of workers engaged in setting up, installing, repairing, and maintaining machinery and equipment, and in fabricating metal parts and tools: Directs workers engaged in repairing and maintaining parts of equipment and machines. Coordinates activities of workers engaged in installation of machinery and equipment. Directs workers in electrical, electronic, mechanical, hydraulic, and pneumatic maintenance and repair of machinery and equipment. Assists workers in diagnosing malfunctions in machinery and equipment based on observation of machinery and applying knowledge from past experience. Directs workers engaged in dismantling, assembling, and installing industrial machinery [MILLWRIGHT SUPERVISOR (any industry) 638.131-030]. Performs other duties as described under SUPERVISOR (any industry) Master Title. May requisition and keep supply of spare parts. May modify programming of robots and related equipment, such as *robot controllers* and *programmable controllers*. May coordinate activities of workers engaged in programming machinery and equipment. May supervise and coordinate activities of workers engaged in making structural repairs to buildings [MAINTENANCE SUPERVISOR (any industry) 891.137-010].
GOE: 05.05.09 STRENGTH: M GED: R4 M4 L4 SVP: 8 DLU: 86

638.131-026 MECHANICAL-MAINTENANCE SUPERVISOR (any industry) alternate titles: maintenance engineer, oil field; shop supervisor

Supervises and coordinates activities of workers engaged in maintaining and repairing mechanical parts of pumps, cranes, compressors, ditch diggers, automobiles, trucks, tractors, pipelaying machines, and similar equipment used in constructing pipelines, transporting oil and other fluids, and in related oil field and construction or airport maintenance activities: Inspects defective equipment in shop or field to determine extent of wear or damage. Performs other duties as described under SUPERVISOR (any industry) Master Title. May contract repair work. May arrange for sale or purchase of equipment. May supervise workers engaged in repairing company-owned railroad cars. May travel to work sites to supervise and coordinate activities of workers and be designated Traveling-Maintenance Supervisor (any industry).
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 80

638.131-030 MILLWRIGHT SUPERVISOR (any industry)

Supervises and coordinates activities of workers engaged in dismantling, moving, assembling, and installing industrial machinery: Measures floor distances with rule to verify foundation layouts. Verifies dimensions of machine parts, using gauges, calipers, and micrometers. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.06 STRENGTH: L GED: R4 M4 L4 SVP: 8 DLU: 77

638.131-034 MAINTENANCE SUPERVISOR, MOBILE BATTERY EQUIPMENT (mine & quarry)

Supervises and coordinates activities of workers engaged in maintenance and repair of mobile battery-powered mining equipment: Reviews list of mobile battery-powered equipment needing repairs. Examines defective equipment and equipment batteries to determine malfunctions, using electrical and hydraulic schematics. Assigns personnel to perform repairs. Inspects repaired equipment for conformance to company and federal safety standards. Notifies supervisor when equipment is back in service. Trains new employees. Tests air in mine shafts for presence of methane or lack of oxygen, using hand held testing devices, and notifies shift supervisors of hazards. Observes work area for defective equipment and hazardous electrical conditions, according to federal and state regulations. Completes accident reports. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 86

638.261-010 AUTOMATED EQUIPMENT ENGINEER-TECHNICIAN (machinery mfg.) alternate titles: engineer, automated equipment; technician, automated equipment

Installs machinery and equipment used to emboss, die-cut, score, fold, and transfer paper or cardboard stock to form box blanks, knock-down advertising displays, and similar products: Confers with customer's engineering staff to determine layout of equipment, to resolve problems of machine design, and to avoid construction problems in plant. Arranges machine parts according to sequence of assembly and effective use of floor space. Directs workers in positioning equipment, following floor plans and manufacturer's instructions. Assembles and installs electrical and electromechanical components and systems, using handtools, electrical testing instruments, soldering irons, and wiring diagrams. Operates equipment through trial run to verify setup. Adjusts controls and setup of machine for specified type, thickness, and size of stock to be processed, for prescribed sequence of operating stages, and to ensure maximum efficiency. Instructs equipment operators and engineering and maintenance personnel regarding setup, operation, and maintenance of equipment. Repairs and services equipment, following preventive maintenance schedule or upon customer's request. May modify previously installed equipment to ensure compatibility with new units, or install safety devices or attachments to old equipment. May confer with customer's engineers to determine effective methods of programming work for machine processing.
GOE: 05.05.05 STRENGTH: M GED: R4 M4 L4 SVP: 7 DLU: 77

638.261-014 MACHINERY ERECTOR (engine-turbine; machinery mfg.) alternate titles: erector; heavy-machinery assembler

Erects and tests machinery and heavy equipment, such as hydraulic turbines, turbine wheels, jaw stone crushers, industrial surface condensers, flaking machines, valves, and mine hoists, according to blueprints and specifications, using handtools, heating equipment, and measuring instruments: Positions steel beams to support bedplates of machines and equipment. Levels bedplate and establishes centerline, using straightedge, levels, and transit. Signals OVERHEAD CRANE OPERATOR (any industry) 921.663-010 to lower basic assembly unit, such as shaft, shaft casing, frame, or housing unit, to bedplate and aligns unit to centerline. Lays out mounting holes, using measuring instruments and drills holes with power drill. Bolts parts, such as side and deck plates, jaw plates, and journals, to basic assembly unit. Attaches moving parts and subassemblies, such as shafts, rollers, flywheels, runners (water wheels), valves, gates, bearings, and bearing supports, to basic assembly unit, using handtools and power tools. Shrink-fits bushings, sleeves, rings, liners, gears, and wheels to specified items, using portable gas heating equipment. Inserts shims, adjusts tension on nuts and bolts, or positions parts, using handtools and measuring instruments to set specified clearances between moving and stationary parts. Connects power unit to machines, or steam piping to equipment, and tests unit to evaluate its mechanical operation. Replaces defective parts of machine or adjusts clearances and alignment of moving parts. Dismantles machinery and equipment for shipment to installation site.
GOE: 05.05.09 STRENGTH: H GED: R4 M4 L4 SVP: 8 DLU: 77

638.261-018 MANUFACTURER'S SERVICE REPRESENTATIVE (machinery mfg.; machine tools) alternate titles: field engineer; field servicer; service engineer; service representative

Installs and repairs machinery or equipment in customer's establishment, following blueprints and manufacturer's instructions, and utilizing knowledge of mechanical, hydraulic, and electrical machinery: Consults with personnel in en-

gineering department to resolve problems of machine design to avoid construction problems in customer's establishment. Studies blueprints and observes tryout of machine in manufacturer's plant to become familiar with machine operation. Operates machine through trial run at customer's establishment to ensure that quality and rate of production meet specifications, and trains customer's personnel in adjusting, maintaining, and repairing machinery or equipment. Consults with customer about deviations of machine operation from original specifications and explains reasons for changes. Repairs or supervises repair of worn or defective machinery or equipment in customer's plant. May be designated according to type, size, or trade name of machines, tools, or equipment serviced.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

638.261-022 PINSETTER MECHANIC, AUTOMATIC (any industry) alternate titles: bowling-pin-machine mechanic

Adjusts and repairs automatic pinsetting bowling machines, following maintenance manuals, schematics, and knowledge of equipment, using handtools, power tools, and testing equipment: Observes operation of machine to determine nature and cause of malfunction. Tests relays, solenoids, transformers, electric motors, and wiring for defects, using continuity tester, ammeter, and voltmeter. Disassembles and replaces or repairs mechanical and electrical components or parts, such as bearings, coils, armatures, and wiring, using handtools. Cleans and lubricates machine. Instructs assistants in locating and repairing minor defects. Directs workers or participates in reconditioning and painting bowling pins. Maintains perpetual inventory of and orders replacements for spare parts.
GOE: 05.10.04 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

638.261-026 FIELD SERVICE TECHNICIAN (machinery mfg.) alternate titles: robot technician

Installs, programs, and repairs robots and related equipment, such as *programmable controllers, robot controllers*, end-of-arm tools, conveyors, and parts orienters, applying knowledge of electronics, electrical circuits, mechanics, pneumatics, hydraulics, and programming, using power tools, handtools, and testing instruments and following manuals, schematic diagrams, and blueprints: Reviews work order and related manuals, blueprints, and schematic diagrams to determine tasks to be performed and tools, equipment, and parts needed for installation of repair assignment. Discusses assignment with customer's representative and inspects installation site to verify that electrical supply wires, conduit, switches, and circuit breakers are installed according to specifications. Positions and secures robot and related equipment to floor, assisted by customer's staff, using crane, handtools, and power tools and following manuals and blueprints, or inspects installation site to ensure that robot has been installed according to specifications. Attaches electrical wires to robot controller and programmable controller and connects cables between robot, robot controller, programmable controller, and hydraulic power unit, using handtools. Connects hoses between hydraulic power unit and robot, using handtools. Verifies that electrical power is reaching robot and that voltage is as specified, using testing instruments. Pushes buttons, flips switches, and moves levers to start robot and related equipment to verify that operation is as specified. Programs robot to perform specified tasks, applying knowledge of programming language, using *teach pendant* and keyboard or control panel on robot controller. Modifies program to refine movement of robot, using teach pendant. Observes and listens to robot and related equipment to detect malfunction and repairs or replaces defective parts, using handtools and power tools [MAINTENANCE MECHANIC (any industry) 638.281-014]. Tests electrical components, such as wiring, switches, and relays, using testing instruments, and replaces faulty components, using handtools. Locates and replaces faulty printed circuit boards in robot controller, applying knowledge of circuit board function, using computer display screen on robot controller and following schematic diagram. May train customer's staff in operation of robot and related equipment. May install electric or pneumatic end-of-arm tools on robot. May repair faulty printed circuit boards.
GOE: 05.05.09 STRENGTH: H GED: R4 M4 L4 SVP: 7 DLU: 86

638.261-030 MACHINE REPAIRER, MAINTENANCE (any industry)

Repairs and maintains mechanical and hydraulic components of production machines and equipment, such as metal fabricating machine tools, material handling system, and automated lubrication system, following blueprints and specifications and using handtools, power tools, and precision measuring instruments: Visually inspects and listens to machines and equipment to locate causes of malfunctions. Dismantles machines and equipment to gain access to problem area, using handtools and power tools. Inspects and measures parts to detect wear, misalignment, or other problems. Removes and replaces worn or defective parts of drive mechanism or hydraulic system, using handtools and power tools, and following blueprints, diagrams, and service manuals. Realigns and adjusts components, such as spindles and clutches, using handtools and following diagrams. Locates damaged air and hydraulic pipes on machine, and measures, cuts, threads, and installs new pipe. Starts machines and equipment to test operation following repair. Repairs broken parts, using brazing, soldering, and welding equipment and handtools. May modify computer-controlled motion of robot, applying knowledge of program commands and using *robot controller* and *teach pendant*. May set up and operate metalworking tools, such as lathe, drill press, or grinder, to make or repair parts. May assist MECHANICAL ENGINEER (profess. & kin.) 007.061-014 to modify sketches or computer-generated designs of machine components, such as hydraulic system and drive mechanism, applying knowledge of shop mathematics, hydraulics, and mechanics, and using computer keyboard and software programs. May work as part of team including such workers as ELECTRICIAN, MAINTENANCE (any industry) 829.261-018; MILLWRIGHT (any industry) 638.281-018; PIPE FITTER (construction) 862.281-022; TOOL MAKER (machine shop) 601.280-042. May be designated according to type of machine repaired as Broaching-Machine Repairer (machine tools); Centerless-Grinding-Machine Adjuster (ordnance); Screw-Machine Adjuster, Automatic (ordnance); Screw-Machine Repairer (machine shop).
GOE: 05.05.09 STRENGTH: H GED: R4 M4 L4 SVP: 7 DLU: 86

638.281-010 FIRE-FIGHTING-EQUIPMENT SPECIALIST (government ser.)

Repairs firefighting vehicles, equipment, buildings, and structures: Inspects vehicles or equipment to determine condition. Repairs vehicles or equipment, using mechanic's tools, precision testing and measuring equipment, and manuals. Orders replacement parts. Repairs and maintains physical structures, using handtools, power tools, blueprints, and wiring diagrams. Estimates repair costs. Keeps records of repairs and cost.
GOE: 05.05.09 STRENGTH: H GED: R4 M3 L4 SVP: 7 DLU: 77

638.281-014 MAINTENANCE MECHANIC (any industry) alternate titles: fixer; machine-maintenance servicer; machine overhauler; machine repairer; mechanical adjuster; repair mechanic; tool-and-machine maintainer

Repairs and maintains, in accordance with diagrams, sketches, operation manuals, and manufacturer's specifications, machinery and mechanical equipment, such as engines, motors, pneumatic tools, conveyor systems, and production machines and equipment, using handtools, power tools, and precision-measuring and testing instruments: Observes mechanical devices in operation and listens to their sounds to locate causes of trouble. Dismantles devices to gain access to and remove defective parts, using hoists, cranes, handtools, and power tools. Examines form and texture of parts to detect imperfections. Inspects used parts to determine changes in dimensional requirements, using rules, calipers, micrometers, and other measuring instruments. Adjusts functional parts of devices and control instruments, using handtools, levels, plumb bobs, and straightedges. Repairs or replaces defective parts, using handtools and power tools. Installs special functional and structural parts in devices, using handtools. Starts devices to test their performance. Lubricates and cleans parts. May set up and operate lathe, drill press, grinder, and other metalworking tools to make and repair parts. May initiate purchase order for parts and machines. May repair electrical equipment. May be designated according to machine repaired as Carton-Forming-Machine Adjuster (any industry); Machine Adjuster (tobacco); Maintenance Mechanic, Record Processing Equipment (recording).
GOE: 05.05.09 STRENGTH: H GED: R4 M4 L3 SVP: 7 DLU: 87

638.281-018 MILLWRIGHT (any industry)

Installs machinery and equipment according to layout plans, blueprints, and other drawings in industrial establishment, using hoists, lift trucks, handtools, and power tools: Reads blueprints and schematic drawings to determine work procedures. Dismantles machines, using hammers, wrenches, crowbars, and other handtools. Moves machinery and equipment, using hoists, dollies, rollers, and trucks. Assembles and installs equipment, such as shafting, conveyors, and tram rails, using handtools and power tools. Constructs foundation for machines, using handtools and building materials, such as wood, cement, and steel. Aligns machines and equipment, using hoists, jacks, handtools, squares, rules, micrometers, and plumb bobs. Assembles machines, and bolts, welds, rivets, or otherwise fastens them to foundation or other structures, using handtools and power tools. May operate engine lathe to grind, file, and turn machine parts to dimensional specifications. May repair and lubricate machines and equipment. May install robot and modify its program, using *teach pendant*. May perform installation and maintenance work as part of team of skilled trades workers.
GOE: 05.05.06 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 86

638.281-022 MILLWRIGHT APPRENTICE (any industry)

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.06 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 77

638.281-026 PARTS SALVAGER (any industry)

Repairs salvable mechanical parts of machines and equipment: Dismantles machinery, equipment, and parts, using handtools, such as hacksaws, files, reamers, wrenches and screwdrivers. Inspects parts to determine salvageability or method of repairing or reworking parts. Sets up and operates metalworking tools, such as engine lathes, milling, drilling, grinding, polishing, and buffing machines to repair parts. Files, taps, reams, bends, and straightens, or uses other methods to recondition parts, using handtools. Verifies dimensions and tolerances, using blueprints, scale, and precision-measuring instruments. May reassemble parts, using handtools and power tools. May direct cleaning, storing, and issuing of reclaimed parts, and packing of usable materials, such as metal sweepings. May arrange for sale of scrap.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

638.281-030 HYDRAULIC-RUBBISH-COMPACTOR MECHANIC (sanitary ser.)

Installs and repairs hydraulic rubbish compactors, using tools and equipment: Installs new compactors, utilizing knowledge of electrical wiring and hydraulic-

pneumatic functions and using handtools and power tools. Diagnoses hydraulic and mechanical malfunctions of compactors to determine required repairs. Adjusts, replaces, or repairs faulty hydraulic units, such as pistons, cylinders, and conveyors. Installs or replaces damaged shafts, guards, casings, and metal frame of compactor units, using electric welding, brazing, or soldering equipment and tools. Diagnoses electrical-electronic system malfunction, and replaces or repairs parts, such as electric motors, switches, and starting and stopping units, using knowledge of wiring, wiring diagrams, voltage systems, and electric-electronic components. Loads compactors and parts onto truck, using forklift.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 86

638.281-034 HYDRAULIC REPAIRER (any industry)

Maintains and repairs hydraulic systems of machinery and equipment, such as robots, applying knowledge of hydraulics and mechanics and using handtools: Observes and listens to operating machinery to detect malfunctions. Visually inspects hydraulic lines and components to detect leaks, damage, and wear. Reads pressure gauges to detect abnormal oil pressure and smells to detect overheated oil. Depresses buttons and switches to turn off machinery. Turns valve to release pressure from hydraulic system and disconnects hydraulic supply and return lines, using handtools. Removes and replaces defective accumulator, using handtools. Connects charging assembly to accumulator and fills accumulator bladder with nitrogen gas to recharge accumulator, following manufacturer's specifications. Replaces worn or damaged hydraulic components, such as oil lines, fittings, cylinders, servo-valves, pressure release valves, gaskets, and seals, using handtools. Disassembles hydraulic system and removes and replaces defective actuator, pump bearings, and pump motor, using handtools and hoist. Observes operation of machinery and equipment to verify repair. Performs routine maintenance, such as changing filters, following schedule, using handtools. May observe readout on display screen of *robot controller* to determine nature of system malfunction. May disassemble defective hydraulic components, such as pumps and accumulator, at workbench and rebuilds or repairs components. May install hydraulic oil lines on new machinery and equipment.
GOE: 05.05.09 STRENGTH: H GED: R3 M3 L3 SVP: 7 DLU: 86

638.361-010 MACHINE ASSEMBLER (machinery mfg.)

Assembles machines, equipment, and their subassemblies, such as baling presses, stokers, blowers, compression pumps, and food wrapping machines, according to customer's needs, following blueprints and other written and verbal specifications: Plans assembly procedures, following specifications and using knowledge gained by experience. Removes small quantities of metal, using hand files or portable grinders, to clean parts or to produce close fit between parts. Drills, taps, or reams holes, using drill press or portable drill. Aligns components, and bolts, screws, or rivets them together, using handtools or portable powered tools. Installs moving parts, such as shafts, levers, or bearings, and works them to test free movement. May bend and install pipe for hydraulic systems. May align and mesh gears in gearbox to assemble system of gears. May test or assist in testing operation of completed product.
GOE: 06.02.22 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 77

638.381-010 FUEL-SYSTEM-MAINTENANCE WORKER (any industry) alternate titles: gas-pit specialist

Installs, maintains, repairs, and adjusts pumps, control valves and meters, strainers and filters, water separators, and pipelines of liquid fuel systems for airfields: Makes periodic inspections of units to detect and correct leakage, corrosion, faulty fittings, and malfunction of mechanical units, meters, and gauges, such as fuel hydrants, tank pits, distribution lines, storage tanks, turbines, pumps, and control rooms. Inspects electrical wiring, switches, and controls for safe operating condition, grounding, and adjustment. Repairs, replaces, and adjusts malfunctioning equipment to restore operating condition specified in regulations and repair manuals. Disassembles, adjusts, aligns, and calibrates gauges and meters. Cleans storage tanks, and removes and installs old or new equipment, such as meter and filter installations, pipe systems, pit covers, and vents, to modify existing installations.
GOE: 05.05.09 STRENGTH: H GED: R3 M3 L3 SVP: 7 DLU: 77

638.484-010 MILLWRIGHT HELPER (any industry)

Assists MILLWRIGHT (any industry) in installing, dismantling, and moving machines, conveyors, and other equipment: Erects scaffolding. Nails together forms and mixes cement for machine foundation. Moves materials, using lift truck. Drills holes. Measures, cuts and installs hangers, using handtools and ladders. Installs and dismantles machines and equipment, using crowbars, chain falls, hoists, and wrenches. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.12 STRENGTH: H GED: R2 M2 L2 SVP: 3 DLU: 77

638.684-010 KNIFE CHANGER (tobacco) alternate titles: knife setter; shredding-machine-knife changer

Replaces dull or worn knives on tobacco shredding machine, using wrench to loosen and tighten bolts that hold knives in position.
GOE: 06.04.15 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

638.684-014 KNIFE SETTER (sugar & conf.)

Assembles and installs knife blocks in beet slicing machine: Positions knives on block, aligns knives with cutter bar, using gauge. Bolts knives in place on block, using handtools. Places assembled block on cutter wheel and bolts it in place, using handtools. May order or purchase replacement parts and cutter knives for slicing machines. May remove and disassemble knife blocks preparatory to sharpening.
GOE: 06.01.02 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

638.684-018 MAINTENANCE-MECHANIC HELPER (any industry) alternate titles: machine-adjuster helper; repair helper

Assists MAINTENANCE MECHANIC (any industry) 638.281-014 in repairing and maintaining machinery and mechanical equipment: Carries tools and equipment to and from storage and working areas. Holds scaffolding members in place or tightens bolts to erect working platforms about machines. Pulls handles to raise materials and tools to working levels. Loosens bolts to dismantle machinery. Drills and breaks up concrete, using jackhammer. Digs trenches for machinery foundations. Mixes and pours concrete for foundations. Cleans machines with sandpaper, solvent, and wiping rags to prepare surfaces for painting. Oils and greases machines. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.15 STRENGTH: H GED: R2 M1 L2 SVP: 4 DLU: 88

639 MECHANICS AND MACHINERY REPAIRERS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with inspecting, maintaining, and repairing mechanical equipment.

639.281-010 AVIATION SUPPORT EQUIPMENT REPAIRER (military ser.)

Inspects, maintains, repairs, and modifies aircraft ground equipment, such as M-G (motor generator) sets, air compressors, and test stands: Conducts periodic and special inspections, using test equipment, to detect malfunctions. Tests and operates equipment for output, leakage, and operation in accordance with technical orders to determine serviceability. Disassembles and assembles malfunctioning accessories and components of aerospace ground equipment, such as motor and engine driven generator sets, air compressors, hydraulic-pneumatic sets, air-conditioners, heaters, exhaust and cooling equipment, and test stands. Replaces worn bearings, bushings, shafts, end plates, brushes, springs, coils, armatures, pushrods, valves, exhaust manifolds, tubing, hoses, and defective wiring. Repairs, adjusts, and operates small gas turbine engines.
GOE: 05.10.02 STRENGTH: L GED: R3 M3 L3 SVP: 5 DLU: 77

639.281-014 COIN-MACHINE-SERVICE REPAIRER (svc. ind. mach.) alternate titles: vending-machine repairer

Installs, services, adjusts, and repairs vending, amusement, and other coin-operated machines placed in establishments on concession basis: Assembles machines following specifications, using handtools and power tools. Fills machines with ingredients or products and tests ice making, refrigeration, carbonation, evaporation, dispensing, electrical, and coin-handling systems. Examines defective machines to determine causes of malfunctions. Adjusts and repairs machines, replacing worn or defective electrical or mechanical parts, using handtools, such as screwdrivers, hammers, and pliers. May collect coins from machine and make settlements with concessionaires. May replenish vending machines with gum, candy, or other articles. May be designated according to type of machine serviced as Juke-Box Servicer (business ser.); Pinball-Machine Repairer (business ser.).
GOE: 05.10.02 STRENGTH: M GED: R3 M3 L3 SVP: 5 DLU: 82

639.281-018 SEWING-MACHINE REPAIRER (any industry) alternate titles: sewing-machine adjuster

Repairs and adjusts sewing machines in homes and sewing departments of industrial establishments, using handtools: Turns screws and nuts to adjust machine parts. Regulates length of stroke of needle and horizontal movement of feeding mechanism under needle. Dismantles machines and replaces or repairs broken or worn parts, using handtools. Inspects machines, shafts, and belts. Repairs broken transmission belts. Installs attachments on machines. Initiates orders for new machines or parts. May operate machine tools, such as lathes and drill presses, to make new parts. May be designated according to location in which employed as Fitting-Room Maintenance Mechanic (boot & shoe).
GOE: 05.10.02 STRENGTH: M GED: R3 M3 L3 SVP: 7 DLU: 81

639.281-022 MEDICAL-EQUIPMENT REPAIRER (protective dev.; retail trade) alternate titles: durable medical equipment repairer; wheelchair repairer

Repairs medical equipment, such as manual or powered wheelchairs, hospital beds, and suction equipment, using knowledge of equipment function and handtools: Test operates and examines malfunctioning equipment to determine cause of malfunction. Disassembles and inspects equipment to locate defective components, such as motors, valves, and electrical controls, using test instruments and handtools. Replaces defective parts, and solders, tightens, and aligns parts which have become loose or out of adjustment, using handtools and soldering iron. Cleans, lubricates, and polishes equipment components to restore surface, using solvent, polish, rags, and grease gun. Test operates unit to ensure equipment functions according to manufacturer's specifications. Occasionally installs modified parts, such as respirator equipment or foot rest, onto wheelchairs, according to customer specification, and fills parts orders from customers.
GOE: 05.10.02 STRENGTH: H GED: R3 M2 L3 SVP: 5 DLU: 86

639.681-010 BICYCLE REPAIRER (any industry) alternate titles: bicycle mechanic; cycle repairer

Repairs and services bicycles, using power tools and handtools: Tightens and loosens spokes to align wheels. Disassembles axle to repair coaster brakes and

to adjust and replace defective parts, using handtools. Adjusts cables or replaces worn or damaged parts to repair handbrakes. Installs and adjusts speed and gear mechanisms. Shapes replacement parts, using *bench grinder*. Installs, repairs, and replaces equipment or accessories, such as handle bars, stands, lights, and seats. Paints bicycle frame, using spray gun or brush. Rubs tubes with scraper and places patch over hole to repair tube. May weld broken or cracked frame together, using oxyacetylene torch and welding rods. May assemble and sell new bicycles and accessories.
GOE: 05.10.02 STRENGTH: M GED: R3 M2 L3 SVP: 4 DLU: 77

639.684-010 SEWING-MACHINE-REPAIRER HELPER (any industry)
Assists SEWING-MACHINE REPAIRER (any industry) in repairing household and industrial sewing machines: Lifts machines to work bench and disassembles parts, using wrenches and screwdrivers. Cleans parts, using solvent and rags. Replaces defective parts and reassembles machines. Starts and observes machines in operation to test performances. Uncrates and assembles new machines. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.15 STRENGTH: M GED: R2 M2 L2 SVP: 4 DLU: 77

64 PAPERWORKING OCCUPATIONS

This division includes occupations concerned with shaping, cutting, scoring, joining, and otherwise machining paper and paper products.

640 PAPER CUTTING, WINDING, AND RELATED OCCUPATIONS

This group includes occupations concerned with cutting multiple sheets of paper, pasteboard, and similar material to specific size; and forming spiral or convolute paper tubing to make such articles as paper containers and covers.

640.132-010 SUPERVISOR, COREMAKER (paper & pulp)
Supervises and coordinates activities of workers engaged in operating machines to spiral-wind continuous cardboard strips to make cores for paper rolls: Orders type of paper and glue to be used, number of strips to be wound, and machine changes required to meet production requirements. Inspects cores for specified length, diameter, and solidity, using rule, calipers, and breakage tester. Directs machine operator in changing speed of traveling cut-off saw, adjusting tension on paper strips, and changing adhesives. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.04 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 78

640.360-010 PANEL-MACHINE SETTER (paper goods)
Sets up machine that cuts edges, flaps, notches, or openings in envelope blanks or envelopes: Bolts specified cutting die onto machine ram, using handtools. Turns handwheel to adjust stroke of ram according to depth of die. Turns setscrews to adjust machine guides and stops to accommodate specified size paper stock, using rule and screwdriver. Operates machine for trial run and compares first piece with sample to verify accuracy of machine setup.
GOE: 06.01.02 STRENGTH: L GED: R3 M2 L3 SVP: 6 DLU: 77

640.385-010 RIBBON-HANKING-MACHINE OPERATOR (paper goods)
Tends machine that winds specified lengths of paper ribbon into hanks: Threads ribbon through guides of worktable and hanking machine, fastening end in jaws of machine holder. Starts machine that winds specified yardage over spindle arms to form hank and examines ribbon for missing threads, tears, defective design, or other imperfections. Stops machine and folds seal on creased lines around center of hank to hold ribbon together and prevent unwinding. Removes ribbon from holder, positions it under blade, and releases handle to cut ribbon and hold other end for hanking. Slides hank from spindle arms, packs it in cardboard cartons in specified manner, and inserts identification slip. Adjusts cutting blade and guides to accommodate different widths of ribbon.
GOE: 06.04.04 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

640.565-010 PAPER CUTTER (beverage) alternate titles: cutting-machine operator; paper-cutting-machine operator; stamp cutter
Cuts, stores, and issues revenue stamps and labels: Turns hand screws on paper-cutting tool to tighten paper guide that holds sheets of stamps or labels in position. Pulls knife down by hand or steps on treadle that lowers knife to cut sheets. Sharpens knife by rubbing it with abrasive stone. Records number of sheets cut and sequence of serial numbers of revenue stamps. Stocks cut revenue stamps and labels, and issues them on request. May be designated according to type of paper item cut as Revenue-Stamp Cutter (beverage).
GOE: 06.04.04 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

640.682-010 CONVOLUTE-TUBE WINDER (paper goods)
Sets up and operates machine to form convolute tubes used for fiber cans or containers: Installs and adjusts winding mandrel, gluing and labeling attachments, and slitting and cutting knives, using handtools. Places roll of paper on machine feedrack and threads paper through gluing, coating, and slitting rollers. Fills glue and paraffin reservoirs, and loads stacks of labels in labeling device or adjusts feeding mechanism. Sets paper feeding timer for specified number of turns. Starts machine and turns wheels and dials to regulate tension on pressure rolls, speed of gluing and coating rollers, temperature of paraffin reservoir, and machine feed speed. Examines cut-labeled tubes for defects, such as misplaced or wrinkled labels, uneven or excessive glue and paraffin distribution, and uneven winding of paper strips. May cut labels to specified dimensions, using hand or powered paper cutter. May attach threading or forming fixture to machine that thread end of tube or shape it into box form.
GOE: 06.02.04 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

640.682-014 CORE WINDING OPERATOR (paper & pulp)
Controls section of paper machine to wind paper onto core to make jumbo roll of specified dimensions: Positions empty core on machine carriage and tightens support clamps, using hoist and wrench. Tears continuous sheet, using compressed airhose, when roll is filled and blows free end around revolving empty core to start new roll. Removes full roll from machine with hoist. Turns handwheel to regulate tension on paper being wound on new roll. Examines sheet for defects, such as dirt, slime spots, holes, and wrinkles, and marks defective portions with chalk. Periodically runs hand along winding roll of paper to test for tension and to feel for soft spots and lumps. Cleans lint from calender rolls, using hand scraper and cloth.
GOE: 06.02.04 STRENGTH: M GED: R3 M3 L3 SVP: 5 DLU: 78

640.682-018 CUTTING-MACHINE OPERATOR (print. & pub.) alternate titles: cutter operator; finishing machine operator; paper cutter
Sets up and operates machine to cut paper stock and glue from spine of book bodies preparatory to printing, binding, and rebinding: Reviews job sample containing dimensions or specifications to determine page sequence, kind of fold, size of sheet, and amount to trim from spine of book body. Measures from edge of page, using scale, and types instructions on keyboard of computer, pushes buttons to activate computer program, or manually sets cutting guides, clamps, and knives, using wrench, to cut paper or spine to prescribed dimensions. Places book body or stack of paper sheets on bed of machine, rolling or folding oversized sheets as necessary. Fans edges of sheets to prevent adherence of pages. Aligns edges by tapping against paper guide, using hand or stick, to ensure square, true edges. Pushes button, types instructions on keyboard, or pulls lever to activate knife and removes trimming preparatory to next cut. Examines cut stock and spine of book body for trimming imperfections, such as ragged edges and incomplete cuts, and to verify that sheets are cut square and to specified size or cut marks. Removes sheets or book body from machine and stacks on skid. Lubricates machine, changes dull knives, and performs running repairs as needed. Jogs book bodies to align edge or edges against back section of guide or three sections of guide in turn to trim spine (back) or head (top), tail (bottom), and fore (front), pressing buttons or depressing pedal to clamp cut edges at each position [BOOK TRIMMER (print. & pub.) 640.685-010].
GOE: 06.02.04 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 89

640.682-022 SPIRAL-TUBE WINDER (paper goods) alternate titles: winder
Sets up and operates machine to wind continuous strips of paper or cardboard into tubes of specified dimensions and cut tubing to length to form fiber cans, containers, or cores for paper rolls: Installs and adjusts forming mandrels and cutting saw on machine, using handtools. Loads rolls of paper or cardboard on machine feedrack and locks them in place with clamps. Threads paper or cardboard through tension and gluing rollers, fills glue reservoirs, and sets thermostatic control to regulate temperatures of glue. Starts machine and turns wheels to adjust tension on pressure rollers and to synchronize speed of traveling cutoff saw with machine feed speed. Observes tubing for excess glue and open seams and adjusts machine to alter glue deposit and degree of spiral. Removes finished cores and stacks or places them on conveyor for transfer to other work areas. May be designated according to type of product wound as Coremaker (paper goods).
GOE: 06.02.04 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 87

640.685-010 BOOK TRIMMER (print. & pub.) alternate titles: bindery operator; multiple-knife-edge-trimmer operator; shearing-machine operator; trimmer operator, three knife
Tends paper-cutting machine that cuts edges of bound and unbound books, periodicals, catalogs, and directories to specified size for binding and rebinding: Reads instructions on worksheet to ascertain machine setting requirements. Inserts or replaces knives in trimmer and adjusts guides to trim head (top), tail (bottom), and fore (front) edges of book to specified dimensions, and locks sections in place. Starts machine for test run, and examines finished book body to ensure finished sample meets job order specifications and book body sample. Loads book bodies into feed receptacle of machine. Starts machine and observes operation. Examines book bodies to ensure specifications are met. Observes operation of machine during production run. Stops machine when machine malfunctions and adjusts knives and guides as required. Replenishes supply of book bodies periodically. May tend manually operated trimmer, jogging book bodies to align edges and placing book body against three sections of guide in turn to trim three edges of book. Depresses treadle or lever to clamp cut edges at each position. May be required to watch for colored markers between pages that indicate narrow margins and foldouts when positioning edges of book bodies against guides. May stack books as they are trimmed. May operate cutter to cut cardboard, paper, or book covers to specified size. May push cart stacked with books to next work station.
GOE: 06.04.04 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 89

640.685-014 BOOK-JACKET-COVER-MACHINE OPERATOR (paper goods)
Tends machine that combines paper and plastic film to be used as jacket covers for books: Mounts rolls of paper and plastic film on machine holders, using

hoist, and installs roll of adhesive tape on either side of machine. Splices ends of paper, plastic, and tape to ends of previous rolls. Changes rubber stamps on printing roll to print specified data, fills inkpot and glue reservoir, and adjusts forming bar and makes other machine alterations to conform to size specifications. Starts machine, gradually increasing speed by depressing foot lever, and observes machine operation as machine glues paper and plastic film together, cuts it to size, and tapes edges. Measures width and length of finished covers and adjusts machine to obtain specified size. Replenishes stock, clears jams, and makes operating adjustments as required.
GOE: 06.04.09 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

640.685-018 CARBON-PAPER INTERLEAFER (pen & pencil) alternate titles: winder

Tends machine that interleafs rolls of carbon and copy paper and winds interleafed paper into rolls of specified length: Reads work order to determine size and type carbon and copy paper to be processed. Places specified rolls of paper on machine spindles, using chain hoist. Threads ends of rolls through feed rollers and paper guides, under edge trimming knives, and laps ends around takeup spindle core. Adjusts paper guides and tension controls, using wrench. Starts machine and observes machine operation to detect wrinkling of paper and uneven winding. Reads footage counter and stops machine when specified footage is wound. Cuts interleafed paper, using knife, and removes roll from machine, using chain hoist. Records size and number of rolls processed on work order.
GOE: 06.04.04 STRENGTH: M GED: R2 M2 L1 SVP: 2 DLU: 77

640.685-022 COMB-MACHINE OPERATOR (fabrication, nec)

Tends one or more machines that cut bookmatch *combs* (blanks) from cardboard rolls: Fastens metal hub to center opening of cardboard roll with handtools and inserts turning shaft in hub. Pushes roll onto let-off rack. Threads cardboard strip into machine through guide and pressure rolls. Adjusts circular cutting knives that slit cardboard to specified width. Turns handwheel to move cutter and punch section of machine forward on track to feed combs into dip conveyor. Starts machine to process combs. Inspects combs for defects, such as insufficient punch pressure and spread, noncuts, and improper width. Adjusts machine with handtools to correct defects.
GOE: 06.04.04 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

640.685-026 COMPENSATOR (paper goods)

Tends cutting mechanism of tube-making machine that cuts multiwall tubes: Turns controls to synchronize speed of drawer rolls with speed of stock so cutting mechanism will cut tubes at printed cutoff line.
GOE: 06.04.04 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

640.685-030 CORNER CUTTER (paper goods) alternate titles: corner-cutter-machine operator

Tends machine that cuts V-or-L-shape pieces from corners of scored cardboard blanks to facilitate folding and forming boxes or from corners of paper sheets used for covering boxes: Turns wheel to adjust angle and position of guides on machine according to size of sheet or blank and cutting instructions. Positions single or multiple blanks or sheets against guides and depresses pedal to lower blade that cuts out corners. Turns stock to bring each corner into position for cutting and cuts specified number of corners. May be designated according to type of machine used as Double-Corner Cutter (paper goods); Single-Corner Cutter (paper goods).
GOE: 06.04.04 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 79

640.685-034 CUT-OFF-MACHINE OPERATOR (paper goods) alternate titles: paper-tube cutter; paper-tube sawyer; trimming-machine operator; tube cutter

Tends cutting machine that cuts paper tubing to specified lengths: Mounts mandrel of specified size to chuck of machine. Spaces cutters along supporting shaft, using measuring device and wrenches. Adjusts height to which shaft is raised when pedal is depressed to prevent turning knife blades from cutting into mandrel. Slides long tube over mandrel, depresses pedal to raise blades that cut tube to lengths, and removes pieces from mandrel. May tend machine equipped with saw blade to cut tubes.
GOE: 06.04.04 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 87

640.685-038 PANEL-MACHINE OPERATOR (paper goods)

Tends machines that cut edges, flaps, notches, or openings in envelope blanks or envelopes: Positions envelope blanks or envelopes on machine table against guides and stops. Depresses pedal or moves lever to lower ram which forces cutting die through stock to cut edges, flaps, notches, or openings.
GOE: 06.04.04 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

640.685-042 PAPER-CORE-MACHINE OPERATOR (paper goods)

Tends machine that winds and seals layers of paper tape around form to make cores for transformer coils: Mounts rolls of glued paper tape in core machine holders. Fills glue moistener reservoir. Turns setscrew and adjusts machine at specified angle for spiral winding. Mounts core form on chuck of machine and wraps end of tape around form. Starts machine that spirally winds and seals layers of paper tape around form and cuts tape when required length is reached. Removes completed cores from machine to stock bins. May oil machine.
GOE: 06.04.04 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

640.685-046 PAPER-REEL OPERATOR (paper goods) alternate titles: cord-reel operator; paper reeler; reel cutter; reel operator; sheeter

Tends machine that winds paper or twisted paper cord from rolls onto adjustable reel and cuts it into specified lengths: Fastens roll of paper or cord into shaft supports. Wraps tape measure around reel and turns handcrank to move horizontal bars in or out to adjust circumference of reel. Removes tape and wraps paper or cord around horizontal bar of reel and secures in place with hooks. Depresses lever or throws switch to start reel, winding paper or cord from roll for specified number of revolutions. Stops machine and cuts through layers of paper or cord along groove in horizontal bar of reel with knife to make individual sheets of paper or pieces of cord. Removes paper from reel to handtruck. Ties cord into bundles. May wrap sheets of paper into bundles preparatory to shipping.
GOE: 06.04.04 STRENGTH: M GED: R2 M2 L1 SVP: 3 DLU: 77

640.685-050 PROCESS-MACHINE OPERATOR (paper goods) alternate titles: gummed-tape-press operator

Tends machine that automatically removes excess curl from gummed or treated paper for winding into rolls: Lifts and positions parent roll of paper on machine support, using hoist. Threads paper through horizontal rollers and guides, over diagonal rollers, and fastens to core on rewind stand. Starts machine, observes operation, and adjusts diagonal and tension rollers according to type of paper processed, using handtools.
GOE: 06.04.04 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

640.685-054 REELER (paper goods)

Tends machine that rolls printed wallpaper into reels for further processing: Slides cardboard cylinder over windup shaft and locks shaft in machine, using wrench. Threads wallpaper through machine and onto cardboard cylinder. Starts machine and observes winding until windup shaft is loaded. Rolls completed reel of wallpaper to storage area. May be identified according to type of machine operated.
GOE: 06.04.04 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

640.685-058 REWINDER OPERATOR (paper goods) alternate titles: pony winder; rewinder; roll winder

Tends machine that winds paper from one roll to another to form compact rolls of specified footage or diameter prior to cutting: Threads end of parent roll into feeding mechanism of machine and adjusts friction brake by hand to maintain tension of paper. Slides rewind cores (tubes) on shafts and starts machine. Verifies perforations, size, and alignment of rewind rolls. Adjusts machine, using handtools. Removes wound roll from shaft and places it on conveyor. May cut defects from paper and splice cut ends together, using tape.
GOE: 06.04.04 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 78

640.685-062 ROLL RECLAIMER (paper goods)

Tends machine that reprocesses rolls of toilet tissue that do not conform to specifications: Places loosely wound rolls on power-driven spindle which rotates core of roll to tighten paper, or unwinds paper from core for salvage. Glues ends of roll to that of incomplete roll and winds it to specified size. Tears damaged tissue from rolls and splices ends. Holds sandpaper against rotating roll to smooth ends of roll.
GOE: 06.04.04 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

640.685-066 ROLL-SLICING-MACHINE TENDER (pen & pencil) alternate titles: inter-fold roll cutter

Tends battery of machines that slice cross sections from rolls of carbon paper or inked plastic sheeting to make narrower rolls: Places roll on arbor of machine and secures paper wrapping around roll with adhesive strip to prevent its unrolling while being sliced. Starts machine, allowing rolls to be rotated against circular knife that slices off narrower rolls. Stops machine and slides sliced rolls from arbor. Examines sides of rolls for ragged or furry edges that show dulling of knife. Places sliced rolls on workbench, places wooden block on top, and pounds with mallet to flatten. Positions flattened roll in fixture of air press, sets plastic spool on center, and pushes buttons causing ram to descend and press spool into roll.
GOE: 06.04.04 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

640.685-070 ROLLING-MACHINE OPERATOR (paper goods) alternate titles: embossing-machine-operator helper; wallpaper-embosser helper

Tends machine that winds and cuts wallpaper into rolls of specified lengths: Adjusts guides to accommodate wallpaper of various widths, using wrench. Threads wallpaper through machine and starts machine. Observes wallpaper for tears as it is automatically rolled and cut. Lifts rolls of wallpaper from discharge end of machine and places specified number of rolls into boxes or ties rolls into bundles. May tend embossing machine that imprints paper for rough or textured effect.
GOE: 06.04.04 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

640.685-074 ROUND-CORNER-CUTTER OPERATOR (paper goods; print. & pub.)

Tends machine that cuts round corners on paper goods and printed products, such as notebook paper, tablets, pamphlets, and booklets: Reads job ticket to determine number of items to be processed and number and designation of corners to be rounded. Adjusts rounding dies to specified settings, using handtool. Removes stacks of printed products or precounted paper from supply skid and positions and aligns paper, pamphlets, or booklets against guides and backstop of machine. Depresses pedal to activate machine that automatically clamps product onto machine bed and lowers rounding-die that cuts round corners in product. Removes finished products from machine and stacks products on table or pallet. May tend drill-punch machine to drill holes in paper [DRILL-PUNCH

OPERATOR (paper goods; print. & pub.) 649.685-034]. May wrap and label stacks of processed paper [PACKAGER, HAND (any industry) 920.587-018]. May tend machine that automatically wraps and heat shrinks plastic film around product [PACKAGER, MACHINE (any industry) 920.685-078]. May sew gathered and collated signatures by hand to form book [STITCHER, HAND (print. & pub.) 977.684-022].
GOE: 06.04.04 STRENGTH: M GED: R2 M2 L1 SVP: 2 DLU: 89

640.685-078 SLOTTER OPERATOR (paper goods)
Tends machine that cuts slots in paperboard carton and partition blanks: Adjusts slotting and cutting knives in machine according to work order, using measuring tape and wrenches. Loads blanks into machine feed hopper and starts machine. Removes and stacks slotted blanks on pallets for bundling or forming.
GOE: 06.04.04 STRENGTH: M GED: R2 M2 L1 SVP: 3 DLU: 77

640.685-082 TIGHTENING-MACHINE OPERATOR (paper goods)
Tends equipment that tightens loosely coiled fly-catcher tape enclosed in tubes: Pushes loaded tape into revolving tapered steel arbor, fastened to drill press spindle, that winds tape into tight circle. Places tubes on tray for capping by other workers.
GOE: 06.04.04 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

640.685-086 TUBE SIZER-AND-CUTTER OPERATOR (ordnance)
Tends machines that die-size and cut paper tubes to specified diameter and lengths preparatory to processing into BB shot containers: Installs and adjusts sizing arbors, dies, cutting rolls, and spacing of pickup fingers, using screwdrivers and wrenches. Starts and observes machines for malfunction. Clears jams and removes scrap paper, using fingers or knife. Measures inside and outside diameters of tubes, using fixed gauges.
GOE: 06.04.04 STRENGTH: M GED: R2 M2 L1 SVP: 3 DLU: 77

640.685-090 BAND-SAW OPERATOR (paper goods)
Tends bandsaw that cuts or slots sheets of paperboard for box blanks or partitions: Reads work order for specifications of box blanks, partitions, or pads. Stacks sheets of paperboard on work surface of bandsaw, squares edges of sheets, and fastens sheets together, using clamps. Marks top sheet of stack according to specifications, using ruler and marking pencil. Presses button to activate bandsaw, and pushes stacks of paperboard against blade, following markings on top sheet to cut out box blanks, partitions, or pads. Places box blanks, partitions, or pads on pallets for further processing.
GOE: 06.04.04 STRENGTH: H GED: R2 M2 L2 SVP: 4 DLU: 86

640.686-010 ROTARY-CUTTER FEEDER (paper & pulp)
Performs any combination of following tasks in slitting paper: Places shaft in core of paper roll, using jack lift. Lifts roll onto feed cutter rack, using hoist, and fastens collars on shaft with wrench to secure roll in position. Positions *layboy* guide stops and stacking paddles to facilitate aligning and stacking sheets, using rule and wrench. May place skids under layboy and remove full skids, using jacklift truck.
GOE: 06.04.04 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

640.686-014 SLOTTER-OPERATOR HELPER (paper goods) alternate titles: partition-slotter helper
Assists SLOTTER OPERATOR (paper goods) to operate machine that cuts slots in paperboard carton and partition blanks. Removes slotted blanks from discharge end of machine and stacks them on pallets. Marks stacks with identifying information. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 06.04.26 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

640.687-010 ROLL EXAMINER (paper & pulp)
Examines paper winding on reel for defects, such as spots, holes, and wrinkles, and inserts strip of paper in roll to flag defects for removal at cutting and rewinding machine.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

640.687-014 SPIRAL-TUBE-WINDER HELPER (paper goods) alternate titles: spiral-winding-machine helper; winder helper
Assists SPIRAL-TUBE WINDER (paper goods) 640.682-022 to fabricate paper cores or tubes: Inspects tubes, ejected from winding machine, for defects, such as excess glue and open seams. Wraps cord around specified number of tubes and ties tubes into bundles. Loads tubes on truck or stacks them on floor. Mounts new reels of paper on machine spindle, using hoist, assists in installing cutting saw and other machine parts, and fills glue reservoir. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 06.04.26 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 78

641 FOLDING, CREASING, SCORING, AND GLUING OCCUPATIONS

This group includes occupations concerned with folding paper, pasteboard, and related materials to desired shapes and angles; creasing the material or cutting part way through it with the aid of scorers; and applying glue or other adhesive substances to it.

641.380-010 ENVELOPE-FOLDING-MACHINE ADJUSTER (paper goods)
Sets up, adjusts, and maintains battery of automatic machines that make envelopes from die-cut blanks or rolls of paper: Installs gears, plungers, and rollers onto machine and turns setscrews to adjust feeding, folding, gumming, sealing, and glassine applying mechanisms according to type and size of envelopes being made, using handtools. Operates machine for trial run and measures dimensions of first piece with rule to ensure conformance to specifications. Observes operation of machines to detect malfunction. Disassembles machines to repair or replace broken or worn parts, using handtools or power tools.
GOE: 06.01.02 STRENGTH: M GED: R3 M2 L2 SVP: 7 DLU: 79

641.562-010 CORRUGATOR OPERATOR (paper goods) alternate titles: corrugated-combining-machine operator
Sets up and operates machine to corrugate and face paperboard to form corrugated paperboard material for containers: Positions rolls of paperboard on machine feedrack, using hydraulic hoist. Threads paperboard through feed, tension, corrugating, and gluing rollers, and fills glue reservoirs. Starts machine and turns dials, wheels, and valves to adjust machine running speed, tension on pressure rolls, temperature of drying belt, and to synchronize speed of feed rolls. Records production data from yardage indicator. May operate machine that corrugates and combines three sheets and be designated Double-Facing-Corrugating-Machine Operator (paper goods); or two sheets and be designated Single-Facing-Corrugating-Machine Operator (paper goods). May operate machine to line paperboard with paper only and be designated Board-Lining-Machine Operator (paper goods).
GOE: 06.02.04 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

641.662-010 BOX-SEALING-MACHINE OPERATOR (paper goods)
Sets up and operates machine to spray and dry adhesive onto box blank flaps to make self-sealing boxes: Positions and secures micro-switches in spray chamber to regulate duration of spraying action, according to size of box, using wrench. Adjusts spray unit controls to regulate mixture, intensity, and spread of adhesive on box flaps. Turns crank to position top and side feed guides to hold box blanks in position during spraying and drying process. Opens petcock to start flow of adhesive to spray unit and flips switch to activate conveyor and dryer. Feeds box blanks into machine and observes machine operation to detect malfunction. Adjusts machine controls to correct defective spraying or drying of adhesive.
GOE: 06.02.04 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 77

641.662-014 TUBE-MACHINE OPERATOR (paper goods) alternate titles: tube maker; tube-making-machine operator
Operates machine to automatically form paper into tubing for making bags: Threads paper from parent roll through rollers and guides and tapes end to previous roll. Adjusts guides, folding devices, and cutting blade according to size and thickness of bag to be made, using handtools. Turns valve to regulate flow of glue. Starts machine and observes operation to ensure uniform folding, gluing, cutting, or rewinding of tubing. Adjusts machine to correct malfunctions.
GOE: 06.02.04 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

641.682-010 BLANKET-WINDER OPERATOR (paper goods)
Sets up and operates machine to glue together continuous sheets of paper to form sheet of specified width: Positions feed guides, feed rollers, and glue pickup rollers on machine shafts according to job order and turns setscrews to secure guides and rollers in place, using handtools. Slides rolls of paper on unwind shaft and mounts shaft on feed end of machine, using hoist. Fills glue tanks with glue. Threads paper between feed guides, over tension bar, over glue pickup roller, and onto rewind roller. Slides empty core on rewind shaft and positions shaft on rewind roller, using hoist. Turns setscrews to lower or raise guide that presses paper against glue pickup roller to control quantity of glue transferred to paper. Starts machine and adjusts controls to regulate machine feed, glue application, tension of paper, and tension of rewind roller. Inspects paper and rolls for uneven glue application, uneven winding, and other machine malfunctions and verifies width of processed paper, using rule. Removes completed roll from machine, using hoist.
GOE: 06.02.04 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

641.682-014 GLUING-MACHINE OPERATOR, AUTOMATIC (print. & pub.)
Sets up and operates machine that automatically glues together specified number of paper sheets, with each sheet protruding equal distance beyond next one, for use as business forms: Moves guides, suction mechanisms, cams, gears, and glue pins to regulate machine according to width and number of sheets glued, and number of places glue is deposited. Loads feeding mechanism with paper sheets, starts machine, and observes spacing and feeding of sheets to ensure that finished assembly meets specifications. Stops machine and removes paper when jams occur.
GOE: 06.02.20 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

641.685-010 BENDER, MACHINE (paper goods) alternate titles: bending-machine operator
Tends machine that folds blanks along scored lines to form boxes: Adjusts machine guides and folders for specified size box. Feeds scored and cornered box blanks into machine that folds them.
GOE: 06.04.04 STRENGTH: L GED: R2 M2 L1 SVP: 3 DLU: 77

641.685-014 BOARD-LINER OPERATOR (wood, container)
Tends machine that glues paper lining onto wooden boards for use in manufacture of lined boxes, such as certain types of cigar boxes: Clamps roll of paper on reel of lining machine and threads paper through guide rollers and glue applicator. Adjusts pressure rollers to accommodate thickness of board to

be lined. Starts machine and lays board on conveyor belt to feed mechanism that rolls and presses glued liner paper onto board, cuts off paper at end of board, and drops lined board in stacking bin.
GOE: 06.04.20 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

641.685-018 BOX-LINING-MACHINE FEEDER (paper goods)
Tends machine that automatically glues linings to interior of boxes: Mixes glue and water in electrically heated tray of automatic gluing mechanism. Starts machine and conveyor that automatically feeds box to machine. Centers glued lining over opening in metal plate and depresses pedal to lower lining ram through opening to force lining into box.
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

641.685-022 CARTON-FORMING-MACHINE OPERATOR (any industry)
Tends machine that forms and glues flat blanks or continuous roll of paperboard into finished cartons for packing merchandise: Adjusts forming bars to accommodate size of box to be shaped, using handtools. Fills glue pots with adhesive and positions rollers to dispense glue onto paperboard. Loads feeding magazine with blanks, or mounts roll of paper on machine standard and threads paper to feeding mechanism and starts machine. Observes machine operation to detect malfunction. May load machine with roll of waxed, parchment, or other paper used to line cartons. May mount roll of metal strip to form cutting edge on cartons. May stamp data with handstamp or attach automatic stamping device.
GOE: 06.04.04 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 81

641.685-026 CARTON-FORMING-MACHINE TENDER (paper goods)
Tends one or more machines that automatically cut, glue, and form cartons or caddies from pasteboard rolls for kitchen, penny, and book matches: Rolls pasteboard to machine, positions on letoff rack, and threads end of pasteboard strip into machine. Starts and observes machine operation and corrects malfunctions, such as improper forming, glue flow, or pasteboard tension, using handtools. Observes finished cartons as they drop from forming machine into rotating hopper, then into gravity feed chute, to prevent jamming. May lift tote box of finished cartons and dump cartons into feed hopper.
GOE: 06.04.04 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

641.685-030 CHIP-APPLYING-MACHINE TENDER (paint & varnish; print. & pub.) alternate titles: chip applier; mounting-machine operator
Tends machine that cements color samples of coated cut paper (chips) to color card display sheets or folders: Loads specified size, type, and color of chips into feeder racks on machine according to written specifications or sample color card. Fills reservoir with liquid adhesive and stacks printed color card blanks on roller feed of machine. Starts machine and observes cementing of chips on blanks to form color card display sheets or folders. Notifies supervisor of malfunctions, such as poor alignment of chips, jammed paper, or mechanical failures.
GOE: 06.04.04 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

641.685-034 COVER STRIPPER (paper goods) alternate titles: box-covering-machine operator; stripping-machine operator; wrapping-machine operator
Tends machine that glues and winds strips of paper around paperboard boxes to form decorative and protective covering: Pours specified amounts of glue and water into glue reservoir. Positions roll of paper on holder and threads end of paper through guides and gluing rollers of machine. Places box on form attached to machine spindle and aligns and presses end of glued paper to side of box. Presses pedal to rotate box to wind paper around box and automatically cut paper after one revolution. Smooths paper on sides of box as it is wound to prevent wrinkling. May turn under excess paper at top and bottom of box.
GOE: 06.04.04 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

641.685-038 DOMER (paper goods)
Tends machine that shapes box tops: Sets box top on machine table (anvil) and presses pedal that lowers die onto box top to shape it. May adjust machine and change shaping parts (dies) to accommodate different styles of boxes.
GOE: 06.04.04 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

641.685-042 ENDING-MACHINE OPERATOR (paper goods)
Tends machine that glues ends on cardboard boxes or containers: Adjusts box form on machine and stacks ends in machine feedrack. Fills glue reservoir and starts machine. Bends scored blank around box form and presses pedal to position and glue end or ends on box. Stacks boxes on table for wrapping. May be designated according to machine operated as Double-Ending-Machine Operator (paper goods); Single-Ending-Machine Operator (paper goods).
GOE: 06.04.04 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

641.685-046 EXTENSION EDGER (paper goods) alternate titles: flanging-machine operator; french-edge operator
Tends machine that glues oversized piece of cardboard (extension piece) to box top or bottom to form decorative protecting edge or flange around box: Loads cardboard pieces into machine feed hopper, fills glue reservoir, and starts machine. Positions formed box on block and presses pedal to activate machine that glues piece onto box. Removes box from machine and stacks on pallet for wrapping.
GOE: 06.04.04 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

641.685-050 FOLDING-MACHINE FEEDER (paper goods)
Tends machine that folds paper goods, such as booklets, pamphlets, notebooks, paper sheets, and manila folders: Turns handwheel to adjust folding slot opening and adjusts backstop according to sample, using rule and wrench. Starts machine and moves lever to engage clutch that activates folding blade and discharge conveyor rolls. Feeds items against backstop of machine, synchronizing feeding with action of folding blade. Removes folded items from discharge table and stacks them on pallets. May rub folded edge with wooden block to crease it. May handfold multiple sheets of paper that exceed machine capacity.
GOE: 06.04.04 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

641.685-054 FOUR-CORNER-STAYER-MACHINE OPERATOR (paper goods) alternate titles: quad stayer; staying-machine operator
Tends machine that folds and tapes corners of cardboard box blanks to form containers: Bolts box form to machine ram, using wrench, and adjusts walls of well to correspond to size of box form. Places reels of tape on machine feedrack and threads tape through feed and moisture rolls. Starts machine and loads scored box blanks into automatic feedrack. Examines boxes to detect defects as they are ejected from machine and stacks boxes on pallets or in bins. May tend wrapping machine that glues wrappers onto boxes [WRAPPING-MACHINE OPERATOR (paper goods)].
GOE: 06.04.04 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

641.685-058 LINER-MACHINE OPERATOR (paper goods)
Tends machine that glues paper over cardboard container blanks and cuts covered blanks to specified length: Spaces feed and gluing rollers according to dimensions of blanks to be covered and adjusts position of end shears that cut covered blanks to specified length, using handtools. Pours glue into machine reservoir, moves lever to increase or decrease temperature of gluing rollers and threads paper from roll through guide and gluing rollers. Starts machine and feeds cardboard blanks into machine that glues paper over blanks and cuts them to specified length. May mix glue solutions.
GOE: 06.04.04 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

641.685-062 PAPER-CONE-MACHINE TENDER (paper goods) alternate titles: body-rolling-machine tender
Tends machine that automatically forms paper *cones* from precut blanks: Loads blanks into feed hopper of machine and fills glue reservoir. Starts machine that forms blanks into cones and glues seams. Inspects paper cones for obvious defects as they are discharged from machine and discards defective cones.
GOE: 06.04.04 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

641.685-066 PATCH-MACHINE OPERATOR (paper goods) alternate titles: window-machine operator
Tends machine that glues transparent cellophane or acetate paper over precut windows in envelope or paperboard carton blanks: Replenishes glue reservoir and fills feed chute with precut transparent strips. Loads blanks in automatic feedrack and starts machine, or feeds blanks singly into machine. Removes jammed blanks from rollers, and inspects envelopes or cartons to detect defects in cutting and gluing. May tend machine equipped with roll of transparent material that cuts material into strips before gluing them to envelope or carton blanks.
GOE: 06.04.04 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

641.685-070 SCORER (paper goods)
Tends machine that scores cardboard blanks along lines where they are to be folded or cut to form boxes or containers: Positions scoring disks on shaft, according to work order specifications, turns setscrew to secure them in place, and turns wheel to adjust pressure on disks, using handtools. Starts machine and loads blanks into hopper or pushes blanks into scoring roll by hand. Removes scored blanks and stacks them on pallets. May score blanks one direction and be designated Scorer, Single (paper goods); or score blanks two directions and be designated Scorer, Double (paper goods).
GOE: 06.04.04 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

641.685-074 SEALING-MACHINE OPERATOR (paper goods)
Tends machine that applies sealing glue, such as dextrin or latex, to envelope flaps and dries them by passing envelopes under heat element: Fills glue reservoir, starts and regulates burners in drying unit, and loads automatic feedrack with envelopes. Observes machine operation and examines envelopes to detect malfunctioning in feeding, gluing, or drying process. Adjusts rollers to regulate glue flow, and turns rheostat to synchronize rate of envelope feed with glue applicator. Removes jammed material from rollers.
GOE: 06.04.21 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

641.685-078 SLIDE-MACHINE TENDER (fabrication, nec)
Tends machine that folds and glues paperboard sheets to form match slides, and applies friction paint (striking material): Fills glue and friction paint reservoirs, using dipper. Loads stack of paperboard sheets into feed mechanism and starts machine. Observes completed slides as they pass on conveyor to detect defective folding, gluing, and friction paint application. Adjusts rollers that apply friction paint and glue, using handtools.
GOE: 06.04.04 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

641.685-082 SPOOL MAKER (paper goods)
Tends machine that presses glued cardboard tubes and disks to form gift wrap ribbon spools: Places cardboard disk endpieces into slots on sides of machine vise. Dips ends of cardboard tube in glue and places tube between disks in vise. Depresses pedal to press disks and tube together to form spool.

GOE: 06.04.04 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

641.685-086 STRING-TOP SEALER (paper goods)
Tends machine that seals string in top of plastic produce bags: Places bag on machine mandrel and positions string on bag with ends under holding clip. Depresses pedal that folds and seals hem around string at top of bag. Removes bag from mandrel and places it in carton. May examine hem for defective sealing.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

641.685-090 STRIPPING-MACHINE OPERATOR (paper goods) alternate titles: binder operator
Tends machine that glues fabric strip over back edge of unbound paper products, such as legal tablets, notebooks, and ledger paper: Turns handwheel to adjust machine-head pressure plate to thickness of item being processed. Places roll of gummed tape on reel and threads end through feed guide and rolls. Turns screws to adjust tension springs that bring pressure on tape to facilitate sticking, using wrench and screwdriver. Starts machine and feeds items into machine feed conveyors. Stacks completed product on skids.
GOE: 06.04.04 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

641.685-094 VALVING-MACHINE OPERATOR (paper goods)
Tends machine that forms opening (valve) in paper bags through which loose materials, such as cement, sugar, lime, fertilizers, and sand are poured into bag: Positions unsewed paper bag on machine bed between guide arms. Depresses pedal or moves lever to start machine that automatically creases and folds bottom of paper bag to form valve, and discharges it onto conveyor. May tend sleeve machine that automatically cuts and glues strips of paper (sleeves) used to close valves of filled bags [SLEEVER (paper goods)]. May tend machine that forms valve and sews ends of bags and be designated Combination Valving-And-Sewing-Machine Operator (paper goods).
GOE: 06.04.04 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

641.685-098 WRAPPING-MACHINE OPERATOR (paper goods) alternate titles: covering-machine operator
Tends wrapping machine that glues wrappers onto box tops or box bottoms by either of following methods: (1) Places box parts on glued wrapper and positions them under plunger of machine. Presses pedal to lower plunger that forces box part and wrapper down past series of brushes that seal wrapper onto box part. (2) Positions box parts onto glued wrappers conveyed by belt that feeds box parts into machine that smooths wrapper around box. May tend four corner stayer machine that folds and tapes corners of cardboard box blanks to form containers [FOUR-CORNER-STAYER-MACHINE OPERATOR (paper goods)]. May tend power shear that cuts sheets of paper to specified dimensions to form wrappers [CUTTING-MACHINE TENDER (any industry)].
GOE: 06.04.04 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

641.686-010 BLANKET-WINDER HELPER (paper goods)
Assists BLANKET-WINDER OPERATOR (paper goods) to operate machine to glue together continuous sheets of paper to form sheet of specified width: Slides rolls of paper on unwind shaft and mounts shaft on feed end of machine, using hoist. Slides empty core on rewind shaft and positions shaft on rewind roller, using hoist. Assists operator to thread paper through machine. Fills glue tanks with glue. Removes completed roll from machine, using hoist. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 06.04.04 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

641.686-014 CARTON-FORMING-MACHINE HELPER (any industry)
Assists CARTON-FORMING-MACHINE OPERATOR (any industry) to shape, form, and glue flat blanks or continuous roll of cardboard or paperboard into finished cartons: Removes and stacks completed cartons from discharge end of machine. Counts number of completed cartons and compares with production order to verify completion of order. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 06.04.04 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

641.686-018 CORRUGATOR-OPERATOR HELPER (paper goods)
Assists CORRUGATOR OPERATOR (paper goods) by performing any combination of following tasks: Inserts spindle through core of roll and adjusts collars to center roll on spindle. Attaches electric hoist hooks to spindle, hoists roll onto machine feedrack, and turns wingnuts to fasten clamps over ends of spindle. Splices end of new roll to end of spent roll, using tape. Mixes starch powder with water to form adhesive, according to formula, and fills glue reservoirs. Performs other tasks as described under HELPER (any industry) Master Title.
GOE: 06.04.26 STRENGTH: H GED: R2 M2 L1 SVP: 2 DLU: 77

641.686-022 LINER-MACHINE-OPERATOR HELPER (paper goods)
Assists LINER-MACHINE OPERATOR (paper goods) in gluing paper over cardboard container blanks: Slides steel shaft through roll of liner paper and secures it in shaft supports of liner machine. Threads liner paper through guide rollers and into feeding mechanism of machine. Keeps adequate supply of cardboard sheets on feeding table and removes lined cardboard sheets from machine. Fills glue reservoir of liner machine with glue. Cleans glue roller and glue pan with solvent solution. May assist in adjusting machine. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 06.04.04 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

641.686-026 PAPER-BAG-PRESS OPERATOR (paper goods)
Feeds paper bags into rolls of pressing machine to complete sealing of prepasted seams and bottom folds.

GOE: 06.04.04 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

641.686-030 SCORER HELPER (paper goods) alternate titles: scoring-machine-operator helper
Feeds sheets of cardboard or paperboard into guide of scoring machine that scores (creases) sheets used to form box blanks. Removes scored blanks from discharge end of machine and stacks them on pallets. May adjust scoring knives, feed guides, and rollers under specific instructions from SCORER (paper goods). May measure scored blanks for conformity to specifications, using measuring tape.
GOE: 06.04.04 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

641.686-034 SLEEVER (paper goods)
Reinforces paper bag openings (valves), performing any of following tasks: Feeds paper sheets into machine that creases paper along one side and deposits glue along creased edge. Opens valved corner with one hand, grasps sleeve with other, and inserts sleeve into valve. Presses bag by hand to refold valve.
GOE: 06.04.04 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

641.686-038 TUBE-MACHINE-OPERATOR HELPER (paper goods) alternate titles: tuber helper
Assists TUBE-MACHINE OPERATOR (paper goods) to operate machine that forms paper into tubing for making bags: Inserts shaft into core of parent paper roll, and centers it with steel collars to secure roll, using handtools. Lifts and mounts roll on machine, using electric hoist. Splices end of new roll to previous roll with tape. Assists operator to thread paper through machine and make adjustments to guides, folding devices, and cutter blade. Replenishes glue reservoirs and cleans glue pumps. Counts tubes at start of operation to confirm tally of automatic counter. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 06.04.04 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

641.687-010 BOX BENDER (paper goods)
Folds cardboard box blanks along scored lines preparatory to corner staying process. Stacks folded blanks on worktable.
GOE: 06.04.26 STRENGTH: M GED: R1 M1 L1 SVP: 1 DLU: 77

641.687-014 BOX-SEALING INSPECTOR (paper goods)
Inspects band of adhesive on self-sealing box blank flaps to detect irregular width and faulty application: Removes box blanks from discharge end of box-sealing machine. Examines flaps to determine width of adhesive band and feels band to determine thickness of adhesive application. Tests strength of adhesive by sealing sample box blank flaps together and pulling them apart to determine force required to break seal. Notifies BOX-SEALING-MACHINE OPERATOR (paper goods) to stop machine when jamming occurs or to adjust machine controls to correct faulty adhesive application. Counts and stacks inspected blanks on conveyor and pushes stacks down conveyor for bundling.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

649 PAPERWORKING OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with shaping, cutting, scoring, joining, and otherwise machining paper and paper products.

649.130-010 SUPERVISOR, PAPER PRODUCTS (paper goods)
Supervises and coordinates activities of workers engaged in setting up and operating machines that cut, wind, fold, crease, drill, score, slit, tape, glue, sew, corrugate, and emboss paper and paperboard to form paper products, such as boxes, cartons, bags, napkins, tissue, envelopes, folders, cards, and tablets: Reads work order and schedules production according to machine capacities and customer requirements. Assigns duties to workers according to production schedule. Inspects sample product to ensure conformance to work order specifications. May train new workers. May set up and adjust machines. May inspect machines for malfunction or worn parts. May repair machines. May requisition materials and supplies. May supply workers with production materials. May operate machine in worker's absence. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 79

649.361-010 PATTERNMAKER, ENVELOPE (paper goods)
Draws patterns and prescribes manufacturing specifications for envelopes, compiling required data from customer orders, machine capacities, and knowledge of envelope manufacturing: Computes size, number, and type of paper sheets needed to fill order, using trigonometry, and knowledge of paper sizes and paper cutting machines. Sketches layout and dimensions of envelope on cardboard, using ruler, square, and other drawing instruments. Selects machines, dies, tools, and compiles machine setup data for such operations as paper and die cutting, machine and hand folding, printing, paneling, and attaching fastening devices, utilizing knowledge of machines, tools, and equipment. Determines sequence of manufacturing operations, utilizing knowledge of types and capacities of available machines, and lists such data on layout card.
GOE: 05.03.02 STRENGTH: L GED: R4 M4 L3 SVP: 7 DLU: 77

649.367-010 INSPECTOR, PAPER PRODUCTS (paper goods) alternate titles: bag inspector; quality-control inspector
Inspects paper and paperboard products during corrugating, laminating, printing, cutting, scoring, coating, forming, sealing, and packaging processes to en-

sure adherence to plant quality standards and work orders: Examines product for defects, such as blisters, wrinkles, improper forming and sealing, glue spots, printing overlap, and color distortions. Measures dimensions and thickness of product, using tape measure and automatic micrometer. Weighs coated and uncoated products, calculates weight of coating, and records weight data on inspection report. Tests mullen (burst quality of paper) and crush qualities of paper and paperboard, using mullen and crush tester, and records test results on inspection report. Spot-counts number of articles in bundle or shipping container to verify accuracy. Examines rejects to determine those that can be salvaged and routes unusable material to scrap baler. May be designated according to product inspected as Paper-Bag Inspector (paper goods); Tube Inspector (paper goods); or according to phase of process as Assembly Inspector (paper goods).
GOE: 06.03.01 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 78

649.380-010 MACHINE SET-UP OPERATOR, PAPER GOODS (paper goods)

Sets up and adjusts machines that convert, saw, corrugate, band, wrap, box, stitch, form, or seal paper or paperboard sheets into products, such as toilet tissue, towels, napkins, bags, envelopes, tubing, cartons, wax rolls, and containers, according to specifications, by any combination of following tasks: Adjusts rolls, guides, and chutes to accommodate type of paper or paperboard fed from parent rolls or flat stock from automatic feedracks, using handtools. Measures, spaces, and sets saw blades, cutters, and perforators, according to product specifications, using rule, thumbscrews, and wrenches. Installs printing attachment to machine and makes adjustment for clarity of print. Threads wire through stitching head and synchronizes speed for spacing stitches. Installs or resets cutting dies according to work orders, using handtools. Operates machine for test run to verify adjustments and observes functioning of machine parts, such as gauges, elevator, belts, slip clutches, oil injectors, glue feeders, and electrical devices. Repairs or replaces defective parts. May be designated according to type of machine adjusted as Bag-Machine Set-Up Operator (paper goods); Gluing-Machine Adjuster (paper goods); Stitcher Set-Up Operator, Automatic (paper goods).
GOE: 06.01.02 STRENGTH: M GED: R3 M2 L2 SVP: 7 DLU: 79

649.487-010 INSPECTOR (paper & pulp)

Examines sample of paper sheets for defects according to quality control specifications: Measures dimensions of sheet with rule, folds sheet and aligns edges to verify squareness. Weighs sheet and compares weight with specification for kind and grade of paper. Fans stack of sheets to examine sheets for tears, soil, streaks, and shading and notifies supervisor of defects. Discards defective sheets or marks stack for reprocessing. Writes daily test reports.
GOE: 06.03.01 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

649.582-010 PARTITION-ASSEMBLY-MACHINE OPERATOR (any industry)

Operates machine that automatically fits precut cardboard sections together to form complete partitions for cardboard cartons, according to specifications: Installs and adjusts stripper bars, feed dogs, side and finger guides, back stops, and ejector bars on machine table, and receiving fingers and push bars on rotating partition assembling wheel, using rule, gauges, and wrenches. Adjusts timing gear settings to synchronize movement of partition sections from machine table into sections in assembling wheel, using wrench. Fills magazines with partition sections and starts machine. Observes feeding and assembling operations and adjusts machine to form partitions to specifications. Maintains production records.
GOE: 06.02.20 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

649.582-014 SIZING-MACHINE OPERATOR (ordnance)

Sets up and operates battery of machines to compress to size and impregnate paper tubes with linseed oil preparatory to processing into shotgun shell bodies: Selects and measures arbors and dies with micrometers and plug gauges to verify specified size. Installs arbors, arbor shanks, collets, dies, and die holders in machine, using handtools. Examines paper tubes for crushed or torn ends, verifies inside diameter periodically, using plug gauge, and dumps tubes into hopper. Turns valve to circulate oil through die holders and starts machine. Observes machine operation and adjusts oil flow that facilitates passage of tubes through sizing dies and impregnates tube exteriors to waterproof and stiffen them. Clears jammed tubes from dies, arbors, and feed channels, and blows out clogged oil lines with airhose. Replaces tube-filled baskets.
GOE: 06.02.18 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 77

649.665-010 SORTING-MACHINE OPERATOR (paper goods)

Inspects sheets of paper for processing defects, using sorting machine: Reads work order and notifies INDUSTRIAL-TRUCK OPERATOR (any industry) to move specified type and quantity of paper from storage area to machine elevator platform. Positions joggers and vacuum feeding mechanism according to size and type of paper, using handtools and ruler. Starts machine and pushes button to raise elevator platform to feed level. Inspects paper sheets moving over machine bed to detect defects and turns lever to eject defective sheets from machine. Notifies INDUSTRIAL-TRUCK OPERATOR (any industry) to remove skids of inspected paper and records production data, such as type paper, time, and quantity inspected.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

649.682-010 BOX-FOLDING-MACHINE OPERATOR (paper goods)

Sets up and operates machine to fold corrugated paperboard box blanks and to glue, stitch (staple), or tape edges to form boxes: Installs feed bars and adjusts guide assembly and folding mechanism according to box blank dimensions and work order specifications, using handtools. Fills glue reservoir, loads automatic stapler, or threads gummed tape through applicator. Stacks box blanks in feed mechanism, starts machine, and observes automatic feeding and folding of box blanks and gluing, stapling, or taping of edges to detect machine malfunction. Inspects sample completed box to verify conformance to work order specifications and adjusts machine controls to correct variations. May be designated according to type of machine used as Folder-Gluer Operator (paper goods); Folder-Stitcher Operator (paper goods); Folder-Taper Operator (paper goods).
GOE: 06.02.04 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 78

649.682-014 CYLINDER-DIE-MACHINE OPERATOR (paper goods) alternate titles: cutting-and-creasing machine operator

Operates cylinder press to score and cut paperboard sheets into box or container blanks: Installs specified chase (cutting and scoring die) on flat bed of machine, using handtools. Glues sheet of paperboard on machine cylinder, rotates cylinder by hand to press design of die in sheet, and cuts paperboard from around die impression on sheet, using knife, to form male portion of die. Starts machine and adjusts feed rollers or arms, and adjusts arms on automatic stacker, using handtools. Turns valves to regulate powder (talc) spray on cut-scored sheets. Measures cut-scored blanks to verify cutting and scoring dimensions with work order, using tape measure. May feed odd size paperboard sheets into machine by hand.
GOE: 06.02.04 STRENGTH: H GED: R3 M2 L2 SVP: 5 DLU: 78

649.682-018 DRILL-PRESS OPERATOR, ACOUSTICAL TILE (wood prod., nec)

Sets up and operates automatic horizontal multiple-spindle drill press to drill holes in insulation board to form acoustical tile: Removes machine headplate, using wrench and air hoist. Attaches specified template pattern to chuckplate, using screwdriver. Places drills into chuck, according to template pattern. Removes template and replaces machine headplate. Adjusts feed rolls, using gauge and wrench. Loads automatic feed magazine with tile and starts machine. Examines tile to verify that holes are clean cut and conform to depth and pattern specifications.
GOE: 06.02.09 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

649.682-022 EMBOSSER OPERATOR (paper goods) alternate titles: calender operator; roll-embosser operator

Sets up and operates machine to emboss designs on paper and plastics-coated textile and cut materials according to work orders: Positions material and pressure and engraved embossing rolls on machine frame, using hoist. Installs and adjusts cutting disks and fastens collars on shafts to secure rolls, using rule, wrench, and screwdriver. Threads material through rolls and around cutters, adjusts feed guides, and starts machine. Turns air valve to regulate pressure of pressing roll on embossing roll and turns handwheel to adjust tension on material. Observes feeding, embossing, and cutting of material, and makes adjustments. Scrapes dirt from pressing roll and cleans it with solvent. May adjust counterweight device or move lever or clutch to regulate pressure on rolls. May regulate flow of steam into rolls to counteract paper curling and to obtain desired depth of embossing and surface shine on paper. May tend winding machine to wind material onto rolls. May emboss paper between tinted rollers. May feed paper sheets into machine and be designated Sheeter Operator (paper & pulp).
GOE: 06.02.09 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

649.682-026 PLATEN-PRESS OPERATOR (paper goods) alternate titles: blanker-press operator

Sets up and operates automatic, platen-type cutting-creasing press to cut rolls of paperboard into carton blanks: Selects, installs, and adjusts specified chase (cutting-creasing die) on press bed, using handtools. Positions and attaches stripping cylinder on roller and turns wheel to adjust tension on rubberized backer roll. Mounts roll of paperboard on machine feed spindle, using hoist, and threads paperboard through feed, tension, and idler rollers. Starts machine and observes operation. Turns dials and wheels to synchronize machine speed with speed of feed rolls and to regulate pressure on feed rolls. Starts conveyor that transports broke to baling machine. Measures cut-scored blanks for conformity to specifications, using tape measure, and examines blanks for defects, such as wrinkles and tears. Adjusts machine to correct defects.
GOE: 06.02.04 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

649.682-030 SHELL-MACHINE OPERATOR (chemical) alternate titles: shell-house operator

Sets up and operates machine to make paper cartridge shells for dynamite and impregnate them with paraffin: Positions roll of paper on machine spindle and threads end of paper under shear plate and between rolls. Adjusts bottom crimper, rolls, and shear according to length and diameter of cartridge, using machinist's rule and wrenches. Pours melted paraffin into dispenser and activates heating element. Starts machine and removes formed and impregnated cartridges.
GOE: 06.02.09 STRENGTH: M GED: R3 M2 L1 SVP: 4 DLU: 77

649.682-034 SLITTER-CREASER-SLOTTER OPERATOR (paper goods)

Sets up and operates machine to slot, score, crease, and trim corrugated or plain paperboard sheets to form container blanks: Turns screws and moves picker feed bar and feed table guides to accommodate size of sheets. Positions slitting, scoring, and slotting dies by sliding dieheads along drive shaft over ma-

chine bed to obtain specified size blanks with prescribed depth and location of slots and creases. Stacks and aligns sheets against guide bar on feeder table. Presses lever to start automatic feed. Measures sample with rule to detect deviation in location of slots and creases.
GOE: 06.02.04 STRENGTH: M GED: R2 M2 L2 SVP: 4 DLU: 77

649.682-038 SLITTER-SCORER-CUT-OFF OPERATOR (paper goods)
Sets up and operates machine that slits, scores, and cuts sheets of plain, laminated, or corrugated paperboard to specified dimensions: Positions and fastens scoring and cutting disks on roller, according to specifications, and installs roller in machine, using handtools. Turns wheels to adjust cutter knives, align paper guides on *layboy*, and adjust pressure on slitting and cutting disks. Starts machine and synchronizes speed of traveling cutoff knives with speed of machine feed. Verifies dimensions of cut-scored blanks with work order, using tape rule. May cut samples from sheets for testing. May operate machine that slits and cuts rolls of paper and be designated Slitter-And-Cutter Operator (paper & pulp; paper goods).
GOE: 06.02.04 STRENGTH: H GED: R3 M2 L2 SVP: 5 DLU: 78

649.682-042 TABLET-MAKING-MACHINE OPERATOR (paper goods) alternate titles: packer operator
Sets up and operates machine to cut rolls of paper into sheets and to print lines, glue, and punch holes to make paper tablets: Adjusts feed guides, cutting disks, and punch rams according to work order specifications. Mounts roll of paper on machine, using electric hoist. Threads end of paper through machine and fills ink and glue reservoirs. Starts machine and turns valves to adjust paper tension and flow of glue to paper. Observes machine operation to detect malfunction and inspects finished tablets to verify conformance to specifications. Records production information, such as quantity, type, and size of tablets produced on work order.
GOE: 06.02.04 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

649.682-046 TAG-PRESS OPERATOR (paper goods)
Sets up and operates machine to print, cut, and punch holes in paperboard to form paper tags and labels: Reads work order to determine type of setup required. Mounts paperboard roll on machine, using jack, and installs and adjusts specified printing plates onto machine bed, using allen wrench and rule. Mounts roll of reinforcing paperboard onto machine, threads end through stamping section and fills machine hopper with metal reinforcing grommets. Spreads specified color ink onto printing plate, using hand scraper, and fills ink reservoir. Adjusts angle of cutting blade, using allen wrench, and turns valves to adjust timing of cutting blades and punch to specifications. Starts machine and observes machine operation to detect malfunction and inspects completed tags or labels to verify compliance with work order specifications. Removes completed tags or labels from discharge end of machine, stacks specified number of tags into boxes, and stacks boxes on skid. Records production information, such as quantity and type of tags or labels produced on work ticket.
GOE: 06.02.04 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

649.685-010 AUTOMATIC-MACHINE ATTENDANT (paper goods) alternate titles: machine assembler
Tends automatic cutting, curling, crimping, capping, labeling, or tubing machines that assemble paper products, such as spools and tubes: Presses pedals, buttons, and switches or turns valves to start and stop machines and auxiliary devices, such as glue heaters, curling heads, and air ejectors. Dumps tubes, caps, labels, covers, spool shields, or paper strips into dispenser, feeds them onto conveyor, or positions them on mandrel. Pours glue into pots. Clears jams. May stack finished product on truck.
GOE: 06.04.04 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 79

649.685-014 BAG-MACHINE OPERATOR (paper goods) alternate titles: bag-making-machine operator
Tends machine that automatically measures, prints, cuts, folds, and glues, or seals plain or wax papers, polyethylene film, or cellophane to form bags: Threads materials from parent roll through guides and rollers to cutters, gluer, printer, folding device, or electric sealer. Starts machine, observes operation, and adjusts machine to ensure uniform shearing, printing, folding, gluing, or sealing of continuous roll of material into finished bags. May insert shaft into core of parent roll and secure with steel collars, using handtools, and mount roll onto machine, using hoist. May be designated according to material processed as Cellophane-Bag-Machine Operator (paper goods); Polyethylene-Bag-Machine Operator (paper goods); Waxed-Bag-Machine Operator (paper goods).
GOE: 06.04.04 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

649.685-018 BINDERY WORKER (paper goods)
Tends paperworking machines, such as corner cutter, embosser, scorer, stitcher, taper, gluer, punch press, and plastic index tab machine to fabricate office supplies, such as file folders, file dividers, index cards, and three-ring binders, from paper or paperboard stock: Positions stock against machine guides, starts machine, and depresses pedal to actuate specified machine. Manually folds and creases materials that exceed machine capacity. Collates printed file folders in numerical order to form set. Forms shipping boxes from flattened blanks and glues labels to box tops. Inspects finished product and places specified quantity and type into boxes according to packing instructions.
GOE: 06.04.04 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

649.685-022 BOTTOMING-MACHINE OPERATOR (paper goods)
Tends machine that automatically cuts, folds, and glues ends of tubes together to form bottoms in single or multiwall paper bags: Loads paper tubes into automatic feedrack, fills glue hopper, and starts machine. Observes machine operation, removes material caught in rollers to relieve jams, and spot-verifies processed bags to detect imperfections in cutting, folding, or gluing. Adjusts feed guides, rollers, and glue regulator, using handtools, to ensure conformity to specifications. May tend machine equipped with valving mechanism that automatically forms opening (valve) in top of bag and inserts sleeve in opening.
GOE: 06.04.04 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

649.685-026 CORE-CUTTER AND REAMER (paper goods)
Tends machines that cut, ream, and slot paper roll cores made of cardboard, fiber, or metal, according to work order specifications: Installs and aligns cutoff saw, reamer, and slot cutters in machines according to length and diameter of core, using rule and wrench. Starts machines and cuts core to length, using circular saw. Pushes core along feeder trough of reamer to ream out ends. Feeds core into cutters of slotting machine to cut slots in core ends. Inserts metal caps in ends of nonmetal cores to coincide with slots in cores, using hammer. May reclaim defective caps by removing them with cap puller and hammering out dents. May tend machines that cut and slot paper roll cores and be designated Core Cutter (paper & pulp).
GOE: 06.02.09 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

649.685-030 COUNTING-MACHINE OPERATOR (paper goods)
Tends machine that counts sheets of paper and inserts marker between sheets at specified interval: Positions skid of paper beside machine counting head, using handtruck. Raises paper at corner, using iron bar, and inserts wedge between skid and paper to fan edge of paper. Secures paper stack to skid, using clamp. Sets counter dial at zero and sets marker interval dial at specified number. Pushes button to move counting head into position against corner of stack and starts machine. Observes machine operation and makes adjustments to counting head to ensure accurate counting.
GOE: 06.04.04 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

649.685-034 DRILL-PUNCH OPERATOR (paper goods; print. & pub.)
Tends multiple-spindle drill press that drills holes in paper goods, such as notebook paper, booklets, envelopes, pamphlets, index cards, and other paper and printed products: Reads job specifications to determine spacing and dimension of holes to be drilled in paper items. Adjusts spacing of drills, positions of backstop and guides according to size of items to be drilled, using handtools. Presses button to start machine. Jogs stack of paper items to straighten and align edges. Positions stacks of paper items against backstop and end guides of machine table. Depresses pedal to raise stock or lower drills to cut holes in paper. Stacks drilled items on pallets. May replace dull drills, using handtools.
GOE: 06.04.04 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 79

649.685-038 EMBOSSING-MACHINE TENDER (paper goods) alternate titles: panel-machine tender
Tends machine that automatically embosses frame-like margin on edge of paper card blanks to form wedding and commercial cards: Loads stack of cards into machine feeder and starts machine. Observes machine operation to detect feeding and embossing malfunction. Inspects completed cards by fanning stacks to detect imperfections, such as dirt spots, dents, and nicks and stacks cards into boxes according to instructions on work ticket.
GOE: 06.04.04 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

649.685-042 ENVELOPE-MACHINE OPERATOR (paper goods) alternate titles: envelope-fold operator; folder, machine
Tends machine that forms plain and window envelopes from paper rolls or precut blanks: Loads stack of blanks into rack of feed mechanism or positions roll of paper on machine rack, using hoist, and threads paper (web) through machine. Starts machine and observes progress of blanks and web through cutting, gluing, folding, and drying units. Pushes button to stop machine in case of malfunction. Fans handful of envelopes to inspect them for quality of folding, sealing, and glue application, and packs them in boxes. Counts pack of envelopes periodically to verify accuracy of mechanical counter. Pours glue into machine container to replenish supply. Wipes or washes glue from machine at end of shift. May adjust glue applicator and drying and pressing rolls. May be designated according to type of machine tended as Plunger-Machine Operator (paper goods); Rotary-Envelope-Machine Operator (paper goods); Side-Seam-Envelope-Machine Operator (paper goods). May tend machine that forms envelopes used in cover of books (book pockets) and be designated Book-Pocket-Machine Operator (paper goods).
GOE: 06.04.04 STRENGTH: M GED: R2 M1 L2 SVP: 4 DLU: 79

649.685-046 FOLDING-MACHINE OPERATOR (paper goods) alternate titles: multifold operator
Tends machines that automatically cut continuous rolls of paper into sheets of specified length, and fold and interlock them to form paper towels, toilet tissue, and napkins for dispensers or to package: Threads paper from parent roll through rollers and guides and tapes end to that of previous roll. Installs embossing rolls, and adjusts tucker, gripper, and feed rolls according to grade of paper and work order. Starts machine and observes operation to ensure uniform dispensing of glue, cutting, perforating, and folding of product. Lubricates machine and makes minor repairs, using handtools. May be designated according to type of machine as Double-Fold-Machine Operator (paper goods); Single-Fold-Machine Operator (paper goods); or according to article folded as Folded-Towel-Machine Operator (paper goods); Napkin-Machine Operator (paper goods).

GOE: 06.04.04 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 78

649.685-050 HANDLE-MACHINE OPERATOR (paper goods) alternate titles: paper-cup-handle-machine operator

Tends machine that die-cuts paper cup handles from roll of paper stock and glues handles onto cups: Mounts roll of paper on machine, using hoist. Fills glue reservoir and stacks cups onto machine feeding mechanism. Starts machine and observes machine operation to detect malfunction. Removes stack of finished cups from machine and places them into packing sleeves. Inserts full sleeves in packing carton.
GOE: 06.04.04 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

649.685-054 KNOTTING-MACHINE OPERATOR (paper goods)

Tends machine that automatically prints, strings, and knots paper tags: Mounts rolls of string and paper or card stock in machine. Starts machine and examines completed tag to detect machine malfunction. Stops machine to clear jams. Ties finished tags into bundles. May tend machine that automatically threads and fastens string to paper tags and be designated Stringing-Machine Operator (paper goods); or tend machine that threads and fastens wire to paper tags and be designated Wiring-Machine Operator (paper goods).
GOE: 06.04.04 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

649.685-058 LACE-PAPER-MACHINE OPERATOR (paper goods)

Tends machine that embosses and pierces paper strips to form lace paper doilies, place mats, and similar decorative articles: Loads roll of paper strip on machine, using chain hoist. Changes dies and cutters on machine and adjusts tension and pressure on feed rolls. Starts machine and inspects sample run for level of embossing, arrangement of piercing, and accuracy of cutoff, and corrects faulty machining.
GOE: 06.04.04 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

649.685-062 LAUNDRY-BAG-PUNCH OPERATOR (paper goods)

Tends machine that perforates paper laundry bags and affixes reinforcing paper eyelets: Threads gummed paper over die. Feeds bags singly into machine slot and depresses lever to lower punch that punches hole in bag and cuts out and fastens eyelet around hole. Inserts drawstrings through eyelets and piles finished bags on table for inspection.
GOE: 06.04.04 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

649.685-066 LAYBOY TENDER (paper & pulp; paper goods; print. & pub.) alternate titles: jogger operator; sheeter helper

Tends *layboy* that automatically stacks, aligns, and records count of paper sheets at discharge end of paper cutters, printing presses, and ruling and paper-making machines. Inspects sheets as they fall into layboy for defects, such as spots, holes, wrinkles, cockled edges, and dirt, and discards defective sheets. Smooths sheets by hand to eliminate air pockets. Stops and starts machine in emergency. May fan sheets or turn up corners to facilitate inspection. May count sheets and insert tabs to mark off reams if layboy does not have automatic counter and tabber. May align sheets by tapping edges by hand.
GOE: 06.04.04 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

649.685-070 MACHINE OPERATOR, GENERAL (paper goods) alternate titles: clasp machine operator; tension machine operator

Tends automatic and semiautomatic machines that punch holes, trim or notch envelope ends, and affix clasps, reinforcing patches, and snap fasteners and string or wire ties to envelopes: Turns screws to adjust guides and stops of machines, such as clasp, eyeletter, patch, tension, and thumb cut to accommodate specified size envelopes, using handtools. Pours clasps, eyelets, snap fasteners, or other envelope parts into machine hoppers and mounts rolls of patching or reinforcing tape on machine spindles. Positions envelopes on feed bed or under operating heads of machines against guides and stops. Depresses hand or foot levers to actuate machines. Removes completed envelopes and packs them in carton or box.
GOE: 06.04.04 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

649.685-074 MATCHBOOK ASSEMBLER (fabrication, nec)

Tends machine that automatically cuts, scores, and folds printed paper strips and staples them to matchbook *combs* to form matchbooks: Places roll of matchbook cover strip on machine spindle and threads end through machine. Loads machine magazine with wire staples and starts machine. Inserts matchbook comb strips into slots on feed conveyor that conveys them to stapling unit that fastens cover to comb strip to form matchbook. Observes machine operation to detect malfunction. Removes finished matchbooks from bin and packs specified number into boxes.
GOE: 06.04.04 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

649.685-078 PAPER-CUP-MACHINE OPERATOR (paper goods)

Tends machine that automatically forms flat-bottomed paper drinking cups: Loads rolls of bottom and sidewall paper on machine. Threads ends of paper through rollers and forming guides, and starts machine that automatically forms paper into cups and glues seams. Periodically tests samples of cups for leaks. Places specified number of cups in tubes preparatory to packing.
GOE: 06.04.04 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

649.685-082 PARTITION-MAKING-MACHINE OPERATOR (paper goods)

Tends machine that cuts interlocking slots or notches in two strips of cardboard and automatically assembles strips at right angles to form multicell partition (divider) for cardboard container: Loads rolls of cardboard into machine feed reels and threads cardboard through guide rolls. Starts machine and observes operation of feeding, slotting, cutoff, and assembly mechanisms to detect malfunctioning. Examines assembled partitions at discharge chute and verifies conformance to specified dimensions, using go-not-go gauges. Replaces worn slotting punches and dull cutoff blades, using handtools. May assemble slotted strips by hand to form multicell partition for cardboard container.
GOE: 06.04.04 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

649.685-086 PATTERNMAKER, ACOUSTICAL TILE (wood prod., nec)

Tends machines that perforate, groove, and blast patterns on insulation board panels to form acoustical tile: Dumps sacks of ground walnut shell into hopper of blaster machine and moves controls to regulate flow of shell into blaster. Adjusts height of saws to control depth of cut, using gauge and wrench. Starts machines and conveyors, and spaces pattern templates on feed conveyor. Feeds panelboards into perforating machine, and observes perforated panels to ensure automatic positioning upon templates. Observes sets of panels and templates as they are conveyed into blaster machine to ensure that specified pattern or decorative design is imprinted upon panels according to template design.
GOE: 06.04.09 STRENGTH: M GED: R3 M2 L1 SVP: 4 DLU: 77

649.685-090 PERFORATING-MACHINE OPERATOR (print. & pub.)

Tends machine that perforates sheets of paper with lines of fine holes to facilitate tearing sheets: Installs perforating disks in machine and sets guides to size of sheet, using handtools. Starts machine and feeds sheets into machine, singly, or keeps feed table supplied with stacks of sheets if machine is fed automatically. Removes perforated sheets as they accumulate on discharge table of machine.
GOE: 06.04.04 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

649.685-094 PUNCHBOARD-FILLING-MACHINE OPERATOR (paper goods) alternate titles: stuffing-machine operator

Tends machine that inserts numbered paper cylinders in holes of punchboards: Places printed paper strips in tubular magazine and locks it in filling machine. Presses punchboard over pegs in plate of machine and moves lever to lower blade that cuts paper into strips and raises plate against teeth that stuffs them into punchboard holes.
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

649.685-098 RING-MAKING-MACHINE OPERATOR (paper goods)

Tends machine that automatically curls and cuts cardboard strips to make rings, such as those used in hat boxes: Mounts rolls of cardboard on machine reel and threads strip through steaming, curling, and cutting devices. Starts machine and gathers and packages ejected rings.
GOE: 06.04.04 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

649.685-102 SALVAGE WINDER AND INSPECTOR (paper goods)

Tends rewinder and identifies and cuts out defective sections of tape to salvage rejected rolls of paper tape: Places rubber belt on machine pullup to obtain desired speed ratio. Secures tape roll onto spindle and threads end of tape around takeup roll. Starts machine and observes tape winding onto roll, using knee and foot controls to regulate winding speed. Inspects tape for dry spots, excessive glue, creases, and holes. Cuts out defective areas, using scissors. Presses flat metal bars to each side of rough tape sections to smooth tape surface. Throws defective tape sections into trash bin. Removes tape rolls from machine and places rolls on cart for packing.
GOE: 06.03.02 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

649.685-106 SHOT-TUBE-MACHINE TENDER (paper goods)

Tends machines that crimp rolled paper tubes to form caps and press them onto ends of other tubes to make BB shot containers: Starts machines, places tubes on skipped spindles by hand, and removes damaged tubes or scrap paper, using wire hook. Removes completed caps from machine hopper, fills shaker frame with crimped caps from hopper and starts shaker machine to arrange caps crimped-side-down. [SHAKER-PLATE OPERATOR (ordnance)]. Examines caps and discards torn, flattened, grease-smeared, or malformed caps. Pushes caps into feeder tray, using T-shape pusher, and hangs loaded tray on gravity-feed station of repairer assembly machine. Notifies machine repairer of malfunction.
GOE: 06.04.04 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

649.685-110 STEEL-TIE ADJUSTER, AUTOMATIC (paper goods) alternate titles: tin-tie-machine operator, automatic

Tends machine that automatically cuts steel and paper strips to specified length, covers steel strip with paper, and glues covered steel strip to paper bag for use in sealing. Fills glue pot with paste and loads bags onto machine feed rack.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

649.685-114 STITCHER OPERATOR (paper goods) alternate titles: semi-automatic-stitcher operator

Tends machine that stitches (staples) edges of plain and corrugated paperboard box blanks to form boxes: Reads production order to determine number of stitches required, turns gauge to specified setting and starts machine. Folds box blank by hand along scored lines or removes folded box blank from folding machine and feeds blank into machine that stitches edges. Inspects completed boxes for defective stitching and records quantity, style, and grade of boxes in production log.
GOE: 06.04.04 STRENGTH: H GED: R2 M1 L1 SVP: 4 DLU: 77

649.685-118 TAG-MACHINE OPERATOR (paper goods) alternate titles: blanker operator

Tends machine that automatically makes shipping tags and file and index cards: Threads paper stock between guides that pass paper under printing roll, corner cutter, punch, eyeletter, and shears. Turns mechanical counter to zero. Starts machine that prints specified data on tag, trims corners, punches holes in end and reinforces hole with paper or metal eyelets, cuts tag or card to size, and records quantity produced. Examines ejected tags or cards for defects and notifies department supervisor of machine malfunction. Packs specified number of tags or cards in bundles or cartons for shipment. May adjust machine controls to omit specific machine operations when not required.
GOE: 06.04.37 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

649.685-122 TAPE-FASTENER-MACHINE OPERATOR (paper goods) alternate titles: tie fastener; tie-tape-machine operator

Tends machine that staples ribbon or string (tape) ties onto flaps of fiber folder: Winds ribbons or string on reel and cuts strands with shears to make lengths of tape according to size of folders [PAPER-REEL OPERATOR (paper goods)]. Adjusts fastening machine guides according to size of folder, using handtools. Fills feed magazine with staples and starts machine. Positions flaps of folders against guides and holds length of tape across envelope flap under machine ram. Depresses pedal to lower ram and staple tape to flap.
GOE: 06.04.04 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

649.685-126 TAPER OPERATOR (paper goods) alternate titles: semi-automatic-taper operator

Tends machine that tapes edges of corrugated paperboard box blanks to form boxes: Mounts roll of gummed tape onto machine and threads tape through feed and moisture applicator rollers and under cutoff knife. Turns petcock to start flow of water to applicator tray. Positions and secures cutoff knife microswitch, according to box dimensions, using handtools. Starts machine, folds blank along scored lines, and feeds folded blank into machine that tapes edges to form box. Observes machine operation to detect malfunction and inspects completed boxes to verify tape application according to specifications. Adjusts tape guides, water flow, or cutoff knife to correct faulty tape application.
GOE: 06.04.04 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

649.685-130 TABLET-MAKING-MACHINE-OPERATOR HELPER (paper goods)

Tends machine that cuts, rules, punches, binds, and stacks materials to produce looseleaf filler, tablets, and wire bound notebooks: Assists TABLET-MAKING-MACHINE OPERATOR (paper goods) 649.682-042 to set up machine. Presses buttons to activate hydraulic lift that positions rolls of paper in feed position. Pours powdered ink and water into container and mixes ingredients with hand stirrer. Loads backing and cover material on inserter platforms. Inspects finished products to determine required machine adjustments and eliminate machine malfunctions. Notifies MACHINE SET-UP OPERATOR, PAPER GOODS (paper goods) 649.380-010 of unresolved problems.
GOE: 06.04.04 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 86

649.686-010 BAG-MACHINE-OPERATOR HELPER (paper goods)

Assists BAG-MACHINE OPERATOR (paper goods) by feeding paper rolls into machine that automatically prints, cuts, folds, and glues roll of paper, polyethylene film, or cellophane to make finished bags: Inserts shaft into core of parent roll and secures it with steel collars, using handtools. Lifts and mounts roll on machine standard, using electric hoist. Tapes leading end of roll to end of previous roll. Replenishes glue and ink reservoirs. Assists BAG-MACHINE OPERATOR (paper goods) in making repairs and adjustments, using handtools. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 06.04.04 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

649.686-014 CARD DECORATOR (print. & pub.)

Tends machine that automatically glues decorative sparkle dust to greeting cards. Feeds greeting cards into machine. Changes dies according to size specified. Refills hoppers of machine with glue and sparkle dust.
GOE: 06.04.04 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

649.686-018 CYLINDER-DIE-MACHINE HELPER (paper goods)

Assist CYLINDER-DIE-MACHINE OPERATOR (paper goods) to operate cylinder press to score and cut paperboard sheets into box or container blanks: Obtains cutting die from storage according to work order and assists operator in aligning die on machine cylinder and fastening die to cylinder. Feeds flat paperboard stock into machine that scores and cuts stock to form box or container blanks. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 06.04.04 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

649.686-022 FINISHING-MACHINE OPERATOR (paper goods)

Feeds preformed bodies of paper cups into machine that automatically inserts plugs into lower ends to form bottoms, rolls tops to finish edges of cups, and ejects completed cups.
GOE: 06.04.04 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

649.686-026 PLATING-MACHINE OPERATOR (paper & pulp) alternate titles. plater

Feeds sheets into plating machine that impresses weave or grain finish into paper: Stacks linen and paper sheets in alternate layers and feeds sheets into rolls of plating machine to impress weave of fabric onto paper.
GOE: 06.04.04 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

649.686-030 SLITTER-CREASER-SLOTTER HELPER (paper goods)

Feeds and off bears machine that slots, scores, and creases corrugated or plain paperboard sheets to form container blanks: Aligns sheet against machine guides and feeds sheet into machine feed rolls. Removes completed container blanks from machine and stacks blanks onto skids. May assist SLITTER-CREASER-SLOTTER OPERATOR (paper goods) in setting up machine.
GOE: 06.04.04 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

649.687-010 PAPER SORTER AND COUNTER (paper & pulp) alternate titles: inspector and counter; overlooker; sorter

Sorts sheets of paper according to specified grade and examines them for defects, such as tears, cuts, roll marks and slime holes, and discards defective sheets. Counts and stacks acceptable sheets and inserts identification marker between reams. Segregates paper according to customer order and records amount and grade of separate orders.
GOE: 06.03.02 STRENGTH: L GED: R2 M2 L1 SVP: 2 DLU: 77

649.687-014 PAPER-CONE GRADER (paper goods)

Examines paper *cones* emerging from cone-making machines for defects. Places acceptable ones on racks and tosses defective cones in trash receptacle. May examine paper tubes and be designated Paper-Tube Grader (paper goods).
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

649.687-018 PAPER-PATTERN INSPECTOR (paper goods)

Examines tissue paper patterns for accuracy of cutting, perforating, and numbering.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

65 PRINTING OCCUPATIONS

This division includes occupations concerned with reproducing data or designs by mechanical transfer of ink or dye to the surface of materials with the aid of type, plates, rolls, and the like. Includes the preparation of type and plate for machines and mechanical bookbinding.

650 TYPESETTERS AND COMPOSERS

This group includes occupations concerned with assembling and setting type matter for printing by means of typesetting or composing machines. Includes linotype machines which assemble letters into lines and cast strips of type from type metal; monotype machines which compose type matter in separate letters; and phototypesetting machines which assemble and photograph mats of individual characters as a line of type on film or photographic paper. Occupations whose duties include substantial typing tasks concerned with cold type setting of type are included in Group 203.

650.132-010 SUPERVISOR, TYPESETTING (print. & pub.)

Supervises and coordinates activities of workers engaged in machine typesetting: Reads production schedule and plans work assignments according to setup and work load of individual machines. Examines proofs to verify conformance to work order specifications. Periodically verifies status of each job in progress in order to maintain production. Trains workers to operate typesetting machines. May operate typesetting machines as necessary. May coordinate setting of copy into type [COPY CUTTER (print. & pub.)]. May supervise workers engaged in phototypesetting and be designated Supervisor, Photocomposition (print. & pub.). Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 07.06.02 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

650.582-010 LINOTYPE OPERATOR (print. & pub.) alternate titles: composing-machine operator

Operates machine to cast complete lines of type from type metal and deposit them in galley in composed form for printing: Starts type-casting mechanism and adjusts marginal stops and gauge to regulate length and thickness of lines to be cast. Reads copy and presses keys of keyboard to select matrices of letters from magazine which are assembled into words. Moves lever to cast line and deposit it in galley when line is complete. Transfers lines of type, with copy, to composing or bank table for making proof copy. Sets new lines of type to correct errors as indicated on proofsheet. Places pigs of metal on feed chain of melting pot to replenish supply.
GOE: 07.06.02 STRENGTH: M GED: R4 M2 L3 SVP: 7 DLU: 81

650.582-014 MONOTYPE-KEYBOARD OPERATOR (machinery mfg.; print. & pub.) alternate titles: composing-machine operator; monotype operator

Operates machine to perforate *paper tape* used to control casting type: Clips copy containing instructions to copyholder. Selects and installs bank of keys to make specified size and style of type. Sets and locks scale for indicating spacing of words in line, adjusts line-length indicator, and installs roll of paper strip, threading end of strip through machine. Admits compressed air to machine. Tears strip loose from supply roll, attaches type-casting instructions to reel, and forwards reel for casting type.
GOE: 07.06.02 STRENGTH: L GED: R4 M2 L3 SVP: 6 DLU: 77

650.582-018 PHOTOCOMPOSING-MACHINE OPERATOR (print. & pub.) alternate titles: typesetter

Sets up and operates photocomposing machine to transfer data from perforated or magnetic tape into print on film or photographic paper, using either

of following methods: (1) Loads roll of film or paper in machine magazine. Secures roll of perforated tape on machine reel and threads end of tape through machine feed rollers. Selects type font according to size and face of type specified and positions it on photographic unit. Turns dials to adjust line spacing and light intensity according to size and face of type. Starts machine that automatically prints type onto film or paper according to coded signal on tape. Removes finished copy from magazine for development. (2) Places reel of magnetic tape onto feed spindle of phototypesetting unit. Depresses keys to enter command codes, such as size and style of type, width and length of column, and to activate computer to produce phototypesetting film, phototypesetting paper, or copy of tape. Removes and stacks finished copies from photocopy printing unit. Removes printing unit from machine, drains chemical solution, washes unit, and refills unit with specified developing solution.
GOE: 05.10.05 STRENGTH: L GED: R3 M1 L1 SVP: 6 DLU: 89

650.582-022 PHOTOTYPESETTER OPERATOR (print. & pub.) alternate titles: phototypesetter

Operates keyboard of automatic phototypesetting machine to photographically print type matter onto film or strips of photosensitive paper to prepare positives or paper flats for making printing plates: Loads roll of photosensitive paper or film into camera magazine, positions magazine on machine, and pulls lever to open exposure slot. Starts typesetting mechanism. Turns dial to select lens and regulate gear that controls size (magnification or reproduction) of matrix letter, exposure, and light intensity, or moves selector levers, depresses keys or control buttons to select style and size of type. Depresses keys of keyboard to select *foto mats* for printing onto photopaper or film. Cuts photopaper with knife to separate exposed portion. Removes exposed photopaper or film from magazine for developing. May perform routine maintenance and adjustments on machine, using handtools.
GOE: 07.06.02 STRENGTH: L GED: R4 M2 L3 SVP: 5 DLU: 77

650.682-010 EQUIPMENT MONITOR, PHOTOTYPESETTING (print. & pub.)

Monitors and controls electronic computer system used in phototypesetting: Sets control switches on optical character reader, computer, or phototypesetter. Inserts command codes to integrate and operate equipment according to data requirements specified in mark-up instructions. Selects and loads input and output units with materials for operating equipment. Moves switches to clear system and start operation of equipment. Observes equipment and control panels on consoles for error lights, messages, and machine stoppage or faulty output. Notifies superior of errors or equipment stoppage.
GOE: 05.10.05 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

650.685-010 TYPESETTING-MACHINE TENDER (print. & pub.) alternate titles: teletypesetter monitor

Tends and adjusts one or more linecasting machines, equipped with tape converter unit, to produce type composition automatically: Positions spool of punched tape on machine reel. Threads end of tape through feed mechanism of converter unit. Turns control to start unit that sets type automatically as directed by coded signal on punched tape. Transfers lines of type, with copy, to composing or bank table for taking of proof. Adds new pigs of type metal to melting pot to replenish supply. Observes operation of machine to detect malfunction of keyboard, matrix circulation mechanism, tape feeding mechanism or other machine mechanisms, and adjusts their mechanical components, using handtools, or depresses keys on keyboard to clear jamming. Periodically cleans matrices, magazine, and molds. May replace worn parts, such as code bars, keys, and spacebands, using handtools and power tools.
GOE: 05.10.05 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77 →

651 PRINTING PRESS OCCUPATIONS

This group includes occupations concerned with producing copies of designs or lettering by transferring ink or pigment on type, plates, or rolls to paper or similar materials by means of a printing press. Includes cylinder presses, offset presses, and platen presses.

651.130-010 SUPERVISOR, PRESS ROOM (print. & pub.)

Supervises and coordinates activities of workers engaged in making ready, operating, and feeding various types of presses used to print newspapers, magazines, books, and other printed matter: Observes press operations and examines printed material to verify conformance with work order specifications. Examines multicolor printed material, using precision instruments, to detect imperfect color tone registration. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.13 STRENGTH: L GED: R4 M3 L4 SVP: 8 DLU: 89

651.362-010 CYLINDER-PRESS OPERATOR (print. & pub.) alternate titles: flatbed-press operator; press operator

Makes ready and operates cylinder-type printing press: Verifies size, color, and type of paper and color of ink from job order. Cleans inking rollers with solvent and replaces them in press, using handtools. Adjusts controls to regulate volume of ink. Packs impression cylinder with tissue or folio. Adjusts delivery tapes, and positions and locks form (type setup or plate) on bed or cylinder of press. Directs CYLINDER-PRESS FEEDER (print. & pub.) in adjustment of feed guides, grippers, and elevator, or hand-feeding press. Starts press and runs off proofsheet. Examines proof to determine off-level areas, variation in ink volume, register slippage, indications of offsetting, and color register. Adjusts press controls, inking fountains, and automatic feeders, and repacks cylinder with overlay to equalize off-level areas as required. May register forms and mix colors. May make overlay for half-tone shades. May operate cylinder press equipped with cutting attachment or may replace type dies with cutting dies to cut or shape paper or paperboard. May operate more than one press. May be designated according to kind of material printed as Check Imprinter (print. & pub.); Envelope-Press Operator (print. & pub.) I; Label-Press Operator (print. & pub.) I; size of press as Pony-Cylinder-Press Operator (print. & pub.). Important variations may be indicated by trade names of machine used.
GOE: 05.05.13 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

651.362-014 CYLINDER-PRESS-OPERATOR APPRENTICE (print. & pub.)

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.13 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

651.362-018 PLATEN-PRESS OPERATOR (print. & pub.)

Makes ready and operates platen-type printing press to produce printed material: Determines setup and operating procedures from work order. Inserts type setup or plate in press bed and tightens locking attachment, using wrench. Adjusts inking rollers to obtain even distribution of ink. Regulates ink flow by adjusting thumbscrews on fountain. Starts press and directs PLATEN-PRESS FEEDER (print. & pub.) to feed sheets by hand onto press platen or to place stack of sheets in feed tray if press is equipped with automatic feeding mechanism. Readjusts press during run to obtain specified color registration. May place stack of sheets in feed tray on press equipped with automatic feeding mechanism. May be designated according to type of material printed as Envelope-Press Operator (print. & pub.) II; Label-Press Operator (print. & pub.) II.
GOE: 05.05.13 STRENGTH: L GED: R4 M2 L2 SVP: 7 DLU: 77

651.362-022 PLATEN-PRESS-OPERATOR APPRENTICE (print. & pub.) alternate titles: make-ready apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.13 STRENGTH: L GED: R4 M2 L2 SVP: 7 DLU: 77

651.362-026 ROTOGRAVURE-PRESS OPERATOR (print. & pub.)

Makes ready and operates rotary-type press that prints illustrative and other subject matter by rotogravure process: Installs engraved copper printing cylinder in press, using handtools. Adjusts doctor (wiper) blade to remove excess ink from surface of printing cylinder. Threads web (roll) of paper or other printing stock through press, adjusting guides and tension bars. Sets focus of electronic scanners on guideline of paper (for multicolor printing) to automatically control color registration. Regulates temperature in web-drying chambers and adjusts automatic cutter at discharge end of press. Inspects material being printed, during production run, and adjusts press as required to produce printed matter to specifications. Directs workers in feeding and unloading press, replenishing ink supply in fountains, cleaning equipment, and other press operations. May operate press equipped to print, cut, and crease paper goods.
GOE: 05.05.13 STRENGTH: M GED: R3 M2 L2 SVP: 7 DLU: 77

651.362-030 WEB-PRESS OPERATOR (print. & pub.)

Makes ready and operates multiunit, web-fed rotary press to print newspapers, books, and periodicals according to written specifications: Locks printing plates on printing cylinder and threads loose end of paper supply roll (web) through and around rollers to cutter and folder. Adjusts compensators to guide paper over rollers and cylinders. Inspects printed sheets visually after registration or position printing and readjusts guides and controls to rectify spacing errors. Adjusts feed controls to rotate cylinder into position where plate locking mechanism is accessible. Unlocks plates and replaces with make-over plates according to directions marked on plate regarding location and time of printing. Rethreads paper through press if web breaks (press stops automatically if web breaks) and readjusts tension rollers. Operates pasting device to splice end of new paper roll to depleted roll. Inspects printed material visually during production and readjusts controls to correct irregular ink distribution, faulty cuts or folds. Replaces cutting blades, worn or damaged ink rolls, and fills ink wells. Cleans, inspects, and lubricates moving parts of press. May supervise and instruct apprentices. May load supply rolls of paper in press at beginning and during run. May be designated Tension Regulator (print. & pub.) when installing paper rolls in press and adjusting controls to regulate tension of paper; or Color-Control Operator (print. & pub.) when adjusting ink controls to secure specified color registration. May operate press from central control console.
GOE: 05.05.13 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

651.362-034 WEB-PRESS-OPERATOR APPRENTICE (print. & pub.) alternate titles: newspaper-press-operator apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.13 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

651.382-010 ENGRAVING-PRESS OPERATOR (print. & pub.) alternate titles: die-stamping-press operator

Makes ready and operates press to engrave decorative designs or lettering on announcements, greeting and business cards, letterheads, and related items, following operating procedures outlined on job order: Installs appropriate die and inking rollers on ram, using wrench. Cuts out and fastens paper template to bed of press to maintain flatness of finished cards or sheets. Inserts and adjusts roll

of wiping paper that automatically cleans die between impressions. Thins ink to desired consistency and fills ink fountain. Starts press to obtain proof copy. Examines proof and adjusts press and ink fountain to obtain uniform indentation and color registration. Starts press and feeds cards or sheets to be engraved onto bed of press.
GOE: 05.10.05 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 77

651.382-014 LITHOGRAPH-PRESS OPERATOR, TINWARE (tinware)

Sets up and operates lithograph press to print descriptive material and designs on tinplate: Installs printing plates on machine rolls, using handtools and gauges. Adjusts feed guides, back and side gauges, and rollers with handtools. Mixes colors of paint according to formula and fills paint fountain. Starts machine and makes trial run. Adjusts or changes gears to regulate rate of feed and turns fountain valves to adjust flow of paint. Inspects lithographed plate to ensure that printing is clear and lined-up according to specifications or sample. Examines plates during process and removes defective plates. Observes heat gauges and regulates controls of drying oven to maintain specified heat.
GOE: 06.02.02 STRENGTH: L GED: R3 M2 L2 SVP: 7 DLU: 77

651.382-026 PRINTER, PLASTIC (plastic prod.; tex. prod., nec) alternate titles: flexigraphic printer

Sets up and operates press to print colored designs on rolls of plastic or plastic-coated material: Positions and clamps printing cylinder on press, using handtools. Pours inks into ink pans and threads plastic film through press rolls. Starts press and turns wheels to adjust pickup, transfer, and printing rolls. Turns rheostats to regulate speed and feed of press, and temperature of drying box. Examines printed sheet to detect defects, such as wrinkles, tears, smeared printing, and uneven color distribution. Cleans and oils press. Repairs or replaces broken or worn parts of press, using handtools. May set print on printing cylinder, and blend colored inks, according to job order.
GOE: 06.02.09 STRENGTH: M GED: R3 M1 L2 SVP: 5 DLU: 77

651.382-030 STEEL-DIE PRINTER (print. & pub.) alternate titles: plate printer

Operates printing press to print embossed forms, such as business cards, letterheads, and announcements, from engraved steel plates: Positions plate in plateholder and builds up space beneath plate with cut pieces of fabric material to make slight crimp of printed areas. Glues plate in position. Sets paper guides and adjusts plate-wiping mechanism, using wrenches. Turns on drying lamps over takeoff conveyor and starts press. Engages automatic feed or feeds sheets to press by hand, aligning them against paper guides.
GOE: 05.10.05 STRENGTH: L GED: R3 M2 L2 SVP: 7 DLU: 77

651.382-034 TAB-CARD-PRESS OPERATOR (print. & pub.)

Sets up and operates specially equipped presses to print, perforate, number, and cut data processing cards according to specifications: Installs die in press bed or on press cylinder and tightens locking attachment, using wrench. Mounts paper roll on reel and inserts end into automatic feed mechanism. Tightens or loosens fountain thumbscrew to adjust ink flow. Starts presses and observes operation to detect malfunction. Examines printed cards for conformance to specifications, using line gauge. May record production on logsheet.
GOE: 05.10.05 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

651.382-038 TRANSFER OPERATOR (print. & pub.)

Sets up and operates machine to print designs, trademarks, sizes, and other identifying information on continuous roll of paper for use as dry transfers or hot iron patterns: Turns setscrew to secure selected die in machine holder. Slides doctor blade in machine slots and plugs ends of machine trough with paper wads to prevent loss of melted ink. Positions block of dry ink in machine trough and adjusts burner flame to melt ink. Measures lettering or design on die with machinist's scale to determine widths of pressure roller and paper roll required. Installs and secures pressure roller, using wrench. Mounts paper roll in machine and threads end between pressure roller and die, fastening end to winding spindle. Turns handwheel and moves lever to adjust angle of doctor blade, tension of paper, and pressure of roller. Sets automatic counter at zero. Starts machine and observes paper for accuracy of printing. Stops machine when specified number of transfers are printed as indicated by automatic counter. Removes printed roll of transfers and die from machine. Cleans and lubricates machine and die, using solvent and cloths, and makes minor repairs.
GOE: 05.10.05 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

651.382-042 OFFSET-PRESS OPERATOR I (print. & pub.) alternate titles: first press operator; lithographic-press operator

Makes ready and operates web or sheet-fed offset printing press to print single and multicolor copy from lithographic plates: Examines job order to determine quantity to be printed, stock specifications, colors, and special printing instructions. Measures plate thickness and inserts packing sheets on plate cylinder to build up plate to printing height and installs and locks plate into position, using handtools, to achieve pressure required for printing. Washes plate to remove protective gum coating. Measures paper thickness and adjusts space between blanket and impression cylinders according to thickness of paper stock. Fills ink and dampening solution fountains and adjusts controls to regulate flow of ink and dampening solution to plate cylinder. Starts press, examines printed copy for ink density, position on paper, and registration, and makes adjustments to press throughout production run to maintain specific registration and color density. Removes and cleans plate and cylinders. May apply packing sheets to blanket cylinder to build up blanket thickness to diameter of plate cylinder. May load paper into feeder or install rolls of paper, make adjustments to feeder and delivery mechanisms, and unload printed material from delivery mechanism. May lead, give directions to, and monitor work of ASSISTANT PRESS OPERATOR, OFFSET (print. & pub.) 651.685-026; FEEDER (print. & pub.) 651.686-014; JOGGER (print. & pub.) 651.686-018; or ROLL TENDER (print. & pub.) 651.686-022.
GOE: 05.05.13 STRENGTH: L GED: R4 M2 L3 SVP: 8 DLU: 89

651.382-046 OFFSET-PRESS-OPERATOR APPRENTICE (print. & pub.) alternate titles: lithographic-press operator apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.13 STRENGTH: L GED: R4 M2 L3 SVP: 8 DLU: 77

651.384-010 PLATEN BUILDER-UP (print. & pub.) alternate titles: make-ready worker

Glues paper to back of platen (pressure plate) cover to raise depressed areas of platen cover and reduce clearance between paper and printing head of printing press: Holds platen obliquely to electric light to locate shadowed depressed areas of platen cover, and draws contour rings around depressed areas, using pencil. Cuts out paper to fit within contour lines and cements paper onto back of platen cover to raise depressions in platen cover, using razor blade and paper cement. Examines printed material to detect defects in printing due to platen face cover depressions. Writes requisitions to order supplies.
GOE: 05.10.05 STRENGTH: L GED: R2 M1 L2 SVP: 4 DLU: 77

651.582-010 PROOF-PRESS OPERATOR (print. & pub.) alternate titles: proofer

Makes ready and operates proof press to make proofs of type setup: Places galley of type on bed of press. Depresses pedal to move ink roller over face of type or applies ink, using hand roller. Places sheet of paper on type and depresses pedal or turns crank to pass rollers over paper to obtain proof of type setup. Removes proofsheet from press and delivers it to PROOFREADER (print. & pub.). May print reproduction proofs of type and illustrating cuts on transparent film or glossy paper, to be used in lithographic plate making. May be designated according to type of press operated as Lithographic Proofer (print. & pub.); Offset-Proof-Press Operator (print. & pub.).
GOE: 05.05.13 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

651.582-014 LITHOGRAPHIC-PROOFER APPRENTICE (print. & pub.) alternate titles: proofer apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.13 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

651.585-010 ASSISTANT-PRESS OPERATOR (print. & pub.) alternate titles: flexographic-press helper; web-press-operator assistant

Performs any combination of following duties to assist printing press operator to make ready, operate, and maintain roll-fed (web) or sheet-fed, single-or-multicolor flatbed, cylinder, offset, flexographic, or web press: Assists press operator to install paper packing sheets on impression (back-up) cylinder, fasten reinforcing bars to metal printing plates and offset blankets, and install plates and blankets on press cylinders, using handtools and power tools. Adjusts machine parts, such as feed and delivery mechanisms, suction grippers, guides, feed wheels, jogging device, tapes, and cams as directed by press operator, using handtools. Lifts and positions roll of paper in feed mechanism, using chain hoist, or positions skid of unprinted sheets on feed device, using handtruck or electric lift-truck. Removes loaded skid of printed material from stacking mechansim, using handtruck, and replaces with empty skid. Fills fountains with ink paste, using spatula. Tends press in absence of press operator. Observes mechanical operation and indicating gauges, such as ammeter and air pressure gauges to ensure that specified operating levels are maintained and makes specified adjustments or notifies press operator when malfunction occurs. Assists in lubrication of press, using grease gun and oilcan. Assists press operator to remove and replace worn rollers and adjust pressure between rollers, using handtools. Cleans ink and distributing rollers, ink fountains, and printing type, using cleaning solvent, brush, and rags. Cleans press and work area, using vacuum cleaner, brush, and airhose. Keeps daily time, production, and material usage reports. Assists in exposing and developing printing plates. Regulates temperature of gas-fired drying units. May be required to serve apprenticeship.
GOE: 05.05.13 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 90

651.586-010 PRESS HELPER (plastic prod.)

Assists PRINTER, PLASTIC (plastic prod.; tex. prod., nec) in printing designs on plastic material: Inserts spindle through roll of plastic material and adjusts collars to center roll on spindle. Positions spindle on printing press feedrack and clamps it in place. Threads material through press rolls and tapes end to winding roll. Places cardboard core on rewind spindle, tapes end of finished plastic roll to core, and moves controls to rewind specified quantity of printed plastic. Observes plastic during rewinding and marks or cuts out defective portions. Records weight of rolls and amount of plastic on rolls. Washes ink rollers and pan in solvent. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 06.04.02 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

651.682-010 FLEXOGRAPHIC-PRESS OPERATOR (paper goods; print. & pub.)

Sets up and operates flexographic printing press to print designs or lettering on rolls of flexible plastic film, paper, and nonabsorbsant stock for use in mak-

ing products, such as plastic, paper, or waxed paper bags, and paper drinking cups: Reads job order and mounts specified rubber plate and printing dies on cylinder, installs cylinder on shaft, and secures assembly in bed of press. Fills dye fonts with prescribed inks or dyes. Moves levers to engage dye rolls, adjusting position of cylinder to print two or more colors without overlapping or smearing previously printed area. Inserts shaft through core of paper or plastic roll and secures roll on press in feed position. Splices end of roll to trailer sheet remaining in press, using tape, and turns handwheel to regulate roll tension and feed as directed. Starts press, adjusting speed, tension, and alignment of printing plate as necessary. Cuts sample of printed material from end of printed roll and inspects for imperfections, such as blurred or off-center impressions. Cleans rubber plate, cylinder, and dye fonts, using solvent, and lubricates press as needed, using grease gun. May mix inks or dyes to produce desired colors. May operate press equipped with laminator attachment to print and laminate polyethylene or cellophane sheeting. May operate press that prints, cuts, and folds paper stock to make paper napkins.
GOE: 06.02.09 STRENGTH: M GED: R3 M2 L3 SVP: 4 DLU: 77

651.682-014 OFFSET-DUPLICATING-MACHINE OPERATOR (print. & pub.)

Operates offset duplicating machine to reproduce typeset matter, drawings, graphs, and similar material by photo-offset process: Secures printing plate in offset duplicating machine. Moves controls to set offset duplicating machine for size and thickness of paper, to position printed impression, and to regulate flow of ink and speed of paper feed, according to material to be reproduced. Starts offset duplicating machine and examines printed copy for ink density, position on paper, and registration. Fills ink fountains and makes adjustments to machine throughout production run to maintain fountain solutions, specific registration, and color density. Cleans, greases, and oils offset duplicating machine and components, removes paper jams, and adjusts cylinder pressure to maintain machine in working order.
GOE: 05.10.05 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 89

651.682-018 STRIPER (paper goods)

Operates cylinder press to print color stripes on paper stock used for making paper bags or wrapping paper: Mounts roll of stock paper on unwind shaft, using hoist. Threads paper through rollers of press and onto windup shaft. Fills ink well with specified color of ink. Pushes button to start and stop machine. Observes operation and turns handwheels to adjust tension of paper. May clean inkwell, using alcohol.
GOE: 06.02.04 STRENGTH: L GED: R3 M1 L1 SVP: 5 DLU: 77

651.682-022 TIP PRINTER (hat & cap) alternate titles: lining printer

Sets up and operates cylinder or platen press that prints labels, slogans, trademarks, or trade names onto hat lining material: Inks disk and rollers of press, using brush or sponge. Tightens or loosens inking rollers, using wrench and, regulates flow of ink from reservoir. Arranges type or engraving blocks in chase (holder) according to specifications. Turns setscrews on chase to secure type or engraving, using wrench. Slides chase into channel on bed of press and turns setscrews to lock chase in die plate. Positions lining material against adjustable guides and turns handwheel to align material. Starts press or turns handwheel to print sample of cut or type. Examines impressions on material for alignment and clarity. Starts press and feeds and removes lining material by hand or monitors automatic feed to prevent jamming. May operate several presses to print variety of colors or part of total design onto lining material. May operate platen press equipped with heated die block to imprint data, using goldleaf.
GOE: 06.04.37 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

651.685-010 BAG PRINTER (print. & pub.)

Tends rotary printing press that prints data, such as brand name, trademark, content analysis, and weight on paper or textile bags: Inserts specified type into plates or selects previously prepared plates, according to data to be printed on bags, and slides plates into channels or slots on cylinder. Turns setscrews or uses wrench to lock plates onto printing cylinder. Pours specified color ink into ink reservoir. Positions supply of bags on press feed bed. Presses button to start press and moves lever or depresses pedal to activate rotary drum and feed mechanism, and feeds individual bags into press. Removes printed bags from discharge shelf of press and stacks bags in storage area according to data printed on bags. Cleans press, using solvent and rags. May tend press that prints two or more colors.
GOE: 06.04.04 STRENGTH: M GED: R2 M2 L2 SVP: 4 DLU: 77

651.685-014 DESIGN PRINTER, BALLOON (rubber goods)

Tends cylinder press that prints designs and lettering on balloons: Rolls preinflated balloon against printing plate on revolving cylinder press that prints design. Pours ink and solvent in trough of cylinder press and adjusts ink flow. Cleans machine rollers, plates, and troughs with solvent and rag when color changes are specified. May inflate balloon on air nozzle, align and press one or more inked block dies against balloon, deflate balloon, and place balloon in box.
GOE: 06.04.07 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

651.685-018 OFFSET-PRESS OPERATOR II (print. & pub.) alternate titles: dial printer

Tends manually controlled offset press that prints lettering on products, such as dial faces and plastic containers: Rolls machine carriage, equipped with pair of clean and inked cylinders, back and forth over press bed to ink engraved plates or dies and transfer impression to clean cylinder. Positions dial faces or containers in holders in front of engraved plates. Pulls carriage forward so that letters are impressed on clean cylinder and transferred to surface of product. Inspects product for smears, stains, uniform shading, and contrast. Places product on tray and places tray into oven to dry printing ink, or places product on conveyor leading to drying oven. Prints flexible containers on press equipped with airhose: forces air into container with hose to produce solid surface for printing. Periodically washes cylinders with solvent. Spreads ink on cleaned cylinder with spatula. May clean smears and spots from rejects with solvent and reprint them. May change ink, rollers, and die cut to print more than one color.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

651.685-022 PLATEN-PRESS FEEDER (print. & pub.)

Tends platen press that prints information onto material, such as paper or cloth, using either of following methods: (1) Places stack of paper in feed tray of automatic feeding mechanism, adjusting height of tray according to height of load. Adjusts guide bars and air pressure controls to regulate force of air in suction feed cups according to size and weigt of paper. Starts press and observes feeding operation. Removes printed sheets from discharge tray. (2) Places piece of cloth or paper against gauge pins on press platen while press head is in upper position. Removes and scans printed material for conformance to standards and inserts new piece after press head descends and returns to upper position. May ink rollers of machine, using putty knife. May be designated according to material printed as Cloth Printer (ordnance).
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

651.685-026 ASSISTANT PRESS OPERATOR, OFFSET (print. & pub.) alternate titles: offset press operator helper; second press operator; web-press-operator helper, offset

Performs any combination of following tasks to assist OFFSET-PRESS OPERATOR (print. & pub.) I 651.382-042 to make ready, operate, and maintain sheet-fed or web offset printing press: Inserts packing sheets on plate cylinder to build up plate to printing height, fastens reinforcing bars to offset blankets, and installs plates and blankets on press cylinders, using handtools and power tools, to achieve pressure required for printing. Adjusts press machine parts, such as feeder and delivery mechanisms, suction grippers, guides, feed wheels, jogging device, tapes, and cams, as directed by OFFSET-PRESS OPERATOR (print. & pub.) I, using handtools. Positions skid of unprinted sheets on feed device of sheet-fed press, using handtruck or electric lift-truck, or lifts and positions roll of paper in feed mechanism of web press, using chain hoist. Fills ink and dampening solution fountains of press. Observes press operation to detect machine malfunctions and examines printed copy for ink density, position on paper, and registration, and adjusts press or notifies OFFSET-PRESS OPERATOR (print. & pub.) I when malfunction occurs. Removes loaded skid of printed material from stacking mechanism, using handtruck, and replaces loaded skid with empty skid. Assists OFFSET-PRESS OPERATOR (print. & pub.) I to remove and replace worn rollers and adjust pressure between rollers of press, using handtools. Washes press and cleans ink and ink distributing rollers and ink fountains, using ink solvent and cleaning mechanism on press. Keeps daily time, production, and material usage reports. May lead, give directions to, and monitor work of FEEDER (print. & pub.) 651.686-014, JOGGER (print. & pub.) 651.686-018, or ROLL TENDER (print. & pub.) 651.686-022.
GOE: 05.05.13 STRENGTH: M GED: R3 M2 L3 SVP: 7 DLU: 89

651.686-010 CYLINDER-PRESS FEEDER (print. & pub.) alternate titles: cylinder-press-operator helper; flat-bed-press feeder

Feeds blank or partly printed sheets into cylinder press by hand or stacks paper in automatic feeding device: Places pile of paper on feedboard of press and starts press. Lifts and feeds single sheets against feed guides at each rotation of cylinder to manually feed press; or turns setscrews to set side guide, suction feed grippers, and feeding wheels, and stacks paper in elevator of automatically fed press. Removes and stacks printed sheets from discharge board. May assist CYLINDER-PRESS OPERATOR (print. & pub.) in making press ready. May be designated according to type of cylinder press fed as Lithographic-Press Feeder (print. & pub.); Pony-Cylinder-Press Feeder (print. & pub.). May record production as indicated by counter on machine.
GOE: 05.12.19 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

651.686-014 FEEDER (print. & pub.)

Stacks sheets of paper into loading tray of sheet-fed offset press or preloading stand adjacent to press: Compares identifying information on paper stock with specifications on work order to verify delivery of specified paper stock. Flexes stack of paper with hands to prevent paper from jamming in press and places stack into loading tray of sheet-fed offset press or preloading stand adjacent to press. Adjusts feeder mechanism on press to correspond with size of paper. May operate mechanical truck to transport boxes of paper to press area. May fill ink fountains and clean press and press components to maintain press in working order.
GOE: 05.12.19 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 89

651.686-018 JOGGER (print. & pub.) alternate titles: press tender; stacker

Removes, flexes, jogs, and stacks printed sheets or folded signatures from discharge unit of web printing press: Removes folded signatures from web press and places signatures on pallet or skid for removal to other area. Removes printed sheets from automatic stacking mechanism of web press, flexes stack

of sheets between hands and taps stack into alignment, using hands and fingers, or places stack on vibrating jogging table and guides stack into precise alignment, and places stack on pallet or skid for removal. May adjust stacking mechanism on press according to paper dimensions. May load and remove rolls of paper on press. May operate mechanical truck to remove paper from press. May clean press and press components to maintain web printing press in working order.
GOE: 06.04.26 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 89

651.686-022 ROLL TENDER (print. & pub.) alternate titles: roll setter
Loads rolls of paper onto automatic splicing unit of web offset printing press: Inspects rolls of paper for blemishes or tears and cuts away damaged area with knife. Rolls paper into loading position on automatic splicer, inserts shaft of automatic splicer through roll core, secures holding chucks of automatic splicer to shaft ends, and threads paper through press components to prepare press for printing. Applies adhesive strip to backup roll and inserts backup roll onto automatic splicing unit of press to prepare paper for automatic splicing. Removes roll of leftover paper from press after automatic splicing. May operate mechanical truck to transport rolls of paper to press area. May clean press and clean and install press components to maintain press in working order.
GOE: 05.12.19 STRENGTH: V GED: R2 M1 L1 SVP: 5 DLU: 90

651.687-010 LITHOGRAPHED-PLATE INSPECTOR (tinware)
Inspects lithographed tinplate for defects, such as ink smears, air bubbles, crooked edges, or imperfect placement of designs. Segregates imperfect sheets and stacks them for further processing.
GOE: 06.03.02 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

652 PRINTING MACHINE OCCUPATIONS

This group includes occupations concerned with printing designs or lettering on surfaces of paper, wood, cardboard, or other materials by means of machines other than printing presses.

652.130-010 SUPERVISOR, DECORATING (glass mfg.)
Supervises and coordinates activities of workers engaged in silk-screening stenciled designs on glass or plastic containers or other glassware: Examines product design specifications to verify photographic transfer of design to silk screens, and to select type of machine to be used, silk screen material, coating material, and container style, using knowledge of production silk-screening techniques. Reviews coating tests results to verify color, taper, consistency, clarity, and absorption characteristics of selected coating material. Observes installation and adjustment of silk-screens, squeegees, and container-holding chucks to ensure setup and quality of product. Measures positioning of screens and holding chucks to ensure correct printing location on container. Inspects containers for quality and clarity of design and conformance to specifications. May create and lay out designs and photographically reproduce them on silk screen. May set and adjust drying furnace temperature and conveyor speed controls. May requisition supplies. Performs other duties described under SUPERVISOR (any industry) Master Title.
GOE: 01.06.03 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

652.130-014 SUPERVISOR, PRINTING AND STAMPING (jewelry-silver.; leather prod.)
Supervises and coordinates activities of workers engaged in gold stamping and ink printing of designs and identifying data on box linings, plastic boxes, or leather covered instrument and jewelry cases: Sets heat, pressure, and time controls on gold-leaf stamping machine, according to item and type of material to be stamped. Installs stamping dies in chase and locks chase in press. Selects spool of goldleaf or foil, places it on crib and threads it through rollers. Installs printing dies and spacers in platen presses. Installs and adjusts ink rollers to ensure even distribution of ink and fills fountain with specified ink. Adjusts presses during operation to maintain desired printing. Repairs equipment, using handtools. Operates automatic platen press to cut cardboard blanks for use as case linings. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R4 M2 L3 SVP: 8 DLU: 77

652.130-018 SUPERVISOR, ROLLER PRINTING (textile)
Supervises and coordinates activities of workers engaged in roller-printing of cloth: Analyzes production schedule and work orders and confers with supervisor to determine amount and type of printing specified. Confers with department heads to coordinate printing activities with other departments. Examines setup of printing machines for *printing roller* and color changes to ensure conformity to specifications. Examines printed cloth swatches and compares with standard to determine if specifications are met. Observes work activity and production records to detect variation from standard procedure or lagging production. Directs workers to alter processing methods or sequence of production schedule to correct problems and ensure completion of work by deadlines. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 77

652.132-010 SUPERVISOR, PRINT LINE (furniture) alternate titles: supervisor, engraving
Supervises and coordinates activities of workers engaged in finishing wood or wood composition panels with artificial wood grain print for use in furniture manufacture: Assigns duties to workers at sanding, filling, coating, and printing stations of panel-printing and drying equipment, according to production priorities. Patrols work areas to detect faulty processing and directs workers to correct substandard products, utilizing knowledge of machine functions and processing standards. Assigns new workers to work with PRINT-LINE OPERATOR (furniture; wood prod., nec) 652.562-010 to learn job duties. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 86

652.137-010 PRODUCTION MANAGER, REPRODUCTION (print. & pub.)
Supervises and coordinates activities of workers engaged in reproduction of special printed matter, such as maps and text books by methods such as offset, handset, or photostatic printing. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.05 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 77

652.137-014 SUPERVISOR, SCREEN PRINTING (textile)
Supervises and coordinates activities of workers engaged in screen printing cloth: Analyzes production schedules and print orders to determine type and quantity of work to be done, and availability of machinery and personnel. Schedules work according to established priorities. Confers with heads of other departments to ensure coordination of screen printing with activities, such as sample printing, production planning, screenmaking, color mixing, inspecting, and packaging. Analyzes problems encountered in screen printing multicolored patterns onto cloth, such as patterns out of register (alignment), colors off-shade, and mechanical malfunctions, and directs workers to correct problems, utilizing knowledge of screen printing techniques. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M2 L3 SVP: 8 DLU: 77

652.260-010 SECTION LEADER, SCREEN PRINTING (textile) alternate titles: working second hand
Sets up and adjusts automatic screen printing machines for workers engaged in screen printing multicolored designs onto cloth articles: Confers with SUPERVISOR, SCREEN PRINTING (textile) to determine daily production schedule and transmits work instructions to other workers. Analyzes print order to determine settings and adjustments required to set up automatic screen printing machine for specified order. Turns thumbscrews, loosens and tightens bolts, and aligns printing screens, using handtools. Patrols printing area to detect problems, such as mechanical breakdowns or malfunctions, printout of register (alignment), and damaged screens. Adjusts belts, drive assemblies, pneumatic lifting mechanisms, and other machine parts to correct problems, or notifies supervisor of malfunction. Counts and records production in log.
GOE: 06.01.02 STRENGTH: M GED: R4 M2 L3 SVP: 7 DLU: 77

652.380-010 DECORATING-EQUIPMENT SETTER (glass mfg.; glass products)
Sets up manually controlled or automatic decorating equipment that prints designs on glass or plastic containers or ware according to either of following methods: Determines type and color of designs to print on containers from orders. (1) Pushes portable, manually controlled decorating equipment and roller conveyors into position for printing. Centers silk screen and squeegee attachment over container on decorating equipment, using gauge, and bolts screen to holding fixture. Examines containers for paint smears and position of design to determine if equipment needs adjusting. (2) Bolts chucks to conveyor of automatic decorating machine to accommodate containers of specified size. Turns setscrews and bends contacts on trip switches to adjust stroke of automatic decorating machine so designs are printed in designated locations on containers. Inspects decorating equipment, and replaces defective switches, pulleys, fixtures, screws, and bolts, using handtools, and sharpens squeegee blades, using *bench grinder*. May record types of quantities of containers decorated in production log. May mix paints according to formula, using bench mixer.
GOE: 06.01.02 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

652.382-010 CLOTH PRINTER (any industry) alternate titles: printer; printing-machine operator
Sets up and operates machine to print designs on materials, such as cloth, fiberglass, plastic sheeting, coated felt, or oilcloth: Turns handwheel to set pressure on *printing rollers*, according to specifications. Turns screws to align register marks on printing rollers with register marks on machine, using allen wrench. Sharpens doctor blade, using file and oilstone, and verifies evenness of blade, using straightedge. Aligns doctor blade against printing roller, using handtools. Dips color from tubs into color boxes to supply printing rollers. Scans cloth leaving machine for printing defects, such as smudges, variations in color shades, and designs that are out of register (alignment). Realigns printing rollers and adjusts position of blanket or back gray cloth to absorb excess color from printing rollers. Records yardage of cloth printed. Coordinates printing activities with activities of workers who feed and doff machine and aid in setting up and cleaning machine. May notify COLORIST (profess. & kin.) 022.161-014 when color shade varies from specifications. May mix own colors. May mount printing rollers on machine for change of pattern [PRINTING-ROLLER HANDLER (textile) 652.385-010]. May position knives specified distance from edge of plastic material to trim excess material from edges. When printing samples of new patterns and novelty designs, is designated Novelty-Printing-Machine Operator (textile) or Proofing-Machine Operator (print. & pub.). May set up and operate cloth printing machine utilizing caustic soda

paste instead of color paste to print designs on cloth which shrink to form plisse and be designated Plisse-Machine Operator (textile).
GOE: 06.02.09 STRENGTH: M GED: R4 M1 L3 SVP: 7 DLU: 77

652.385-010 PRINTING-ROLLER HANDLER (textile) alternate titles: copper-roller handler, printing; mandrel-press hand

Mounts *printing rollers* on cloth printing machine for change of pattern. Inserts mandrel through *printing shell* and positions shell on hydraulic jack, using hoist. Starts jack that presses mandrel into shell to assemble completed roller. Removes used rollers from printing machine and lifts new rollers into position with aid of other workers, using hoist. Removes printing shells from mandrel, using hydraulic jack. Moves used rollers to warehouse for cleaning and storage, using handtruck.
GOE: 06.04.05 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

652.462-010 RUBBER-PRINTING-MACHINE OPERATOR (rubber goods) alternate titles: leader, print rubber

Operates machine to print decorative designs on uncured rubber sheeting, used in making footwear. Computes required yardage of each design and type of sheeting compound from work ticket. Selects drum of stock to match order. Pushes A-frame, in which drum of stock is mounted above empty rewind drum, to stop in front of *printing roller* and attaches wheel-mounted motor to axle of rewind drum, using collar and wrench. Selects and installs printing roller engraved with specified design, using wrenches. Fills paint reservoir. Pulls sheeting from wrapper and threads end through rollers onto conveyor belt and attaches wrapper to core of rewind drum. Starts conveyor and rewind motor and observes sheeting for clarity of printing. Turns stopnuts and T-screws to adjust distance between paint transfer and printing rollers to print design clearly and without cutting into stock.
GOE: 06.02.09 STRENGTH: M GED: R3 M2 L1 SVP: 4 DLU: 77

652.567-010 CLOTH-PRINTING INSPECTOR (textile)

Examines cloth during printing process for defects, such as color smears, grease spots, and irregular color shade and register. Observes cloth for printing defects as it emerges from printing machines into handtrucks. Compares cloth patch cut from each truckload of printed cloth with standard to verify color shade and position of design. Reports substandard printing to CLOTH PRINTER (any industry). Records flaws found in each truckload of cloth and lot number on ticket attached to patch cut from fabric.
GOE: 06.03.02 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

652.582-010 MARKER (ordnance) alternate titles: gun numberer; piece marker, small arms

Operates presses to imprint serial and parts numbers, trademarks, and insignia on small arms parts. Locks dies in holder on die bed and positions parts, such as gun barrel, slide, receiver, or frame in holding fixture. Starts hydraulic ram, or turns handwheel to impress letter and number dies into surface of part. Stamps parts unsuited for press operations, using punch-dies and mallet. Examines impressions for accuracy and clarity and replaces worn dies. Changes dies after each imprinting when numbering in sequence. Records serial number, model, and caliber of gun for identification purposes. May inspect gun components for external defects.
GOE: 06.02.02 STRENGTH: M GED: R3 M1 L1 SVP: 4 DLU: 77

652.582-014 ROTARY-SCREEN-PRINTING-MACHINE OPERATOR (textile) alternate titles: roller printer

Operates rotary screen-printing machine to print designs on textiles. Mounts screen-printing rollers in specified sequence on machine. Turns knob to set machine speed and adjust pressure of rollers, according to type of design and cloth being printed. Turns valves that automatically admit printing paste into rollers. Starts machine and conveyor belt that carries textile articles under printing rollers. Inspects article being printed to detect colors out of register (alignment). Turns knob to adjust position of rollers so that each color is printed in allotted spaces in design. Removes foreign matter from rollers to prevent irregular flow of printing paste.
GOE: 06.02.06 STRENGTH: M GED: R3 M1 L1 SVP: 4 DLU: 77

652.585-010 PHOTOLETTERING-MACHINE OPERATOR (print. & pub.) alternate titles: typesetter

Tends photolettering machine that photographically prints display type and headings onto film or photographic paper. Secures roll of film or paper in machine magazine. Inserts specified film fonts in machine reel. Turns reel to specified selector mark to position letters to be printed and moves lever to expose specified letter on film or paper. Pushes cutter button to separate finished proofs from roll of film or paper. Removes finished copy from magazine for development.
GOE: 05.12.19 STRENGTH: L GED: R2 M1 L2 SVP: 4 DLU: 77

652.586-010 UTILITY WORKER, CLOTH PRINTING (textile)

Feeds cloth printing machine, off bears drying unit of cloth printing machine, or changes printing machine parts to assist workers engaged in roller printing of cloth, according to one of following methods: (1) Stops scray feed roller when feed roll of cloth is exhausted. Inserts metal rod through new roll of cloth, rolls cloth from dolly into brackets at feed end of printing machine, and clamps rod into brackets. Sews end of cloth from new roll to end of cloth in machine, using portable sewing machine. Restarts scray feed roller. (2) Stops printing machine dryer and ravels seam to separate full takeup cloth roll from cloth in machine. Tucks cloth corners into roll to prevent unwinding. Reads automatic counter and records yardage on production ticket. Mounts empty takeup rod on machine, wraps end of cloth around rod, and restarts machine. (3) Assists BACK TENDER, CLOTH PRINTING (textile) 652.685-010; GREIGE-CLOTH TENDER, PRINTING (textile) 652.686-018; or PRINTING-ROLLER HANDLER (textile) 652.385-010 in removing and replacing *color boxes*, doctors, *printing rollers*, *sieve cloths*, and gears during color or style changeover, using handtools. Washes printing paste from parts, using water hose, solvent, and rags. (4) Pushes handtrucks loaded with rolls of cloth, printing paste, or machine parts to move materials between work stations.
GOE: 06.04.05 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

652.662-010 PRINTING-MACHINE OPERATOR, TAPE RULES (cutlery-hrdwr.)

Sets up and operates battery of machines that print graduations and numerals on steel measuring tapes. Wraps strip of rubber ink-blanket on impression wheel and secures strip ends in slots. Mounts printing dies on type-holding wheel, and turns screw clamp to tighten wrap-around wires. Mounts wheel on machine, using electric hoist. Lifts reel of steel tape onto machine spindle and threads tape through machine. Starts machine and observes printing process. Examines tape rule for defects in printing and compares it with master rule to verify its length and accuracy of graduations. Adjusts cams, using handtools, to print tapes of various lengths. Stops machine and notifies supervisor of printing defects.
GOE: 06.02.09 STRENGTH: M GED: R3 M2 L1 SVP: 5 DLU: 77

652.662-014 WALLPAPER PRINTER I (paper goods) alternate titles: surface printer

Sets up and operates machine to print colored patterns on wallpaper. Seats and locks print rollers for designated pattern in specified brackets on machine, using wrench. Threads wallpaper through machine. Turns adjustment screws on drive gears to position print rollers. Adjusts scraper bar and tension on *sieve cloths* with handtool to control quantity and distribution of color solution on wallpaper. Starts machine and observes printed wallpaper for defects, such as color splashes, smears, and misalignment of printed designs.
GOE: 06.02.04 STRENGTH: M GED: R3 M1 L1 SVP: 6 DLU: 77

652.662-018 PRINT-LINE OPERATOR (furniture; wood prod., nec) alternate titles: hardboard panel printer; print-line supervisor

Operates tandem print-line machine to smooth, paint, and print wood grain designs on surface of furniture, composition-wood dimensional panels, or hardboard panels. Confers with supervisor or reads production schedule to determine panels to be processed. Selects printing cylinders according to production schedule and installs cylinders on machine, using hoist and handtools. Gives directions to workers engaged in feeding, inspecting, and removing panels to ensure that sanding, painting, and printing of panels conforms to specifications. Fills reservoir of printing unit with ink or stain. Tests viscosity of paint in painting unit by timing flow of paint through porous container, using watch. Pushes buttons to start individual units, and observes units to detect malfunctions. Turns knobs and handles or pushes buttons to adjust sanding, painting, and printing of panel surfaces. Occasionally assists maintenance personnel in disassembly and reassembly of individual units. Maintains record of ink and paint used. May blend stains to obtain color and viscosity specified by job order. May add catalyst or solvent to paint, utilizing experience, to achieve specified viscosity of paint.
GOE: 06.02.18 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 81

652.665-014 STRICKLER ATTENDANT (fabrication, nec) alternate titles: color-depositing-machine tender

Tends series of color-depositing machines that deposit and brush color mix through stencils to produce patterns on hard-surface floor covering. Observes machines to ensure required laying-on, brushing, and scraping operations in each unit. Signals other worker to stop machines, and adjusts and oils blades, scrapers, and brushes in malfunctioning unit, using handtools and oilcan. Removes mix adhering to plate and cleans out clogged stencils, using brush and scraper. Installs and adjusts stencils for pattern changes. Signals workers to dump colors into machine, according to pattern formula sheet.
GOE: 06.02.09 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

652.682-010 BOX PRINTER (any industry) alternate titles: box labeler; box-printing-machine operator; carton-lettering-machine operator; sleeve machine operator

Sets up and operates machine to print trademarks, designs, or identifying data on containers such as cardboard or wooden boxes, performing any combination of following duties: Selects printing plate or type slug, or sets type, according to oral instructions or written job order. Fastens type or printing plate in holding mechanism of machine, using handtools. Fills fountains with ink of required color or colors and adjusts rate of flow of ink with finger screws, or squeezes or spreads ink paste on ink plate or rollers, using ink knife (spatula). Turns setscrews to adjust spacing guides. Feeds or stacks boxes or container pieces in feed hopper of automatic printing machine and removes them from discharge hopper after printing. Places box ends on holding plate and depresses pedal that lowers printing plate onto box end. Scans containers to verify accuracy and clarity of printing. Observes edges of wooden box parts for imperfections, such as split, ragged, or uneven edges, and sets them aside. Removes and cleans type or plate, and ink rollers, using handtools, solvent, and rags. May distribute containers to packaging stations or place containers in storage areas.
GOE: 06.02.09 STRENGTH: L GED: R3 M1 L2 SVP: 3 DLU: 87

652.682-014 EMBOSSOGRAPH OPERATOR (any industry)
Operates press to print embossed display signs: Selects type dies and arranges them on bed of press. Places gummed paper on type, gummed side up, and positions cardboard sign stock on paper. Pulls lever to close press and stamp gummed paper letters into cardboard. Removes sign from press, discards scrap, and touches letters with flatiron to make gummed paper adhere to cardboard. Trims finished sign on papercutter.
GOE: 06.02.09 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

652.682-018 SCREEN-PRINTING-MACHINE OPERATOR (textile) alternate titles: automatic-silk-screen printer
Operates automatic screen-printing machine to print multicolor designs on textiles: Mounts screens in specified sequence on machine. Pours printing paste onto screens or fills automatic feed pan. Turns knob to set machine speed and adjusts swing and pressure of squeegees, using handtools, according to type of design and cloth being printed. Starts machine and conveyor belt that carries textile articles under screens. Inspects articles being printed to detect colors out of register (alignment). Turns screws to adjust position of screens so that each color is printed in alloted spaces in design. Removes foreign matter from screens to prevent irregular flow of printing paste. Tapes holes in coated portion of screen if leak develops.
GOE: 06.02.09 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

652.682-022 STAMPER, MACHINE (pottery & porc.)
Sets up and operates machine to stamp designs on pottery and porcelain flatware: Clamps ware mold in machine. Observes gauges and moves levers to adjust machine pressure, according to size of ware and pattern to be stamped on ware. Aligns design stamp on bed or head of machine and adjusts guide bars. Stirs premixed ink on pallet and applies ink on stamp with inking pad or fills reservoir of mechanical inking device with color glaze. Positions and clamps ware in head of press, places ware in holding device of stamp fixture, or positions ware over vacuum holding device on bed of press. Positions stamp for transferring design onto ware, using guide bars. Depresses pedal to lower head of press and stamp design on ware. Removes ware from bed of machine. Inspects design and discards ware with defective printing. Rubs ware with abrasive stone to remove ink spots or excess glaze.
GOE: 06.02.08 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

652.682-026 STRIPING-MACHINE OPERATOR (nonfer. metal)
Sets up and operates striping machine to ink multicolored identification stripes on insulated wire according to specifications: Installs striping wheels in inking head and fills ink reservoirs. Adjusts footage counter and ink timer. Clamps wire spool on payoff spindle and threads wire around capstan, through inking head, and onto takeup spindle and starts machine. Inspects striped cable for defects and turns setscrews to adjust pressure of striping wheels. Mixes inks in power mixer, following formula, to obtain specified color shades. May thread wire through electric oven to dry ink.
GOE: 06.02.09 STRENGTH: L GED: R3 M1 L1 SVP: 3 DLU: 77

652.682-030 STAMPING-PRESS OPERATOR (any industry) alternate titles: gold-leaf printer; gold marker; gold stamper; hot stamper; leaf stamper; lettering-machine operator; stamper
Operates machine to emboss and imprint designs, lettering, numbers, or product information onto surfaces of material, such as paper, cloth, leather, or plastic, using foil, gold-leaf, coated ribbon, or plastic tape, following specifications: Receives verbal instructions, reads work order sheet, or inserts disk in drive of computer and depresses keys to retrieve job order slip with printing instructions on computer screen. Sets heat, pressure, and time controls, according to material to be stamped. Installs and locks character wheel, embossing die, or stamping die in heated chase of machine. Turns on heating element. Inserts reel of specified material, such as foil, gold-leaf, coated ribbon, or plastic tape in holder or on spindle, and threads end through rollers which feed and guide material under die mounted on ram of machine or places sheet of foil over impression. Positions and aligns workpiece under holding arm in bed of hand fed machine or feed hopper of automatically fed machine in position specified on work order or in illuminated window on computerized machine. Starts machine which lowers ram to heated die or character wheel and ribbon to emboss and imprint workpiece and automatically moves coated ribbon with each stroke of machine. May operate machine to imprint trade names, brand, and grade onto leather sweatbands and be designated Sweatband Printer (hat & cap). When printing titles and designs on book covers, is designated Embosser (print. & pub.). When imprinting identifying information on battery lids or encasements, is designated Embossing-Press Operator (elec. equip.).
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 89

652.685-010 BACK TENDER, CLOTH PRINTING (textile)
Tends machine that prints designs on textile fabrics: Pushes cloth roll from handtruck onto rack at back of machine. Sews end of cloth to end of preceding roll, using sewing machine. Starts feed rollers and observes cloth as cloth unwinds into scray to detect cloth pieces sewn into roll face down. Ravels seams, turns face of cloth up, and resews cloth ends. Turns setscrews to adjust width guides and tension devices. Ladles color from buckets into color boxes or turns valve to transfer color from tubs to color boxes. Sews new length of back gray cloth to length in machine. When blanket is used, scoops talcum into hopper where blanket is dusted after passing through washbox. Removes color boxes and doctors and washes *printing rollers*, using brush and water hose, to prevent damage to rollers when printing stops. Assists PRINTING-ROLLER HANDLER (textile) 652.385-010 or GRAY-CLOTH TENDER, PRINTING (textile) 652.686-018 in removing and replacing color boxes, doctors, printing rollers, and gears when changing pattern.
GOE: 06.04.05 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

652.685-014 BINDING PRINTER (textile)
Tends machine that prints identifying information on bias binding: Slides rolls of binding on dispenser rod and secures rod into brackets of machine. Fills reservoir of printing machine with ink and inserts presser roller in brackets above *printing roller*. Threads ends of binding from rod over suction guides, between presser and printing rollers and over top guides to takeup rod. Flips switch to start machine that prints identifying data on binding and winds printed binding on takeup rod. Observes printing to detect defects, such as smudges and ink streaks on binding. Cuts smeared binding from roll and staples rolls to prevent unwinding. Slides printed rolls from takeup rod and loads rolls on truck for transporting to drying oven. Loads binding on racks of drying oven and sets automatic timer and temperature control to dry binding. Packs binding in cartons and seals and bands carton, using strapping tool. Writes identifying information on label and attaches label to cartons. Moves cartons of binding to storage area, using handtruck.
GOE: 06.04.05 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

652.685-018 CARTON MARKER, MACHINE (boot & shoe; garment) alternate titles: box marker; box stamper, machine; carton stamper
Tends marking machine that prints shoe and garment size, lot, and style numbers on boxes: Positions marking dies by moving fingers (levers) on disk of machine. Removes box cover and places base of box over platen. Depresses pedal or moves lever to lower dies onto end of box and print identifying symbols. May label boxes.
GOE: 06.04.37 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

652.685-022 CUTTING-AND-PRINTING-MACHINE OPERATOR (tex. prod., nec) alternate titles: printer
Tends machine that cuts cloth into specified lengths, prints information, such as brand name, contents, and weight on lengths, and folds lengths for use in making bags: Turns dial to specified length number or changes gears with wrench to obtain specified length of cut. Fits crimped edges of printing plate over rods on printing cylinder of machine and tightens setscrews to secure plate to cylinder. Sews end of new cloth roll to end of cloth in machine, using portable sewing machine. Fills ink fountain and starts machine. Verifies location of information on bag length by comparing printed length with order sample. May place folded cloth pieces onto handtruck for removal to sewing department.
GOE: 06.04.05 STRENGTH: H GED: R3 M2 L1 SVP: 3 DLU: 77

652.685-026 DECORATING-MACHINE OPERATOR (glass products)
Tends automatic ceramic-decorating machine that prints single or multicolored pictures or designs on cylindrical glass or plastic containers: Positions precut stainless steel stencils in machine and adjusts roller guides that hold container in place during printing process. Pours premixed paint into ink reservoir. Turns valves to regulate temperature of paint and to regulate flow of paint onto stencil. Smooths paint onto stencil, using flat-bladed knife. Empties cartons of containers onto conveyor that feeds them into machine automatically. Starts machine that rotates container under stencil and ejects printed containers on moving conveyor. Inspects printed containers to ensure that printing is clear and free of smudges.
GOE: 06.04.09 STRENGTH: L GED: R3 M1 L1 SVP: 3 DLU: 77

652.685-034 GLOVE PRINTER (glove & mit.)
Tends printing press that prints information, such as slogans and trademarks, on gloves: Inserts specified preset type in bar holder of type case, or fits rubber plates over type case. Spreads ink on inking roller, using putty knife. Positions glove or mitten on bed of machine or on conveyor, following markings or guides. Removes printed gloves. Examines printing to detect ink smears and pairs gloves according to quality of printing.
GOE: 06.04.37 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

652.685-038 INK PRINTER (jewelry-silver.; leather prod.; plastic prod.)
Tends platen-press that prints designs and identifying data on leather, leatherette, or satin-covered jewelry, watch and instrument cases, and case linings. Cleans and lubricates press.
GOE: 06.04.37 STRENGTH: S GED: R2 M1 L2 SVP: 2 DLU: 77

652.685-042 KEYING-MACHINE OPERATOR (print. & pub.)
Tends keying machine that prints coded data on paper stock used to promote sale of magazines: Ascertains stock and code information to be used. Removes printing head from keying machine, inserts specified type in holder, and replaces head. Adjusts machine for size of stock and loads stock in paper guides on machine table. Starts machine that automatically prints code, and observes operation to determine whether print is legible. Removes processed stock from machine.
GOE: 06.04.37 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

652.685-046 MARKING-MACHINE OPERATOR (textile)
Tends machine that prints trademark on back of cloth: Pours printing ink and water into mixing can in proportions specified for cloth style. Starts pump to circulate ink between mixing can and trough under pickup roll. Positions truck of cloth at front of machine and starts cloth feeding over printing roll. Exam-

ines cloth to detect penetration of ink to face of cloth. Turns handwheel to adjust pressure roll that controls amount of ink applied to fabric. Doffs trucks of marked cloth at *swing-folding attachment*.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

652.685-050 MARKING-MACHINE OPERATOR (knitting; tex. prod., nec)

Tends machine that prints identifying information, such as brand names, size, and style onto such products as hosiery, knitted garments, or towels: Reads work order to determine color of ink to use and information to print. Pushes lever to move specified stamp keys into position, attaches rubber typing plate to type holder and inserts type holder into slots of printing head, or inserts slugs in chase of printing plate and turns setscrew to lock printing plate in machine. Spreads ink paste on ink roller of machine or clamps tube of ink in automatic ink dispenser. Places article on bed of machine under printing head. Depresses pedal or flips switch to start machine that transfers printed information from inked plate onto article. Stacks printed article onto worktable. Cleans machine, type slugs, type plate and holder, ink plate and rollers, using cleaning solution, cloth, brush, and airhose. May erase misprints, using tissue paper and ink eradicator.
GOE: 06.04.37 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

652.685-054 NAME-PLATE STAMPER (any industry)

Tends machine that stamps or embosses identifying data on nameplates for manufactured products, using one of following methods: (1) Assembles dies or aligns type in die block, using setscrews. Positions die block on press bed, lowers ram with handwheel, and feeds blank plates into powered machine or pulls lever to imprint data on blank. (2) Turns wheel to specified character and pulls lever to stamp character on blank. Repeats operation for each character until specified information is embossed on plate. May place nameplate in hinged forming block and close block manually to shape plate to specified curvature.
GOE: 06.04.37 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

652.685-058 PRESS FEEDER (tinware)

Tends automatic feeder on press that lithographs tinplate: Cuts bands from pallet load of tinplate, using cutters. Verifies load ticket against production schedule to ensure that specified tinplate is used. Pushes load from roller platform onto feeding hoist. Moves lever to raise load between guides to feeding position. Turns cranks to adjust feeder guides to accommodate size of plate. Observes feeding operation and stops feeder mechanism to remove defective plates. Mixes inks and washes press.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

652.685-062 PRINTER (pen & pencil)

Tends machine that prints trademarks, advertisements, and designs on parts of marking devices, such as pens, wooden and mechanical pencils, or felt or fiber tipped markers: Positions and aligns specified printing dies or type in machine head. Places parts, such as casings or caps, in machine hopper or holding device. Presses switch or depresses pedal to start machine that prints characters or designs on parts. Removes parts from machine conveyor or holding device. Inspects printed characters or designs and compares with written specifications. Places parts on rack for drying. May push rack into drying compartment. May pour ink into machine reservoir. May tend machine that prints trademark, size, and code number on ballpoint pen refills.
GOE: 06.04.37 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

652.685-066 PRINTER, FLOOR COVERING (fabrication, nec)

Tends machine that automatically prints colors and designs on felt-base floor covering: Places felt paper rolls on machine spindles, using chain hoist. Installs specified printing blocks on presses, using handtools. Pours specified preweighed paint colors into machine troughs. Threads felt paper through rollers and starts machine. Observes felt paper strip passing under paint-filled troughs from which printing blocks are automatically lowered to print pattern onto felt paper.
GOE: 06.04.04 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

652.685-070 PRINTER, MACHINE (hat & cap)

Tends machine that prints decorative designs on harvest hats (strawhats) in hat manufacturing establishment: Places specified *printing roller* in machine holding device and turns setscrew to align roller and machine register marks. Pours specified paint into machine reservoirs. Pushes button or pulls lever to start machine. Removes hat from rack and places hat on machine ram. Depresses pedal to raise hat against printing rollers to print design on hat. Releases pedal to lower machine ram and removes hat. Observes printed design for imperfections and places hat on rack to dry or auto oven conveyor.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

652.685-074 PRINTING-MACHINE OPERATOR, FOLDING RULES (cutlery-hrdwr.)

Tends machine that prints graduations and numerals on enameled wooden slats used in folding rules, and automatically inserts printed slats in drying racks: Stacks blank slats in magazine of printing machine. Positions empty racks in feed magazine of slat-inserting mechanism. Starts machine and observes printing and racking processes. Examines printed slats for printing defects, and compares them with master rule to verify accuracy of graduations. Stops machine and clears jams in feeding mechanisms, using screwdriver. Replaces broken shearpins, using fingers. Lifts racks of printed slats from machine to handtruck.
GOE: 06.04.03 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

652.685-078 ROLLER OPERATOR (toy-sport equip.)

Tends roller-printing machine that colors embossed letters or designs on wooden blocks for games, such as dominoes and anagrams: Adjusts height of machine roller to accommodate block. Positions blocks in racks, and places racks on conveyor belt that feeds them into machine for coloring. Removes blocks from conveyor and stacks them for drying.
GOE: 06.04.21 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

652.685-082 STAMPER II (tex. prod., nec)

Tends machine that stencils design onto cloth as outline for tufting: Staples stencil (raised pattern) around stencil cylinder. Lays marking bar (colored paraffin) in holder. Mounts roll of cloth on machine brackets, threads cloth between stencil and marking bar, and laps cloth around takeup roller. Places weights on marking bar to hold bar against cloth. Starts machine that draws cloth between stencil and marking bar, transferring design in paraffin to cloth. Doffs rolls of stenciled cloth from delivery end of machine.
GOE: 06.04.05 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

652.685-086 STENCIL-MACHINE OPERATOR (textile)

Tends machine that brushes designs into wet pile of pile fabric: Inserts metal rod through cloth roll and lifts roll into feeding position. Threads cloth over tension rod, between stencil roller with raised design and brushing rollers, and laps end around takeup roll, or sews end of cloth roll to cloth in machine, using portable sewing machine. Starts machine, and straightens cloth with hands to remove wrinkles as cloth enters machine. Pushes lever to disengage winding shaft and doffs rolls of stenciled cloth onto handtruck.
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

652.685-090 STRIKE-OFF-MACHINE OPERATOR (textile) alternate titles: roll tester

Tends strike-off machine that prints cloth with samples of color paste for comparison with color standards prior to production printing: Tapes piece of white cloth on printing drum. Places moist cloth pads between engraved strikes (depressions) on *printing roller* to separate colors being printed. Pours color sample on engraved strikes of roller. Starts strike-off machine to print impression on cloth. Removes printed sample from machine and places cloth in steam press to dry or places cloth in aging machine to develop and fix color. Trims sample, using scissors. Marks identification number on sample and records sample identification data. Washes strike-off roller and doctor, using brush or rag and water. May tend single-roller printing machine that prints cloth samples for use by laboratory.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

652.685-094 TICKET PRINTER AND TAGGER (garment)

Tends machine that automatically prints identifying information, such as size, style, and lot number, on tickets, and sews, glues, heat seals, or staples tickets to garments or garment parts: Selects and positions specified type in chase attachment and inserts attachment in machine. Turns knobs to set stationary type or numerical counter of machine in starting position. Places roll of tickets on holder and inserts end of roll into feeding device. Places spool of thread or wire on holder and threads it through machine. Places garment or garment part on machine bed and under needle or stapling device. Pushes lever to start machine that automatically feeds tickets under stamping head, prints information on tickets, and cuts and sews, glues, heat seals, or staples ticket to garment or garment part. May tend machine that prints identifying information on tags or tickets [TICKETER (any industry)]. May be designated according to product labeled as Glove Tagger (glove & mit.).
GOE: 06.04.37 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

652.685-098 TICKETER (any industry) alternate titles: label stamper; ticket maker; ticket printer

Tends machine that prints information, such as price, size, style, or color, on identification tags or labeling material: Selects type, according to specifications, and inserts type into machine, using tweezers, or turns dial on machine to move type into printing position. Mounts roll of tags or labeling material on machine brackets and threads end of roll through feeding device. Applies liquid or paste ink to printing rollers or printing pad on machine, using applicator. Flips switch or depresses pedal to start machine that automatically prints information on tags or material. Observes printed tags or material during start-up for defects, such as crooked lines, blurred print, or off-centered printing, and turns knobs or repositions printing plate, using handtools, to adjust machine. Removes printed material from delivery end of machine. May turn crank to print information on tags or material. May cut individual labels or tags from rolls of material, using scissors. May tend machine equipped with automatic cutter and counting control that stops machine when specified number of tickets have been printed. May tend machine that threads string through holes in tags or labels [STRINGING-MACHINE OPERATOR (paper goods) 649.685-054]. May tend machine that prints identifying information on tags or tickets and sews tickets to garments or garment parts [TICKET PRINTER AND TAGGER (garment) 652.685-094]. May tend machine that automatically prints identifying information on ticket and pins ticket to articles and be designated Pin-Ticket-Machine Operator (any industry).
GOE: 06.04.37 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 81

652.685-102 WAD-PRINTING-MACHINE OPERATOR (ordnance)

Tends automatic machines that print identifying data on top wad used in shotgun shells: Fills ink reservoir. Selects printing rollers or die set according

to work order and installs them in machine, using handtools. Scoops blank wads from supply trough onto grooved board and shakes board to arrange wads in grooves. Tilts board and slides stacks of wads from grooves into feed tubes. Sets feed tube in machine or fills hopper with blank wads, using scoop. Starts machine and examines wads for clarity of printing. Cleans type, using brush and solvent, or replaces worn dies to obtain clear impression. Weighs containers of printed wads and records amount of each type printed. Loads feed tubes with printed wads, using shaker board, for use in shell-loading machines.
GOE: 06.04.37 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

652.685-106 TYPE-PROOF REPRODUCER (machinery mfg.)
Tends phototypesetting machine and photo processor that print and develop proof of phototypesetting type disk in disk manufacturing establishment: Selects roll of programmed tape from file, secures roll onto reel of phototypesetting machine, and threads tape through machine rollers and into reader to prepare machine for automatic operation. Cleans dust and lint from disk and places disk in phototypesetting machine. Depresses keys to enter command codes for projection of type images from type disk onto film cassette in photo unit of machine and onto screen of cathode ray tube. Scans images on screen to detect type defects and notifies SUPERVISOR, TYPE-DISK QUALITY CONTROL (machinery mfg.) 979.137-026 of irregularities. Removes film cassette from machine, places cassette on receiving platform of photo processor, and depresses switch to begin developing cycle. Depresses switch to stop machine when runoff (proofsheet) emerges. Removes disk from phototypesetting machine, and places disk and runoff in specified storage area.
GOE: 05.10.05 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 86

652.685-110 SYMBOL STAMPER, SEMICONDUCTOR PACKAGES (electron. comp.) alternate titles: marker
Tends automatic printing machine that prints identifying symbols and numbers on semiconductor packages: Refills ink or paint reservoir. Inserts printing plate or type block in printing machine. Places semiconductor package on holding fixture in printing machine or places tube containing semiconductor packages in loading device of automatic printing machine. Flips switch or depresses pedal to print symbols and numbers on semiconductor circuit packages. Visually inspects package markings to identify misprints. Cleans and reprints packages, using cleaning solution and cotton swabs. Places printed semiconductor packages in trays. May set type on type block, using tweezers. May place printed packages in oven to dry or set ink.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 86

652.686-010 CLOTH-PRINTER HELPER (any industry)
Feeds and off bears machine that prints cloth: Pushes roll of cloth from handtruck onto rack at back of scray. Sews end of cloth roll to preceding cut of cloth, using sewing machine. Starts feeding rollers that unwind cloth into scray. Positions handtruck beneath *swing-folding attachment* and packs cloth into truck with hands. Tears cloth or ravels seam when truck is filled. May feed and off bear cloth printing machine that utilizes caustic soda instead of color paste to shrink cloth to form plisse and be designated Plisse-Machine Operator Helper (textile).
GOE: 06.04.05 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

652.686-014 GRAINER, MACHINE (any industry)
Feeds metal or simulated wood panels, sheets, or strips into machine that prints lines resembling natural wood grain. Holds or moves irregularly shaped pieces against printing roller to impart grainlike appearance. Stacks grained pieces for further processing or assembly into articles, such as television cabinets, automobile dashboards, and office furniture.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

652.686-018 GRAY-CLOTH TENDER, PRINTING (textile) alternate titles: gray tender
Feeds back gray cloth into cloth printing machine, and removes printed cloth from delivery end of machine: Trucks rolls of back gray cloth to printing machine, removes burlap wrapping, and sews end of cloth to preceding roll, using sewing machine. Starts feeding rollers that unwind back gray cloth into scray. Positions handtruck beneath *swing-folding attachment* and scans cloth for printing flaws as cloth is folded into truck. Notifies CLOTH PRINTER (any industry) 652.382-010 as flaws occur. Marks lot number on end of each truck of cloth, ravels connecting seam, and replaces full truck with empty truck. Tears sample from each lot of cloth. Assists PRINTING-ROLLER HANDLER (textile) 652.385-010 or BACK TENDER, CLOTH PRINTING (textile) 652.685-010 in removing and replacing color boxes, doctors, *printing rollers*, and gears when changing pattern, and in mounting feedrolls of cloth on printing machine. May truck soiled cloth to BACK-GRAY-CLOTH WASHER (textile) 582.685-030.
GOE: 06.04.05 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

652.686-022 LOADER-UNLOADER, SCREEN-PRINTING MACHINE (textile)
Feeds or off bears automatic screen-printing machine that prints designs on textile products, such as towels, sheets, and pillowcases: Positions articles on conveyor belt of machine, following marks on conveyor. Removes printed articles from conveyor at discharge end of machine and places articles over wire, on racks, or on perforated conveyor belt that carries articles through drier. Cleans printing screens, using solvent, water, and rags.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

652.686-026 PRINT-LINE FEEDER (furniture)
Feeds furniture composition-wood dimensional panels onto feed conveyor of tandem print-line machines that automatically smooth, paint, and print wood grain designs on top surfaces of panels: Removes panels, with previously inserted filler blocks, from handtruck and positions panel on feed conveyor so that smooth surface of panel is up and filler blocks support underside of panel.
GOE: 06.04.03 STRENGTH: M GED: R1 M1 L1 SVP: 1 DLU: 77

652.686-030 PRINT-LINE TAILER (furniture)
Removes dimensional furniture panels from discharge conveyor of print-line machines that smooth, paint, and print wood grain designs on top surfaces of panels: Pushes panels along roller conveyor from inspection point to off bearing area and removes panels from conveyor. Scans panels for inspector's marks and stacks defective panels aside. Stacks nondefective panels on handtruck, inserting paper sheets between panels to protect printed surfaces from abrasions.
GOE: 06.04.03 STRENGTH: M GED: R1 M1 L1 SVP: 1 DLU: 77

652.686-034 RAISED PRINTER (print. & pub.) alternate titles: thermograph operator
Feeds cards and stationery (received while ink is still wet after printing) into machine that dusts them with powder that adheres to ink. Feeds dusted stationery through baking equipment to fuse together particles of powder and produce raised effect resembling steel-die or copperplate engraving.
GOE: 06.04.21 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

652.686-038 SCREEN-PRINTING-MACHINE-OPERATOR HELPER (textile)
Performs variety of duties to assist automatic screen-printing machine operator in printing multicolored patterns on textiles: Turns thumbscrews and loosens and tightens bolts, using wrench, to remove, replace, adjust, or align screens in bed of screen printing machine as instructed by machine operator. Pushes new roll of cloth into feed brackets and aligns end of new cloth with end of cloth in machine and sews ends together, using portable sewing machine. Carries stacks of cloth articles, such as towels, washcloths, and bathmats from storage boxes, and stacks articles on shelf for use by workers feeding machine that prints precut cloth articles. Observes operation of printing machine to detect flaws in printing, such as blurs, smears, and color out of register (alignment), and reports problem detected to machine operator. Pours printing paste onto screen as required. Loads and unloads handtrucks, and trucks printing screens and drums of printing paste to and from storage areas.
GOE: 06.02.06 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

652.686-042 TOWEL INSPECTOR (textile)
Inspects screen-printed towels for imperfections in print and weave: Pulls or lifts towels from drying rack on conveyor belt emerging from drier. Examines towels for print defects, such as off color, smears, inadequate color penetration, or mismatched pattern, and mill defects, such as picks, tears, broken warp or filling, or soil. Places towels of less than first quality aside and counts and places first quality towels onto wheeled cart or into shipping container. Marks style, quality and quantity on shipping label and attaches label to container, using glue and brush. Carries second quality towels to collection area. Keeps daily time and production reports and submits reports to supervisor.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

652.686-046 WARE SERVER (glass mfg.)
Feeds glass containers onto conveyor of machine that prints (stencils) trademarks or labels on them.
GOE: 06.04.37 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

652.687-010 CLOTH SPREADER, SCREEN PRINTING (textile)
Spreads cloth on tables in preparation for screen printing and removes cloth from table after printing: Places roll of cloth on unrolling device and pushes cloth along table to unwind it, following markings on table. Pins ends of cloth to table and smooths out wrinkles. Presses cloth against gummed tabletop or pins selvages of cloth to table to prevent slipping. Slides rods under printed cloth and raises it to drying rack. Winds dry cloth onto tube, using handcrank or motor-driven winder.
GOE: 06.04.27 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

652.687-014 COLOR DIPPER (textile)
Refills *color boxes* on cloth-printing machine with specified colors, using hand dipper. Typically services machines printing eight to fifteen colors.
GOE: 06.04.16 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

652.687-018 FILLER-BLOCK INSERTER-REMOVER (furniture)
Inserts filler (support) blocks into recessed areas on underside of dimensional composition-wood furniture panels to ensure uniform sanding, painting, and printing of wood grain as panels are conveyed through tandem print-line machines, or removes blocks from underside of panels subsequent to processing on print-line machines and pushes panel to PRINT-LINE INSPECTOR (furniture).
GOE: 06.04.25 STRENGTH: M GED: R1 M1 L1 SVP: 1 DLU: 77

652.687-022 PAINT POURER (fabrication, nec)
Pours paint in carriage of machine that prints colors and designs on linoleum rugs. May mix paint to attain required color, using paddle.
GOE: 06.04.34 STRENGTH: M GED: R1 M1 L1 SVP: 1 DLU: 77

652.687-026 PASTER, SCREEN PRINTING (textile) alternate titles: stretcher
Positions (stretches) textile articles, such as towels, bath cloths, blankets, sheets, and pillowcases at designated intervals on gummed-top table to prepare them for screen printing. Smooths wrinkles from articles and presses articles

to table top with hands to prevent slipping. May hang printed articles on line to dry.
GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

652.687-030 PATTERN HAND (woodworking)
Prints patterns on paper strips and glues printed strips to wood or plastic sheets to guide workers engaged in cutting sheets: Covers metal cut of desired pattern with printing ink, using handroller. Places paper strip on lower platen of hand transfer press, and positions inked cut on paper strip. Moves lever to close press and stamp pattern on paper strip. Removes printed strip from press and glues strip to wood or plastic sheet. May nail several sheets together when more than one object is to be cut to same pattern.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 87

652.687-034 PRINT-LINE INSPECTOR (furniture)
Examines furniture composition-wood-dimensional-panels for processing defects on discharge conveyor of tandem print-line machine. Feels and inspects panels to detect defects, such as scratches, blemishes, and discolorations. Marks defective areas with chalk or crayon and pushes panels along conveyor for removal.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

652.687-038 PRINTER, FLOOR COVERING, ASSISTANT (fabrication, nec)
Lifts roll of felt paper, using chain hoist, and places roll on spindle of machine that paints designs on roll to make floor covering. Pours specified paint colors into machine troughs.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

652.687-042 WALLPAPER INSPECTOR (paper goods) alternate titles: quality-control inspector
Examines rolls of wallpaper for defects, such as discoloration, printing irregularities, streaks, and color splashes, and tests for improper coating or waterproofing: Unrolls portions of wallpaper rolls or hangs rolls on test wall to examine for surface defects and symmetry of printed figures, register of colors, and uniformity of waterproof coating. May inspect new paper stock to detect ripples or other flaws. May inspect sample rolls of wallpaper for printing irregularities before authorizing printing of remaining rolls. May apply specified test chemicals to wallpaper sample to test for washability.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

652.687-046 WALLPAPER INSPECTOR AND SHIPPER (paper goods)
Inspects wallpaper for printing defects and prepares wallpaper for shipment: Lifts bolt of wallpaper onto letoff rack. Pulls wallpaper across inspection table and clamps wallpaper to rod on powered *windup rack*. Sets footage meter. Presses foot switch and observes wallpaper for defects, such as color splashes, smudges, and irregular printing as paper is wound onto windup rack. Cuts wallpaper from bolt when specified footage is wound. Wraps rolls of wallpaper with paper covering, and stamps identifying information on rolls. Packs rolls of wallpaper in cartons for shipment or stacks them in storage bins. May compare colors with master swatch to verify color accuracy. May brush excess flock from surface of flocked wallcovering, using soft brush.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

652.687-050 WALLPAPER-PRINTER HELPER (paper goods) alternate titles: back tender
Assists WALLPAPER PRINTER (paper goods) I to print wallpaper, performing any combination of following duties: Carries pails of prescribed color solutions to printing machine. Ladles color solutions into specified color trays of machine and maintains supply of color solutions during printing process. Changes color trays and assists WALLPAPER PRINTER (paper goods) I to change print rollers. Washes print rollers and floor area around machine, using water hose. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 06.04.26 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

653 BOOKBINDING-MACHINE OPERATORS AND RELATED OCCUPATIONS

This group includes occupations concerned with gathering, folding, sewing, and stapling signatures to form magazines, pamphlets, or books, affixing covers to sewn signatures, compressing books to size, stiffening backs of book bodies with glue, forming joints of book covers and bodies, reinforcing backs of books with fabric strips, gluing cover boards to end sheets, and drying books.

653.131-010 SUPERVISOR, BINDERY (print. & pub.) alternate titles: bindery chief; bookbinder, chief; supervisor; floorleader; section manager
Supervises and coordinates activities of workers engaged in assembling, forming, finishing, covering, and ruling products such as books, pamphlets, periodicals, notebooks, looseleaf binders, tablets, and other printed and published products manually and by machine: Oversees binding or rebinding operations to verify conformance with plant standards. Performs duties as described under SUPERVISOR (any industry) Master Title. May only supervise workers engaged in forming operations, such as folding, cutting, gathering, stitching (stapling), and sewing printed sheets, and be designated Supervisor, Assembly Room (print. & pub.). May only supervise workers engaged in assembling, finishing, and binding sets, folders, and loose leaf binders and be designated Supervisor, Finishing/Binding (print. & pub.). May only supervise workers engaged in setting up and operating machines that draw lines, cut rounded corners, and drill holes in paper products and be designated Supervisor, Ruling (paper goods; print. & pub.).
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 89

653.360-010 CASING-IN-LINE SETTER (print. & pub.) alternate titles: machine adjuster
Sets up, according to job order specifications, machines that automatically perform in sequence such operations as rounding and backing, supering (applying strip of reinforcing material to back of book) and lining, casing-in, and pressing to convert gathered signatures (pages) into finished book: Mounts rolls of cloth and paper lining and headbands on machine spindles. Fills glue pot and adjusts flow of glue. Installs and adjusts feed guides, holding clamps, rollers, rounding forms, creasing ram, and other machine parts to accommodate specified size books, using measuring instruments and handtools. Sets thermostatic control and pressure gauge according to thickness of book and amount of pressure to be applied. Turns screws to adjust cutting mechanism to cut linings and headbands to book size. Starts machine to process sample book and verify accuracy of machine setup. Makes adjustments as necessary during production run. May direct activities or perform duties of CASING-IN-LINE FEEDER (print. & pub.) 653.686-010.
GOE: 06.01.02 STRENGTH: L GED: R3 M2 L3 SVP: 8 DLU: 90

653.360-018 BINDERY-MACHINE SETTER (print. & pub.) alternate titles: bindery leadperson
Sets up machine or machines that automatically perform one or more bindery operations, such as folding, cutting, gathering, stitching or gluing, following blueprint or job specifications, and using measuring instruments and handtools: Installs and adjusts machine knives, side guiders, feed guides, holding clamps, pockets, rollers, specified jogging tray at discharge end of machines, and other machine parts to accommodate sheets, signatures, or books of specified size. Turns dials to required graduations to set grippers and gripper feelers according to thickness of signatures or flat sheets being gathered. Secures reel of stitching wire on spindle of stitching heads and threads wire through feeding, cutting, stitch forming, and driving mechanisms. Positions and clamps stitching heads on crossarm to space stitches as specified. Turns thumbscrews and handwheels to adjust length of stitches and tension on creasing blades and folding rollers according to thickness of pages to be stitched or sheet size and number of folds specified. Adjusts cams and other mechanisms to synchronize speed of automatic feeding devices and stitching. Fills glue pot and adjusts flow of glue and speed of conveyors. Starts machines and makes trial runs to verify accuracy of machine setup. Observes operation to detect machine malfunctions and makes adjustments as required. May maintain machinery in operating condition. May train workers to set up, operate, and use automatic bindery machines. May oversee work of BINDERY-MACHINE FEEDER-OFFBEARER (print. & pub.) 653.686-026. May be classified according to name of machine as Folding-Machine Setter (print. & pub.); Gathering-Machine Setter (print. & pub.); Perfect-Binder Setter (print. & pub.); Stitching-Machine Setter (print. & pub.).
GOE: 06.01.02 STRENGTH: L GED: R3 M2 L2 SVP: 8 DLU: 90

653.382-010 FOLDING-MACHINE OPERATOR (print. & pub.) alternate titles: finishing machine operator; folder, machine; folder operator
Sets up and operates machine to automatically fold, slit, and score printed sheets into signatures for binding: Examines work order to determine setup specifications or inserts sample sheet in machine and sets guides to edge of sheet. Adjusts air blasts on feeder to regulate amount of air separating sheets of paper to provide continuous flow of paper through machine. Adjusts conveyor blades or knurled rollers to feed sheet into folding rollers. Turns screws to regulate tension of creasing blades and folding rollers according to thickness of paper and size and number of folds specified, using handtools. Sets slitting knives to slit sheets as specified. Stacks sheets to be folded on conveyor belt of automatic feed. Presses button to activate machine and observes machine operation. Adjusts machine during production run as required. May operate two or more machines. May jog, stack, band, and box folded sheets.
GOE: 06.02.04 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 89

653.382-014 COLLATING-MACHINE OPERATOR (print. & pub.) alternate titles: set-making-machine operator
Sets up and operates collating machine to perform functions such as assembling and perforating, stapling, gluing, folding, or cutting sheets of paper, forms, or signatures in specified sequence to form sets, following job specifications: Turns screws to adjust pockets and guides to accommodate sheets of paper to be collated. Turns dials to required graduations to set grippers and gripper feelers according to thickness of single sheets or signatures being collated, using measuring instruments. Turns knobs, using handtools, to set or adjust air blowers or air suction devices to required position and force to facilitate pickup of individual sheets. Sets *indexing* control to numbered position corresponding to number of sheets to be assembled or sets automatic counter at discharge end of machine. Turns screws to adjust speed of conveyor belt, using handtools, and installs specified jogging tray at discharge end of machine. Threads wire into machine to load stitcher head when sets are to be stapled. Fills glue reservoir and adjusts flow of glue when top edges of sets are to be glued. Flexes and jogs stacks of sheets to ensure sheets are in specified order and to align edges of sheets. Feeds sheets into machine in reverse order (last sheet first) or places stacks of sheets in specified machine pockets. Replenishes

pockets with sheets of paper or signatures throughout production run. Starts machine to verify accuracy of machine setup, following sample, and observes operation of machine throughout production run. Stops, resets, and restarts machine when malfunctions occur. Removes collated products from machine or conveyor belt and stacks products on skid or pallet. Records time spent on specific tasks or number of sets or book bodies collated on daily production sheet. Performs routine maintenance to ensure machine is in working order. May place rolls of paper and carbon paper onto feed spindle of roll-fed machine, using chain hoist. May punch holes in completed sets, using drill punch.
GOE: 06.02.04 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 90

653.662-010 STITCHING-MACHINE OPERATOR (print. & pub.) alternate titles: machine operator; finishing machine operator; stitcher operator

Sets up and operates machine to automatically gather, stitch, and trim folded signatures or flat sheets of paper to form paperbound books, magazines, pamphlets, catalogs, or booklets: Examines work order to determine work instructions. Adjusts feeder pockets to size of folded signatures or flat sheets. Adjusts air pressure pump to separate sheets. Sets stitchers for specified length and thickness of stitch and threads stitching wire into machine. Sets trimmer knives to trim three sides of publication to specified size. Starts machine and makes trial run. Readjusts machine setup if necessary, and regulates machine speed. Takes periodic readings of counter and records number of publications produced or examines samples periodically for defects and records number as indicated on counter to determine when problem occurred. Gives directions to crewmembers engaged in feeding and off bearing activities. May feed and off bear machine. May oil, grease, and clean machine parts and make minor repairs to keep machine in working condition. May be designated according to type of stitching machine operated as Saddle-Stitching-Machine Operator (print. & pub.). May set up and operate machine to apply glue to backs of books prior to trimming and be designated Side-Stitching-Machine Operator (print. & pub.). May set up and operate related stitching machines.
GOE: 06.02.04 STRENGTH: L GED: R3 M1 L3 SVP: 6 DLU: 89

653.667-010 INSPECTOR, PUBLICATIONS (print. & pub.) alternate titles: inspector; quality control inspector

Inspects magazines, periodicals, catalogs, pamphlets, and rebound books for defects, such as loose, torn, or wrinkled pages, missing staples, incorrect bindings, incorrect book cases, and warped laminated paperback covers: Selects copies of publications from machine or table and examines covers and copies for defects, such as ragged edges, torn or wrinkled pages, incomplete cuts, incorrect bindings, incorrect casing material and color, authors, titles, call numbers, dirt and glue on covers, and bubbles in laminated covers. Fans pages to detect defects, such as errors in numbering, duplicate pages, color variation and inaccurate registration, ink smears, cut print, missing inserts, and dirty and wrinkled end papers. Notifies operating personnel of defects. Locates and removes defective copies from conveyor, stacking table, or pallets, and disposes of defective publications according to instructions from supervisory personnel. May clean covers and repair defective books, using cloth, cleaning solvent, and variety of handtools and bindery machines. May examine finished books and compare information on worksheet with work performed on books for accuracy and completeness. May stack books on conveyor or table for shipping. May operate machine to print shipping labels for boxes [ADDRESSING-MACHINE OPERATOR (clerical) 208.582-010].
GOE: 06.03.02 STRENGTH: L GED: R3 M1 L2 SVP: 5 DLU: 89

653.682-010 BOOK-SEWING-MACHINE OPERATOR II (print. & pub.) alternate titles: back sewer

Sets up and operates machine to sew gathered and collated signatures (pages) into book form for binding: Pulls thread through lubrication box, thread guides, and needle to thread machine, and soaks bobbins of thread in water to lubricate thread. Places book under needle, sets presser foot to thickness of book, and turns setscrews to adjust length of stitch. Pushes book under presser foot with back against guide, depresses pedal to activate needle, and sews through length of book. Feeds and sews books in succession until delivery trough is full. Stops machine, cuts threads connecting books, and stacks separated books. May stitch endpapers to top and bottom of signatures. May operate machine equipped with multiple needles. May be known by type of book stitched and be designated Blankbook-Stitching-Machine Operator (print. & pub.) II. May specialize in stitching trimmed or shaved spine of books for rebinding.
GOE: 06.02.04 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 89

653.682-014 COVERING-MACHINE OPERATOR (print. & pub.)

Operates automatic book-covering machine to glue paper covers to wire-stitched books, pamphlets, and catalogs: Adjusts guide, spacing, and tension bars, and glue-distribution device according to size of book, by turning setscrews and handwheels. Fills glue reservoir, and loads feed hoppers of machine with covers and books. Pulls control lever to start machine. Removes finished books from discharge table. May direct other workers in keeping hoppers supplied with covers and books, and in removing and stacking finished books. May operate machine arranged in tandem with other bookbinding machines.
GOE: 06.02.20 STRENGTH: L GED: R3 M2 L1 SVP: 5 DLU: 77

653.682-018 HEAD-BANDER-AND-LINER OPERATOR (print. & pub.)

Sets up and operates machine to glue headbands, paper lining, and superlining to backs of book bodies prior to binding, according to specifications: Reviews work order to determine setup specifications. Sets feed guide and holding clamps to book size. Installs rolls of cloth, paper lining, and headbands. Sets feeds to cut linings and headbands to book size. Fills glue reservoir and tightens nuts to secure glue rollers, using wrench. Starts machine and runs sample book through machine. Inspects sample to determine if headband and lining are securely attached. Resets feeds, guides, and holding clamps of machine as necessary. Feeds books singly, back down, into machine. Removes books from machine delivery table and stacks them. May fill endpaper feed with endpapers of specified size. May position books singly, back up, in machine, apply glue to back of books, linings, headbands, and endpapers by brushing, feeding between saturated rollers, or holding material against saturated brush, and attach headband, linings, and endpapers to backs of book bodies manually when rebinding books for reuse. May operate machine arranged in tandem with other bookbinding machines.
GOE: 06.02.20 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 89

653.682-022 TINNING-MACHINE SET-UP OPERATOR (print. & pub.)

Sets up and operates automatic machine to fold and clamp metal edging to ends of calender pictures and staples calender to picture: Moves lever to shift gears that adjust speed of feed mechanism. Adjusts metal-forming heads, using hex-head wrench. Turns handcrank to adjust mechanism that inserts hanger loop as metal strip is clamped to top of sheet. Turns handcrank to set cutter that cuts metal strips between sheets after bottom of sheet has been tinned. Manually sets microswitch that activates spray to apply strip of glue that holds calender for stitching. Sets head and side guides of stitcher that staples calender to sheet. Places rolls of metal stripping onto machine, places reel of wire onto stitching device, and pours glue into reservoir. Places stacks of pictures and calenders onto feed tables. Presses button to start machine. Monitors operation of machine, clears jams, and replenishes supplies.
GOE: 06.02.09 STRENGTH: M GED: R3 M1 L2 SVP: 5 DLU: 77

653.685-010 BINDERY WORKER (print. & pub.) alternate titles: bindery operator; table worker

Tends various machines and equipment and performs any combination of following tasks involved in binding books, periodicals, and pamphlets, and assembling related printed materials in accordance with work order specifications: Punches holes in paper sheets, manually or by machine. Creases and compresses signatures prior to affixing covers, using press or by hand. Fastens sheets, signatures, or other printed materials together, using hand or machine stapler, or adjusts or tends machine that inserts wire or plastic binding strips into punched holes to fasten pages and covers together. Feeds covers, signatures, and sheets into various machines for collating, stitching, trimming, folding, ruling, stapling, roughing, *indexing*, gluing, and perforating operations. Removes, stacks, and packs printed material in various stages of completion on pallets as it accumulates on delivery table of machines. Examines stitched, collated, bound, and unbound publications to ascertain that pages are bound in numerical or folio order according to sample copy, and for such defects as imperfect bindings, ink spots, torn, loose, and uneven pages, and loose and uncut threads. Inserts illustrated pages, extra sheets, and collated sets into catalogs, periodicals, directories, pocket portfolios, or looseleaf binders, and inserts sheets and applies labels to envelopes or periodicals by hand or machine. Places paper jackets on acceptable books. Applies gold leaf, silver leaf, or metallic foil lettering or designs on covers, using stamping machine. Applies adhesive tape, mylar strips, and index tabs to sheets by machine. Wraps product in plastic, using shrink-wrapping machine, packs products in boxes, and tapes lids of boxes shut. Records daily production. Cleans work area around machine. May make ready bindery equipment and work stations. May lead, train, and monitor work of less experienced workers.
GOE: 06.04.04 STRENGTH: L GED: R2 M2 L2 SVP: 4 DLU: 89

653.685-014 BOOK-SEWING-MACHINE OPERATOR I (print. & pub.) alternate titles: book sewer; tape-sewing-machine operator

Tends machine that sews sheets of gathered and collated signatures and sews signatures into book form preparatory to binding: Threads needles, adjusts machine bed to width of signatures, sets feed arms for size of signatures, and passes tape through guides, following written instructions. Opens signature and places it over feed arm. Depresses pedal to revolve feed arm, sew signature, and present another arm in feeding position (signature is released from arm after sewing and positioned for sewing to next signature). Places signatures in succession on feed arms, depressing pedal to sew individual signatures and to stitch sewed signatures together. Stops machine when delivery table is full. Cuts stitching holding books together, and stacks separated books. May stitch or fasten endpapers or linings to first and last signatures of books. May stitch signatures and apply glue along binding edge of first and last signatures to reinforce binding of book bodies. May specialize in stitching cut or shaved spine of books preparatory to rebinding for resale or reuse. May be known by type of book stitched and be designated Blankbook-Stitching-Machine Operator (print. & pub.) I.
GOE: 06.02.04 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 90

653.685-018 CASE-MAKING-MACHINE OPERATOR (print. & pub.) alternate titles: caser operator; cover-making-machine operator

Tends machine that glues binder boards and reinforcing strips to covering material, miters corners of covers, and turns edges of covers over boards to assemble book covers: Reads work order to determine adjustment requirements. Turns thumbscrews to adjust feed hopper guides according to size of binder boards and covers, and fills feed hopper with binder boards and covers. Mounts

roll of reinforcing paper onto spindle, or inserts roll into holder, and adjusts cutting blade. Adjusts corner-nicking and mitering blades as specified. Fills glue fountain and turns switch to activate heating element. Adjusts rollers to distribute glue on binder boards and reinforcing strips. Adjusts pressure gauge of roller, according to thickness of binder boards. Starts machine and places covering pieces sequentially onto feeder. Examines finished covers to ensure established standards have been met. Adjusts machine as necessary during production run. Occasionally stirs glue to maintain consistency. May mount roll of headbands on spindle of machine that cuts and glues headbands on each end of reinforcing strip. May position, align, and press binder boards, reinforcing strips, and headbands onto covering material, and turn in corners manually. May slide cover down into machine or push cover between press surfaces of pneumatic-powered machine that folds, creases, and bonds protruding edges of covers over boards and manually rotates cover until all edges have been creased and bonded. May feed covers through rotary press to ensure bonding. May stack finished covers on table.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 90

653.685-022 MAGAZINE REPAIRER (print. & pub.)

Tends saddle-stitching machine to repair salvable magazines, comic books, or catalogs in bindery. Picks up book from supply on worktable, opens book, and places book in tentlike position over fixture of wire-stitching machine. Examines book to determine location of missing stitch (staple), and positions book under stitching head. Depresses pedal to start machine and insert missing stitch. Stacks stitched book on worktable for removal. Examines wrinkled, creased, or dog-eared pages and cover sheets and separates sheets judged to be salvable and discards remainder of sheets. Rolls and bends sheets and smooths with hands and fingers to remove wrinkles and creases. Folds repaired sheets by hand and stacks sheets to be returned to binding machines. Keeps daily production records.
GOE: 06.04.04 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

653.685-026 ROUNDING-AND-BACKING-MACHINE OPERATOR (print. & pub.) alternate titles: rounder and backer; rounder

Tends machine that automatically rounds and backs bound signatures and forms grooved hinge space for book covers. Installs rounding form in machine, sets spacing of holding clamps and backing rollers, and adjusts turning of feeder according to size of sample book or work order specifications. Starts machine that automatically rounds and backs test book. Feeds book bodies into feed holder of machine. Examines book bodies for conformance to specifications as book bodies are ejected sequentially from machine onto conveyor belt. Stops machine when malfunctions occur. May adjust machine as necessary to correct malfunction. May remove and stack rounded and backed books on table. May clamp partially rounded and backed books in press, fan signatures outward, and pound signatures into required curvature manually, using hammer. May tend machine mounted in tandem with other bookbinding machines.
GOE: 06.02.09 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 90

653.685-030 SPIRAL BINDER (paper goods; print. & pub.) alternate titles: insert-machine operator; spiral-bind operator; wire-spiral binder

Tends machine that forms, inserts, trims, and fastens spiral binding in covers of paper goods such as booklets, pamphlets, and notebooks: Measures guides, using ruler, and positions or adjusts guides to accommodate size of sheets to be bound. Tightens setscrews to secure guides in specified position. Starts machine. Positions and holds items to be bound inside guide stops of machine and depresses pedal to form, insert, cut off, and crimp ends of spiral binder. Stacks bound items on skid. Removes broken pieces of wire from machine, using pointed pliers. Removes and replaces damaged covers and backs. May thread wire into machine. May manually start preformed spiral in perforated holes of items to be bound and hold spiral against rubber-covered spindle or wringer-like rollers which twist spiral into remaining perforations.
GOE: 06.04.09 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 86

653.686-010 CASING-IN-LINE FEEDER (print. & pub.) alternate titles: caser-in

Feeds gathered signatures (pages) into machines that automatically perform in sequence such operations as rounding and backing, supering (applying strip of reinforcing material to back of book) and lining, casing-in, and pressing to convert gathered signatures into complete books: Jogs signatures to align edges. Places aligned signatures against guides of feed conveyor. Notifies CASING-IN-LINE SETTER (print. & pub.) of machine malfunction.
GOE: 06.04.04 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

653.686-026 BINDERY-MACHINE FEEDER-OFFBEARER (print. & pub.)

Feeds or off bears machines that automatically perform one or more operations to fold and cut printed sheets into signatures, assemble or gather sheets in specified sequence, or wire stitch or glue sheets to form books, magazines, catalogs, and pamphlets: Lifts stacks of sheets, pages, covers, or inserts from supply pallet and jogs stack on machine table to align edges. Flexes stack to ensure sheets are in specified order, following sample, or to admit air between sheets to facilitate suction-cup pickup. Places stacks into specified hoppers, pockets, or against guides on feed conveyor and replenishes stacks as needed. Observes feeding and pickup mechanisms to detect defective pages and removes defective pages from machine. Removes signatures, paperbound books, magazines, catalogs, or pamphlets from discharge conveyor. Observes discharge mechanism and notifies machine operator or machine setter of jams and excessive defective publications. Places defective publications aside to be salvaged or discarded. May thread wire from feed spool into stitching machine to load stitcher head. May push button to stop machine in case of jams. May count specified number of publications and tie them into bundles or place publications on strapping machine that wraps and seals reinforcing plastic bands around them. May keep daily production records. May be designated according to machine function as Folding-Machine Feeder (print. & pub.); Gathering-Machine Feeder (print. & pub.); Perfect-Binder Feeder-Offbearer (print. & pub.); Saddle-Stitching-Machine Feeder-Offbearer (print. & pub.); Side-Stitching-Machine Feeder-Offbearer (print. & pub.).
GOE: 06.04.04 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 90

653.687-010 COLLATOR (print. & pub.)

Examines gathered book, magazine, and pamphlet bodies to verify order and number of included signatures: Riffles bodies, one section at a time, observing signature figures. Notes omitted, misplaced, or duplicated signatures, and rearranges or inserts sections to correct subject matter. Stacks completed bodies.
GOE: 07.07.03 STRENGTH: L GED: R2 M2 L1 SVP: 2 DLU: 77

654 TYPECASTERS AND RELATED OCCUPATIONS

This group includes occupations concerned with casting and assembling type into equipped form for printing by means of machines that select, cast, cool, and assemble type on sticks.

654.382-010 CASTING-MACHINE OPERATOR (machinery mfg.; print. & pub.) alternate titles: caster operator; monotype caster; type caster

Sets up and operates machine to cast and assemble type for printing: Places reel of controller paper on holder, threads free end around tension and feeding rolls, and attaches it to winding roll. Sets composing stick to length of line specified in casting instructions. Inserts and locks matrix case, designed for specified size of type, in case holder. Locks galley next to stick on bed of machine. Starts machine and admits compressed air to machine (machine automatically selects, casts, cools, and assembles type in stick, being controlled by perforations made in controller paper). Stops machine when galley is full or when strip is completed. Removes and stores controller reel and matrix case. Removes galley and forwards it for proofing.
GOE: 05.10.05 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

654.582-010 TYPE-CASTING MACHINE OPERATOR (print. & pub.)

Sets up and operates machine to cast lines of type: Sets up matrices in assembly stick by hand, according to copy for which slugs are to be made. Locks assembly stick containing matrices in groove on top of machine. Starts machine and monitors operation while metal slugs bearing printed characters corresponding to characters on matrices are automatically produced. Removes assembly stick after slugs are made and distributes matrices and slugs in compartments of cases used for storing them until use. May be known by trade name of machine used.
GOE: 05.10.05 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

654.687-010 MATRIX INSPECTOR (machinery mfg.)

Examines metal matrices (dies) for defects which are discernible with naked eye.
GOE: 06.03.02 STRENGTH: S GED: R2 M1 L2 SVP: 3 DLU: 77

654.687-014 PAGER (machinery mfg.)

Separates pieces of type after they are removed from type molds. Cleans type and removes burrs, using file. May separate type according to specified quantity of each character and size and face of type.
GOE: 06.04.37 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

659 PRINTING OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with producing copies of designs or lettering by transferring ink or pigment to paper or other material.

659.360-010 PLATE FINISHER (print. & pub.)

Sets up and operates power cutting tools to trim electrotype or stereotype plates and mounts them on wood or metal blocks, according to specifications, for use in printing press: Operates metal cutting tools, such as saws, plate milling machine, shaving machine, and radial or straight line routing machine, to remove surplus backing from plate, shave and smooth plates to specified thickness, cut out metal from nonprinting areas, and cut plates to size, and bevel edges. Sets plate on surface plate and taps with hammer and block to flatten plate. Rubs face of plate with finisher's rubber or magnesia to determine low and high spots. Taps low spots with punches and hammer to raise and level them to printing height. Operates plate curving machine (slip roll forming machine) that curves plates to fit plate cylinder of rotary printing press. Examines plates with magnifier or microscope to detect flaws in halftone dots and lines and raises, lowers, or repairs imperfections with engraver's handtools. Mounts finished plates on wood or metal blocks, using hammer and nails or thermoplastic adhesive and heat press. May operate hand or power single color proof press to print proof of plate, observing printing quality of plate and conformity of image on copy. May modify plates for other than rotary type presses.

best copy available

GOE: 05.05.07 STRENGTH: M GED: R4 M2 L2 SVP: 8 DLU: 77

659.381-010 PLATE SETTER, FLEXOGRAPHIC PRESS (print. & pub.)

Prepares cylinders for installation in flexographic printing press according to specifications and diagrams: Measures and cuts brass plate of specified dimensions, using rule and blade-shearer, and bends plate to fit curvature of cylinder, using plate curver. Lifts and places printing cylinder of specified size on proof machine holding-rack. Measures and draws centering lines on cylinder to be used as guides for alignment of plate and dies. Slides formed plate on cylinder, positions plate according to centering lines, and clamps plate in place with tension bands. Trims and bevels rough edges of rubber dies, using knife. Positions dies on cylinder plate, following guide markings and diagrams, and fastens dies to plate with adhesive paper. Applies ink to dies with roller, and operates proof machine to make trial impression on proof paper. Examines proof to detect typographical or compositional errors and to verify quality and registration of print. Measures thickness of mount with micrometer to verify tolerance. Rejects defective dies and remounts or repositions dies to correct errors in original setup until trial impression meets quality standards.
GOE: 06.01.02 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 77

659.382-010 EMBOSSER (print. & pub.)

Sets up and operates machine to emboss gilt or blind (without goldleaf) lettering and designs on book covers, following specifications: Glues embossing plate to copper backing plate and installs backing plate into hot plate of machine. Cuts piece of cardboard to approximate size of plate and places cardboard on machine bed under plate. Starts machine to lower ram and impress cardboard. Cuts surface of cardboard around impression, leaving design or letters raised to increase machine pressure at contact points, using knife, compass, and square, and glues cardboard to bed under plate, adjusting bed so impression and plate are in alignment. Closes switch to heat plate. Sets guides to hold cover in position, and adjusts table height to obtain correct depth of impression. Places cover, with prelaid goldleaf in position, against guides on machine bed and starts machine that lowers ram and stamps goldleaf design or lettering on cover. Removes and stacks embossed covers. Stamps blind lettering or designs on covers in like manner. May perform simple embossing of book covers, using heated handtools.
GOE: 05.10.05 STRENGTH: L GED: R4 M2 L2 SVP: 6 DLU: 90

659.462-010 ELECTROTYPE SERVICER (print. & pub.)

Reviews incoming orders for completeness of customer's instructions and discusses order with customer. Contacts customer by phone or visit to obtain instructions or make suggestions for production of duplicate printing plates. Discusses variations in materials supplied, problems, and delays that arise during production. Verifies condition of plates in stock. Makes black and white proofs of each plate, using proof press, and compares proof with customer's copy and instructions. Inspects outgoing work for compliance with customer's specifications.
GOE: 05.10.05 STRENGTH: L GED: R3 M2 L3 SVP: 3 DLU: 77

659.662-010 PRINTER-SLOTTER OPERATOR (paper goods) alternate titles: cutting-and-creasing-press operator

Operates machine to print and slot container blanks, according to work orders: Selects, installs, and adjusts slotting and perforating knives in machine according to specified dimensions of slot and spacing of perforations, assisted by PRINTER-SLOTTER HELPER (paper goods) 659.686-014. Positions and attaches printing mats to print rollers according to printing order, using hand or air staple gun, wrenches, and tape measure. Fills ink reservoirs with specified colors of ink and turns thumbscrews to adjust flow of ink through fountains. Turns handwheels and pushes buttons or levers to adjust paper guides on machine feed table and automatic stacker, using handtools, and starts machine. Measures printed-slotted blanks to verify machine setup. Examines printed-slotted blanks for even ink distribution, trueness of color, printing flaws, and wrinkles. May operate machine equipped with gluing and folding attachment and be designated Flexo-Folder-Gluer Operator (paper goods).
GOE: 06.02.04 STRENGTH: H GED: R3 M2 L2 SVP: 5 DLU: 78

659.667-010 INKER (print. & pub.)

Compares color of printing ink with sample to ensure adherence to formula or customer specifications: Determines ink viscosity by timing flow from test cup and adds desired amount of solvent to meet viscosity requirements for kind of ink and application. Fills ink reservoirs in presses and adds more solvent to thin ink or uncovers reservoirs to allow evaporation of excess solvent during press run. May fill lubricating cups with oil and grease. May assist press operator to set up printing press.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

659.682-010 CUT-AND-PRINT-MACHINE OPERATOR (ordnance)

Sets up and operates battery of one or more types of printing presses to print identifying data on paper sheets that are wound into tubes for shotgun shells: Places type block on press bed, arranges wooden blocks to hold it in desired position, and locks them in place by tightening wedges with key wrench. Wraps and clamps tympan sheet around backing cylinder and fills reservoir with ink, using putty knife. Fills feed tray with paper and turns valve to start suction of feed cups. Starts press and runs proof sheet. Examines it for uniformity of impression, alignment, and spacing, and feels imprint for depth. Builds up tympan for darker impression by inserting sheets of tissue or thicker paper between cylinder and tympan or by cutting and pasting strips over light portions. Mounts paper roll in rear cradle of cut and print machine, using chain hoist, and threads end through series of rollers to cutoff blade. Selects curved printing plates with desired wording and screws them to printing cylinder. Wraps and clamps tympan sheet around backing cylinder. Runs proof and builds up impression. Examines stock for deviation from color standard by holding it to light and pulling stock through fingers to determine texture. Measures thickness of paper and skived edges, using dial indicator, to periodically verify conformance to specifications. Adjusts guides, pickup fingers, and cylinder and roller alignment by trial and error, by turning setscrews, wingnuts and stopnuts, using handtools. Turns gears to adjust length of cut. Clears jammed paper from mechanism, using fingers or screwdriver.
GOE: 06.02.09 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 77

659.682-014 EMBOSSING-PRESS OPERATOR (print. & pub.) alternate titles: embosser

Sets up and operates press to emboss paper stock, such as labels or stationery: Installs and locks embossed plate in chase and locks chase in bed of press. Mixes embossing composition to puttylike consistency, spreads glue on platen, and applies thin pad of composition over glue. Makes impression of embossing to desired depth in composition on platen, trims off excess, and allows composition to harden. Scrapes high spots on counter die (impressed composition) to prevent it from puncturing paper. Starts press, sets sheets singly in gauge pins, and embosses them, removing and stacking them as embossed.
GOE: 06.02.04 STRENGTH: L GED: R3 M2 L2 SVP: 7 DLU: 77

659.682-018 EMBOSSING-PRESS-OPERATOR APPRENTICE (print. & pub.)

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 06.02.04 STRENGTH: L GED: R3 M2 L2 SVP: 7 DLU: 77

659.682-022 RULING-MACHINE SET-UP OPERATOR (paper goods; print. & pub.) alternate titles: disc-ruler operator; head ruler, linoprint ruling machine operator; pen-ruler operator; straight ruling machine operator

Sets up and operates ruling machines to draw lines on tablets, notebooks, looseleaf fillers, and index cards according to specifications: Reads job orders to determine settings. Installs and adjusts machine parts, such as slitting knives, trimming blades, ruling heads, discs or pens, printing reels, belts, and gear, using handtools. Sets guides, feed rollers, punching units, and other machine parts to accommodate size and style of material being produced. Mixes ink compounds, fills ink wells, and turns valves to regulate flow of ink. Places stacks of paper sheets on feedboard of machine or installs rolls of paper in roll-fed machine and turns handwheel to adjust cutting mechanism that cuts product to specified length. Sets counter when printing sheets for looseleaf fillers. Starts machine for test run. Examines lines being drawn to detect variations in line width or color tone, and measures dimensions of product, using tape rule, to ensure conformance to specifications. Makes adjustments as required. Starts machine and observes operation of machine during production run. Inserts pieces of cardboard and sheets of printed paper into stacks of lined sheets at specified intervals to provide backs and fronts when making tablets. Stops machine when malfunction occurs, corrects malfunction, or notifies other worker of malfunction. Cleans machine parts, using solvent. May oversee workers in supplying paper stock to machine. May operate roll-fed machine, equipped with paper cutter and two sets of ruling heads or pens to draw horizontal and vertical lines, and be designated L-Type-Ruling-Machine Operator (print. & pub.).
GOE: 06.02.04 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 79

659.682-026 SIGN WRITER, MACHINE (any industry) alternate titles: display-card writer; sign printer

Sets up and operates sign printing machines to print store display cards and signs, according to size and quantity of signs ordered, using either of following methods: (1) Clamps cardboard on base of machine that prints letters one at a time. Pushes lever to position type case over cardboard. Pulls lever to depress plunger that prints letter on cardboard. (2) Chooses type style, positions letters in composing stick, and clamps it on bed of manual platen press that prints sign in one operation. Selects and mixes color of poster paint, and applies paint to type, using roller. Inserts cardboard into holding clamps of press, and pulls carriage to end of press bed. Depresses pedal to lower cylinders against cardboard and type to print sign. May lay out display signs that include photographs or merchandising samples. May use chemicals and heat to produce embossed signs.
GOE: 06.02.09 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

659.684-010 DIE MOUNTER (paper goods) alternate titles: plate mounter

Mounts rubber plates (dies) on fiberboard or plastic mats, according to printing order specifications, for use in printing-slotting machines: Lays out and draws outline of box or container on mat, according to specifications, using tape measure and marking pencil. Positions and aligns rubber plates on fiberboard mat, according to markings. Fastens plate on mat, using glue and staple gun. Examines initial run of printed box or container for printing defects, such as overlap and uneven color distribution. Cleans used plates with ink solvent and airhose, and files plates according to printing order number. May requisition new plates.
GOE: 06.02.31 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 78

659.685-014 SAMPLE-BOOK MAKER (paper goods)

Tends machine that cuts wallpaper samples and assembles samples to make sample book: Transfers specified rolls of wallpaper to cutting machine, using

handtruck, and lifts roll onto letoff rack. Threads wallpaper through machine and pushes lever to specified setting for cutting width. Sets type on printing cylinder of machine to print identifying information on wallpaper samples. Turns setscrews to synchronize printing with cutting process and starts machine. Sorts and stacks wallpaper samples on shelves according to code number. Assembles wallpaper samples in specified sequence to make sample book. Trims assembled wallpaper samples with powered shear and staples them together. May be designated according to specific task performed as Sheeter-Machine Operator (paper goods).
GOE: 06.04.04 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

659.685-018 SHOTGUN-SHELL-REPRINTING-UNIT OPERATOR (ordnance) alternate titles: shell-reprint operator

Tends machine that dissolves and wipes defective printing from shotgun shells and reprints them with load information: Pours shells from salvage boxes into deprinting (washing) machine hopper. Inserts felt wipers in wiping wells and shell-holding bushings in feed dial to accommodate gauge shell to be run. Fills solvent and ink reservoirs. Pastes strip of rubber type of specified load data around roller and inserts roller in reprinting machine holder. Starts hopper paddle, drying fan, and deprinting and reprinting mechanisms, and observes machine action for jams. Removes jammed shells, using fingers or wire pick. Examines shells for clarity of print and repositions type strip on roller to center printing on shells.
GOE: 06.04.37 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 77

659.685-022 TRANSFER-MACHINE OPERATOR (knitting; tex. prod., nec) alternate titles: transfer-iron operator

Tends machine equipped with heated plate that transfers designs or identifying information, such as brand name, style, and size, from transfer paper onto such products as hosiery, towels, and wiping cloths: Selects roll of transfer paper according to work ticket and places roll on reel. Threads transfer paper through feed guides, under heated plate, and onto takeup reel of machine. Turns knob to specified temperature setting to heat transfer iron of machine. Turns setscrews to adjust feed guides of conveyor belt according to specifications. Places article on conveyor belt against guide or positions article on machine bed under transfer iron. Presses button or depresses pedal to start machine that lowers electrically heated iron onto transfer paper to transfer printed data or designs onto article. Examines article to detect deviations from standard and adjust feed guides as necessary or notifies supervisor. Places articles on table or handtruck. May tie specified number of articles in bundle, using string. May clean surface of transfer iron, using sandpaper.
GOE: 06.04.37 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 78

659.685-026 MILL STENCILER (steel & rel.)

Tends machine that prints identification data on fabricated pipe: Positions and secures type in holder on printing machine, using handtools. Examines test impression to ensure printing of specified information, such as heat and lot numbers, size, gauge, and grade of pipe, and shift and initials of welder. Turns dial on number printer that prints designated consecutive number on each pipe in turn. Monitors and adjusts printer to maintain clarity of print. Cleans printing machine, using solvents and rags.
GOE: 06.04.10 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 86

659.686-014 PRINTER-SLOTTER HELPER (paper goods) alternate titles: creasing-and-cutting-press feeder

Feeds precut paperboard blanks or sheets into machine that prints, scores, perforates, and slots them for forming into boxes: Loads precut blanks into automatic machine feeder, or positions stacks of paperboard sheets against guides on feed table and inserts each sheet into machine feed rollers. Adjusts scoring, perforating, and slotting disks or knives in machine as directed by PRINTER-SLOTTER OPERATOR (paper goods) 659.662-010, using wrench and tape measure. Fills ink reservoirs with ink of specified color. May off bear machine and stack processed blanks or sheets for further processing. May assist operator of machine equipped with gluing and folding attachment and be designated Flexo-Folder-Gluer-Machine Helper (paper goods).
GOE: 06.04.04 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 78

659.687-010 RACKER (paper goods)

Hangs wet, freshly printed, or flocked wallcovering on rack to air dry: Slides stick under wallcovering as it emerges from discharge end of silk-screen table or flocking machine. Raises stick to form loop of wallcovering and places stick in specific slots of wooden rack, using care to avoid contact of wet surface with other objects or surfaces.
GOE: 06.04.26 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

659.687-014 RACKER, SILK-SCREEN PRINTING (any industry)

Inspects and racks printed paper or cardboard: Examines printed pieces for smears or uneven color. Places acceptable pieces in rack to dry. Replaces filled racks. Maintains supply of cardboard or paper for printing. Refills printing tray with paint and performs other routine tasks.
GOE: 06.03.02 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

66 WOOD MACHINING OCCUPATIONS

This division includes occupations concerned with shaping wooden parts or products by removing excess material from stock or objects, primarily by such means as cutting, boring, abrading, milling, and planing. Includes laying out, job setting, repairing, fitting, and assembling. Includes machining cork and corncob pipes.

660 CABINETMAKERS

This group includes occupations concerned with the complete cycle of cutting, shaping, and assembling prepared parts of complex wood products, such as store fixtures, office equipment, and home furniture. Typical jobs would include operating a variety of machines, such as the bandsaw, jointer, mortiser, tenoner, molder, gainer, and variety machine. Workers who are primarily concerned with one or a limited number of machine phases would be classified according to their specialty.

660.130-010 CABINETMAKER, SUPERVISOR (woodworking)

Supervises and coordinates activities of CABINETMAKERS (woodworking) engaged in constructing and repairing wooden cabinets and high-grade furniture, performing duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.08 STRENGTH: M GED: R4 M4 L4 SVP: 8 DLU: 77

660.280-010 CABINETMAKER (woodworking)

Sets up and operates variety of woodworking machines and uses various handtools to fabricate and repair wooden cabinets and high-grade furniture: Studies blueprints or drawings of articles to be constructed or repaired, and plans sequence of cutting or shaping operations to be performed. Marks outline or dimensions of parts on paper or lumber stock, according to blueprint or drawing specifications. Matches materials for color, grain, or texture. Sets up and operates woodworking machines, such as power saws, jointer, mortiser, tenoner, molder, and shaper, to cut and shape parts from woodstock. Trims component parts of joints to ensure snug fit, using handtools, such as planes, chisels, or wood files. Bores holes for insertion of screws or dowels by hand or using boring machine. Glues, fits, and clamps parts and subassemblies together to form complete unit, using clamps or clamping machine. Drives nails or other fasteners into joints at designated places to reinforce joints. Sands and scrapes surfaces and joints of articles to prepare articles for finishing. May repair high-grade articles of furniture. May dip, brush, or spray assembled articles with protective or decorative materials, such as stain, varnish, or paint. May install hardware, such as hinges, catches, and drawer pulls. May repair furniture, equipment, and fixtures and be designated Cabinetmaker, Maintenance (woodworking). May be designated according to products made as Piano-Case Maker (musical inst.). May cut, shape, and assemble wooden parts to construct frames for refrigeration equipment and be designated Refrigerator Cabinetmaker (svc. ind. mach.).
GOE: 05.05.08 STRENGTH: M GED: R4 M4 L3 SVP: 6 DLU: 77

660.280-014 CABINETMAKER APPRENTICE (woodworking)

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.08 STRENGTH: M GED: R4 M4 L3 SVP: 6 DLU: 77

661 PATTERNMAKERS

This group includes occupations concerned with laying out, cutting, building, and fashioning wooden patterns. Includes following blueprints to achieve proper dimensions of a pattern, and any combination of gluing, nailing, severing, planing, sanding, and painting. A patternmaker would use a variety of machines, such as bandsaw, circular saw, borer, router, planer, drill press, sander, and shaper.

661.131-010 LOFT WORKER, HEAD (ship-boat mfg.)

Supervises and coordinates activities of workers engaged in laying out and constructing templates and molds used as patterns and guides for fabrication of structural parts of ship, performing duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.06 STRENGTH: L GED: R4 M4 L3 SVP: 8 DLU: 77

661.137-010 SUPERVISOR, FRAME SAMPLE AND PATTERN (furniture)

Supervises and coordinates activities of workers engaged in machining and building sample furniture frames and patterns. Analyzes production forms to verify accuracy of figures and to estimate cost factors, such as raw materials and production time, using calculator. Studies blueprints to determine style, type, and dimensions of sample frames and patterns to be fabricated. Directs activities of workers in machining operations. Inspects completed units for compliance with specifications of blueprints and production order, using precision-measuring tools. Initiates changes or adjustments in machine setup or sequence of operations, utilizing knowledge of woodworking and engineering. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M4 L4 SVP: 8 DLU: 86

661.280-010 PATTERNMAKER (furniture)

Lays out and cuts wooden furniture patterns following blueprints, specifications, or drawings, using handtools and woodworking machines: Consults blueprints, drawings, or written specifications to determine size and shape of pattern and machine setup required to cut pattern to specifications. Draws outline of pattern on stock with drawing instruments or transfers outline to stock by tracing over drawing on woodstock, using pencil. Sets up and operates woodwork-

ing machines, such as bandsaw, variety saw, planer, shaper, borer, lathe, router, or mortiser to cut, shape, and smooth pattern to specified shape. Measures and compares cut pattern with specifications, using rule and caliper. Adjusts woodworking machines to change shape or size of cut pattern to ensure cut stock conforms to drawings and specifications, using various handtools. Marks part number on pattern, using hand stamp or marking pencil, and maintains record of patterns for references. Issues patterns to designated machine operators.
GOE: 05.05.08 STRENGTH: M GED: R4 M4 L4 SVP: 7 DLU: 86

661.281-010 LOFT WORKER (ship-boat mfg.) alternate titles: mold loft worker

Lays out lines of ship to full scale on mold-loft floor and constructs templates and molds to be used as patterns and guides for layout and fabrication of various structural parts of ships: Lays out full-scale portions of ship's plan, working from blueprints and tables of offsets. Marks frame lines and other reference lines on loft floor with marking instrument. Measures dimensions between lines and prepares table of offsets. Compares prepared tables with tables on blueprints. Constructs template, using knowledge of geometric construction, and handtools and woodworking machines, such as crosscut, rip, and bandsaws. Marks templates with identifying data and instructions, such as number of pieces to be made, type, and weight of stock, and location for installation. Constructs full scale wood mockups of ship's parts and sections for use as guide in shaping or positioning parts. May construct wooden plug mold parts, such as hulls, decks, and cabins of fiberglass boats, and be designated Plug Builder (ship-boat mfg.).
GOE: 05.05.08 STRENGTH: L GED: R4 M4 L3 SVP: 7 DLU: 77

661.281-014 LOFT WORKER APPRENTICE (ship-boat mfg.)

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.08 STRENGTH: L GED: R4 M4 L3 SVP: 7 DLU: 77

661.281-018 PATTERNMAKER APPRENTICE, WOOD (foundry)

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.08 STRENGTH: M GED: R4 M4 L3 SVP: 8 DLU: 77

661.281-022 PATTERNMAKER, WOOD (foundry)

Plans, lays out, and constructs wooden unit-or sectional-patterns used in forming sand molds for castings according to blueprint specifications, using handtools and power tools: Lays out pattern on woodstock, dividing pattern into sections according to shape of casting to facilitate removal of pattern from mold, utilizing knowledge of casting techniques, and using marking and measuring devices, such as scriber, shrink rule, and square. Cuts and shapes parts, using bandsaw, lathe, planer, and router. Fits and fastens parts together to form pattern or section, using glue, nails, dowels and screws. Trims, smooths, and shapes surfaces, using handtools, such as plane, drawknife, chisels, and mallets. Assembles sections and verifies dimensions of complete pattern, using templates, straightedges, calipers, and protractors. Glues fillets along interior angles of pattern. Paints pattern in standard code colors to indicate method of assembly. Shellacs, lacquers, or waxes finished pattern. May construct templates for use in shaping irregular curves in pattern [TEMPLATE MAKER (any industry)]. May construct wooden models. May be designated according to type of pattern constructed as Die-Cast Patternmaker (foundry); Die-Lay-Out Worker (foundry). May repair broken or damaged patterns and correct patterns to compensate for defects in castings and be designated Pattern Setter (foundry). I.
GOE: 05.05.08 STRENGTH: M GED: R4 M4 L3 SVP: 8 DLU: 77

661.380-010 MODEL MAKER, WOOD (any industry)

Constructs full-sized and scale wooden precision models of products, such as boats, automobiles, household appliances, aircraft, and machinery, using handtools, measuring instruments, and woodworking machines: Selects wooden stock and marks layout of parts on stock, using precision equipment, such as scriber, square, protractor, surface plates, height gauges, and scales, following blueprint or draft. Cuts and shapes lumber to general outline of part, using woodworking machines, such as bandsaw, lathe, planer, and router, or has stock shaped by SHAPER OPERATOR (woodworking). Assembles wood parts, using dowels, glue, nails, bolts, screws, and other fasteners. Planes, shaves, files, scrapes, and sands model to attain specified shape, using handtools. Verifies dimensions and contours of model during hand forming process, using templates and measuring device. Waxes and polishes finished model. May fabricate work aids, such as scrapers or templates for own use. May construct hardwood hammer form dies used to produce handmade sheet metal parts. May construct plastic duplicates [PLASTIC DUPLICATOR (machine tools)].
GOE: 05.05.08 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

661.381-010 HAT-BLOCK MAKER (woodworking) alternate titles: hat-block bench hand

Finishes, shapes, and sizes rough-cut hat blocks: Clamps rough-cut crown block in vise on workbench, and shaves and shapes top of block to specified contour with spokeshave. Removes block from vise and sets in gauge to determine height of crown. Judges crown of block for shape, and marks high spots to be removed. Sands sides of block to shape on curver sander. Measures block with steel tape to ascertain head size. Drives block onto taper chuck turning machine, using mallet. Starts machine and sands rotating block by hand.
GOE: 06.01.04 STRENGTH: L GED: R3 M3 L2 SVP: 6 DLU: 77

662 SANDING OCCUPATIONS

This group includes occupations concerned with smoothing, cleaning, and roughing wood surfaces by means of sandpaper or similar abrasives.

662.132-010 SUPERVISOR, SANDING (woodworking)

Supervises and coordinates activities of workers engaged in sanding wood furniture stock, applying knowledge and experience with specific sanding processes, equipment, and kinds of wood: Computes amount of sanding supplies required, based on production schedules, and requisitions materials. Inspects sanded material for smoothness and to verify conformance to company standards. Trains new workers and assigns workers to work stations. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.03 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

662.682-010 MOLDING SANDER (woodworking) alternate titles: automatic-mold sander; contour sander

Sets up and operates belt-sanding machine to smooth moldings or contoured surfaces of woodstock: Selects sanding form from stock or builds form, according to pattern, using chisels, mallet, rasps, hammer and nails, and fabric tape. Clamps sanding form to pressure bar above sanding belt, positions specified sanding belt over belt pulleys, and turns handwheels to regulate speed and tension of sanding and feed belts. Starts machine and depresses lever to regulate pressure of sanding form on belt as stock is conveyed beneath belt, or places stock against stops on table and depresses belt against stock with hand-held sanding form. Inspects and feels stock to ascertain smoothness. May sand flat surfaces with hand-held flat form and be designated according to technique as Float Sander (woodworking).
GOE: 06.02.03 STRENGTH: M GED: R3 M2 L1 SVP: 4 DLU: 78

662.682-014 MULTIPLE-DRUM SANDER (woodworking) alternate titles: drum sander

Sets up and operates sanding machine equipped with two or more sandpaper-covered drums to smooth surfaces of flat woodstock: Reads work ticket to ascertain information, such as grade, type, and quantity of woodstock to be sanded, specified thickness of finished pieces, and whether both sides of stock require sanding. Moves specified woodstock to be sanded to feed-end of machine, using handtruck. Wraps specified grades of sandpaper around individual drums, inserts ends of sandpaper in drum slot, and tightens bolts with wrench to close slot and expand drum to produce uniform sanding surface. Turns handwheels or pulls lever to raise or lower individual drums or bed of machine, according to thickness of panels and depth of cut. Presses button to start machine, and turns handwheel to control speed of conveyor, according to grade and type of woodstock to be sanded. Feeds woodstock onto endless belt or between live rolls that carry stock under rotating drums. Feels and examines sanded surfaces and measures thickness of sanded stock with gauge to ensure specified finish and depth of cut. Observes ampere meters and turns handwheels to adjust tension and relieve pressure of individual drums when friction between drums and sanded stock causes excessive heat to drum motors. Replaces sandpaper on drums when dark, wavy streaks are detected on sanded stock. May sand particleboard panels. May be designated according to type of machine operated as Endless-Bed-Drum Sander (woodworking); or according to type of stock sanded as Veneer Sander (woodworking).
GOE: 06.02.03 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 81

662.682-018 STROKE-BELT-SANDER OPERATOR (woodworking)

Operates stroke-belt sanding machine to smooth flat surfaces or edges of wood furniture stock: Turns handwheels to set tension of sanding belt, adjust machine table height, and limit stroke of pressure shoe, according to thickness and length of stock. Presses switch to start sander, and positions woodstock to be sanded on movable table located under sanding belt. Presses lever to lower pressure shoe onto sanding belt and force belt against surface of stock to sand stock. Pushes or pulls table to move stock under belt to smooth entire surface. Feels sanded article to ascertain smoothness. Cleans machine, using airhose and rags. Replaces worn sanding belts. May press belt against stock with pressure blocks to bevel corners and edges of stock or to smooth flat surfaces of ornamental stock.
GOE: 06.02.03 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 79

662.685-010 CORK GRINDER (toy-sport equip.) alternate titles: grinder operator

Tends machine that grinds cork into various shapes, such as semirounds, for shuttlecock bases and handle grips for fishing rods: Starts grinding machine and places workpiece in holding fixture or on arbor. Engages automatic feed or manually feeds cork against grinding drum of machine. May change grinding drums, using wrenches, to grind various shapes.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

662.685-014 CYLINDER-SANDER OPERATOR (woodworking)

Tends machine that smooths cylindrical wooden articles by revolving articles against moving abrasive belt: Starts machine and adjusts tension of abrasive belt. Inserts article through collar or pipe, places article on conveyor, or dumps article in hopper to feed it into feed roller or holding guide (track) and against sanding belt. May replace worn sanding belts. May install collar or guide, according to size of stock, using handtools. May be designated according to arti-

cle sanded as Dowel-Sander Operator (woodworking); Handle-Sander Operator (woodworking); Pole-Sander Operator (woodworking); Sander, Wooden Pencils (pen & pencil).
GOE: 06.04.03 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

662.685-018 LAST SCOURER (wood prod., nec) alternate titles: last grinder

Tends sanding wheel to smooth wooden shoe lasts to specified finish: Starts sanding machine and holds and turns last against revolving sandpaper-covered wheel to remove specified amount of material and smooth surface of last while retaining original contours. Feels surface of last to ascertain if last is of specified finish and verifies contours, using templates. Replaces worn sandpaper belt on sanding wheel.
GOE: 06.04.25 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

662.685-022 SANDING-MACHINE BUFFER (wood prod., nec)

Tends machine that buffs surface of cork sheets, from which outsoles for shoes are cut, to roughen sheets for better adhesion and to remove unevenness. Turns handwheels to set distance between feeder and sander rolls, verifying setting with thickness gauge. Starts machine and feeds sheet sideways through upper rollers that sand, brush, and return finished material through lower rollers on same side for takeoff. Removes worn, and spirally winds new sandpaper onto roll, cuts ends on bias with scissors, and slips metal sleeves over ends to secure paper to roll.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

662.685-026 SANDING-MACHINE TENDER (wood prod., nec) alternate titles: grinding operator; polisher and sander

Tends machine that sands and smooths sheets of composition cork to reduce thickness: Turns handwheel to adjust sander to attain specified thickness. Places sheet on feed bed of machine and guides material through rollers to sanding mechanism. Depresses pedal to release pressure of rollers for removal of sheet. Gauges sheets periodically to verify thickness, using ruler, balance scale, and thickness gauge.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

662.685-030 SIZING-MACHINE TENDER (pen & pencil) alternate titles: drum sander; end trimmer; trimmer

Tends sanding machine that removes excess glue and lead from wooden pencil blanks: Removes metal clamp from blanks. Places blanks in machine hopper and starts machine. Removes sanded blanks from machine and stacks blanks on cart. May mix and spray coloring on ends of pencil blanks to indicate hardness of pencil lead, using spray gun.
GOE: 06.04.03 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

662.685-034 SPEED-BELT-SANDER TENDER (woodworking)

Tends powered belt-sanding machine that sands panels and flat wooden stock: Turns handwheel, moves lever, presses button, or flips switch to adjust clearance between sanding belt and feed bed, according to thickness of stock and depth of cut. Starts machine and inserts end of stock between feed rolls that carry stock through machine. Measures sanded stock to verify specified clearance between sanding belts and feed bed, using gauge, micrometer, or caliper. May replace worn sanding belts. May tend multibelt machine that does rough and finish sanding in tandem.
GOE: 06.04.03 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 81

662.685-038 TURNING-SANDER TENDER (woodworking) alternate titles: sanding-machine tender, automatic

Tends sanding machine that sands cylindrical woodstock by rotating stock against strips of sandpaper backed by sanding brushes: Turns handwheel to space chucks of machine according to length of stock, and aligns feed rest for feeding stock to stock carriers, using wrench. Clamps strips of slitted sandpaper and sanding brushes in position. Pushes button to start machine. Places stock on feed rest for pick up by rotating spindles or positions stocks between chucks manually. Observes and feels stock discharged from machine into receptacle to verify smoothness, or removes stock from chucks manually. Cleans machine with airhose. May move levers to adjust feed carrier and rotating chucks, and to force sanding brushes against stock. May tend sanding machine that removes excess plaster of paris from corncob pipe bowls and be designated Bowl Sander (fabrication, nec).
GOE: 06.04.03 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 78

662.685-042 WOOD-HEEL BACK-LINER (boot & shoe) alternate titles: quirk sander

Tends machine that removes back lines (ridges) from formed wooden heels: Inserts heel in holding device of machine and presses heel against sanding belt or abrasive disk to remove ridges.
GOE: 06.04.03 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

662.686-010 END-TOUCHING-MACHINE OPERATOR (wood prod., nec)

Feeds corks into slot or fills hoppers of automatic machines that sandpaper flat surfaces to smooth finish. Observes operating machines to prevent clogging.
GOE: 06.04.09 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

662.686-014 MULTIPLE-DRUM-SANDER HELPER (woodworking) alternate titles: drum-sander offbearer

Removes stock as it is discharged from machine and inspects and feels surfaces of stock to determine if stock is sanded to specifications. Places stock on truck or platform. Counts and records number of pieces sanded. Aids MULTIPLE-DRUM SANDER (woodworking) in replacing worn sandpaper. May feed stock into machine.
GOE: 06.04.03 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 77

663 SHEARING AND SHAVING OCCUPATIONS

This group includes occupations concerned with cutting, slicing, and shaving wood by the action of a keen-edged cutting tool mounted in a machine.

663.132-010 SUPERVISOR, GREEN END DEPARTMENT (millwork-plywood)

Supervises and coordinates activities of workers engaged in peeling veneer strips from logs and clipping veneer strips into sheets of specified sizes: Analyzes work orders to determine quantity, dimensions, and quality of finished plywood panels required by customers. Computes initial log and veneer requirements for each order, allowing for shrinkage, trim work, and waste during processing. Inspects peeled and clipped veneer for dimensional accuracy and to determine if maximum amount of usable veneer is being obtained, using ruler, dial thickness gauge, and tape measure. Directs workers to adjust machines when work does not conform to specifications. Trains new workers in operation of machines. Performs other duties as described under SUPERVISOR (any industry) Master Title. May supervise workers engaged in drying peeled veneer sheets [SUPERVISOR, DRYING (millwork-plywood) 563.135-010].
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 78

663.380-010 KNIFE SETTER (saw. & plan.)

Sets up machines to shred woodstock into excelsior of specified thickness: Installs knives and spurs (metal combs that furrow surface of woodstock in front of knives), using wrenches and screwdrivers. Turns setscrews and moves levers to regulate speed of conveyor and depth of cut. May sharpen knives and spurs [KNIVE AND SPUR GRINDER (saw. & plan.)].
GOE: 06.01.02 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

663.585-010 CLIPPER, AUTOMATIC (millwork-plywood) alternate titles: defect cutter

Tends air-powered machine that clips continuous sheet of veneer to specified width and to clip out defects. Turns dial to set machine cutting mechanism and starts conveyor that carries veneer under knife. Observes veneer sheet being conveyed to clipper, noting defects, such as knots, cracks, pitch pockets, and rot, and presses button that causes knife to clip out defective portions of veneer to obtain maximum grade. Stacks clipped veneer sheets on skid and marks identification data on top sheet. May replace dull knives, using handtools.
GOE: 06.04.03 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

663.682-010 BARKER OPERATOR (millwork-plywood)

Operates barking machine to remove bark, knots, and foreign matter from veneer blocks preparatory to peeling process: Presses buttons to control conveyor system that transfers block from storage deck into position over hydraulic hoist and to raise hoist until block is centered between chucks. Pushes and turns lever to press chucks into ends of block and to start and control rotation speed of block. Pushes lever to lower and control pressure of scraping tool against rotating block and to activate and control horizontal movement until bark is removed. Raises tool, stops block rotation, raises hoist, retracts chucks, and lowers barked block onto conveyor that transfers block to lathe deck. May remove bark, chips, and other material from conveyor and barking machine. May control conveyor that lifts logs from pond onto barker deck.
GOE: 06.04.03 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

663.682-014 POLE-PEELING-MACHINE OPERATOR (saw. & plan.; wood prod., nec) alternate titles: pole peeler; pole shaver

Operates machine to peel bark from logs: Moves levers to raise or lower rollers of feed mechanism that moves logs under cutter head of machine. Starts machine and moves levers or turns handwheel to lower knife blades against surface of log and remove bark. Applies pressure to cutting head of machine according to shape and size of log, using lever or handwheel. Sharpens and changes cutting blades of machine, using handtools. May lubricate machine, using oilcan and grease-pump.
GOE: 06.04.03 STRENGTH: L GED: R3 M1 L1 SVP: 3 DLU: 77

663.682-018 VENEER-SLICING-MACHINE OPERATOR (millwork-plywood) alternate titles: straight-slicing-machine operator

Operates machine to slice flitches into veneer strips: Adjusts gears of mechanism that automatically advances flitch specified distance for each slice, using wrench. Places flitch with selected grain pattern side toward knife in machine clamps and tightens clamps, using wrench. Starts machine, verifies thickness of veneer with ruler or caliper, and adjusts feed mechanism. Releases clamps to drop piece too thin for slicing. May cut defects from surface of flitch, using chisel and mallet. May operate circular saw to cut flitches.
GOE: 06.02.03 STRENGTH: M GED: R3 M1 L1 SVP: 3 DLU: 77

663.685-010 BLOCK-SPLITTER OPERATOR (paper & pulp)

Tends machine that splits wood blocks to size, preparatory to grinding: Starts machine and conveyor system. Depresses pedal to stop and start conveyor to move block in front of wedge-shaped splitting ram. Positions one end of block against steel backstop and opposite end in splitting position against ram according to grain, using *picaroon*. Moves lever to force ram against end of block and split block to size. Segregates knots and rotted areas and moves them onto waste conveyor, using picaroon.

GOE: 06.04.03 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

663.685-014 EXCELSIOR-MACHINE TENDER (saw. & plan.) alternate titles: excelsior-machine feeder; shredding-machine tender

Tends one or more machines that shred woodstock into excelsior: Presses pedal to open feed rollers and position woodstock. Starts machine that automatically feeds stock to cutters. Stops machine and turns woodstock to expose all surfaces to cutters to obtain maximum amount of excelsior from each log.
GOE: 06.04.03 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

663.685-018 MOLDING CUTTER (woodworking)

Tends machine that cuts to length and miters ends of molding or shim strips: Slides end-stop against rule to set machine to cut molding of specified length. Slides stock under knife against stop while chopper knife (two blades mounted at right angles) descends automatically to cut molding, or depresses treadle or pulls lever to lower knife that cuts and miters molding. Stacks cut molding on rack. May change chopper blades when blades become worn.
GOE: 06.04.03 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

663.685-022 PUNCHER (woodworking)

Tends machine that cuts D-shaped hole in head of wooden handles for tools, such as forks and shovels: Starts machine and withdraws soaked handle from barrel partly filled with steam-heated water. Places head of handle successively in two jigs and under two sets of knives that descend on handle and make rough and finish cuts to form head.
GOE: 06.04.03 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

663.685-026 ROUNDING-MACHINE TENDER (pen & pencil) alternate titles: shaping-machine tender

Tends machine that shapes and cuts wooden blanks to form pencils: Places blanks in hopper and starts machine. Removes pencils from bin of machine and places pencils in rack. Ties pencils into bundles. May replace machine cutters according to size and shape of pencil, using wrench. May examine pencils for surface defects, such as nicks and scratches, and measure diameter of pencils, using micrometer.
GOE: 06.04.03 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

663.685-030 SHAKE BACKBOARD NOTCHER (saw. & plan.) alternate titles: backer board

Tends machine that notches boards for use as insulation backing on shakes: Inserts insulation board in jig and butts end of board against stop. Presses pedal to lower punch that notches edge of board to provide for circulation of air when board is installed. Removes board from jig and places board on conveyor.
GOE: 06.04.03 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

663.685-034 SLICING-MACHINE TENDER (furniture)

Tends machine that slices boards into slats for wood indoor or porch shades: Adjusts guide on machine table to specified width of boards and tightens bolts, using wrench. Starts machine, holds board against guide, and pushes board into blade that slices board into slats.
GOE: 06.04.03 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

663.685-038 SPLITTER TENDER (saw. & plan.)

Tends steam or hydraulically powered chisel that splits wooden blocks into bolts used for making shingles or shakes: Positions block on machine table and turns block for splitting, according to grain pattern, knots, and defective sections of block. Moves lever or pedal to raise block against cutter knife or drop chisel on block. Places split blocks or bolts on conveyor.
GOE: 06.04.03 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 78

663.685-042 SPLITTING-MACHINE TENDER (wood prod., nec)

Tends machine that splits slabs or blocks of composition corkboard into sheet of specified thickness: Sets dial gauge or turns handwheels to set rollers at specified distance from each other and from endless belt knife, to cut sheet of prescribed thickness. Places slab or block on roller conveyor that moves it to automatic feeding mechanism or pushes slab or block into roller opening that forces it against knife to cut sheet. Measures sheet with dial indicator or snap gauge and makes machine adjustment to meet thickness specifications. Repositions slab or block for each succeeding cut and stacks sheets. May adjust grinding wheel that sharpens knife, using wrench. May place slabs or blocks and sheets in steam-heated oven to condition them for cutting.
GOE: 06.04.09 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

663.685-046 STAVE-MACHINE TENDER (wood. container)

Tends machine that cuts staves or strips for slat baskets from sheets of veneer: Turns nuts, using handtools, to adjust frequency of clipping blade descent onto veneer sheet. Starts conveyor to carry veneer sheets under knife that automatically cuts sheets into staves or strips. Removes staves or strips from machine and examines them for defects and conformance to standards, using ruler.
GOE: 06.04.03 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

663.685-050 VENEER CLIPPER (millwork-plywood) alternate titles: drop clipper; dry-clipper tender; veneer cutter; veneer trimmer

Tends drop-knife clipping machine that cuts veneer sheets to specified size and cuts out defective sections: Lifts veneer from cart onto feed table of clipping machine. Examines veneer for defects, such as knots and splits. Positions veneer under drop knife with edge of material at measured distance from knife, using ruler, to obtain cuts of desirable grain pattern and specified width and length that are free of defects. Pushes button, presses pedal, or moves lever to release knife-locking device and actuate knife. Slides veneer around on table or turns handwheel to reposition veneer after each cut until veneer is clipped to size and free of defects. Stacks clipped veneer on table or handtruck. Records number of sheets in each stack on work ticket or on top sheet of stack. Cleans and lubricates machine, using airhose and grease gun.
GOE: 06.04.03 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 78

663.686-010 BLOCK FEEDER (fabrication, nec)

Feeds wooden blocks into machine that cuts blocks into match sticks: Splits blocks into specified lengths, using hatchet. Places blocks grain up on machine feed table and pushes blocks into feed rollers.
GOE: 06.04.03 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

663.686-014 BREAK-OFF WORKER (millwork-plywood)

Off bears and breaks veneer sheets discharged from *rotary lathe* into specified lengths or at points of imperfection, such as holes, splits, and discolorations. Discards waste veneer into handtruck or onto conveyor that carries it to *hog mill* for grinding into fuel wood.
GOE: 06.04.03 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

663.686-018 GREEN-CHAIN OFFBEARER (millwork-plywood) alternate titles: clipper offbearer

Removes green veneer sheets from conveyor and stacks sheets on designated carts according to grain pattern and size: Observes veneer sheets to identify grain pattern, size, and quality. Removes veneer sheets from conveyor and stacks sheet on designated carts according to grain pattern. Pushes loaded cart to pickup area.
GOE: 06.04.40 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

663.686-022 LATHE SPOTTER (millwork-plywood)

Positions veneer blocks (logs cut to length) between spindles of veneer lathe, using electric hoist: Measures diameter of block to locate and mark center, using ruler. Examines end of log to detect rot, cracks, and splits. Selects chuck of minimum diameter according to size and conditon of block, and places block on lathe spindle. Secures hooks to ends of block, activates hoist to suspend block between lathe chucks, and signals VENEER-LATHE OPERATOR (millwork-plywood; wood. container) to press chucks into block. Removes knots, dirt, and other foreign matter, using ax, steam hose, and pick. May assist in chaining lathe knives. May operate lathe-charging-machine from console to position logs for automatic loading into rotary veneer lathe. May be designated according to type of log peeled as Flitch Hanger (millwork-plywood).
GOE: 06.04.03 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

663.686-026 SLICING-MACHINE TENDER (wood prod., nec)

Feeds composition cork sheet into machine that slices sheet to specified widths. Removes and packs sliced products in cartons.
GOE: 06.04.09 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

663.686-030 VENEER-CLIPPER HELPER (millwork-plywood)

Assists VENEER CLIPPER (millwork-plywood) in cutting veneer sheets to specified size and cutting out defective portions, performing any combination of following duties: Loads dried veneer sheets on conveyor belt that carries sheets to clipping machine. Positions veneer sheets under clipping blade, following guide marks, to align sheets for clipping edges and to cut sheets to specified width. Stacks clipped veneer sheets on cart and pushes loaded cart to next processing station. Performs other duties described under HELPER (any industry) Master Title.
GOE: 06.04.03 STRENGTH: H GED: R1 M1 L1 SVP: 2 DLU: 77

663.687-010 WOOD INSPECTOR (paper & pulp)

Inspects debarked pulpwood logs used in the manufacture of paper and related materials: Observes logs passing on conveyor to detect completeness of debarking process. Removes partially debarked logs from conveyor and places them in pushcart. Pushes filled cart to feed end of debarker for recycling of logs. Empties contents of cart onto conveyor, pushes cart back to inspection area, and resumes inspection.
GOE: 06.03.02 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 77

664 TURNING OCCUPATIONS

This group includes occupations concerned with shaping wood by the paring or chipping action of rigid cutting tools applied to wood rotating on a lathe.

664.382-010 SWING-TYPE-LATHE OPERATOR (woodworking) alternate titles: automatic-lathe operator; lathe hand; variety-lathe operator

Sets up and operates swing-type (rotary cutting) lathe to cut round and multishaped wood parts in manufacture of furniture: Examines blueprints, drawings, patterns, and specifications to ascertain size and shape of finished product. Selects and installs knives on cutterheads on machine spindle arbor, using template, rule, calipers, and wrenches; or loosens nuts securing end of lathe opposite drive end of arbor, swings support end to side, slides preassembled cutter heads on arbor according to arrangement of knives on cutterheads, and secures cutterheads on arbor and support end of lathe, using handtools. Selects and installs cam on arbor to control rotation and shape of stock to be cut, using wrench. Inserts woodstock between headstock and tailstock and turns crank to clamp stock in position. Starts machine and moves lever to swing rotating stock against rotating knives of cutterhead until shape is completed, or presses switch

for automatic operation of machine equipped with hopper-feeding attachment. Verifies dimensions of shaped product, using template or calipers and rule. May sharpen cutting knives, using *bench grinder*. May be designated according to product as Bat-Lathe Operator (woodworking); Handle-Lathe Operator (woodworking).
GOE: 06.02.03 STRENGTH: M GED: R3 M3 L2 SVP: 4 DLU: 78

664.382-014 WOOD-TURNING-LATHE OPERATOR (woodworking) alternate titles: wood-lathe operator

Operates wood-turning lathe to turn woodstock, and cuts designs in and shapes stock by holding chisels against rotating stock: Places stock between *spur chuck* and tailstock and turns handwheel to force points of centers into stock. Slides tool rest to position for cutting and moves lever to secure it in place. Starts machine, places gouge or *caliper chisel* over tool rest and against stock, and moves chisel to reduce stock to rough cylinder. Lays out cutting lines on stock according to drawing, using rule and pencil. Selects chisel according to type of cut specified and holds chisel against rotating stock to cut shapes according to drawing. Verifies dimensions of shapes and cuts, using calipers and rule. May smooth surface of piece by holding sandpaper against rotating piece. May apply wax or other finishes to parts in lathe.
GOE: 06.02.03 STRENGTH: M GED: R4 M2 L1 SVP: 5 DLU: 77

664.382-018 TRIMMING MACHINE SET-UP OPERATOR (fabrication, nec)

Sets up and operates machines to cut and shape bottom of smoking pipe bowls: Sharpens trimming machine knives, using grinding wheel. Inserts and secures knives in cutterhead of trimming machine, using wrench. Positions and secures clamp and carriage stops in specified location, using wrench and tape measure. Places pipe bowl blank on clamp and moves lever to secure blank in place. Pushes machine carriage forward and rotates carriage handle to move and revolve bowl blank against rotating knives to cut and shape all surfaces of pipe bowl bottom. Moves lever to release pipe bowl blank from machine clamp.
GOE: 06.02.03 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 86

664.662-010 VENEER-LATHE OPERATOR (millwork-plywood) alternate titles: rotary-slicing-machine operator; rotary-veneer-machine operator

Sets up and operates rotary lathe to cut veneer from logs: Selects and installs knives and adjusts gears of knife-feeding mechanism according to specified thickness of veneer to be cut, using handtools. Signals LATHE SPOTTER (millwork-plywood) 663.686-022 to position log between chucks of lathe and pushes lever or button to drive chucks into log. Pulls lever to set lathe knife to cut veneer to specified thickness and to start log rotating. Verifies thickness of veneer with ruler or caliper and adjusts speed of knife-feeding mechanism and turning speed of lathe accordingly. Pushes chuck control to release log core onto conveyor. May stop machine and tilt blade away from log when machine becomes clogged with slivers or bark. May replace dull knives and broken or worn parts, using handtools. May set up and operate *back-roll lathe* to cut veneer stock to specified lengths and widths for manufacture of wirebound boxes and baskets and be designated Back-Roll-Lathe Operator (wood. container).
GOE: 06.02.03 STRENGTH: M GED: R3 M1 L1 SVP: 4 DLU: 78

664.682-010 BARREL-LATHE OPERATOR, INSIDE (wood. container) alternate titles: keg-lathe operator, inside

Operates machine to turn down inside surface of tight barrels or kegs to smooth and clean surface: Adjusts machine to accommodate barrel. Places barrel in horizontal position between two center supports and pulls lever to actuate end frames (chuck rings) which grasp and support ends of barrel. Starts machine to rotate barrel. Moves lever that causes rotating cutters to enter opposite ends of barrel and contact inside surfaces, exerting sufficient force on lever to cut away specified thickness of wood as cutters advance on opposite sides of barrel. Inspects and feels surface for smoothness. Stops rotation of barrel and cutters and removes barrel from machine.
GOE: 06.02.03 STRENGTH: M GED: R3 M1 L1 SVP: 4 DLU: 77

664.682-014 BARREL-LATHE OPERATOR, OUTSIDE (wood. container) alternate titles: barrel planer; lathe operator

Operates machine to scrape and smooth outer surface of barrel by holding handtools against barrel: Removes temporary hoops from barrel and places barrel horizontally on barrel rest. Starts machine. Clamps barrel between chucks of lathe. Holds barrel plane against surface of revolving barrel and guides tool along length of barrel to scrape and smooth barrel. Lifts tool from surface of barrel, releases pressure of tail chuck on barrel, and lifts barrel from machine.
GOE: 06.04.03 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

664.682-018 SKIVING-MACHINE OPERATOR (ordnance)

Operates skiving machine to round and groove rectangular, hollow, wooden blanks to shape parts for rifles and shotguns: Mounts blank between front and tail mandrels and locks tailstock to secure workpiece. Starts machine to rotate blank. Turns handcrank to feed skiving knives into workpiece until lug stops are reached, indicating end of cut. Reverses handcrank to withdraw knives. Moves lever to bring cutters down to trim and face ends. Examines finished piece for imperfections, such as cracks, knots, and broken ends. Measures length and diameter of slide handles and depth of grooves, using fixed gauges.
GOE: 06.02.03 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

664.682-022 SPAR-MACHINE OPERATOR (wood prod., nec)

Operates wood-turning lathe to peel, trim, and shape poles into round or tapered form to use as transmission line poles crossarms and boat masts: Installs cutters in machine and fastens cutter-guide arm on straight or tapered track, according to work order, using rule and wrenches. Pulls control cables of hoist to lift pole onto lathe carriage. Centers and secures piece between live spindle and tailstock, using handwheel, rule, and wrenches. Starts motors to actuate exhaust fan and cutterhead, and to rotate pole. Pulls levers and turns handwheel to move cutterhead along rails against pole to cut and shape pole to specified dimensions. Measures pole as cutting progresses, using rule and calipers. Sharpens and replaces worn cutters. May clean machinery and work area, using broom.
GOE: 06.02.03 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

664.684-010 BOWL TURNER (fabrication, nec) alternate titles: hand turner

Turns corncob pipe bowls on high-speed lathe, using cutting tool. Places cob on revolving spindle of lathe. Holds and moves cutting tool (wood chisel) against revolving cob to shape cob, according to size and contours of finished models.
GOE: 06.04.03 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

664.685-010 BRIAR CUTTER (fabrication, nec)

Tends machine that turns and shapes briar blocks into smoking bowl blanks: Clamps block in holding device of wood lathe. Turns wheel that feeds block into machine equipped with preset cutting tools that simultaneously shape sides, turn top, and bore hole in briar block. May use power saw to cut pipe bowl blanks from briar blocks, prior to shaping and boring process.
GOE: 06.04.03 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

664.685-014 BUCKET CHUCKER (wood. container) alternate titles: tub chucker

Tends machine that smooths inside surface of bucket: Places bucket in chuck of machine. Forces bottom of bucket into chuck, using iron bar. Steps on pedal to start chuck and bucket rotating. Feeds cutting tool into inner surface of bucket, manually smoothing bucket. Cuts croze near bottom of bucket with special attachment to machine. Rubs top edge of bucket with sandpaper to smooth bucket and removes bucket from lathe.
GOE: 06.04.03 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

664.685-018 COPY-LATHE TENDER (woodworking)

Tends series of copy lathes that turn wood or plastic blanks into items, such as rifle or shotgun stocks, golf club heads, and shoe lasts: Clamps specified model of article to be turned next to scanning arm of copy lathe and mounts wood or plastic blank between lathe centers. Starts machine to activate cutters and rotate blanks to shape workpiece while guided by roller (follower) that scans surface of model. May rough shape blanks on band-scroll saw before turning. May adjust machine to regulate size of copied model. May be designated according to article turned as Last Turner (wood prod., nec); Stock Turner (ordnance).
GOE: 06.04.03 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

664.685-022 FRAZER (fabrication, nec) alternate titles: shank turner; trimmer

Tends one or more machines that shape smoking pipe bowls and shanks: Places pipe bowl over chuck and turns nut or moves lever to expand chuck against inside of bowl, using wrench. Starts machine that automatically rotates bowl against cutters to remove excess briar. Removes shaped pipes from machines. May turn handwheel to rotate bowl against cutters. May tend machine that cuts and shapes only bottom of smoking pipe bowl.
GOE: 06.04.03 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 78

664.685-026 SHUTTLE SPOTTER (woodworking)

Tends spotting machine that tapers ends of shuttle blocks: Places shuttle blocks in machine carriage. Moves carriage to force end of shuttle against spotting head that automatically shapes shuttle to specified contours.
GOE: 06.04.03 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

664.685-030 SPAR-MACHINE-OPERATOR HELPER (wood prod., nec)

Tends machines to assist SPAR-MACHINE OPERATOR (wood prod., nec) in making boat masts and transmission line crossarms: Raises one end of pole while SPAR-MACHINE OPERATOR (wood prod., nec) raises other, using electric hoist. Secures pole between tailstock and headstock of lathe by turning crank. Inspects pole, and marks top with tacks. Measures pole and saws pole to specified length. Locates and bores boltholes, using car-mounted drill press. Marks identifying data on end of spar, using crayon. Rolls poles to and from work area, using peavey. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 06.04.03 STRENGTH: H GED: R2 M2 L2 SVP: 3 DLU: 77

664.685-034 TURNING LATHE TENDER (furniture)

Tends turning lathe that shapes furniture parts: Positions workpiece against stops on lathe carriage rests. Moves lever to drive tailstock and headstock centers into workpiece. Pushes lever to start spindle drive and move turning workpiece into turning centerhead of lathe to shape workpiece. Pulls lever to pull workpiece back from cutterhead and disengage drive clutch. Removes and inspects workpieces for smoothness and defects and places finished pieces onto cart. Discards defective pieces. Pushes cart of turned pieces to next operation. Sharpens blade, using whetstone.

GOE: 06.04.23 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 86

665 MILLING AND PLANING OCCUPATIONS

This group includes occupations concerned with cutting a smooth surface on rough woodstock and reducing it to desired thickness by the action of rotating cutting tools mounted on a machine.

665.382-010 CHUCKING-MACHINE OPERATOR (woodworking)

Sets up and operates machine to shape ends of wooden parts to fit into sockets of implements, or into mortises of opposing wooden parts: Selects and installs cutting head, and adjusts knives, guides, and stops, according to size and shape of cuts to be made. Verifies distances of settings and size of stock, using rule and calipers. Clamps stock in feed-yoke or places stock on automatic fixture. Starts machine and turns handwheel to feed stock into cutting head. Withdraws stock when stop is reached. May be designated according to machine operated as Double-End-Chucking-Machine Operator (woodworking).
GOE: 06.02.03 STRENGTH: M GED: R3 M2 L1 SVP: 5 DLU: 77

665.382-014 LOCK-CORNER-MACHINE OPERATOR (woodworking)

Operates routing machine with horizontal spindles to cut matching dovetail or rectangular tenon to form interlocking joints in end of woodstock: Selects, installs, and spaces bits on spindles of machine according to width and number of cuts specified, using rule and wrench and following work ticket. Aligns jigs, guides, and stops to control depth and length of cut, using rule and wrench. Presses button to start machine, inserts stock against sideguide, and depresses pedal to force stock through bits to cut male portion of dovetail. Inserts stock against sideguide and between clamps to cut female dovetail. Fits male and female dovetails together periodically to verify accuracy of cuts, and aligns guides when dovetails do not fit, using wrench. May be designated according to type of joint made as Dovetail-Machine Operator (woodworking).
GOE: 06.02.03 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 78

665.382-018 WOOD-CARVING-MACHINE OPERATOR (woodworking)

Sets up and operates multiple-spindle carving machine to make identical carvings simultaneously on pieces of wooden stock: Examines pattern, stock, and drawings, blueprints, or written instructions to determine knives needed to reproduce pattern on stock to be carved and number of pieces of carved stock needed. Selects, inserts, and locks bits in chuck of cutter spindles, using wrenches. Centers wood blanks between chucks on machine bed and secures blanks by turning handscrews or using wrenches. Inserts and locks *tracer point* in master chuck by turning thumbscrew or lock key. Presses starter buttons to activate cutter spindles to be used. Holds master spindle and moves tracing point over and around contours of pattern to reproduce pattern, as carvings, on blanks. Moves mechanism that turns blanks and pattern for carving on sides or for carving rounded objects, such as chair legs. Removes bits and tracing points after rough cuts are made and installs finish-cutting bits and point to complete carvings, using wrenches. May verify accuracy of carvings against specifications, using caliper, rule, or template. May blow carving chips and dust from carved blanks during carving process, using airhose, to ensure blanks are being cut according to pattern. May sharpen bits, using bench grinder.
GOE: 06.02.03 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

665.482-014 MORTISING-MACHINE OPERATOR (woodworking)

Sets up and operates multiple-head mortiser machine to cut mortise slots in woodstock: Selects and installs mortising chisels (cutterheads) or mortise chain saw assembly, according to number and size of mortises to be cut. Turns handcrank or knobs to adjust spacing of cutterheads according to specifications of work order. Lays out and marks cuts to be made on stock, using rule and pencil, or places pattern on machine bed and measures distance between slots in pattern to determine location of mortiser heads. Clamps stock to machine table and adjusts machine table or cutting head for depth of cut. Presses button to start machine and presses pedal to force cutting head into woodstock. Verifies location and depth of mortises, using rule and caliper. May be designated according to type of cutting head used as Chain-Mortiser Operator (woodworking); Chisel-Mortiser Operator (woodworking). May set up and operate machine that automatically spaces and cuts mortises in stiles for insertion of slats to form louvered doors and windows and be designated Louver-Mortiser Operator (saw. & plan.).
GOE: 06.02.03 STRENGTH: M GED: R3 M3 L2 SVP: 4 DLU: 77

665.482-018 TIMBER-SIZER OPERATOR (saw. & plan.) alternate titles: planer operator

Operates planing machine to surface planks and timbers and reduce stock to specified dimensions: Installs cutting heads on machine drive spindles and adjusts blade exposure according to specified depth of cut, using wrenches and gauges. Adjusts feed roll tension and positions fences that guide stock between cutterheads. Starts machine, exhaust blower, and conveyors, and slides timber against guide to align timber on feed rolls. Verifies dimensions of sized stock, using gauge or rule.
GOE: 06.02.03 STRENGTH: M GED: R3 M2 L1 SVP: 4 DLU: 77

665.665-010 ROUGH PLANER TENDER (woodworking)

Tends machine that smooths surface and sizes rough lumber in woodworking establishment: Turns handwheels to adjust cutting depth and feed rate according to thickness and species of lumber to be planed. Presses buttons to start planer and feed conveyor. Depresses pedal to actuate hydraulic load bed that raises lumber stack to level with machine feed conveyor to facilitate loading. Loads boards in consecutive sequence onto feed conveyor that conveys boards through machine planing operation. Periodically attaches sharpening device to planer blade assembly, using wrench, and turns lever to guide abrasive surface of device along blade surface to sharpen blade.
GOE: 06.04.03 STRENGTH: H GED: R3 M3 L2 SVP: 3 DLU: 86

665.682-010 DOWEL-MACHINE OPERATOR (woodworking) alternate titles: dowel-sticker operator

Sets up and operates machine to shape dowel-rod from squared stock: Selects and installs cutting head, and adjusts knives, guides, and feed rolls, according to size and finish of dowel-rod to be cut. Verifies distances of settings and size of stock, using calipers and micrometers. Starts machine and inserts stock between feed rolls that force stock through cutting head. May install cutting heads that cut spirals or longitudinal grooves while rounding stock. May specialize in rounding stock for tool handles and be designated Handle-Rounder Operator (woodworking).
GOE: 06.02.03 STRENGTH: M GED: R3 M2 L1 SVP: 5 DLU: 77

665.682-014 HEADER (wood prod., nec)

Operates machine to scarf end of wooden pipe for fittings: Inserts knives in slots of cutting head and adjusts knives for depth of cut, using steel scale and wrench. Positions pipe on machine bed and turns handwheel to clamp pipe in place. Starts machine and pulls lever to move cutting head over end of pipe to cut scarf. Verifies depth of cut and length of scarf against written specifications and drawings, using steel scale. Removes pipe from machine and rolls pipe onto conveyor.
GOE: 06.02.03 STRENGTH: M GED: R3 M3 L2 SVP: 4 DLU: 77

665.682-018 MOLDER OPERATOR (woodworking)

Sets up and operates molder to plane, shape, and groove woodstock: Reads work ticket and examines pattern shape to determine molder setup procedures and type woodstock to be cut. Selects and installs cutting heads on machine according to pattern to be cut, and inserts and bolts specified knives in slots of cutterheads already in machine, using wrenches and gauges. Positions pattern on molder and turns handwheel to adjust cutting knives flush with pattern. Removes pattern and turns handwheel to adjust guides, pressure bars, and table levels according to depth, position of cuts, and stock dimensions. Starts machine, places stock on feed table, and turns handwheels to press feed rollers against stock for feeding stock through machine; or inserts stock into hopper of automatic feed mechanism that carries stock through machine. Inspects stock being cut to determine defects. Verifies dimensions of cut material, using gauges, rule, or caliper.
GOE: 06.02.03 STRENGTH: M GED: R3 M3 L2 SVP: 5 DLU: 78

665.682-022 PLANER OPERATOR (woodworking) alternate titles: facer operator; planing machine operator

Sets up and operates power-fed facer or planer machine to surface and size woodstock used in furniture production: Selects and installs knives in cutterhead according to work order, using wrenches and gauges. Turns handwheels to adjust table level, pressure bars, and feed rolls according to depth of cut and thickness of stock. Starts planer, and positions woodstock on conveyor or inserts woodstock between feed rolls that carry woodstock through planer. Inspects and feels planed woodstock to verify smoothness of cut and thickness of stock, using gauge and rule. May sharpen cutters on abrasive wheel or stone. May operate circular saw to remove woodstock defects, such as splits and holes, and to square ends of stock prior to processing boards through planer [CUT-OFF-SAW OPERATOR (woodworking) 667.682-022]. May signal coworker to stop feeding stock into planer when jams occur.
GOE: 06.02.03 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 79

665.682-026 PROFILE-SHAPER OPERATOR, AUTOMATIC (woodworking) alternate titles: rotary profile-shaper operator, automatic

Sets up and operates straight-line or rotary profile shaping machine that automatically follows contours of model or form to shape single or entire edges of wood furniture parts: Selects cutterheads or knives to conform to pattern contour, according to type of cut specified on work order. Installs cutterheads in vertical spindle of machine or inserts and bolts specified knives in slots of cutterheads already in machine, using handtools. Turns handwheel or crank to align knives with contours of model or form. Bolts or clamps model or form to bed of machine, using wrenches or air clamps. Sets stops on straight-line profiling machine and turns crank to adjust air clamps that hold stock in position for cutting. Presses button to start machine and positions stock under clamps and over model or form. Moves controls to actuate mechanism that closes clamps; moves carriage, turntable, or form containing stock against rotating cutters until edges of stock are shaped; returns carriage to starting position; and releases clamps for removal of stock. May turn thumbscrews or handwheel to regulate speed of carriage, turntable, or drive sprocket, according to type of stock and complexity of contours. May compare stock dimensions with pattern to detect cutting defects.
GOE: 06.02.03 STRENGTH: M GED: R3 M2 L1 SVP: 4 DLU: 78

665.682-030 ROUTER OPERATOR (woodworking) alternate titles: routing-machine operator

Sets up and operates single- or multiple-spindle routing machine to cut slots, grooves, designs, or recesses in woodstock: Studies blueprints, drawings, or samples and written specifications to ascertain size, depth, and location of cuts

to be made. Selects and installs router bits in spindle chucks according to specifications, using chuck key. Spaces spindles on shaft at specified intervals, using wrenches, and turns handwheels or sets stops to regulate depth of cut. Clamps stock to jig, inserts pin in guidehole of machine table, and places jig over guide pin, or clamps part to movable table of machine. Starts machine and presses pedal to raise table and feed stock into rotating bits. Moves stock under bits, following guides, lines, or slots in jig, to cut specified slots, designs, grooves, or recesses in stock. Measures dimensions of processed woodstock to verify conformance to specifications, using ruler, gauges, or calipers. May be designated according to machine operated as Multiple-Spindle-Router Operator (woodworking); or according to cut made as Handhole-Machine Operator (wood. container).
GOE: 06.02.03 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 79

665.682-034 SHAPER OPERATOR (woodworking)
Sets up and operates single- or double-spindle shaping machine to cut grooves, rabbets, flutes, or pattern shapes on surface and edges of woodstock: Examines drawings, blueprints, or written orders to determine cutting pattern. Selects, installs, aligns, and adjusts cutterheads, guides, and jigs to make specified cuts and shapes, using handtools. Starts machine and feeds woodstock (with grain of wood) into cutterheads, holding and pressing stock against guide or jig to obtain specified cut. Measures shaped stock to verify conformance to pattern, using rule, calipers, or gauges. May hold and push stock into cutterheads without aid of jig or guide. May sharpen and mount cutting knives in cutterheads, using balance scale, *truing I* block, emery wheel, and wrench. May be designated according to machine operated as Double-Spindle-Shaper Operator (woodworking). May operate shaper machine to mold panels by cutting away sections along edges of stock and be designated Panel-Raiser Operator (saw. & plan.). May be designated according to parts shaped as Small-Parts-Shaper Operator (woodworking).
GOE: 05.05.08 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 78

665.682-038 VENEER JOINTER (millwork-plywood)
Sets up and operates machine to smooth, square, and apply glue to edges of veneer sheets preparatory to splicing: Turns handwheels to adjust cutter knives, pressure bar, and table or feed bed height to make cuts according to specifications. Pulls lever to adjust conveyor speed, according to length and thickness of veneer. Aligns edges of stack of veneer sheets and pushes stack between pressure bar and conveyor that carries stock over rotating cutting tool and glue wheel. Observes machine and presses pedal to reverse movements of conveyor to relieve jamming. Removes and replaces dull cutter knives, using wrench. May remove sheets and examine edges for evenness and uniform glue application.
GOE: 06.02.03 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 79

665.682-042 JOINTER OPERATOR (woodworking)
Sets up and operates jointer machine to reduce flat furniture woodstock to specified width or to plane, square, smooth, rabbet, or otherwise shape edges of stock so that stock might be joined tightly: Selects and installs knives in cutterhead according to pattern to be cut, using wrenches and gauges. Adjusts and clamps guide in position on machine table, according to width of stock and specified angle of cut. Turns handwheels to adjust table height and to expose cutting knives, according to specified depth of cut and thickness of stock. Starts machine, places stock on machine table against guide, and pushes stock over rotating cutting knives, or inserts stock into automatic feed mechanism that carries stock through machine. Reverses stock and cuts opposite edge. Verifies cuts, angles, and dimensions of stock to ensure conformance with specifications, using gauges, square, rule, or template. May operate machine to square or tongue and groove edges of core stock so that stock may be glued together to form wide boards and be designated Glue-Jointer Operator (woodworking).
GOE: 05.05.08 STRENGTH: M GED: R3 M2 L3 SVP: 4 DLU: 78

665.685-010 BOTTOM-TURNING-LATHE TENDER (wood. container)
Tends machine that shapes tub and bucket bottoms from bottom blanks: Centers blank between faceplates of machine and clamps blank in place, using handwheel. Presses pedal to rotate blank. Feeds cutting bits into rotating stock, by turning handwheel, to cut blank to specified diameter.
GOE: 06.04.03 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

665.685-014 END FRAZER (fabrication, nec) alternate titles: stem frazer
Tends machine that tapers ends of wooden stems of smoking pipes for insertion into corncob pipe bowls: Selects frazing head, according to size specifications on work ticket, and inserts frazing head into shaft of machine, using mallet. Starts machine. Grabs stem with pliers and inserts end of stem into frazer head, tapering end to specified dimensions. Verifies dimensions of tapered stem against specifications, using micrometers or slip rings. Turns setscrews to adjust angle of blades in frazer head, using screwdriver. Removes blades from frazer head and sharpens blades, using powered grinding stone.
GOE: 06.04.03 STRENGTH: L GED: R2 M2 L1 SVP: 3 DLU: 77

665.685-018 PLOW-AND-BORING-MACHINE TENDER (woodworking)
Tends machine that cuts grooves and bores holes in window sash stiles for insertion of sash weight cords: Sets stop according to length of stiles and tightens it, using wrench. Starts machine and places woodstock on machine table against guide. Pushes stock over rotating cutter to cut grooves until piece strikes stop. Activates drill to cut hole at end of groove. Stacks completed work on skid.
GOE: 06.04.03 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

665.685-022 PLYWOOD-SCARFER TENDER (millwork-plywood) alternate titles: scarfer operator
Tends machine that scarfs ends of plywood panels: Installs knives in rotary cutterhead and adjusts angle of cutter, according to thickness of panel and adjusts guides according to width of panel, using handtools. Positions and clamps panel on machine table and starts machine. Presses pedal to move panel under rotary cutter that scarfs end of panel. Removes scarfed panels from machine and stacks panels on pallets or carts for gluing.
GOE: 06.04.03 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

665.685-026 SCOOPING-MACHINE TENDER (furniture) alternate titles: scraper tender; seat scooper, machine
Tends machine to chip out saddle forms in wooden chair seats: Installs cams and cutterheads according to seat contour specified on work ticket. Turns handwheels to set cutterheads for depth of cut. Places chair seat on feed belt that pulls it under cutterheads. Removes chair seat at discharge end of machine. May tend drill that bores holes in scooped seat to permit attachment of chair back.
GOE: 06.04.03 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

665.685-030 STAVE JOINTER (wood. container)
Tends machine that smooths, bevels, and tapers edges of wooden barrel staves: Positions stave against guide on machine. Presses pedal to activate mechanism that moves guide forward forcing stave edge against rotating jointer wheel that smooths, bevels, and tapers stave edge.
GOE: 06.04.03 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

665.685-034 STOCK CHECKERER II (ordnance) alternate titles: checkering-machine operator; grip checkerer, machine
Tends machine that checkers (series of crosslike grooves) stock or grip of guns for decorative and gripping purposes: Places stock or wooden forepiece of gun in special holding device of machine. Starts machine that cuts checks (similar to knurling) in wood. Inspects checkered portions to ensure that machine is cutting as specified. May adjust checkering machine to correct checkering impression made on gun stocks and forearm, using wrenches.
GOE: 06.04.03 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

665.685-038 RODDING MACHINE TENDER (furniture)
Tends machine that cuts spiral grooves in wood dowel-rods and shaves circumference of rod to specified size: Starts rodding machine. Inserts dowel rods into feed trough and between feed rollers of rodding machine that cuts spiral groove in rods and trims diameter of rods to specified size. Observes cutting action of rodding machine and stops machine when malfunctions are noted. Removes spiraled rods from tail end chute and stacks rods on handtruck for removal to subsequent processing. Notifies specified personnel of malfunction of machine.
GOE: 06.04.03 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 86

665.685-042 ROUTER TENDER (furniture)
Tends automatic tape router to cut designs in woodstock. Lifts and positions stock in guides on bed of router. Secures stock to machine bed, using C-clamps. Turns dial to position cutterhead to begin cycle and starts router. Observes router during cycle to detect malfunctions, and notifies specified personnel when malfunctions occur. Blows wood shavings from router stock, using airhose. Unscrews C-clamps and lifts and stacks stock on handtruck.
GOE: 06.04.03 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 86

665.685-046 SHAPING MACHINE TENDER (furniture)
Tends bandsaw and double-spindle shaping machine that cut veneer into curved shapes for use in furniture manufacture: Flips switch and presses buttons to activate machines. Places stack of veneer on bed of bandsaw, positions pattern on top veneer sheet and marks cutting line. Guides stack of veneer against blade of bandsaw to rough-cut veneer. Positions and secures stock of rough-cut veneer on form of double-spindle shaping machine, and guides loaded form between revolving cutterheads, using form as guide, to smooth-cut veneer to shape of pattern.
GOE: 06.04.03 STRENGTH: H GED: R3 M1 L2 SVP: 3 DLU: 86

665.686-010 POLE-PEELING-MACHINE-OPERATOR HELPER (wood prod., nec) alternate titles: pole-peeler helper; pole-shaver helper
Feeds logs into machine that removes bark and unloads peeled logs: Rolls logs from ramp onto dual carriage tram, using peavey or hydraulic jack. Pushes tram to machine and releases carriage bolster to drop butt end of log onto machine feed gears. Fastens peeled end of log to discharge tram, using chain. Trips tram carriage release to unload peeled pole. May square end of pole with power saw. May shave unremoved bark, using chisel or draw knife.
GOE: 06.04.03 STRENGTH: H GED: R1 M1 L1 SVP: 2 DLU: 77

665.686-014 STAVE-PLANER TENDER (saw. & plan.) alternate titles: planer feeder
Feeds machine that smooths concave and convex surfaces of barrel or keg staves. Inserts staves between feed rollers that carry staves between rotating cutters of machine.
GOE: 06.04.03 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

665.686-018 VENEER-JOINTER HELPER (millwork-plywood) alternate titles: veneer-glue-jointer feedback; veneer-jointer returner
Turns stack of veneer sheets discharged from veneer-jointing machine and feeds sheets into return channel of machine. Performs duties as described under HELPER (any industry) Master Title.

GOE: 06.04.03 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

665.686-022 VENEER-JOINTER OFFBEARER (millwork-plywood)
Off bears jointer machine that smooths, squares, and applies glue to edges of veneer sheets preparatory to splicing: Off bears veneer sheets from discharge end of machine and stacks sheets on worktable. Examines edges of veneer sheets for gluing and stacks sheets requiring more glue onto pallet to be refed through jointer machine. Mixes powdered glue with water, using electric mixer, and pours glue into reservoir of jointer machine. May off bear flitches of hardwood veneer from jointer machine and stack flitches on cart.
GOE: 06.04.03 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

666 BORING OCCUPATIONS

This group includes occupations concerned with piercing wood by means of rotary cutting tools advanced into the wood in the direction of the tool's axis to make, enlarge, or thread holes.

666.382-010 BORING-MACHINE OPERATOR (woodworking)
Sets up and operates single- or multiple-spindle boring machine to bore holes in wooden parts: Examines blueprints, drawings, samples, or written specifications to ascertain size, type, and setting of boring tools, stops, jigs, and guides to be used. Inserts specified number and size bits in chucks of boring heads according to location specified for holes in stock. Adjusts spindle locations and stops to regulate spacing and depth of bore, using rule or template and wrenches. Turns handwheels to move table and guides to center stock under bits and regulate depth of bore. Starts machine, places wood on table against guides, and moves lever or depresses pedal to activate pneumatic clamps that hold stock in place and to engage wood with rotating bits. Measures location and depth of holes and compares measurements with work order and pattern specifications to verify accuracy of machine setup. Stacks bored material on handtruck and attaches work ticket where specified. Cleans machine, using airhose and rags. May be designated according to machine operated as Boring-Machine Operator, Double End (woodworking); Boring-Machine Operator, Horizontal (woodworking); Boring-Machine Operator, Vertical (woodworking); Cluster-Bore Operator (woodworking); Gang-Bore Operator (woodworking). May operate boring machine to bore, ream, and countersink bungholes in barrels and be designated Bunghole Borer (wood. container).
GOE: 06.02.03 STRENGTH: M GED: R3 M3 L2 SVP: 4 DLU: 78

666.482-010 PULLEY-MORTISER OPERATOR (woodworking) alternate titles: frame-pulley-mortising-machine operator
Operates boring machine to cut mortises in window jambs for installation of sash weight pulleys: Installs boring bit of specified size in machine chuck and tightens chuck, using wrench. Sets stops and guides on machine carriage according to depth and length of cut, width and length of jamb, and specified location of mortise. Sets jamb in machine carriage against guide and stop, and clamps jamb in place with lever. Starts machine and moves lever to feed jamb into cutter to cut mortise. Measures dimensions and location of cut, using rule.
GOE: 06.02.03 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

666.582-010 PREFITTER, DOORS (woodworking)
Operates boring machine to drill holes for latches and locks on doors, and cuts recesses in doors for hinges and locks, using portable router: Places door on worktable and positions template on door at point indicated on specification sheet or blueprint. Starts and guides router against template. Positions hinge in recess to verify depth of cut. Clamps door to table of boring machine. Positions bits over marks on door indicating location of holes to be bored. Starts machine which indexes cutting heads automatically to bore prescribed holes or pulls cord on lever to lower rotating bit [BORING-MACHINE OPERATOR (woodworking)]. Chisels out wood from recess to prepare it for lock, using wood chisel.
GOE: 06.02.03 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 77

666.684-010 FRAMER (wood prod., nec)
Bores holes in wood structural components, such as trusses, spans, stringers, decking, or fence posts, prior to wood preserving process: Positions wood on blocking of framing floor or guides structural components, suspended from hoist, into position on framing rack, using peavey and working as member of team. Aligns template on top of wood, installs specified bit size in auger, and bores holes of specified diameter in wood, using pneumatic-powered auger, hand auger, or multiple-spindle boring machine. May fabricate template according to work order specifications, using diagrams, measuring tape, square, handtools, and power tools.
GOE: 06.04.25 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

666.685-010 STEMHOLE BORER (fabrication, nec)
Tends machine that bores stemhole in corncob-pipe bowls: Places bowl in holding device of machine. Flips switch or presses button to start boring machine and depresses pedal that moves bowl against rotating bit to bore stemhole in pipe bowl. May insert drill bit in chuck of boring machine, according to work ticket, using chuck key. May tend machine that bores stemholes and sands bowl tops and be designated Stemhole-Borer-And-Topper (fabrication, nec).
GOE: 06.04.03 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 78

666.685-014 BORING-MACHINE OPERATOR (furniture)
Tends single- or multiple-spindle boring machine that bores holes in wooden furniture stock: Lifts and places woodstock against preset guides of machine bed and presses button to start rotating boring bits of previously set up machine. Holds woodstock against guides and presses button to lower rotating bits that bore holes into woodstock. Removes stock from machine and examines workpiece for boring defects, such as splits. May place woodstock in hopper that automatically feeds piece under bits of machine. May cut defects from sections of woodstock prior to boring, using cut-off saw.
GOE: 06.04.03 STRENGTH: M GED: R2 M2 L2 SVP: 2 DLU: 86

667 SAWING OCCUPATIONS

This group includes occupations concerned with severing or shaping wood by the reciprocal or rotary cutting action of a blade which wears out a kerf.

667.137-010 SUPERVISOR, STAVE CUTTING (wood. container)
Supervises and coordinates activities of workers engaged in cutting barrel staves: Coordinates movement of bolts between yard, cutting area, and drying area. Examines staves and bolts to ensure products meet company standards. Directs workers to sharpen saw blades or to adjust cutting of staves to maintain production standards. Examines bolts to detect defects, such as knots and splits. Grades bolts, using factors such as ratio of sapwood to heartwood. Calculates value of bolts and writes pay voucher for purchases. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R3 M2 L2 SVP: 7 DLU: 86

667.382-010 STOCK GRADER (woodworking)
Appraises and cuts planed lumber to width or length to obtain clear-faced pieces (pieces free from imperfections): Adjusts stops of cutoff saw or ripsaw to required distances. Starts machine and inspects lumber stock for imperfections. Pushes lumber past saw, cutting away undesired parts and cutting acceptable pieces to desired lengths or widths. May be designated according to type of saw used as Cut-Off-Saw Grader (woodworking); Ripsaw Grader (woodworking).
GOE: 06.02.03 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

667.482-014 POCKET CUTTER (woodworking) alternate titles: frame-gate-mortiser operator; gate cutter; gate-mortiser operator
Operates machine to cut gates into window jambs to allow for installation and adjustment of sash counterweights after frames are erected: Adjusts distance between saws, using wrench. Positions stops on machine table according to dimensions of jamb and specified location of gate. Places jamb on machine table against stops and clamps jamb in place. Starts machine, and pulls lever to feed stock into circular saws that cut two parallel slits into jamb to form sides of gate. Presses pedal that raises one set of two reciprocating saw blades and lowers another set of two blades to cut slits simultaneously across wood grain on top and bottom of jamb to form ends of gate. Measures completed cuts for accuracy, using rule, and makes machine adjustments. May replace worn saw blades. May operate pocket cutter combined with pulley mortiser and be designated Pocket-And-Pulley-Machine Operator (saw. & plan.).
GOE: 06.02.03 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

667.482-018 STOCK CUTTER (saw. & plan.) alternate titles: bill cutter; stock-saw operator; trim sawyer
Operates saws to cut lumber according to customer's order or plant production specifications: Selects lumber of kind and grade specified on work order. Measures and marks lumber according to specifications, using rule and square. Cuts lumber to specified length and width, using crosscut saws [CUT-OFF-SAW OPERATOR (woodworking) I], ripsaws [RIPSAW OPERATOR (woodworking)], or multiple-purpose saws [VARIETY-SAW OPERATOR (woodworking)].
GOE: 06.02.03 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

667.485-010 SHINGLE SAWYER (saw. & plan.)
Tends machine that saws wooden blocks into shingles: Places block in machine carriage and adjusts carriage to ensure that shingles are of specified thickness. Starts machine that moves carriage back and forth to feed block into rotating saw to cut shingles. Catches shingles as they fall from saw, grades shingles according to knots, rot, or other defects, and trims off defects with power saw. Sorts trimmed shingles according to grade and tosses shingles into specified containers.
GOE: 06.02.03 STRENGTH: M GED: R3 M1 L1 SVP: 4 DLU: 77

667.662-010 HEAD SAWYER (saw. & plan.) alternate titles: band-log-mill-and-carriage operator; band-sawmill operator
Operates head saw and feed carriage to saw logs into cants or boards: Starts mechanical loader arms that place log on carriage. Sets dogs and adjusts carriage blocks to align log for sawing. Activates carriage that moves log against saw blade. Starts saw to cut log. Observes exposed face of log after first cut to determine grade and size of next cut and adjusts setting of carriage blocks. Starts mechanical log turner that turns log over on carriage for subsequent cuts. May change saw blades. May be designated according to type of saw operated as Band-Head-Saw Operator (saw. & plan.); Circular-Head-Saw Operator (saw. & plan.).
GOE: 06.02.03 STRENGTH: L GED: R3 M2 L1 SVP: 7 DLU: 77

667.662-014 MACHINE-TANK OPERATOR (wood. container) alternate titles: power-saw operator
Operates power saws to cut lumber to specified dimensions for bottom and sides of wooden tanks and cuts out tank bottom from assembled boards: Meas-

ures and marks boards to specified length for tank bottom. Cuts bottom boards, using swinging cutoff saw. Measures and cuts stave lumber to specified length for stave. Gives directions to workers placing and centering bottom assembly on turntable near bandsaw. Turns handwheel to move turntable toward bandsaw. Starts bandsaw and feeds bottom assembly against blade of saw and revolves turntable to cut assembly along circle marked on assembly by TANK ASSEMBLER (wood. container). Withdraws bottom from saw.
GOE: 06.02.03 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

667.682-010 BAND-SCROLL-SAW OPERATOR (woodworking) alternate titles: scroll-saw operator; tilting-head band-sawyer

Operates bandsaw to saw curved or irregular designs on woodstock or to saw thick wooden pieces to size: Turns handwheels to adjust machine bed and set tension on blade between drive and idler wheels of bandsaw. Turns knobs to adjust guide post of blade, according to thickness of stock, and to position friction wheel behind blade to prevent backward movement of blade when cutting stock. Positions jig or attachment on machine bed to cut stock to size, using C-clamps and wrenches. Starts machine and pushes or turns stock against bandsaw blade to cut stock along marked outline or configuration of jig. Removes cut stock and verifies dimensions of stock, using rule, caliper, and pattern. Opens drive and idler wheel covers and turns handwheels to loosen tension on bandsaw blade to replace dull or defective blades. May nail several pieces of woodstock together when one design is to be cut. May position template on woodstock and mark cutting outline on stock, using pencil and template.
GOE: 06.02.03 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 78

667.682-014 BOTTOM-SAW OPERATOR (saw. & plan.)

Operates machine to cut blocks of wood into boards of specified thickness for bottoms of buckets and tubs: Adjusts height of guide for desired thickness of board. Clamps wood in position on feed carriage. Starts saw rotating. Pushes carriage over saw and withdraws carriage cutting off board of specified thickness. Loosens clamp and drops wood down on guide for next cut.
GOE: 06.02.03 STRENGTH: M GED: R3 M1 L1 SVP: 4 DLU: 77

667.682-018 CORNER-TRIMMER OPERATOR (wood. container)

Operates machine to trim corners of lock-corner wooden boxes: Adjusts position of guide rails, using wrench. Starts saw and holds corner of box against guide rails and pushes box into saw, trimming excess material from lock-corner. Piles trimmed boxes on handtruck.
GOE: 06.02.03 STRENGTH: M GED: R3 M1 L1 SVP: 5 DLU: 77

667.682-022 CUT-OFF-SAW OPERATOR I (woodworking) alternate titles: cross-cut-saw operator; trimmer operator

Operates one or more single- or multiple-blade circular saws to cut wood and wood products to specified lengths: Adjusts and secures ends and backstops on saw table, using wrench, or bolts saws to shaft and turns handwheels to space saws and stops, according to specified length of stock. Starts saw and places material to be cut on conveyor belt, drums, or feed chain that feeds stock into saws, or positions workpiece against end stop and under saw, syncronizing action with automatically descending blade, or pushes material on table and cuts wood, depending on type saw, utilizing one of following methods: (1) Pulls lever to swing saw through material. (2) Pushes moveable table past saw. (3) Depresses treadle to raise saw through slot in machine table. (4) Tilts table for angle cut and presses pedal to move saw through workpiece to cut stock. Replaces dull or damaged saw blades and lubricates machine, using wrench and grease gun. May examine material prior to cutting to determine what cuts will remove defects and produce maximum footage. May verify dimensions of stock cut and accuracy of cuts, using rule and square. May be designated according to type of saw used as Double-Cut-Off-Saw Operator (woodworking); Drum-Saw Operator (saw. & plan.); Swinging-Cut-Off-Saw Operator (woodworking); Table-Cut-Off-Saw Operator (woodworking); Tilting-Saw Operator (woodworking); Treadle-Cut-Off-Saw Operator (woodworking). May be designated: Equalizing-Saw Operator (woodworking); Multiple-Cut-Off-Saw Operator (millwork-plywood; wood. container); Timber Cutter (mine & quarry).
GOE: 06.02.03 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 81

667.682-026 EDGER, AUTOMATIC (saw. & plan.)

Operates multiple-blade sawing machine and conveyor system from panelboard to straighten edges of rough lumber and saw lumber into boards of prescribed widths: Starts conveyor to move lumber and scans board as it passes to determine cut that will produce highest quality and grade. Presses panel buttons to space saw blades and trips pedal to start feed rollers leading to saws.
GOE: 06.02.03 STRENGTH: L GED: R3 M2 L1 SVP: 5 DLU: 77

667.682-030 GANG SAWYER (saw. & plan.)

Operates gangsaw or sash-gangsaw to cut lumber from cants: Moves hand and foot levers to shift cants from chain conveyor table to live rolls and align cants with saws. Starts machine and turns handwheels to adjust feed and tension rollers and speed of machine. May adjust saws to vary width of cuts, using handtools. May replace saw blades. May be designated according to type of saw operated as Circular-Gang-Saw Operator (saw. & plan.); Sash-Gang-Saw Operator (saw. & plan.).
GOE: 06.02.03 STRENGTH: L GED: R3 M2 L1 SVP: 5 DLU: 77

667.682-034 HEAD SAWYER, AUTOMATIC (paper & pulp; saw. & plan.) alternate titles: double-cut sawyer

Operates head saw, log carriage, and conveyor system, using panel buttons and hand and foot controls to saw logs into rough cants or boards: Starts conveyor that transfers log to log carriage with kicker arms. Activates log turners that turn log, scans log to ascertain best approach for trimming and cutting, and aligns log with saw. Sets specified depth of cut and activates carriage to force log against saw blade to cut board. Scans exposed face of log after first cut to determine grade and size of next cut.
GOE: 06.02.03 STRENGTH: L GED: R3 M2 L1 SVP: 6 DLU: 77

667.682-038 HEADING-SAW OPERATOR (saw. & plan.)

Operates heading saw to cut pieces of heading material from heading bolts: Loosens nut and adjusts guides to thickness of heading material. Stands bolt on end in swing carriage of machine. Moves bolt against guides and clamps bolt with tooth-edged clamp. Starts saw and pushes swing toward saw to cut strips of heading material from bolt. Withdraws swing, removes heading strip, and repeats cuts until bolt is completely sawed.
GOE: 06.02.03 STRENGTH: M GED: R3 M1 L1 SVP: 4 DLU: 77

667.682-042 JIGSAW OPERATOR (woodworking) alternate titles: fret-saw operator; scroll-saw operator

Operates machine equipped with narrow vertically reciprocating saw blade to make irregular external and internal cuts on woodstock: Starts machine and places stock on machine table. Holds and guides stock against saw, following outline marked on stock to make cuts. Detaches saw blade from machine, inserts blade through previously bored hole in stock and reattaches blade to machine, using handtools, to make internal cuts.
GOE: 06.02.03 STRENGTH: M GED: R3 M1 L1 SVP: 4 DLU: 77

667.682-046 PACKAGER, HEAD (saw. & plan.)

Operates double-end trimming machine to saw simultaneously several pieces of lumber to identical lengths: Sets movable saw at specified distance from stationary saw. Stacks lumber in machine and butts ends of lumber against guide block. Moves lever to clamp lumber in machine. Starts saws that cut off ends of lumber. Places sawed lumber on conveyor.
GOE: 06.04.03 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

667.682-050 PONY EDGER (saw. & plan.)

Operates multiple-blade sawing machine to straighten edges of rough lumber and cut lumber into boards of prescribed widths: Starts machine. Lays rough board on edger table and spaces saw blades so that board of highest quality will be cut from rough board. Adjusts power-feeding mechanism to thickness of board. Pushes board into feed rollers which force board between saws that straighten edges of board. May replace dull saw blades.
GOE: 06.02.03 STRENGTH: M GED: R3 M2 L1 SVP: 6 DLU: 77

667.682-054 RADIAL-ARM-SAW OPERATOR (woodworking)

Operates circular saw mounted on overhead radial arm to cut boards and other woodstock to specifications: Reads work order or receives instructions from supervisor. Turns crank to raise and lower saw to depth of cut. Turns hand nuts and rotates radial arm and saw arbor to set saw for angle and bevel cuts. Lays material on table and aligns cutting mark under saw blade. Starts saw and pushes or pulls rotating blade against workpiece to make cut. Sets and locks blade at right angles to radial arm and feeds material into saw to rip lumber. May replace saw blade with attachments to shape, rout, groove, mortise, or drill workpiece.
GOE: 06.02.03 STRENGTH: M GED: R3 M1 L2 SVP: 4 DLU: 81

667.682-058 RESAW OPERATOR (woodworking) alternate titles: resaw-machine operator; resawyer; resizer operator; splitter

Operates saws to cut planks, timbers, or boards into boards of lesser thickness according to work orders: Observes lumber on conveyor as lumber approaches saw to determine cut to be made. Turns handwheels or manipulates levers to adjust distance between feed rolls and set saw for thickness of board to be cut. Depresses levers to control speed of saw and feed rolls. Observes automatic feeding of lumber to saw or pushes end of lumber into feed rolls. May replace dull saw blades, using handtools. May be designated according to type of saw used as Band-Resaw Operator (saw. & plan.; wood. container); Circular-Resaw Operator (saw. & plan.; wood. container); Multiple-Resaw Operator (wood container); Horizontal-Resaw Operator (saw & plan.).
GOE: 06.02.03 STRENGTH: H GED: R3 M2 L1 SVP: 6 DLU: 79

667.682-062 RIP-AND-GROOVE-MACHINE OPERATOR (furniture)

Operates machine to rip and cut grooves on curved or irregularly shaped furniture stock in one operation: Turns panel controls to set stops and saws for cutting grooves of specified width and depth. Feeds stock under rollers. Measures first cuts to verify processed part against work order, using rule.
GOE: 06.02.03 STRENGTH: L GED: R3 M2 L1 SVP: 4 DLU: 77

667.682-066 RIPSAW OPERATOR (woodworking) alternate titles: ripsawyer

Operates electrically powered machines equipped with one or more bandsaw or circular saw blades to rip boards along grain or to trim edges of boards, according to work ticket: Turns handwheel, uses wrench and ruler, or positions and secures collars and turns setscrews on saw shaft to adjust ripping and saw guides or distance between saws, according to specified width of boards. Moves levers or turns handwheel to adjust height of saw blade and speed of feed rolls, according to thickness of board. Starts saw, positions board against guide, and slides board into feed rolls or aligns board on feed rolls, using *shadow line* as guide. Verifies accuracy of saw setting and dimensions of lumber stock, using rule. May count pieces of lumber cut to determine when specified quantity has been ripped. May replace saw blades and lubricate machine. May be

designated according to saw operated as Band-Ripsaw Operator (woodworking); Circular-Ripsaw Operator (woodworking); Gang-Ripsaw Operator (woodworking). May operate ripsaws to cut stock so that grain and pattern match adjoining parts and be designated Ripsaw Matcher (woodworking).
GOE: 06.02.03 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 80

667.682-070 SHAKE SAWYER (saw. & plan.)
Operates band ripsaw to cut bolts into shakes: Starts saw and positions bolt on saw table. Pushes and guides bolt through saw so that bolt is cut diagonally to form shakes. Trims edges of shake with saw or saws and grades shake according to length and width. Tosses shake into bin according to grade. May replace saw bands, using handtools.
GOE: 06.02.03 STRENGTH: M GED: R3 M2 L1 SVP: 4 DLU: 77

667.682-074 STAVE-BOLT EQUALIZER (saw. & plan.) alternate titles: equalizer operator; equalizer
Operates equalizer saw to saw barrel-stave bolts into specified lengths with square ends: Adjusts distance between saws. Lays bolt on carriage of equalizer and starts saws. Pushes carriage between saws to trim and square ends of bolts. Withdraws carriage and removes bolts.
GOE: 06.04.03 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

667.682-078 STAVE-LOG-CUT-OFF SAW OPERATOR (saw. & plan.) alternate titles: cut-off-saw operator
Operates power saw to cut logs into specified barrel-stave lengths: Rolls log on conveyor or table of saw, using cant hook. Starts conveyor which moves log into position or pushes log along table. Starts saw and lowers saw against or pulls saw through log for each cut to saw log to specified lengths.
GOE: 06.02.03 STRENGTH: H GED: R3 M2 L1 SVP: 4 DLU: 77

667.682-082 STOCK-PATCH SAWYER (woodworking) alternate titles: defect cutter
Operates saw machine to cut out defects in finished woodstock: Inspects board to determine extent of defect and moves lever to adjust saw for length and depth of cut to be made. Places stock on machine table and slides stock under saw blade at point of defect in board. Depresses pedal to lower saw to cut out defect. Releases pedal and pushes board on conveyor for further processing.
GOE: 06.02.03 STRENGTH: M GED: R3 M2 L1 SVP: 4 DLU: 77

667.682-086 VARIETY-SAW OPERATOR (woodworking) alternate titles: combination-saw operator; universal-saw operator
Operates adjustable circular saw to perform such operations as ripsawing, cross cutting, beveling, grooving, and mitering of woodstock: Selects sawing disk according to type of cut specified on work order and bolts disk to machine shaft, using wrench. Turns handwheel or crank to tip machine table to specified angle or to raise table according to specified depth of cut. Positions guides on machine table according to specifications of cut, and turns knobs to set guides or bolts guides in place, using wrench. Starts machine, places woodstock on table against guides, and pushes stock against saw. Measures cut stock with ruler, caliper rule, or square to verifiy dimensions against specifications. Removes cut stock from machine and maintains production count. May turn handwheels and knobs to adjust machine guide, blade, and table to make additional cuts of woodstock, according to work order. May be designated according to operation performed as Miter Sawyer (woodworking).
GOE: 05.05.08 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 81

667.682-090 LOG-CUT-OFF SAWYER, AUTOMATIC (saw. & plan.)
Operates panelboard of circular saw and conveyor system to saw logs to specified lengths and to move cut logs to other stations for further processing: Starts conveyor belt that transfers log to feed conveyor. Observes log to determine number of usable lengths to be cut, and presses button on panelboard to lower saw that trims and squares log ends. Cuts log to specified lengths by registering length specification on control panel of machine that automatically measures log and lowers saw to cut log when log reaches selected position. Controls discharge conveyor to transfer log to HEAD SAWYER (saw. & plan.) 667.662-010 or GANG SAWYER (saw. & plan.) 667.682-030 according to size and texture of log.
GOE: 06.02.03 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 78

667.682-094 TRIMMER SAWYER (saw. & plan.)
Operates bank of circular saws to cut out defective sections of boards: Reads markings on boards as boards move on conveyor to saws to determine what cuts will produce highest grade. Moves levers (piano-like keys) to raise or lower one or more saws along trimmer bed to cut lumber into lengths and trim out defects. Climbs onto conveyor to lift and remove jammed lumber.
GOE: 06.02.03 STRENGTH: M GED: R3 M2 L1 SVP: 4 DLU: 79

667.685-010 BAND-SAW OPERATOR (wood. container) alternate titles: hogshead head-matcher
Tends bandsaw that cuts headings for barrels, hogsheads, or kegs: Clamps heading mat, boards, or veneer sheet in position on circular table. Loosens nut and sets blade guides according to thickness of heading material. Starts saw and turns table to revolve material against saw, cutting circular headings. Removes headings from table.
GOE: 06.04.03 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

667.685-014 BAND-SAW OPERATOR (woodworking)
Tends bandsaw that cuts wooden stock for toys and games: Stacks specified number of pieces of stock on cutting table against preset ripping fence. Pushes cutting table against saw until stock is severed. Drops cut pieces into tote box. Periodically gauges piece with template to verify accuracy of machine setup.
GOE: 06.04.03 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

667.685-018 BEADING SAWYER (fabrication, nec)
Tends beading machine that cuts decorative bead (groove) around edge of smoking pipe bowls: Places bowl of pipe over chuck of machine and turns nut to expand chuck against bowl, using wrench. Pulls lever to position bowl against rotating saw. Turns handwheel to rotate bowl, sawing bead around edge of bowl.
GOE: 06.04.03 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

667.685-022 BOLTER (saw. & plan.) alternate titles: bolt sawyer; knee bolter; short-log-bolter operator
Tends circular saw that cuts slabs, edgings, and short logs into pieces suitable for making sawmill byproducts, such as shingles, shakes and laths, or for fuel: Starts conveyor that moves slab, edging, or short log into cutting position against end stop. Starts saw and moves saw to cut pieces according to requirements. May set dogs or wedges to hold slab, ending, or short log in place. May be designated Cut-Off Sawyer, Shingle Mill (saw. & plan.) when cutting pieces used for making shingles. May be designated Scrap Sawyer (saw. & plan.) when cutting scrap lumber for use as fuel.
GOE: 06.04.03 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 78

667.685-026 BUZZSAW OPERATOR (any industry)
Tends circular cutoff saw that custom cuts fireplace and stove fuel wood from random lengths of wood: Places wood on carriage and adjusts guides to specified length. Starts saw and moves carriage past saw to cut wood to length. Advances wood to carriage guides and repeats moving carriage past saw.
GOE: 06.04.03 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

667.685-030 COB SAWYER (fabrication, nec)
Tends belt-driven saw that cuts corncobs into specified lengths for bowls of corncob pipes: Pushes lever that engages belt to start saw. Positions cob against stop on table of saw and depresses pedal that advances revolving saw blade, cutting cob to specified length. Places husks and other waste material on conveyor belt for disposal.
GOE: 06.04.09 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

667.685-034 CUT-OFF SAWYER, LOG (paper & pulp; saw. & plan.) alternate titles: butt sawyer; deck sawyer; pondsaw operator; timber trimmer
Tends power-driven circular, chain, or drag saw located on deck or at edge of pond to cut logs to standard length: Moves logs in pond into position for sawing, using pike pole. Moves levers to drop dogs to hold log in place. Starts saw and cuts log to required length. May tend circular cutoff saw, mounted on deck, to cut smaller diameter or crooked logs into usable lengths. May replace saw blades.
GOE: 03.04.02 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

667.685-038 DOWEL POINTER (woodworking)
Tends machine that cuts dowels from dowel rod, and grooves and points dowels for use: Selects guide sockets according to diameter of stock, and secures sockets in automatic feedhead with locking thumbscrews. Adjusts saws to cut dowels to specified length. Starts machine, and inserts dowel rods in guide sockets to be cut and pointed. May sort and stack finished dowels in rack.
GOE: 06.04.03 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

667.685-042 KERFER-MACHINE OPERATOR (furniture)
Tends machine that saws parallel cuts in veneered stock so veneer panels can be bent around corners on furniture: Installs saw blades and adjusts depth of cut. Places veneer stock on jig and feeds stock into machine.
GOE: 06.04.03 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

667.685-046 SAWYER, CORK SLABS (wood prod., nec)
Tends bandsaw and circular saw that cuts cork slabs into beveled strips from which heels, with beveled inside edge, are cut: Selects miter jigs according to bevel angle specified and bolts jig onto bandsaw table, using wrench. Starts machine and pushes slab through jig which holds slab at specified angle or pushes slab flat between guides on circular saw tabletop, against rotating blade set at fixed angle, for bevel cut.
GOE: 06.04.09 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

667.685-050 SHINGLE TRIMMER (saw. & plan.)
Tends table saw to trim edges and cut defects from shingles: Starts saw and conveyor. Inspects each shingle for defects, such as rot, knots, and faulty grain. Places shingle on saw conveyor and guides shingle through saw. Tosses unusable shingles into waste bin. May replace worn saw blades, using handtools.
GOE: 06.02.02 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

667.685-054 SLASHER OPERATOR (paper & pulp; saw. & plan.) alternate titles: slasher sawyer
Tends bank of circular saws that saw logs, slabs, or scrap wood into pieces for fuel or processing into pulp: Starts saws and activates slasher conveyor chains. Straightens moving logs or slabs on conveyor to prevent jamming saws and to maintain uniform spacing, using pike pole.
GOE: 06.04.03 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

667.685-058 STAVE-LOG-RIPSAW OPERATOR (saw. & plan.)
Tends power saw that rips logs of specified length into halves or quarters for barrel-stave cutting: Places log, or halved log, on saw carriage or lifts log

to saw table, and starts saw. Shifts lever moving carriage toward saw or pushes log along table to feed log into saw and rip log in half. Moves carriage away from saw and removes sawed pieces.
GOE: 06.04.03 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

667.685-062 STAVE-SAW OPERATOR (wood. container) alternate titles: bolt sawyer

Tends stave (hollow cylinder) saw that cuts barrel, keg, tub, and bucket staves from stave bolts: Adjusts guides to attain specified thickness of stave. Lays bolt on carriage and holds bolt against guides. Depresses pedal to start carriage that feeds bolt into stave saw to cut rough staves. Releases pedal to stop carriage and removes stave. Repeats process to produce required number of staves.
GOE: 06.04.03 STRENGTH: M GED: R3 M1 L1 SVP: 4 DLU: 77

667.685-066 TURNING-MACHINE OPERATOR (wood. container) alternate titles: rounding-machine operator; turner-machine operator

Tends machine that rounds and trims assembled blanks for heads of barrels or bottoms of baskets: Adjusts limit of horizontal swing saw to shape blanks of specified size. Centers and clamps blank in chuck of machine. Starts machine and moves feed lever that swings rotating saw against blank and simultaneously starts chuck and blank revolving. Holds saw against revolving blank to trim and shape periphery. Opens jaws of chuck and removes finished head. May remove defects from barrel heading material, using circular saw. May be designated according to part formed as Basket-Bottom-Rounding-Machine Operator (wood. container); Head-Turning-Machine Operator (wood. container).
GOE: 06.04.03 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

667.685-070 AUTOMATIC BANDSAW TENDER (furniture)

Tends bandsaw that automatically cuts curved or irregular designs on woodstock or saws stock to size: Compares sample piece of stock with prefabricated templates to select template. Positions and secures template on machine bed, turns dials, and positions stock clamps to set up automatic bandsaw. Places stock on machine bed, pulls lever to clamp stock in position, and presses buttons to activate automatic machine cycle. Pushes lever to release stock clamps, removes cut stock from machine, and stacks stock on handtruck.
GOE: 06.04.03 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 86

667.685-074 CUT-OFF-SAW OPERATOR II (woodworking)

Tends circular saw that saws kiln-dried lumber, rough lumber, or woodstock to standard lengths in sawmills, furniture plants, or woodworking establishments: Examines boards of rough lumber or finished woodstock for defects, such as excessive warping, knots, and cracks, to determine where to cut boards to minimize waste. Pushes boards against stop guides on saw table, and depresses button or pedal to activate saw to cut boards to specified length. Places cut boards on conveyor for further processing. May tend equipment with multiple saws.
GOE: 06.04.03 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 86

667.686-010 CLOTHESPIN-MACHINE OPERATOR (woodworking)

Feeds wooden clothespin blanks into machine that picks up, saws, and flares one end of block. Removes defective stock.
GOE: 06.04.03 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

667.686-018 TRIMMER HELPER (saw. & plan.) alternate titles: rebut-machine tail offbearer

Feeds lumber into double-end trimmer and keeps lumber straight into saw blades, working as member of team.
GOE: 06.04.03 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

667.686-022 TURNING-MACHINE-OPERATOR HELPER (wood. container)

Assists TURNING-MACHINE OPERATOR (wood. container) in tending machine that rounds and trims assembled blanks for heads of barrels on bottoms of baskets. Performs duties as described under HELPER (any industry) Master Title.
GOE: 06.04.03 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

667.687-010 BUZZSAW-OPERATOR HELPER (any industry) alternate titles: cordwood-cutter helper

Assists BUZZSAW OPERATOR (any industry) in cutting logs into suitable lengths for use in stoves and fireplaces: Lifts limbs and trunks onto table of circular saw and holds them steady while they are cut. Throws cut pieces into piles. Lifts sawed pieces and stands pieces on end under blade of hydraulic-powered log splitter. May hold limbs and trunks of fallen trees while they are sawed to length in woods with chain saw. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 06.04.03 STRENGTH: H GED: R1 M1 L1 SVP: 1 DLU: 77

667.687-014 LOG INSPECTOR (saw. & plan.) alternate titles: log culler

Inspects logs, used in manufacture of barrel staves, before they are cut into lengths by STAVE-LOG-CUT-OFF SAW OPERATOR (saw. & plan.) and separates and marks for use in manufacture of barrel-heading material those logs having defects, such as knots, crooks, and checks.
GOE: 03.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

667.687-018 SAWMILL WORKER (saw. & plan.) alternate titles: swamper

Performs any combination of following duties in preparing logs for cutting into lumber and storing cut lumber in sawmill: Unloads logs from trucks or cars. Rolls logs onto sawmill deck. Examines logs for defects, such as embedded pieces of iron or stone, decayed wood from splits, and marks defects for removal by other workers. Rolls logs from deck onto log or carriage. Rides log carriage of head saw and adjusts position of logs on carriage to cut planks of required thickness. Sorts and guides planks emerging from saw onto roller tables or conveyors for trimming edges. Straightens lumber on moving conveyors. Straightens edges of rough lumber, using saw. Operates and maintains donkey engines. Sharpens and adjusts teeth of woodworking saws. Tends fires in donkey engine. May relieve designated workers engaged in preparing or cutting logs into lumber and be designated Sawmill-Relief Worker (saw. & plan.).
GOE: 06.04.40 STRENGTH: M GED: R3 M1 L1 SVP: 3 DLU: 86

669 WOOD MACHINING OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with shaping wooden parts or products by removing excess material from stock or objects.

669.130-010 SUPERVISOR, ASSEMBLY ROOM (furniture)

Supervises and coordinates activities of workers engaged in fabricating wooden shades, venetian blinds, curtain, sash, or traverse rods: Sets up equipment, such as saws, slicing, and wood weaving machines. Verifies conformance of parts to specifications, using gauges, calipers, micrometers, or other measuring instruments. Repairs or requisitions replacement of defective equipment. Trains new workers. Directs workers in operation of equipment. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

669.130-014 SUPERVISOR, CUTTING DEPARTMENT (pen & pencil)

Supervises and coordinates activities of workers in cutting department of wooden pencil manufacturing plant: Examines and counts slats, blanks, and pencils for adherence to company standards. Sets up, operates, and adjusts machines, such as disk sanders and rounding machines. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 77

669.130-018 SUPERVISOR, FRAMING MILL (wood prod., nec)

Supervises and coordinates activities of workers engaged in handling, classifying, peeling, trimming, notching and boring, and branding lumber for use as crossties, pilings, bridge timbers, and utility poles: Assigns space in yard for lumber, according to production schedule and type and condition of lumber. Schedules peeling, trimming, adzing, and boring of lumber, according to classification of lumber and length of time in yard. Orders branding of lumber with identification data, such as customer, type of lumber, and date of treatment. Performs other duties as described under SUPERVISOR (any industry) Master title. May be designated according to type of product as Supervisor, Pole Yard (wood prod., nec); Supervisor, Tie Yard (wood prod., nec).
GOE: 06.02.01 STRENGTH: L GED: R4 M2 L2 SVP: 8 DLU: 77

669.130-022 SUPERVISOR, MACHINING (woodworking)

Supervises and coordinates activities of workers engaged in operating variety of woodworking machines to shape wooden parts or products by removing excess material: Analyzes work orders to determine production schedules. Computes amounts of stock and supplies required for operations, based on production schedules, and requisitions materials from storage area. Inspects and measures wood products, using pattern and rule, to verify conformance to company standards. Directs workers in adjusting machines and equipment to repair products which fail to meet standards. Trains new workers in setup and operation of machines. Performs other duties as described under SUPERVISOR (any industry) Master Title. May plan flow of materials through department and develop physical layout of machines according to work orders. May lay out designs on stock to guide workers in machining operations [PATTERN MARKER (woodworking) I 761.381-022]. May be designated according to department supervised as Supervisor, Finish-End (furniture); Supervisor, Rough-End (furniture).
GOE: 05.05.08 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 81

669.130-026 SUPERVISOR, SAWMILL (saw. & plan.)

Supervises and coordinates activities of workers engaged in shaping logs or wood to form rough lumber, shingles, cooperage stock, lathes, and veneer stock: Reads work orders to determine type product to be produced and production schedule. Instructs workers on machine setup to meet production requirements. Inspects material during and after processing to determine that dimensions and grade meet specifications. Directs workers to adjust machine setup or processing procedure to correct defects. Performs duties as described under SUPERVISOR (any industry) Master Title. May inspect, grade, scale, and tally incoming lumber and verify invoices. May compute wood requirements needed to meet production demands. May supervise and coordinate activities of workers engaged in removing bark from logs prior to processing.
GOE: 06.01.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 79

669.130-030 SUPERVISOR, SHUTTLE FITTING (woodworking)

Supervises and coordinates activities of workers engaged in cutting and corrugating shuttle chambers, shaping tapered shuttle ends, cutting grooves and slots, and in performing related duties to assemble component parts of wooden shuttles. Sets up machines. Performs duties as described under SUPERVISOR (any industry) Master Title.

GOE: 06.02.01 STRENGTH: L GED: R4 M2 L2 SVP: 7 DLU: 77

669.130-034 SUPERVISOR, SHUTTLE PREPARATION (woodworking)

Supervises and coordinates activities of workers engaged in sawing ends of seasoned wooden blocks, planing surfaces, and boring, scoring, and tapering ends to shape blocks into shuttle blanks. Sets up woodworking machines. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M2 L2 SVP: 7 DLU: 77

669.130-038 SUPERVISOR, SHUTTLE VENEERING (woodworking)

Supervises and coordinates activities of workers engaged in cutting fiber veneer strips and gluing strips on wooden shuttles. Sets up and operates shearing, shaping, and surfacing machines. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

669.132-010 SUPERVISOR, SAWING AND ASSEMBLY (furniture)

Supervises and coordinates activities of workers engaged in sawing, shaping, and assembling woodstock to form furniture frames and mock-ups: Reviews production schedules and confers with department head to determine production priorities, availability of equipment and personnel, and processing changes. Examines furniture parts during machining and assembly, and directs workers to change machine setup or work techniques to eliminate defects. Reassigns workers or performs duties of absentee workers. Operates woodworking machines, such as bandsaw, ripsaw, and boring machine to cut woodstock to specifications. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 86

669.137-010 SUPERVISOR, WOOD-CREW (saw. & plan.)

Supervises and coordinates activities of workers engaged in culling, cutting, and loading wood on cars or trucks to be sold for fuel or used at sawmill. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 03.02.02 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

669.280-010 MACHINE SETTER (woodworking)

Sets up various types of woodworking machines, such as lathes, molders, planers, routers, sanders, saws, and shapers, for machine tenders and operators: Examines blueprints, drawings, work orders, and patterns to determine size and shape of item to be fabricated, machines to be set up, and sequence of machining operation. Selects and installs required knives, saws, bits, cutterheads, or abrasives on drum, arbor, spindle, or in chuck of machine, using handtools. Positions and attaches or installs guides, patterns, fixtures, or jigs to table or bed of machine with clamps or bolts, and turns handwheels or moves levers to adjust stops, guides, and cutting depths. Cuts or shapes sample and verifies cuts, angles, and dimensions to ensure conformance with specifications, using gauges, calipers, square, rule, or template. Turns handwheels, moves levers, or uses handtools to adjust machine. May reshape or sharpen knives and cutterheads. May be designated according to type of machine set up as Automatic-Lathe Setter (woodworking); Double-End-Tenoner Setter (woodworking); Drum-Sander Setter (woodworking); Molder Setter (woodworking); Planer Setter (woodworking); Tongue-And-Groove-Machine Setter (woodworking). May be designated: Router Setter (woodworking); Sander Setter (woodworking); Shaper Setter (woodworking).
GOE: 06.01.02 STRENGTH: M GED: R3 M3 L3 SVP: 7 DLU: 79

669.360-010 CHECKERING-MACHINE ADJUSTER (ordnance)

Adjusts and maintains semiautomatic checkering machines that cut decorative gripping surfaces on wooden gun stocks and forearms: Bends springs and turns setscrews to adjust stops and cams that regulate length of stroke and depth of cut produced, using handtools. Replaces worn parts, such as microswitches, pulley belts, and motor brushes. May give instructions to new operators [STOCK CHECKERER (ordnance) II] in use of machine.
GOE: 06.01.02 STRENGTH: M GED: R3 M2 L1 SVP: 7 DLU: 77

669.364-010 INSPECTOR, ASSEMBLY (furniture)

Assembles and inspects samples of furniture parts to determine conformity to specifications prior to mass production of parts: Inspects and measures samples of furniture parts to determine conformity to specifications, using ruler, caliper, protractor, and square. Discusses with SUPERVISOR, MACHINING (woodworking) 669.130-022 alternate machine setup to correct defects, utilizing knowledge of wood and woodworking machines. Fits and knocks parts together to form furniture, using mallet. Secures parts together, using clamps. Examines assembled furniture to determine conformity of appearance to finish sketch of furniture. Notifies PRODUCTION SUPERINTENDENT (any industry) 183.117-014 when parts and assembled furniture meet production specifications.
GOE: 06.02.22 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 86

669.380-010 MACHINIST APPRENTICE, WOOD (woodworking)

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.08 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 77

669.380-014 MACHINIST, WOOD (woodworking) alternate titles: woodworking-machine operator

Sets up and operates variety of woodworking machines to surface, cut, and shape lumber, and to fabricate parts for wood products, such as doors, door and window frames, furniture, and sashes, according to specifications: Selects, installs, and adjusts saw blades, cutterheads, boring bits, and sanding belts in respective machines, using handtools and rule. Starts machine and makes trial cut. Operates machines to saw [CUT-OFF-SAW OPERATOR (woodworking) I 667.682-022; RIPSAW OPERATOR (woodworking) 667.682-066; VARIETY-SAW OPERATOR (woodworking) 667.682-086]; to smooth and shape lumber and wood parts [PLANER OPERATOR (woodworking) 665.682-022; SHAPER OPERATOR (woodworking) 665.682-034]; to cut tenons and mortises in woodstock [TENONER OPERATOR (woodworking) 669.382-018; MORTISING-MACHINE OPERATOR (woodworking) 665.482-014]; to bore holes [BORING-MACHINE OPERATOR (woodworking) 669.382-010]; to cut slots, grooves, and designs in woodstock [ROUTER OPERATOR (woodworking) 665.682-030]; and to sand lumber, woodstock, and parts [MOLDING SANDER (woodworking) 662.682-010; CYLINDER-SANDER OPERATOR (woodworking) 662.685-014; SANDER, MACHINE (woodworking) 761.682-014]. Periodically verifies dimensions of parts for adherence to specifications, using gauges and templates. May assemble fabricated parts to make millwork products, such as doors, sashes, and door and window frames. May sharpen machine cutting heads, using handtools and grinder. May be designated according to products as Door Maker (saw. & plan.); Frame Maker (saw. & plan.); Sash Maker (saw. & plan.).
GOE: 05.05.08 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 81

669.380-018 PIPE-AND-TANK FABRICATOR (wood, container)

Sets up and operates machine to cut, croze, slot, shape, and incise materials for prefabricated wooden tanks or pipes: Lays out materials for tank bottoms and clamps material together on platform, using screw clamps. Bolts machine pivot to center of work material and attaches radial-arm bandsaw to pivot, using overhead hoist. Starts saw and removes clamps and sawed pieces as saw moves around radius of tank bottom material. Removes saw, attaches shaper to radial-arm, and bevels outside edges of material. Saws pipe and tank stave material to specified size, using trim saw. Operates straight or curve line crozing machine to bevel or croze end of tank staves that fit into bevel on bottom of tank. Operates stave slotting machine to cut slots in ends of staves. Inserts wood or metal splines in slotted ends of staves by hand. Operates incising machine to incise straight or curved staves and tank pieces for wood preserving treatment. Measures and cuts plates, rafters, trusses, *headers*, center posts and hatches for flat or conical roofs on tanks, using bandsaw, shaper, jointer, drill press, and handtools. Constructs wooden floats and measuring boards for liquid level indicators on tanks. May operate dowel-boring machine. May operate radial shaping machine to form laminated rings for wooden pipe.
GOE: 05.10.01 STRENGTH: M GED: R3 M2 L2 SVP: 7 DLU: 77

669.382-010 DADO OPERATOR (woodworking)

Sets up and operates single- or multiple-blade machine to cut grooves, notches, recesses, rabbets, lap joints, and tenons in wooden parts: Examines drawings, blueprints, or samples and written specifications and selects and installs saws, dado heads, and spacers, using rule and wrenches. Turns handwheels to move guide fence and adjust table height to attain specified location and depth of cut. Starts machine and pushes wooden parts past cutting heads by hand, or inserts parts between feed rolls that carry parts through machine. May be designated according to type of saws used as Warble-Saw Operator (woodworking); or according to part and cut made as Cleat Notcher (wood. container); Partition Notcher (wood. container); Strap Recesser (wood. container).
GOE: 05.05.08 STRENGTH: M GED: R3 M2 L1 SVP: 5 DLU: 77

669.382-014 RAFTER-CUTTING-MACHINE OPERATOR (mfd. bldgs.)

Sets up and operates machine to cut notches and bevels in rafters for precut or prefabricated houses: Determines from specifications or blueprints number and size of rafters to be cut. Selects and installs saws and cutterheads in machine, and adjusts their spacing and depth and angle of cut, using wrenches, rule, and protractor. Positions board on table or carriage of machine and clamps board in place. Starts machine and moves lever to feed board into saws and cutterheads to cut rafter.
GOE: 06.02.03 STRENGTH: H GED: R3 M3 L2 SVP: 4 DLU: 77

669.382-018 TENONER OPERATOR (woodworking)

Sets up and operates single- or double-end machine to cut tenons, or to size, trim, groove, shape, or match ends of woodstock used in furniture manufacture: Examines blueprints, drawings, patterns, or written specifications to determine size, type, and setting of saw blades, cutterheads, cams, and jigs to be used. Selects and installs saw blades, cutters, and accessories in machine, using rule and wrenches. Turns handwheels, presses buttons, and reads gauges; or positions pattern on machine, to space saws and cutterheads, according to length and depth of cut. Positions dogs on conveyor according to width measurement for feeding stock through machine and tightens dogs in place, using wrench. Presses button to start machine, holds stock against guide on machine carriage, and pushes carriage through machine to convey stock between cutters, or places stock against guide and dogs on feed chain which pulls stock through machine. Removes processed stock and verifies dimensions, using rule or template. May turn handwheel during operation of machine to increase or decrease distance between saws and cutterheads and adjust for errors. May be designated according to machine operated as Double-End-Tenoner Operator (woodworking).
GOE: 05.05.08 STRENGTH: M GED: R4 M3 L3 SVP: 5 DLU: 78

669.382-022 MULTI-PURPOSE MACHINE OPERATOR (furniture)

Sets up and operates machine with multiple cutterheads to simultaneously saw, bore, groove, shape, and sand woodstock to form furniture parts: Reads

work ticket to determine machining operations required to form specified furniture parts. Selects, installs, and adjusts blades, bits, cutter knives, and sanding belts, according to specifications, using handtools. Attaches specified forms that hold woodstock during machining operations to automatic carriage holding device of machine, using handtools. Selects and installs punch cards into machine control panel that determine sequence and duration of machining operations. Presses buttons to start machine, positions woodstock in holding forms, and adjusts clamps to secure woodstock in form. Presses button to activate automatic machining cycle. Removes processed parts from holding form and verifies finished dimensions, using steel tape rule, gauges, and calipers. Stacks finished parts in storage area.
GOE: 06.02.03 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 86

669.382-026 TURNING MACHINE SET-UP OPERATOR (fabrication, nec)

Sets up and operates turning machines to shape and bore smoking pipe bowls: Sharpens turning machine cutting knives, using grinding wheel. Inserts and secures knives in cutterhead, using socket wrench. Turns handwheels and moves levers to adjust turning machine carriage stops and cutting depth of machine. Places block in clamp on machine carriage and moves lever to secure block in clamp. Pushes machine carriage handle to move block into cutterhead to shape and bore sample pipe bowl. Examines sample pipe bowl to verify shape and dimension against specifications, using caliper and gauges. Performs other duties as described under BRIAR CUTTER (fabrication, nec) 664.685-010.
GOE: 06.02.03 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 86

669.485-010 POWER-BARKER OPERATOR (paper & pulp; saw. & plan.)

Tends machine that removes bark and dirt from logs by one of following methods: (1) Starts conveyor to move logs from pond to drum of barking machine. Moves lever to activate chains or start drum revolving to tumble logs and knock off bark. Turns valve to regulate water spray that removes chips and dirt from log. Breaks up log jams in drum, using peavey or pike pole and chain hoist. (2) Moves lever to activate kicker arms that kick log into machine cradle. Turns controls that start log rotating between toothed gears that remove bark from log, and regulates and directs pressurized water jet to remove loose bark and dirt. (3) Turns levers to control movement and centering of log in jet ring and to regulate pressure of water jets. Starts conveyors that carry logs from barking machine to saw deck. May be designated according to machine operated as Drum-Barker Operator (paper & pulp); Hydraulic-Barker Operator (paper & pulp, saw. & plan.); Ring-Barker Operator (saw. & plan.).
GOE: 06.04.03 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

669.662-010 BOX-BLANK-MACHINE OPERATOR (wood. container) alternate titles: stitching-machine operator

Sets up, adjusts, and operates machine to staple cleats and boards together to assemble box sections: Adds or removes links from chain-feed belt, spaces stops on belt, and spaces stapling heads, according to dimensions of box, using wrench. Mounts spools of wire on machine, threads ends through stapling heads, and starts machine. Directs workers engaged in feeding cleats and boards to machine and removing finished product. May make wirebound box sections, threading binding wire through guides so that staples fasten binding wire to box, and be designated Wire-Bound-Box-Machine Operator (wood. container).
GOE: 06.02.20 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

669.662-014 FRAME-TABLE OPERATOR (wood prod., nec) alternate titles: framer; framing-mill operator

Operates machines to frame timbers for utility poles and for structures, such as buildings, bridges, and piers: Lays out timber for cutting operation, according to blueprints, sketches, or work order, using square, ruler, and pencil. Installs dado cutter or adzing knives. Starts motor that adjusts cutter for depth and angle of cut. Signals FRAME-TABLE-OPERATOR HELPER (wood prod., nec) to spot timber on carriage under cutting tool. Starts machine and advances cutter into wood by turning wheel. Marks finished pieces with die-filled hammer or crayon. Changes cutters, using handtools. Makes repairs and lubricates machine. Bores holes in timber, using drill press or portable drill. May specialize in framing utility poles and be designated Pole Framer, Machine (wood prod., nec).
GOE: 06.02.03 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

669.662-018 TONGUE-AND-GROOVE-MACHINE OPERATOR (woodworking)

Operates machine that joins woodstock of varying widths to form panels by simultaneously cutting tongue in one piece and groove in other, applying glue, sliding tongue and groove together, and ejecting glued pieces: Adjusts guides, cutters, feed and glue rolls, according to thickness and length of stock, depth of cuts, and dimensions of panel, using handtools. Starts machine and gives directions to feeders who simultaneously feed stock into each end of machine. Inspects joined pieces to detect loose joints and makes machine adjustments to correct operation of machine. Changes worn cutterheads and installs cutterheads, according to type of tongue and groove specified, using handtools. May operate ripsaw to cut panels to specified width. May feed or off bear machine. May select wood pieces of matching grain or color.
GOE: 06.02.03 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

669.682-010 ADZING-AND-BORING-MACHINE OPERATOR (wood prod., nec) alternate titles: tie-mill operator

Operates variety of machines to trim, bore, incise, and date stamp railroad ties and utility pole crossarms, preparatory to treating with wood preservatives. Adjusts stops and guides, and installs dating punches, boring bits, adzing cutters, incising rollers, and knives, according to work order, using rule, wrenches, pry bar, and hammer. Starts machines and conveyor system and observes operation. Removes defective material from conveyor prior to processing operation. Replaces worn or broken drills, adzing cutters, incising knives, and machine parts. May feed ties or crossarms into machine and inspect finished work.
GOE: 06.02.03 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

669.682-014 BARREL ASSEMBLER (wood. container)

Controls equipment to assemble wooden barrels, performing any combination of following duties: Positions ends of designated staves in truss hoop to form barrel shell and places shell on conveyor that conveys shell through steam box to make staves pliable. Places shell in hoop driver that forces truss hoop onto end of shell opposite bilge to secure staves in shell. Positions steamed shell over gas burner to form permanent shape of staves. Aligns staves and forces truss rings onto barrel shell, using barrel-assembly machine or vibrator platform, cooper's hammer, and hoop driver. Pulls levers to hold shell in croze cutter and to rotate shell against cutterheads that cut croze and trim ends of barrel shell staves. Removes end truss hoops to facilitate installation of barrelheads, using truss-pulling machine. Positions barrelhead in croze of shell and moves lever to lower cinch ring of machine that forces head into croze; or positions shell and heads in heading machine, hammers heads into place, moves lever to squeeze staves around heads, and place steel hoop into position to secure heads. Starts sander and moves levers to push rotating barrel against sanding belt to smooth exteriors of barrel, or sands exterior of barrel, using hand held belt or disc sander. Installs permanent hoops, using hoop driver. Drills hole in barrel for filling and emptying purposes, using drill press [BUNGHOLE BORER (wood. container) 666.382-010]. Inspects barrels for defects, such as loose staves, cracks, and defective assembly. May be designated according to machine operated as Croze Cutter (wood. container); Head-Up Operator (wood. container); Heater Operator (wood. container); Hoop-Driving-Machine Operator (wood. container); Leveler (wood. container) II; Sander (wood. container). May be designated: Tap-Out Operator (wood. container); Truss Driver (wood. container); Truss Puller (wood. container).
GOE: 06.02.20 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 78

669.682-018 BUCKET TURNER (wood. container) alternate titles: tub turner

Operates bucket-turning machine to smooth and finish outer surfaces of wooden buckets: Clamps bucket between chucks of machine and removes assembling ring from bucket with hammer. Starts machine to rotate bucket. Pushes lever on tool carriage to feed tool along surface of bucket, finishing bucket surface. Smooths surface of bucket, using block covered with sandpaper. Places temporary hoop on bucket and removes it from machine.
GOE: 06.04.03 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

669.682-022 CHUCKING-AND-BORING-MACHINE OPERATOR (furniture) alternate titles: chair-post-machine operator

Sets up and operates machine to saw, bore, and round ends of chair posts, rails, and backs: Turns handwheel to adjust space between chucks and saws. Installs cutterheads according to size of stock and angle of cut and spaces boring bits according to specified location of holes, using handtools. Turns knobs to adjust feed stops. Pushes button to start machine. Positions material and depresses pedal to activate mechanism to saw, bore, and shape material or feeds woodstock into machine that automatically clamps, saws, bores, and rounds ends of woodstock. Starts machine and feeds woodstock into machine that automatically clamps and processes it.
GOE: 06.02.03 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

669.682-026 CHUCKING-AND-SAWING-MACHINE OPERATOR (woodworking)

Sets up and operates machine to saw woodstock to specified length and to shape ends of stock to fit into mortises (recesses) of opposing wooden parts: Selects knives according to diameter of cut specified on work ticket. Aligns and bolts knives in cutterhead and screws it on spindle, using wrenches. Adjusts angle of table by turning handwheel and bolts or clamps holding jigs to table. Places stock in jig and pushes table containing stock into circular saw to trim end of stock. Pulls table back against stops and depresses pedal to advance cutterhead that shapes end of stock.
GOE: 06.02.03 STRENGTH: L GED: R3 M2 L1 SVP: 4 DLU: 77

669.682-030 CORNER-BRACE-BLOCK-MACHINE OPERATOR (furniture) alternate titles: corner-block cutter

Sets up and operates machine to saw, groove, and drill blocks used to reinforce corners of furniture frames: Sets angle of cutoff saw and installs bit and dado saw, according to work ticket. Places stock on holder and pushes stock into rotating saw to cut end at angle. Lays stock on conveyor belt that carries it into machine that cuts grooves and drills holes.
GOE: 06.02.03 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

669.682-034 CROZE-MACHINE OPERATOR (wood. container) alternate titles: crozer

Operates crozer machine to cut croze (groove) in wooden tank staves, into which tank bottom is fitted: Starts machine. Places stave on machine table, aligns mark on stave with cutoff saw blade, and depresses pedal to clamp stave in position. Pulls saw and dado-cutter assembly across stave. Releases pedal and slides stave along machine bench to helper.
GOE: 06.02.03 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

669.682-038 DOUBLE-END-TRIMMER-AND-BORING-MACHINE OPERATOR (furniture)

Sets up and operates multiple-spindle boring and trimming machine to bore vertical or horizontal holes and trim or miter ends of stock used in furniture manufacturing: Reads work specifications to determine location, angles, depth, diameter, and number of holes to bore in stock and cuts to be made by saws. Installs specified bits in spindle chucks, using wrench. Adjusts chucks for location specified, using handtools and pattern stock. Attaches holders, jigs, or stops, and adjusts pneumatic clamps with handtools. Removes pattern and starts boring heads and saws. Positions stock under clamps and against stops on machine bed, and depresses pedal or turns automatic cycle lever to activate machine to clamp, bore, trim, and release stock. Periodically verifies accuracy of setup by comparing trimmed and bored stock with pattern stock, using caliper, square, or tape measure. May operate machine that trims or miters only one end of wooden stock and be designated Single-End-Trimming-And-Boring-Machine Operator (woodworking).
GOE: 06.02.03 STRENGTH: M GED: R3 M2 L3 SVP: 4 DLU: 78

669.682-042 DOWEL-INSERTING-MACHINE OPERATOR (woodworking) alternate titles: rail-doweling-machine operator

Sets up and operates machine to bore holes, and glue and insert dowels in ends of door and sash rails: Adjusts stock guides, pressure arms, and glue discharge pipes, and inserts and spaces drills in chucks to accommodate size of rails to be processed, using stock sample, rule, and wrench. Pours glue into machine reservoir, loads dowel hopper, and starts machine. Feeds trial rail into machine and checks spacing of dowels with rule and caliper. Feeds machine by placing stack of rails in rail-feed hopper.
GOE: 06.02.03 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

669.682-046 EMBOSSING-MACHINE OPERATOR (wood prod., nec)

Operates machine to indent picture-frame molding with ornamental designs: Installs embossing wheel in machine, using handtools. Turns handwheel to lower wheel over bed of machine to thickness of molding and sets feed guides. Starts machine, places sample piece of molding in guides, and pushes sample under embossing wheel. Inspects embossing on sample and adjusts wheel to correct depth of indentation.
GOE: 06.02.03 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

669.682-050 INLETTER (ordnance)

Operates multispindle woodworking machine to rout, mill, drill, and profile recesses in gun stocks to receive metal gun parts, such as barrel, breech, receiver, and trigger: Clamps gunstock blank in fixture on carriage of machine. Turns crank to feed workpiece into series of routing bits, each equipped with tracing pin. Moves dropbar to force tracing pins to follow contours of metal model in designated sequence, so routing tools will cut duplicate recesses in wooden gunstock. Turns crank to feed gunstock into horizontal milling cutter and moves dropbar that controls cutter to round off and smooth routing cuts. Verifies accuracy of cuts by fitting metal gun parts into their respective recesses and using fixed gauges.
GOE: 06.02.03 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

669.682-054 LAST TRIMMER (wood prod., nec)

Operates machines to shape and smooth shoe lasts to specified contour and size, performing any combination of following tasks: Cuts lathe centers from last turnings at specified point, using bandsaw or handsaw. Files toe area of last to specified contour outline drawn on bottom of last. Sands toe area with sandpaper or operates sanding machine to attain specified size and finish. Verifies finished size, using templates. Operates sanding machine to sand heel area of last to remove excess material, form heel, and establish specified length of last. Verifies last length, using gauge. Replaces worn sandpaper belts on sanding machines. May draw last bottom outline, using sole pattern and pencil [LAST MARKER (wood prod., nec)]. May specialize on one part of last and be designated Heel Grinder (wood prod., nec); Toe Stripper (wood prod., nec).
GOE: 06.02.03 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 77

669.682-058 NAILING-MACHINE OPERATOR (any industry) alternate titles: box maker; nailer, machine

Sets up and operates machines to drive nails into boards to fasten wood assemblies, such as boxes, furniture frames, crates, and pallets, and to nail lids on boxes: Spaces nail chucks and rails according to specifications and turns setscrews to fasten chucks to rails. Turns wheel to raise or lower table according to size of pieces to be nailed. Fills hopper with nails. Fastens or adjusts stops and jigs on machine table to facilitate positioning of material to be nailed. Starts machine, positions boards on table under chucks, and depresses pedal to drive nails into boards. May move levers to control nail feed and turn knobs to position nail setting heads. May be designated according to part nailed as Bottom Nailer (wood. container); Cleat Nailer (wood. container); Frame Nailer (wood. container); Strap Nailer (wood. container); or according to type of machine as Lidding-Machine Operator (any industry).
GOE: 06.02.03 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

669.682-062 PLUGGING-MACHINE OPERATOR (woodworking)

Operates machine that routs out defects, such as knots, dents, and holes, in boards, and inserts glue and plugs in cutout areas: Fastens router and plug cutter into machine chucks, using wrench. Fills glue reservoir. Inserts wood slat into machine for plug material. Grasps board and inspects board for defects, such as knots, dents, and blemishes. Starts machine, and inserts defect in board under device holding router and plug cutter. Depresses pedal, causing router to bore hole, glue injector to inject glue into hole, and plug cutter to cut plug and press it into glued hole. Removes board, wipes off excess glue, and stacks it on pallet on cart.
GOE: 06.02.03 STRENGTH: M GED: R3 M1 L1 SVP: 4 DLU: 77

669.682-066 TIP INSERTER (woodworking)

Operates variety of machines to shape ends of wooden shuttles and attach tips: Squares ends of shuttles, using disk sanding machine. Saws off ends of shuttles, using machine equipped with rotating saw blade. Removes burrs from sawed ends with knife. Bores holes in shuttle ends for insertion of ferrules, using boring machines. Taps steel ferrule into ferrule hole with hammer. Dips corrugated shaft of metal tip in glue and sets tip in hole previously drilled. Forces tip into hole, using arbor press.
GOE: 06.02.09 STRENGTH: M GED: R3 M1 L1 SVP: 4 DLU: 77

669.682-070 UTILITY OPERATOR (saw. & plan.)

Operates and controls barkers, saws, edgers, planers, trimmers, and chippers in sawmill to relieve other operators during rest and meal periods, emergencies, and vacations: Receives assignment to operate specific machine from SUPERVISOR, SAWMILL (saw. & plan.) 669.130-026. Moves levers, turns handwheels, depresses pedals, and pushes console buttons to activate machines and to observe, rotate, and move logs and boards on conveyors and adjustable tables to shape boards for optimum market value. Changes cutting blades, adjusts machines, and clears machine jams, using handtools. Lubricates and cleans machine parts.
GOE: 06.02.03 STRENGTH: M GED: R4 M2 L2 SVP: 6 DLU: 86

669.685-010 BARREL-ASSEMBLER HELPER (wood. container)

Assists BARREL ASSEMBLER (wood. container) to assemble barrels, performing any combination of following duties: Starts gas burner or oven to heat shells (barrels without ends). Removes and replaces machine attachments, such as croze cutter and drill chucks. Replaces worn sanding belts on sander. Performs other duties as described under HELPER (any industry) Master Title. May be designated according to machine operator assisted as Croze-Cutter Helper (wood. container); Head-Up-Operator Helper (wood. container); Heater Operator Helper (wood. container); Hoop-Driving-Machine-Operator Helper (wood. container); Leveler Helper (wood. container); Sander Helper (wood. container); Truss-Driver Helper (wood. container); Truss-Puller Helper (wood. container).
GOE: 06.04.03 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 77

669.685-014 BASKET ASSEMBLER I (wood. container) alternate titles: basket maker

Tends machines that fabricate components of veneer, rattan, reed, and willow baskets of specified size and shape and assembles components, performing any combination of following tasks: Interlaces strips of veneer or other materials to weave basket bottom. Tends machine to shape woven bottom and interlace veneer strips with bottom to form sides. Bends extended ends of bottom perpendicular to matted portion of bottom and places hoop around ends to hold ends in position for weaving ends and sides. Staples rim to basket bottom. Tapers or points ends, using knife, and weaves ends into sides. Nails rims together to hold sides in place. Tends machine that shapes and staples veneer strips to basket rim. Tends basket-cover machine to cut cover mats (woven veneer strips) to size. Tends machine that bends basket cover into arc and staples rim to cover. Stitches or staples reinforcing splints (wood strips) to top edges of mat. Shapes wire in bail-bender to form bails (wire handles). Bends soaked wood strips to form basket handles. Staples wire handles to rim of basket. Tends machine that clamps wood handles to basket. Examines baskets for imperfections and discards defective baskets for repair. May be known according to type or section of basket formed or assembled as Bottom Maker (wood. container); Slat-Basket-Top Maker (wood. container); or machine tended as Handle-Machine Operator (wood. container); Hoop-Coiling-Machine Operator (wood. container); Loop-Machine Operator (wood. container); Mat-Machine Tender (wood. container). May be designated: Basket-Bottom Machine Operator (wood. container); Braider (wood. container); Cover-Machine Operator (wood. container); Cover-Mat-Machine Operator (wood. container); Handle Bender (wood. container); Hamper Maker, Machine (wood. container); Market-Basket Maker (wood. container) I; Stitcher Operator (wood. container); Webb Layer (wood. container).
GOE: 06.04.03 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 78

669.685-018 BLIND-SLAT-STAPLING-MACHINE OPERATOR (woodworking)

Tends machine that drives staples in edges of blind slats and attaches stapled slats to slide rods: Adjusts and sets stop and ratchet, and lays rod in position under stapler head. Places slat under stapler and moves lever to drive staples into slat and hold slat to rod. Ratchet automatically moves rod along until section is completed.
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

669.685-022 BOTTOM-HOOP DRIVER (wood. container)

Tends machine that drives and tightens bottom hoops on buckets and tubs. Adjusts height of table by adding or removing iron plates from table. Sets bucket or tub on table with bottom up and lays hoop over and around bottom. Centers bucket or tub under driving head of machine and presses on pedal that lowers driving head on hoop, forcing it in place. Releases pedal to raise driving head and removes bucket or tub from machine.
GOE: 06.04.20 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

669.685-026 CIRCLE-CUTTING-SAW OPERATOR (wood, container) alternate titles: bottom turner

Tends machine that cuts circular basket bottoms from woodstock and bores holes in bottoms. Positions stock on rotary chuck. Depresses pedal to activate machine that rotates woodstock in opposite direction from rotating drill and cylindrical sawblade to cut woodstock into disk and bore holes in center of disk. Removes wood disk from machine.
GOE: 06.04.05 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

669.685-030 CLAMPER (woodworking)

Tends machine that presses partially assembled and glued doors, window sashes, or furniture parts together to complete assembly. Places part on machine table between pressing rails, starts machine, and depresses pedal to squeeze parts together. Positions glued reinforcing blocks to specified locations of assembly, according to instructions, and secures blocks, using pneumatic screwdriver or nailer and stapler. Releases pressure, removes assembly from machine, and stacks assembly on skid or places assembly on conveyor for further processing. May preglue assembly parts and knock parts together, using mallet prior to clamping. May brush glue on parts prior to clamping. May reinforce joints with staples or nails, using pneumatic stapler or hammer. May be designated according to product as Door-Clamp Operator (saw. & plan.); Sash-Clamp Operator (saw. & plan.).
GOE: 06.04.20 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 79

669.685-034 COAT-HANGER-SHAPER-MACHINE OPERATOR (woodworking)

Tends machines that shape and polish unfinished wooden coat hangers. Smooths rough edges on ends of hangers, using rotating sanding disk. Starts automatic shaper and loads machine hopper with hangers. Transfers shaped hangers to polishing machine and places bars of paraffin in machine. Starts machine. Removes filled trays of polished and waxed hangers from polishing machine.
GOE: 06.04.03 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

669.685-038 CORE-COMPOSER FEEDER (millwork-plywood) alternate titles: tenderizer tender

Tends machine that trims uneven edges of veneer sheets and tenderizes (indents and breaks wood fibers of) veneer for composing into plywood core sheets. Pushes buttons and pedal to start machine and to raise veneer stack on lift table to feeding height. Aligns uneven edges of veneer sheets on lift table, using *shadow line*, and feeds sheets into machine for trimming and tenderizing. Observes veneer sheets discharged from tenderizer machine onto feed conveyor of core composer machine and slackens feeding pace as necessary to reduce detected pile ups. Observes stacker lift table at discharge end of core composer machine and activates conveyor to remove full stacks and reposition stacker lift table for next stack. Occasionally measures moisture content of veneer prior to tenderizing, using moisture meter, and removes veneer containing excessive moisture for redrying.
GOE: 06.04.03 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

669.685-042 CORRUGATED-FASTENER DRIVER (woodworking) alternate titles: corrugator operator; shook splicer; splicer-machine operator; stitcher operator

Tends machine that cuts metal fasteners from corrugated metal stripping and drives fasteners into boards across joints to fasten boards together. Positions spool of corrugated metal stripping onto machine spindles and threads end of stripping between clamps of automatic feed driver-head. Positions and tightens machine driver-head above workpiece joint, using wrench. Starts machine, positions workpiece against machine table stop, and depresses pedal to activate machine driver-head and force fastener into workpiece. May be designated according to parts fastened as Box-Top-Stitching-Machine Operator (wood. container); Door-Frame Assembler, Machine (woodworking).
GOE: 06.04.20 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

669.685-046 DOVETAIL-MACHINE OPERATOR (wood, container) alternate titles: bumper operator; forming operator

Tends machine that presses notched ends of boards together to form lock-corner box frame. Turns handwheels to adjust side and end pressure bars according to frame dimension. Positions boards on table and starts machine. Presses pedal to activate pressure bars that force notched ends of boards together, forming lock-corner joints. May dip ends of boards in glue before joining. May melt glue in glue pot.
GOE: 06.04.20 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

669.685-050 DOWELING-MACHINE OPERATOR (woodworking) alternate titles: doweler; dowel-setting-machine operator

Tends machine that glues and drives dowel pins into holes in parts of wooden articles preparatory to assembly. Slides stops on machine to align grooves, through which dowels are fed, with holes in wooden part according to work order. Dumps dowel pins into hopper and pours glue into glue reservoir. Turns valve to regulate pressure and amount of glue injected into holes to prevent wood from splitting when dowels are driven into holes. Positions part against stop and depresses pedal to inject glue and drive dowels into holes. Releases pedal and removes wooden part from machine. Secures position of dowels in wooden parts with nails or staples, using pneumatic nail gun or stapler. May mix glue.
GOE: 06.04.20 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 86

669.685-054 END STAPLER (wood, container) alternate titles: end operator

Tends stapling machine that staples battens down center of wire-bound box ends to stiffen and strengthen them. Lays batten in groove of stapler and places end board between guides and on batten. Slides batten and box end onto feed belt of machine. Steps on pedal to operate machine, stapling batten to box end.
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

669.685-058 FRAME-TABLE-OPERATOR HELPER (wood prod., nec) alternate titles: framing-mill-operator helper

Tends frame table carriage that moves, positions, and holds timbers under radial arm of framing machine to assist FRAME-TABLE OPERATOR (wood prod., nec) to frame timbers. Lifts timbers onto carriage, using air hoist. Pulls levers and turns wheel controls to move carriage and position timbers for cutting. May change saws and cutting tools.
GOE: 06.04.18 STRENGTH: M GED: R2 M2 L1 SVP: 2 DLU: 77

669.685-062 HEADING-MACHINE OPERATOR (pen & pencil) alternate titles: end trimmer

Tends machine that sands excess point from pencil ends and cuts pencils to specified length. Dusts ends of pencils with cornstarch to prevent sticking together. Places pencils in hopper of machine and starts machine. Examines pencils for defects, such as chips in paint and incorrect length. Bundles pencils, using cord, and places bundles on pallet or places pencils in rack and blows wood and lead dust from pencils, using airhose. Replaces worn sandpaper on machine drum. May replace knives in machine, using wrench.
GOE: 06.04.03 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

669.685-066 NAILING-MACHINE OPERATOR, AUTOMATIC (any industry)

Tends nailing machine that joins items, such as picture frames, or attaches molding, trimming, carving, scrollwork, or overlay panels to wooden stock. Positions reel of nail wire on spindle of machine and pulls wire through rollers into driving mechanism. Turns knobs or levers to adjust machine to cut nails of specified length. Positions stock parts to be nailed together in specified arrangements on table of machine under driving mechanism. Depresses pedal or button to drive nails into stock. Moves stock as necessary to receive additional nails.
GOE: 06.04.20 STRENGTH: L GED: R2 M2 L1 SVP: 2 DLU: 78

669.685-070 ROOF-TRUSS-MACHINE TENDER (mfd. bldgs.)

Tends machine that automatically joins lumber to fabricate roof trusses used in construction of buildings. Threads stapling wire through staple head of machine and pours glue into machine glue reservoir. Starts machine and feeds precut wood onto machine that glues and staples material together and shears off excess material to form completed roof truss. Removes roof truss from machine and stacks on pallet for further processing.
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

669.685-074 SLAT-BASKET MAKER, MACHINE (wood, container) alternate titles: basket-factory machine hand; basket-machine operator

Tends machine that staples basket hoops and slats together. Places spools of wire on wire holders and draws wire through machine guides and slots in stapling heads. Inserts end of hoop strips into slots on basket-shaped form and positions veneer stave between stops on form. Depresses pedal to start machine that staples hoop strips and strand of wire to stave and rotates form into position for succeeding staves.
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

669.685-078 SMOKING-PIPE DRILLER AND THREADER (fabrication, nec)

Tends machine that bores hole and cuts threads in bottom of shankless pipe bowls. Places pipe bowl over chuck of machine and turns nut to expand chuck against bowl, using wrench. Pulls lever to align bowl with drill and turns handwheel to feed bowl into rotating drill. Moves lever to align bowl with circular saw and turns handwheel to rotate bowl beneath saw that cuts threads in bowl.
GOE: 06.04.03 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

669.685-082 SQUEEZER OPERATOR (wood, container)

Tends machine that squeezes tongue and groove boards together. Turns handwheels to adjust machine for length, width, and thickness of finished piece. Starts machine. Positions matched boards on feed table from which they are automatically fed into machine that squeezes them together or depresses pedal to activate bars that squeezes them together.
GOE: 06.04.20 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

669.685-086 STITCHING-MACHINE OPERATOR (wood, container)

Tends machine that fastens metal channels to hogshead headings. Positions channeled heading on circular table with channel ends against stitching unit. Lowers roller clamps to hold heading in position. Starts machine to revolve table and presses button to stitch channel to heading at uniform intervals. Removes heading from machine.
GOE: 06.04.20 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

669.685-090 TIPPLE TENDER (millwork-plywood)

Tends conveyor system that transfers veneer from lathe into holding trays. Starts tipple conveyor, observes action of lathe cutting veneer, and opens trap

to allow waste veneer to flow onto clipper or *hog mill* conveyor. Moves control lever to synchronize tipple conveyor speed with lathe cutting of production veneer and pushes button to align discharge end of tipple conveyor with empty holding tray. Responds to signal that indicates tray is full and separates veneer in tray from veneer sheet by tearing, or with air jets. May assist VENEER-LATHE OPERATOR (millwork-plywood) 664.662-010 in changing lathe knives and in positioning wood between lathe chucks.
GOE: 06.04.40 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 77

669.685-094 TURNER (fabrication, nec)

Tends machine that cuts bowl of smoking pipe from briar block or corncobs and bores hole in bowl: Examines corncobs for chipped edges and cracks and discards defective corncobs. Places block or corncob between machine clamps and moves controls to tighten them. Depresses pedal or moves lever to move block against chucking and coring head that cuts bowl from block and bores hole in briar or corncob bowl. Presses button or pulls lever to release clamps and places bowl in box. May tend machine that automatically saws pipe bowl shanks to specified length, bores holes in shanks, bores airholes in pipe bowls, and inserts metal sleeves in shank holes. May change cutting and boring tool, according to size of bowl, using wrench. May place corncob blanks into feeder that feeds blanks into machine that automatically bores hole in blank. May bore bowls of corncob pipes and be designated Cob Borer (fabrication, nec).
GOE: 06.04.03 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 78

669.685-098 VENEER REPAIRER, MACHINE (millwork-plywood)

Tends machine that cuts defects from veneer sheets and repairs defects by inserting patches in cutout areas. Fills feed chute of machine with veneer patch stock and starts machine. Slides and positions veneer sheet on machine table so that defects, such as knots, holes, and pitch pockets are under head of machine. Depresses pedal to activate head that cuts or punches out defective area and inserts patch. Stacks repaired sheets on skids or slides them onto conveyor. May grade repaired sheets. May be designated according to machine operated as Raimann-Machine Operator (millwork-plywood); Skoog-Machine Operator (millwork-plywood).
GOE: 06.04.03 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

669.685-102 GROOVER-AND-STRIPER OPERATOR (wood prod., nec)

Tends machines in tandem that groove, paint, seal, and dry surfaces of hardboard panels: Positions grooving blades and striping wheels according to panel specifications, using handtools and tape measure. Pours paint and sealer into designated reservoirs to supply coating rollers and wheels. Moves controls on console panel to start and synchronize machines. Inspects and feels finished panels, and adjusts controls to conform with production specifications.
GOE: 06.04.03 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 86

569.685-106 PUNCH PRESS OPERATOR (wood prod., nec)

Tends punch press machine that punches holes in hardboard panels to make pegboard panels: Reads work schedule to ascertain production information, such as size, type, and quantity of panels to be processed. Adjusts panel guides on machine table, according to production information, using handtools. Presses buttons to start machine, pulls panels from stack, aligns panels against guides on machine table, and pushes panels against feed rollers of machine. Measures first panel of each stack of hardboards to verify specified measurements, and feels edges of holes in pegboard panels to determine sharpness of punch press. Observes machine operation to detect malfunction of machine parts and notifies supervisor when punch dies need changing or machine malfunctions occur. Lubricates specified sections of machine, using grease gun and oilcan. Bands stacks of pegboards for storage, using steel banding ribbons, clips, and strapping tool.
GOE: 06.04.03 STRENGTH: M GED: R2 M2 L2 SVP: 2 DLU: 86

669.686-010 AUTOMATIC-NAILING-MACHINE FEEDER (woodworking)

Positions door frame parts between chain dogs on conveyor that carries them under driving heads of automatic nailing machine.
GOE: 06.04.03 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

669.686-014 BOX-BLANK-MACHINE-OPERATOR HELPER (wood. container)

Assists BOX-BLANK-MACHINE OPERATOR (wood. container) in assembling box sections, performing any combination of following duties: Lays cleats against stops on feed belt of machine. Places boards or slats across cleats held in position by stops. Removes *box blanks* from machine and bends back projecting wire over wood to facilitate handling of blanks. Assists in adding and removing links from chain feed belt and spaces stops and stapling heads. Performs other duties as described under HELPER (any industry) Master Title. May be designated according to duties performed as Board Layer (wood. container); Cleat Layer (wood. container); Wire Bender (wood. container); or type of machine as Wire-Bound-Box-Machine Helper (wood. container).
GOE: 06.04.20 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

669.686-018 CHAIN OFFBEARER (saw. & plan.)

Pulls lumber from moving conveyor coming from ripsaw, resaw, planer, trimmer, and grading tables, and slides and stacks lumber on piles, according to grade marked on each piece. May push buttons to start and stop conveyor and deposit waste material onto slasher conveyor for waste recovery. May band stacked lumber to facilitate moving, using banding machine. May be designated according to condition of lumber removed from conveyor as Dry-Chain Offbearer (saw. & plan.); Green-Chain Offbearer (saw. & plan.); or may be designated according to machine from which lumber is conveyed as Planer-Chain Offbearer (saw. & plan.).
GOE: 06.04.03 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 78

669.686-022 REED-PRESS FEEDER (wood prod., nec)

Feeds reeds into machine that stitches reeds together to make insulation panels of specified dimensions. Trims edges with shears. May remove finished panels from machine and transfer panels to storage areas. May participate in unloading reeds onto work floor.
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

669.686-026 SLAT-BASKET MAKER HELPER, MACHINE (wood. container)

Assists SLAT-BASKET MAKER, MACHINE (wood. container) in assembly of slat baskets: Positions preformed inside top hoop and basket bottom on basket-shaped form of machine and holds bottom until hoop and bottom are stapled to staves. Removes assembled basket from machine and twists loose ends of wire hoops with handtool to tighten hoops. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 06.04.20 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

669.686-030 WOODWORKING-MACHINE FEEDER (woodworking)

Feeds woodstock on conveyors, into hoppers, or between rollers of woodworking machines that cut, saw, sand, bore, or shape woodstock: Conveys woodstock from stock area to woodworking machine, using handcart. Lifts stock from cart and feeds stock onto conveyor, into hopper, or between rollers of machine. Stops machine to remove jammed pieces or make minor adjustments, using handtools. May assist machine operator in setting up machine and in cleaning work area, machines, and equipment. May collect and convey scrap wood from machine areas to *hog mill* and feed scrap into machine. May be designated according to machine fed as Boring-Machine Feeder (woodworking); Flooring-Machine Feeder (saw. & plan.); Molder Feeder (woodworking); Stitcher Feeder (wood. container); Tongue-And-Groove-Machine Feeder (woodworking); or according to product as Shake Feeder (saw. & plan.). May be designated: Adzing-And-Boring-Machine Feeder (wood prod., nec); Box-Blank-Machine Feeder (woodworking); Glue Jointer Feeder (woodworking); Planer Feeder (woodworking); Resaw Feeder (woodworking); Turner (woodworking).
GOE: 06.04.03 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 78

669.686-034 WOODWORKING-MACHINE OFFBEARER (woodworking) alternate titles: tailer

Off bears material at discharge end of machines that cut, smooth, bore, or shape woodstock. Stacks woodstock aside or loads woodstock on truck, pallet, or conveyor for movement to additional processing stations. May count and examine woodstock to detect manufacturing defects. May reposition woodstock and feed woodstock into machine or back to operator for subsequent processing. May depress pedal to raise or lower conveyor to facilitate stacking. May discard scrap or defective pieces of woodstock into scrap containers or onto conveyor for burning. May place sticks between specified intervals of stacked woodstock to provide air circulation and increase stability of stack. May be designated according to machine assigned as Jointer Offbearer (woodworking); Molder Offbearer (woodworking); Planer Offbearer (woodworking); Saw Offbearer (woodworking); Tenoner Offbearer (woodworking).
GOE: 06.04.03 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 81

669.687-010 CLEAT FEEDER (wood. container) alternate titles: cleat thrower

Positions one or more cleats, used in wood boxes or box shooks, against stop under nailing machine. Carries supply of cleats of specified size from storage area to work station.
GOE: 06.04.40 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

669.687-014 DOWEL INSPECTOR (woodworking)

Inspects dowel pins for flaws, such as square ends, knots, or splits, and discards defective dowels.
GOE: 06.03.02 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

669.687-018 LUMBER STRAIGHTENER (saw. & plan.) alternate titles: laborer, sawmill; lumber guider

Straightens lumber on conveyor to align lumber for grading, sawing, edging, trimming, sorting, stacking, or for transfer to other conveyors. Clears jammed material, using *picaroon* to permit normal flow of lumber along conveyor. Cleans work area, using broom and shovel. May pile lumber on trucks or pallets. May tend automatic conveyor and sorting machine that sorts lumber for further processing. May be designated according to process involved as Cross-Tie Turner (wood prod., nec); Sorter-Lumber Straightener (saw. & plan.); Stacker-Straightener (saw. & plan.); Trimmer Loader (saw. & plan.); Trimmer Tailer (saw. & plan.).
GOE: 06.04.40 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 79

669.687-022 PICKER (saw. & plan.)

Selects and examines seasoned logs, and loads logs onto skid and machine conveyor for processing into excelsior: Selects seasoned logs, following specifications on work ticket, and examines wood for moisture content, using moisture gauge. Lifts logs onto skid for transportation to cutting machine that cuts logs into log blocks. Lifts log blocks from floor and places them onto conveyor for movement to wood shredding (excelsior) machine.
GOE: 03.04.02 STRENGTH: H GED: R2 M1 L2 SVP: 2 DLU: 77

669.687-026 TIE INSPECTOR (saw. & plan.)
Inspects railroad ties for defects and checks measurement of ties, using tape measure. Examines tie for defects, such as knots, square or round ends, or rot. Measures width of tie, using tape measure. Classifies tie according to width and kind of wood.
GOE: 03.04.02 STRENGTH: H GED: R2 M1 L2 SVP: 2 DLU: 77

669.687-030 GRADER (woodworking) alternate titles: lumber inspector; sizer grader
Inspects and grades milled, rough sawed, or dimensional stock lumber according to standards: Examines lumber on table, moving belt, chain conveyor, or in racks for defects, such as knots, stains, decay, splits, faulty edges, pitch pockets, wormholes, and defective milling. Grades lumber, using caliper rule, to ensure specified dimensions. Marks lumber to indicate grade and processing instructions, using marker. Tallies pieces of lumber according to grade and board footage. May determine cuts to be made to obtain highest marketable value from material. May remove unsatisfactory pieces from conveyor or table and place pieces on stacks, in bins, or on carts. May scale board footage, using calibrated scale on lumber ruler, and record results. May be designated according to lumber graded as Flooring Grader (saw. & plan.); Green-Lumber Grader (woodworking); or according to location of work as Dock Grader (woodworking); Green-Chain Marker (saw. & plan.); Planer-Mill Grader (saw. & plan.). May review work of other graders and be designated Check Grader (woodworking). May be designated: Dry-Lumber Grader (woodworking); Milled-Lumber Grader (woodworking); Puncher (saw. & plan.); Rough-Lumber Grader (woodworking).
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 81

67 OCCUPATIONS IN MACHINING STONE, CLAY, GLASS, AND RELATED MATERIALS

This division includes occupations concerned with shaping stone, clay, and glass parts or products by removing excess material from stock or objects, primarily by such means as cutting, boring, abrading, milling, and planing. Includes laying out, job setting, repairing, fitting, and assembling.

670 STONECUTTERS AND RELATED OCCUPATIONS

This group includes occupations concerned with trimming and surfacing blocks and slabs of stone to desired size, shape, or finish.

670.362-010 GANG SAWYER, STONE (stonework) alternate titles: gang-saw operator;stone sawyer
Sets up and operates one or more gangsaws or reciprocating saws to cut rough blocks of stone into specified dimensions for further processing. Builds bed of timbers on flat car. Aligns and levels stone on bed, using crowbar, sledgehammer, wedges, blocks, and spirit level. Marks dimensions on stone, using straightedge, rule, and crayon. Turns crank or pushes button to activate winch that moves car onto track under saw frame. Moves saw blades along frame, aligning blades with marks on stone, positions blocks (width gauges) between blades, levels blades, and inserts wedges into frame to secure blades to frame. Turns lever to lower saw blades on stone. Starts saws and pump that circulates water and abrasive under reciprocating blades to cut stone. Observes sawing to detect exhausted abrasive supply. Dumps abrasive into abrasive pit to maintain cutting speed. Turns crank to increase or decrease speed of saws according to hardness of stone and uniformity of abrasive flow. Washes stone, using water hose, and verifies width or thickness of cut stone, using rule. Replaces worn saw blades. Signals OVERHEAD CRANE OPERATOR (any industry) 921.663-010 to remove cut slabs from car or saw bed. May operate diamond gangsaw equipped with up to thirty vertically mounted diamond-edged saw blades.
GOE: 06.02.03 STRENGTH: M GED: R3 M2 L1 SVP: 5 DLU: 77

670.384-015 STONE GRADER (stonework) alternate titles: checker;inspector
Inspects, repairs, and grades rough-cut and finished blocks or slabs of stone according to work order specifications. Examines stone block for defects in workmanship and quality, such as cracks, fractures, and scratches. Measures dimensions of block, using tape measure. Cleans fractures and cracks in block with acid and sponge. Fills imperfections with matching colored wax, and polishes patched area, using file, hone, and portable buffer. May select rough blocks from stock for cutting and polishing. May mark code numbers on finished blocks according to work order specifications. May order quarry blocks for cutting and polishing.
GOE: 05.07.01 STRENGTH: H GED: R3 M2 L2 SVP: 6 DLU: 77

670.587-010 STONE LAYOUT MARKER (stonework)
Marks coded instructions on sandstone slabs to specify subsequent processing according to blueprint specifications. Studies blueprint to determine required dimensions of slab and processes needed to finish product. Locates specified slab on conveyor and verifies dimensions, using tape measure. Marks coded instructions on slab to specify processing required, such as radius edge, drip groove, and finished butt joint, using chalk. Records identification number of pieces on form and engraves number on slab edge, using air-powered engraving tool. Pushes slab onto roller conveyor for subsequent processing.
GOE: 06.02.31 STRENGTH: M GED: R3 M2 L1 SVP: 3 DLU: 77

670.685-010 STONE TRIMMER (stonework) alternate titles: slate trimmer
Tends trimming machine fitted with rotary cutting knives or single blade on spring pole to trim rough roofing slate to largest size that slabs will make. Sets notched bar that enables slab to be cut to desired size. Holds irregular slate slab beneath rotating cutting blade to trim edges. Turns slab and trims other edges. Sharpens cutting knives on grinding wheel. May split flagstone along cut line, using hammer and chisel.
GOE: 06.04.08 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

673 ABRADING OCCUPATIONS

This group includes occupations concerned with smoothing, polishing, or sharpening stone, clay, or glass by the wearing away action of abrasives on plane or rotary action machine tools.

673.130-010 SUPERVISOR, EDGING (glass products)
Supervises and coordinates activities of workers engaged in edging and beveling of glass and mirrors: Patrols work areas and observes workers to assure conformance to company standards. Trains new workers in duties. Performs other duties as described under SUPERVISOR (any industry) Master Title. May perform routine maintenance on machines. May change or dress grinding wheels. May supervise workers engaged in operation of grooving machine that grinds grooves in glass shelving.
GOE: 06.02.01 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

673.364-010 LEAD WORKER, WAFER POLISHING (electron. comp.)
Assists SUPERVISOR, ELECTRONICS PROCESSING (electron. comp.) 590.130-010 in coordinating activities of workers engaged in polishing wafers for use in manufacturing semiconductor devices: Reviews production goals with SUPERVISOR, ELECTRONICS PROCESSING (electron. comp.), prioritizes wafers to be polished, and assigns workers to stations. Monitors production and adjusts work assignments when necessary. Inspects polished wafers and measures wafer thickness, using gauge, to ensure conformance to customer specifications. Trains workers in equipment operation and wafer inspection. Observes workers to ensure compliance with safety rules and production standards. Completes work schedules and daily production reports. May lend polishing machines [POLISHING MACHINE TENDER (electron. comp.) 673.685-094] and demounting machines [WAFER MOUNTER (electron. comp.) 726.685-058] to substitute for workers during worker absence or to relieve bottlenecks in work congested areas.
GOE: 06.02.09 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 86

673.380-010 EDGING-MACHINE SETTER (glass products)
Sets up and adjusts machines that grind and polish edges of glass used in manufacture of mirrors: Turns handwheels to loosen spindle assemblies of horizontal edging machines and turns calibrated gauges and levers to move specified grinding, smoothing, and polishing wheels into processing position and to set spacing between opposed grinding, smoothing, and polishing wheels, according to thickness and width of mirrors. Turns valves to regulate air pressure that forces grinding, smoothing, and polishing wheels against processed surfaces of mirrors. Places trial glass on feed conveyor of machines and observes ammeters to determine load on abrasive wheels and examines ground edge to determine if alignment and cutting depth of wheels are in accordance with specifications. Loosens spindle assemblies and grinding, smoothing, and polishing wheel units, using handwheels and wrenches, and turns setscrews to adjust operating depths of individual wheels. Turns handwheels to adjust edge guides of conveyors to ensure equal grinding, smoothing, and polishing of mirror edges. May set up and adjust machine that automatically drills single holes in mirrors.
GOE: 06.01.02 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 78

673.382-010 SANDBLASTER, STONE (stonework)
Operates sandblasting equipment to cut inscriptions and decorative designs on monumental stone: Dumps abrasive into mixing chamber of sandblasting equipment. Turns valve to admit compressed air into mixing chamber. Selects sandblasting nozzle according to size of lettering or intricacy of design and attaches nozzle to hose leading from mixing chamber. Moves lever or turns valve to jet abrasive through nozzle. Guides nozzle back and forth over stone surface following stencil outline to cut inscription or design in stone. Verifies work by measuring or estimating depth of cut as sandblasting progresses, using rule or employing experience in sandblasting. Removes parts of stencil or adds stencil during blasting to create differences in depth of cuts and intricate designs. May shape (or carve) designs in stone, using sandblasting equipment. May sandblast stone without stencil to produce rough, pitted finish. May operate portable equipment to sandblast letters and designs on stone at cemetery sites. May cut stencils preparatory to sandblasting. May operate machine that automatically moves sandblasting nozzle back and forth over stencilled stone.
GOE: 05.10.01 STRENGTH: M GED: R3 M1 L1 SVP: 6 DLU: 77

673.382-014 SANDBLASTER, STONE APPRENTICE (stonework)
Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.10.01 STRENGTH: M GED: R3 M1 L1 SVP: 6 DLU: 77

673.382-018 STONE POLISHER, MACHINE (stonework)
Sets up and operates machine to grind stone to smooth finish or polish stone to lustrous finish. Selects grinding or polishing wheels according to type of

stone, finish specified, or step in finishing process. Moves arm of machine over wheel and attaches wheel to spindle with bolt or latch. Spreads abrasive or water on stone by hand, or turns valves to circulate abrasive or water on stone. Pushes levers to start machine and guides rotating wheel over surface of stone by hand, observing puddles of water on stone to detect uneven areas. Washes stone, using hose, and changes abrasive or wheel as grinding or polishing progresses to surface stone according to specifications. May grind and polish curved or irregular stone surfaces, using portable polisher [STONE POLISHER, HAND (stonework)]. May fill cracks or imperfections in stone with wax that matches color of stone. May place, align, and level stone on machine bed. May be designated according to type of stone surfaced as Granite Polisher, Machine (stonework); Marble Polisher, Machine (stonework).
GOE: 06.02.08 STRENGTH: M GED: R3 M1 L1 SVP: 6 DLU: 77

673.382-022 STONE POLISHER, MACHINE APPRENTICE (stonework)
Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 06.02.08 STRENGTH: M GED: R3 M1 L1 SVP: 6 DLU: 77

673.382-026 CRYSTAL GRINDER (electron. comp.)
Operates grinding machine to abrade semiconductor crystal ingot to improve cylindrical shape of ingot and attain specified diameter: Reads work order to determine target diameter of ingot. Measures ingot diameter, using calipers or micrometer, and calculates thickness of material to be removed from ingot and length of grinding time. Positions and secures ingot in trunnions or brackets on grinding machine. Adjusts machine controls for position of grinding tool and speed of grinding. Pushes buttons to activate coolant flow, rotation of ingot, grinding tool, and timer. Measures ingot diameter after grinding and continues grinding to attain specifications for diameter. May change worn grinding tools and other parts and adjust machine, using handtools. May attach graphite pieces to ends of ingot before grinding, using epoxy, and remove graphite and epoxy from ingot after grinding, using radiant oven and solvent. May operate saw to cut sample wafer from ingot for inspection. May perform routine maintenance on grinding machine, such as adding oil and cleaning machine. May operate flat grinding machine to grind *flat* along length of ingot and be designated Crystal Flat Grinder (electron. comp.).
GOE: 06.02.02 STRENGTH: H GED: R3 M2 L2 SVP: 5 DLU: 86

673.662-010 TOP POLISHER (stonework)
Sets up and operates one or more automatic stone polishing machines to polish monument tops: Studies diagram of monument to determine diamond polishing wheel required and attaches wheel to machine, using handtools. Measures length and width of monument top and sets dials to control width and length of travel of polishing head. Moves stone under head of machine and levels stone, using spirit level, wooden blocks and wedges. Positions polishing wheel on top of monument, turns valve to start flow of water, and pulls switch to start polishing wheel. Observes ammeter to determine load on motor and turns dial to adjust current according to reading. Observes operation of machine and adjusts dials and switches to regulate speed of machine and length and width of travel of polishing wheel. Feels stone to determine progress of polishing and rolls stone from under wheel when polishing is completed. Signals OVERHEAD CRANE OPERATOR (any industry) 921.663-010 to pick up stone. Lubricates machine, using grease gun. Inspects inventory of diamond polishing wheels and notifies supervisor when wheels need replacing. May grind sharp edges from monuments, using portable grinding machine.
GOE: 06.02.08 STRENGTH: M GED: R3 M2 L1 SVP: 6 DLU: 77

673.666-010 BELT SANDER, STONE (stonework)
Feeds and off bears automatic belt sanding machine that sands tops of sandstone table and counter tops, assisted by coworker: Pulls cart loaded with sandstone table and counter tops to work area and transfers stone from cart to roller conveyor. Presses button to start sanding machine and pushes stone tops from roller conveyor onto belt conveyor that carries stone under belt sander. Guides stone tops emerging from sanding machine onto roller conveyor. Feels edges of stone to detect rough or uneven areas and sands edges of stone tops, using sandpaper. Pushes stone along roller conveyor for further processing.
GOE: 06.04.08 STRENGTH: V GED: R2 M1 L1 SVP: 2 DLU: 77

673.666-014 STRIPPER (glass mfg.)
Strips sections of ground flat glass from tables: Cuts along joints between sections of flat glass and between glass sections and table edge to break plaster of paris bond, using knife and scraper. Inserts knife blade between table and glass and turns knife blade on edge to separate section of glass from table. Lifts glass from table and inserts flat sheets into individual compartments on truck, or attaches suspended clamps and signals worker on overhead crane to lift glass from table.
GOE: 06.04.08 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

673.682-010 AUTOMATIC PATTERN EDGER (glass products)
Sets up and operates pattern edging machine to *pencil edge* pattern (irregularly shaped) mirrors or glass: Turns screws to level arms of machine suction cup platform, using hex wrench. Turns bolts to loosen and extend or retract arms to adjust for size of mirrors or glass being edged, using wrench. Positions workpiece on platform and presses down on workpiece to ensure contact with suction cups and stability of workpiece on platform. Moves calibrated lever mechanism to adjust height of motorized diamond edging wheel. Flips switch and turns valve to start edging machine and flow of water to edging wheel. Depresses pedal to activate suction cups that lock workpiece onto platform. Grasps hand grips of edging wheel and moves wheel against patterned edges of workpiece to form pencil edge. Feels edge of workpiece to ensure specified smoothness and uniformity. Depresses pedal to disengage suction cups. Removes and carries workpiece from machine and places onto rack.
GOE: 06.02.08 STRENGTH: H GED: R3 M1 L1 SVP: 3 DLU: 77

673.682-014 BEVELING-AND-EDGING-MACHINE OPERATOR (glass mfg.; glass products)
Sets up and operates one or more machines to bevel, *pencil edge*, and polish rectangular glass or mirror edges: Loosens calibrated gauge with wrench and turns gauge to set grinding wheels to cut bevel to close tolerances. Presses buttons and turns handwheels to start flow of coolant (water) and polishing compound (rouge or cerium) onto grinding wheels. Starts machine and places glass or mirrors on conveyor of machine. Observes ammeter to determine grinding load. Turns handwheels to adjust grinding wheels. May move glass from machine and wipe edges to remove polishing compound. Feels edge for smoothness. Rejects defective glass or mirror and readjusts gauge.
GOE: 06.02.08 STRENGTH: M GED: R3 M2 L3 SVP: 4 DLU: 77

673.682-018 EDGER-MACHINE OPERATOR (stonework)
Sets up and operates machine to grind and polish edges and cut drip grooves on underside of sandstone table and counter tops: Reads work instructions written on sandstone slab. Presses buttons and pulls levers on control panel to start diamond saw and specified combination of diamond grinding and polishing wheels. Turns valve to start water flow that cools grinding and polishing wheels and saw blades during operation. Pushes sandstone slab from roller conveyor onto belt conveyor that conveys stone through grinding, polishing, and sawing process. Examines slab to determine if grinding, polishing and sawing conforms to specifications. Reprocesses slabs not meeting specifications. Lubricates machine, using grease gun. Examines diamond grinding, and cutting tools for wear and notifies supervisor of replacement need.
GOE: 06.02.08 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

673.682-022 FINISH OPENER, JEWEL HOLE (clock & watch)
Operates jewel-opening machine to smooth and polish jewel holes to size: Mounts wire, on which jewels are strung, in machine, pulls wire taut, and forces sleevelike devices against each end of jewel row to force jewels tightly together. Brushes shellac over jewels and allows them to harden. Starts belt which causes row of jewels to rotate around wire. Pulls diamond-dusted tapered wire back and forth through rotating jewels to enlarge and polish holes. Pulls thicker portion of wire into working position until hole reaches specified diameter. Verifies size of hole on graduated tapered needle. Works to tolerances of 0.0001 inch.
GOE: 06.02.08 STRENGTH: L GED: R3 M2 L1 SVP: 5 DLU: 77

673.682-026 MITER GRINDER OPERATOR (glass mfg.; glass products)
Sets up and operates machine to cut mitered or rectangular grooves in flat glass articles, such as mirrors, counter dividers, or shelves: Installs grinding (cutting) wheels according to specifications, using wrench. Sets guide rails according to width of glass, using ruler and screwdriver. Clamps stop on end of table to hold glass in position. Positions glass against stop and guide rail and starts machine. Turns valve to start flow of coolant against grinding wheel. Depresses pedal to lower wheel to surface of glass. Pushes lever to move glass and table under grinding wheel. Observes grinding process and feels cut to determine if groove is being cut to specified depth. Turns handwheel to adjust weight or pressure of grinding wheel on workpiece.
GOE: 06.02.08 STRENGTH: M GED: R3 M2 L3 SVP: 4 DLU: 77

673.682-030 SLAB GRINDER (stonework)
Operates bridge-like track-mounted machine equipped with horizontally mounted cast iron grinding wheel to level surface of dimension stone used for building purposes and in manufacture of monuments: Turns valve to start and adjust flow of water and abrasive over stone and grinding wheel. Climbs into cab of machine or onto control platform and moves levers to guide abrasive wheel over stone, observing level gauge to detect uneven areas. Observes ammeter to determine resistance against grinding wheel and moves levers or pushes buttons to adjust pressure of wheel against stone and control speed of wheel. May operate machine that oscillates rotating grinding wheel as it traverses slab, using successively finer abrasives to grind and buff stone to mirror-like finish and be designated SLAB POLISHER (stonework). May operate machine equipped with cast iron wheel set with diamond-impregnated polishing bars to grind (sand) and polish sandstone and be designated Diamond Sander (stonework).
GOE: 06.02.08 STRENGTH: L GED: R3 M1 L1 SVP: 5 DLU: 77

673.685-010 ABRASIVE GRINDER (nonmet. min.)
Tends machine that faces and grinds specified radii on abrasives: Sets machine guides to regulate angle of feed of abrasive to grinder. Places abrasive in fixture and manually feeds abrasive to grinding wheel, or starts machine that automatically feeds abrasive against grinder. Inspects abrasives for conformance to specifications, using fixed gauge and micrometer.
GOE: 06.04.09 STRENGTH: L GED: R3 M1 L1 SVP: 3 DLU: 77

673.685-014 BED RUBBER (stonework)
Tends machine that grinds rough-sawed stone blocks or slabs to smooth surface and specified finish: Positions designated surface of stone on machine bed (rotating circular metal plate), using electric hoist. Dumps abrasive, such as grit, sand, and steel shot into hopper of machine. Starts machine, turns valves, and

opens hopper gate to regulate flow of water and abrasive under stone. Measures block or slab to verify thickness with work order specifications. Removes finished stone from rubbing bed and cleans abrasive from surface, using scraper, brush, and water hose. May place lead or stone weights on block to ensure even abrading of stone.
GOE: 06.02.08 STRENGTH: H GED: R3 M2 L1 SVP: 4 DLU: 77

673.685-018 BEVELER (glass products)

Tends machine that bevels edges of sheet glass. Starts machine and places glass sheet on edge in feed channel. Removes beveled glass from machine and repeats process to bevel all edges. Verifies width, depth, and angle of bevel, using gauge. Bevels glass of irregular sizes and shapes by hand, using abrasive stone. Stacks beveled glass on pallet or in rack.
GOE: 06.04.08 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

673.685-022 BEVELER (nonmet. min.)

Tends machine that bevels ends of asbestos brake linings. Reads work order to determine quantity, size and type brake linings to be beveled. Moves brake linings to work area, using portable rack. Loosens locknuts and positions machine guides and stop according to specification, using rule, wrench and template. Pushes buttons to start machine and conveyor. Places and holds lining against stop and over grinding wheels to bevel ends of lining. Removes beveled lining from machine and compares with template to determine conformance to specifications. Places lining onto conveyor for conveyance to packaging department. Records number of linings beveled onto work order.
GOE: 06.04.08 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

673.685-026 BLOCKER (glass mfg.; glass products)

Tends machine that polishes (blocks) surface of flat glass for products, such as mirrors and display cases. Positions glass on padded table under felt-covered polishing heads. Pours polishing compound, such as cerium or rouge, on glass surface. Moves lever to lower polishing heads onto glass surface. Pushes and pulls table along guide rails and tracks to bring entire surface of glass into contact with polishing heads or moves polishing heads over glass on stationary table. Raises polishing heads and wipes polishing compound from glass with cloth or sponge. May remove and place glass on conveyor of glass-washing machine.
GOE: 06.04.08 STRENGTH: M GED: R2 M2 L2 SVP: 2 DLU: 77

673.685-030 BLOCKER, AUTOMATIC (glass mfg.; glass products)

Tends machine that conveys flat glass or mirrors under polishing (blocking) and cleaning heads to polish and clean glass surface. Mixes polishing compound according to formula and pours compound into storage tank. Feeds glass or mirrors onto conveyor of machine. Pushes button to start machine and pulls lever to start flow of polishing compound onto glass or mirror surface. Pushes button to raise or lower polishing heads and cleaning brushes individually or collectively according to size, thickness, and number of glass pieces. May record production.
GOE: 06.04.08 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

673.685-034 CIRCLE BEVELER (glass products)

Tends machines that grind and polish beveled edge of circular-shaped glass for mirrors. Reads work ticket to determine dimension of bevel required. Pulls switch to start suction pump. Holds glass against suction-head (holding device) and depresses pedal to activate suction that holds glass to be beveled. Pushes suction-head assembly toward horizontally mounted grinding wheel and releases locking pin to secure assembly at specified position. Repeats procedure for second suction-head assembly mounted on opposite side of grinding wheel. Pulls switches to start grinding wheel and suction-heads rotating. Turns valves to start flow of water to grinding wheel. Lowers weighted levers that move and hold glass against grinding wheel. Measures depth of bevel periodically, using rule. Removes glass from beveling machine and mounts glass on suction-head of bevel polishing machine. Applies polishing compound to felt polishing wheel, using bristle brush. Lowers weighted lever to position beveled edge of glass against polishing wheel. Wipes bevel with fingers and inspects glass for smoothness.
GOE: 06.04.08 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

673.685-038 CIRCLE EDGER (glass products)

Tends edging machine that automatically *pencil edges* circular mirrors or glass used as table tops. Places template over workpiece and marks center of workpiece, using red pencil. Moves switch levers to start suction pump and circle edging machine and turns valve to start flow of water to edging wheels. Centers workpiece on suction cup of edging machine and depresses pedal to activate suction cup that locks workpiece into place. Raises foot-controlled lever to engage motorized edging wheels to edge of workpiece and presses button to start revolving of workpiece against edging wheels to form pencil edge on workpiece. Observes pencil edging process to ensure specified dimensions and to prevent breakage of workpiece caused by improper setting of motorized edging wheels. Turns bolts to loosen motors, using wrench, and slides motors on tracks to correct setting. Feels edge of mirror or glass to verify smoothness. Removes workpiece from suction cup when edging is complete and places workpiece on rack.
GOE: 06.04.08 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

673.685-042 CONVEX-GRINDER OPERATOR (button & notion)

Tends machine that rounds edges of pearl button blanks and forms convex surface on back of blank. Places blanks face down in automatic chucks of feed mechanism that forces blanks against abrasive wheel shaped to produce convex surface. May tend convex-grinding machine to form studs on backs of buttons, or to shape button faces. May place single blank in chuck of manually controlled convexing machine and pull on leverage bar to force blank against abrasive wheel.
GOE: 06.04.08 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

673.685-046 DIAMOND-POWDER TECHNICIAN (nonmet. min.)

Tends equipment that pulverizes industrial bort and separates particles into grades of diamond powder. Pours bort into ball mill and starts machine to grind bort. Removes powder from mill and pours it through sieves to separate particles. Pours sifted particles into glass tank containing chemical mixture. Siphons liquid containing particles from tank after specified time into glass jars. Siphons liquid, following settlement of particles, from top of jars. Dumps particles onto table and dries them with infrared lamp. Weighs and bottles powder and labels containers.
GOE: 06.04.08 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

673.685-050 ENGRAVER TENDER (glass products)

Tends multistation glassware cutting machine that engraves designs in sequence on glassware. Presses buttons to start machine and turns valves to start flow of coolant. Places mouth of glassware on *indexing* spindle located between cutting wheels and sets base of ware on rest. Loads and unloads machine in specific sequence to engrave design on outside of ware. Removes and inspects completed ware for defects and places ware in tray. Notifies supervisor of machine malfunction.
GOE: 06.04.08 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

673.685-054 FINGER-GRIP-MACHINE OPERATOR (glass products)

Tends one or more grinding machines that cut finger grips (grooves) in sliding glass doors. Sets guide rails and stops to control length, centering, and depth of cut, using wrenches, setscrews, and measuring tape. Turns valve to start flow of water to grinding wheel, and flips switch to start machine. Positions glass on table against stops and guide rails under cutting wheel and pushes or pulls lever to lower rotating cutting wheel to surface of glass and to raise cutting wheel when groove is ground. May set micro-switch that raises wheel automatically when specified depth of groove is obtained. May install cutting wheels on spindles, using wrench. May dress grinding wheels.
GOE: 06.04.08 STRENGTH: M GED: R3 M2 L1 SVP: 3 DLU: 77

673.685-058 FINISH-MACHINE TENDER (pottery & porc.)

Tends machine that automatically smooths and cleans edges of ceramic flatware preparatory to firing ware in kiln. Selects rubber cushion rings according to ware being furnished and positions rings on vacuum cradle on machine turntable. Inserts abrasive pads in adjustable arms that press pads against revolving ware and positions sponge belts on rotating machine spindles to clean ware after smoothing. Tightens coupling on water hose to water tank connection and turns valve to start and regulate flow of water onto sponge belts to maintain moisture content of belt. Pushes button to start machine and turns dial to regulate speed of turntable according to size ware being processed. Observes machine operation and product to detect need for machine adjustment. Removes and replaces ware at machine to maintain continuous work flow.
GOE: 06.02.08 STRENGTH: H GED: R3 M1 L1 SVP: 5 DLU: 77

673.685-062 GROOVER (nonmet. min.)

Tends machine that cuts ventilating (cooling) grooves in asbestos brake linings. Positions tension rollers and guides on machine according to size of brake linings specified on work order, using handcrank, measuring scale, and screwdriver. Turns handwheel to position abrasive grooving wheel for specified depth of cut. Pushes button to start machine and feeds lining into machine and observes lining for surface or grooving defects. Measures depth, width, and position of groove, using template, and adjusts machine as required. Discards linings not meeting specifications and places acceptable linings in rack. Records production data on work order.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

673.685-066 LEVEL-VIAL INSIDE GRINDER (cutlery-hrdwr.)

Tends battery of machines that grind interior walls of glass tubes. Brushes abrasive paste onto abrading rods. Inserts tubes in holders and slides holders over abrading rods. Pushes bar to lower *indexing* wheels onto tube holders and starts machine. Stops machine after specified time and removes tubes and holders. Rinses tubes in water tank to remove compound.
GOE: 06.04.08 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

673.685-070 NOTCH GRINDER (glass products)

Grinds notch in edge of glass dial blank as reference point for assembling, using abrasive grinding wheel. Mounts blank in sliding jig and aligns mark on blank with grinding wheel. Starts machine and pushes jig into rotating wheel. Pulls jig back and removes notched blank.
GOE: 06.04.08 STRENGTH: S GED: R2 M1 L2 SVP: 3 DLU: 77

673.685-074 STONE ROUGHER (optical goods)

Tends battery of automatic machines that rough grind surfaces of lens blanks. Bolts block with mounted lens to rotating spindle of stone-roughing machine, and releases lever of feed mechanism that places lens block against revolving grindstone. Sets feed mechanism by adjusting setscrew controlling position of spindle. Removes lens block after specified period of time, and inspects lens for conformance to specifications. May turn valve to regulate flow of water over grindstone.

GOE: 06.04.08 STRENGTH: L GED: R3 M1 L1 SVP: 2 DLU: 77

673.685-078 STRAIGHT-LINE EDGER (glass mfg.; glass products)

Tends machine that conveys rectangular glass over grinding and polishing wheels to obtain *pencil edge* and to polish edges: Places glass on grooved conveyor with top edge of glass against guide. Attaches weights to top of glass or pulls lever to lower pressure roller that forces glass against grinding and polishing wheels. Turns handwheel to regulate speed of conveyor according to type of glass. Starts flow of coolant and polishing compound to grinding and polishing wheels. Turns glass to finish other edges and removes glass from machine. Places glass on skid. Observes quality of glass edge to determine need for wheel dressing or adjustment, and lowers or raises wheel by turning nut with wrench; or reads ammeter to determine grinding load and notifies maintenance department to adjust wheels. May wipe polishing compound from edges with cloth. May maintain record of number of pieces edged.
GOE: 06.04.08 STRENGTH: H GED: R2 M2 L2 SVP: 3 DLU: 77

673.685-082 STRIP POLISHER (stonework)

Tends machine to grind and polish slate products, such as flooring, mantels, and coping, to specified thickness and cut grooves in bottom surface of slate to increase adhesion to mortar bed: Selects spacers (width guides) according to distance between grooves and positions saw blades and spacers on machine arbor, using wrench. Turns handwheels to move grinding wheels and blades into grinding and sawing position according to thickness specified for stone and depth of grooves. Places slate strip on conveyor, moves conveyor guides against stone, and tightens guides in position, using wrench. Turns valve to spray water (coolant) on grinding wheels and sawing blades. Starts machine and places slate strips on conveyor that feeds strips between grinding wheels and saw blades of machine. Removes stone from conveyor and places stone on pallet.
GOE: 06.04.08 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

673.685-086 DISC-PAD GRINDER (nonmet. min.)

Tends machine that smooths and polishes asbestos disc pads for brake linings: Places disc pads on automatic feed tray of machine. Adjusts grinding head of machine according to specified thickness of polished pads. Starts machine that automatically feeds pads through enclosed grinding and washing units. Observes operation to detect machine malfunctions. Stops machine and clears detected jams. Measures random sample of polished disc pads to determine if pads are ground according to specifications, using caliper. Adjusts grinding mechanism as required, using handtools. Records data, such as production and downtime when machine breakdown occurs.
GOE: 06.04.08 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 86

673.685-094 POLISHING MACHINE TENDER (electron. comp.)

Tends abrading machines that polish or lap surface of semiconductor wafers: Reads work order to determine specifications. Loads wafers or carriers containing wafers onto polishing or lapping machine. Adjusts machine controls or loads programmed control media in machine to regulate pressure, time, and slurry flow. Starts lapping machine that removes saw marks and reduces wafer thickness or starts polishing machine that polishes wafers. Observes machine operation and listens to sounds of belts, cams, and abrading wheel to detect machine malfunctions. Adjusts mechanisms or requests repairs as necessary. Stops machine at prescribed time, removes wafers from machine, and rinses wafers with water to cool wafers and remove slurry. Examines wafers for defects, and measures wafer thickness, using thickness gauge. May clean wafers, using chemical solutions, water, or gases, to remove contaminants from wafer surface. May mount wafers onto carriers. May mix slurry. May tend machine that rounds wafer edges and be designated Edge-Round Tender (electron. comp.). May be designated according to machine tended as Lapping Machine Tender (electron. comp.).
GOE: 06.04.09 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 86

673.685-098 RADIUS CORNER MACHINE OPERATOR (glass products)

Tends machine that grinds and polishes corner edges of flat glass to specified radius: Turns dials to set timer of grinding and polishing wheels to specified settings. Moves lever, turns knob, and presses button to open water valve to start flow of water against grinding wheel, open air pressure valve, and start air pump of machine. Breaks off specified amount of each corner of glass sheets, using glass pliers, positions glass sheets against stops on padded table surface of machine, and presses button to start automatic grinding and polishing cycles of machine. Turns glass sheets to position each corner for processing. Observes and feels corner edges to determine whether reprocessing is necessary. Places processed glass on racks, and separates glass with pieces of cardboard.
GOE: 06.04.08 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 86

673.685-102 WAFER ABRADING MACHINE TENDER (electron. comp.)

Tends abrading machines that roughen surface of semiconductor wafers to distinguish front from back: Adjusts controls to set speed, time, and pressure of abrading belts according to specifications. Loads container of wafers into abrading machine and starts machine that automatically abrades surface of wafer. Removes abraded wafers from machine and inspects wafers to detect abrading defects, such as cracks, using microscope. Replaces worn abrading belts.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 86

673.686-010 BEVELING-AND-EDGING-MACHINE-OPERATOR HELPER (glass mfg.; glass products)

Feeds and off bears automatic edging machines that grind and polish edges of rectangular glass or mirrors: Removes rectangular pieces of glass or mirror from discharge end of beveling-and-edging machine, turns glass over, and feeds glass onto conveyor of machine to finish other edge. Wipes polishing compound from edge of glass. Places glass or mirror on skid. May work as member of team. May be designated Beveling-Machine-Operator Helper (glass mfg.; glass products); Straightedge-Machine-Operator Helper (glass mfg.; glass products).
GOE: 06.04.08 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 78

673.686-014 BURR GRINDER (optical goods)

Feeds molded lens blanks into automatic burr-grinding machine that removes burrs and sprues, smooths edges, and ejects blanks from machine. Catches blanks ejected from machine and stacks them in trays prior to grinding and polishing. May perform particular phase of operation, such as feeding blanks into machine or catching and stacking ejected blanks.
GOE: 06.04.08 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

673.686-018 EDGER-MACHINE HELPER (stonework)

Off bears sandstone slabs from edge-grinding machine and sands edges, using sandpaper-covered block: Pulls sandstone slabs emerging from machine onto turntable and sands edges of slabs, using sandpaper-covered block to smooth irregularities and sharp edges on stone. Pushes slab onto roller conveyor to return slab to edge-grinding machine or onto conveyor for subsequent processing. Lubricates and cleans machine, and cleans work area.
GOE: 06.04.08 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

673.686-022 EDGING-MACHINE FEEDER (glass mfg.)

Feeds and regulates machine that smooths edges of automobile window glass.
GOE: 06.04.08 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

673.686-026 LAYER (glass mfg.)

Feeds sheets of glass onto conveyor type, plaster-covered table that carries sheets into grinding machine: Climbs onto table and receives glass from workers on floor. Lowers ends simultaneously onto table to avoid cracking sheet. Positions sheets end to end so that edges will not be chipped or glass cracked as glass passes beneath grinding heads. Raises glass and scoops more plaster under edges to level sheets. Pulls roller over glass sheets to settle them in and remove air bubbles from plaster.
GOE: 06.04.08 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

673.686-030 DISC-PAD GRINDING MACHINE FEEDER (nonmet. min.)

Feeds asbestos disc pads onto automatic feed platform of grinding machine that polishes pads: Strikes pads against one another to remove excess asbestos particles. Breaks flange from rims of pads by hand and stacks pads onto automatic feed platform of grinding machine.
GOE: 06.04.09 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 86

673.687-010 JOINER (glass mfg.)

Positions and secures sheets of glass on table preparatory to grinding and polishing operations: Dumps quantity of plaster onto table and spreads it, using trowel. Guides sheets of glass, lowered by overhead crane, onto plaster-covered table so that glass sheets lie end to end. Inserts stubs (wooden blocks) between sheets to prevent chipping. Drives wood pegs up through holes along edge of table to prevent glass from shifting or sliding from table. Fills spaces between sheets with plaster to provide continuous smooth surface for grinding and polishing.
GOE: 06.04.30 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

674 TURNING OCCUPATIONS

This group includes occupations concerned with shaping materials by the paring or chipping action of rigid cutting tools, or the wearing away action of rotating abrasive wheels, applied to material rotating on a lathe or similar machine.

674.382-010 GLASS-LATHE OPERATOR (electron. comp.)

Operates glass lathe to cut, shape, and seal glass bulbs used in manufacturing electronic tubes, following blueprints, standard procedures, and sample parts. Places glass blanks and tube components in chuck or tailstock of lathe, adjusts and locks parts in lathe manually or depresses pedal of compressed air device that automatically locks parts in lathe. Starts lathe, lights gas-torch heating element, turns valve to regulate flames, according to specified heating rate, and heats glass to working temperature indicated by color. Turns handwheels or pushes lever to control heating of specified areas of glass parts. Depresses pedal to control air blast and holds tools against revolving glass to perform mechanical operations, such as cutting and shaping glass to repair defects. Anneals glass parts, using gas torch. May operate glass lathe to form glass beads on tube components or to seal new glass tubing on necks of rebuilt television or oscilloscope tubes. May fuse glass seal tube and connector pins into side of partially formed vacuum tubes, using gas torch.
GOE: 06.02.08 STRENGTH: M GED: R3 M2 L3 SVP: 4 DLU: 89

674.662-010 STONE-LATHE OPERATOR (stonework) alternate titles: lathe operator; turner

Sets up and operates stonecutting lathe to turn and shape blocks of stone, such as limestone, marble, granite, and sandstone to form columns, pillars, balusters, and other cylindrical building and monumental work: Mounts block of stone between centers of lathe, using hoist. Signals OVERHEAD CRANE OPERATOR (any industry) 921.663-010 to position stone in lathe. Adjusts rough-

ing tool or grinding wheel on carriage and starts machine. Opens water valve and feeds tool or grinding wheel against and along length of rotating stone. Removes roughing tool or wheel and installs finishing tools, using handtools. Measures stone to ensure cutting to specified dimension and contour, using caliper. May knock off corners of rough stone with hammer. May cut intricate designs in stone, using special tools. May sharpen cutting tools. May operate lathe to polish stone objects and be designated Stone-Lathe Polisher (stonework).
GOE: 06.02.08 STRENGTH: H GED: R4 M2 L2 SVP: 7 DLU: 77

674.682-010 FINISHING-MACHINE OPERATOR (nonmet. min.)
Sets up and operates lathe to dress (cut) grinding wheels to specified dimensions and type of surfaces: Positions and fastens grinding wheel in machine chucks, and mounts cutting (abrasive) wheel on machine carriage or traverse mechanism, or inserts and adjusts cutting tool in toolholder. Starts machine and turns wheels to regulate speed of machine and depth and angle of cut depending on type of surface finish desired, width of surface faces, angle between faces, and thickness and diameter of wheel specified. Verifies dimensions of wheel against specifications, using tape measure and calipers.
GOE: 06.02.02 STRENGTH: L GED: R3 M2 L1 SVP: 4 DLU: 77

675 PLANING AND SHAPING OCCUPATIONS, N.E.C.

This group includes occupations concerned with cutting a smooth surface on rough stock and reducing it to desired size by the action of rotating cutting tools; and imparting a particular shape to material.

675.682-010 CONTOUR GRINDER (stonework) alternate titles: profile grinder
Sets up and operates machine with single or multiple grinding wheels to shape building or monumental stone into various designs: Levels and aligns stone on car or machine bed according to design specified for stone, using crowbar, wedges, square, and spirit level. Clamps stone to backstop, securing stone for grinding. Selects template, according to contour of design, and bolts template into position on machine to guide grinding wheel over stone. Turns valve to spray water over wheels and stone. Moves levers to lower grinding wheel against stone and start machine that moves rotating wheel back and forth over stone, following outline of template. Observes ammeter to determine resistance against wheel and moves lever to increase or decrease pressure on wheel. Compares stone with template or scans design marked on stone to determine conformance to specifications. Dresses surface of worn grinding wheels by holding dressing tool against rotating wheel. May rough out contour of stone preparatory to finishing by machine, using chisel, hammer, and pneumatic cutting tools. May operate machine without template to grind flat surface on stone [TOP POLISHER (stonework)]. May operate machine to grind joints or grooves or cut and shape stone moldings, fluted columns, panels, and decorative designs in building or monumental stones.
GOE: 06.02.08 STRENGTH: M GED: R3 M2 L1 SVP: 5 DLU: 77

675.682-014 PLANER OPERATOR (elec. equip.)
Operates machine to plane flat surfaces of carbon or graphite stock to specified thickness and surface finish for use as anodes in electrolytic cells or as brushes in electric motors and generators.
GOE: 06.02.09 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

675.682-018 PLANER, STONE (stonework) alternate titles: planing-machine operator
Sets up and operates planing machine to shape, smooth, and square surface of stone blocks and slabs: Positions stone block on machine bed, using hoist, and secures it in place on bed with clamps (dogs). Measures and marks stone, using pattern, tape measure, and marking pencil. Installs and adjusts cutting tool in machine chuck, using wrench, and starts machine. Pulls levers and turns wheels to regulate cutting speed and depth of cut. Cuts specified design by hand in portion of stone that cannot be cut by machine, and smoothes edges of stone, using mallet, chisel, and file. May shape and sharpen cutting tools on grindstone according to specifications. May replace worn or broken parts, using handtools, and lubricate machine.
GOE: 06.02.08 STRENGTH: H GED: R3 M2 L2 SVP: 5 DLU: 77

676 BORING AND PUNCHING OCCUPATIONS

This group includes occupations concerned with piercing material by means of rotary cutting tools or rigid tools advanced into the material to make, enlarge, or thread holes.

676.382-010 DRILL-PRESS OPERATOR, PRINTED CIRCUIT BOARDS (electron. comp.)
Sets up and operates single- or multispindle drill press to bore holes in fiberglass boards used in production of printed circuit boards (PCB's): Studies drill drawing and product specifications to determine hole locations and dimensions, drill speed, and feed rate. Selects and installs bits in spindles, using handtools. Moves controls to set drill speed, feed rate, and depth of cut. Positions board(s) to be drilled over registration pins on machine bed. Views enlarged image of artwork on lighted scope to position and align single-spindle drill and board and depresses pedal or moves lever to operate drill press to bore holes. Positions template on registration pins under stylus of multispindle drill press and guides stylus that automatically depresses bit to activate drill press to bore holes. May operate single-spindle drill press to bore holes in metal template. May measure hole size, using micrometer gauge. May sand finished boards or template, using sander.
GOE: 06.02.02 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 86

676.462-010 ROUTER OPERATOR (stonework)
Sets up and operates multispindle routing machine to cut sink openings in sandstone countertops and tabletops and to drill holes in synthetic composition board: Reads blueprints to determine location and size of sink openings or holes to be cut. Installs specified router bit in 45- or 90-degree angle spindle chuck, using chuck key. Positions sandstone slab or composition board on machine bed and secures workpiece to bed, using C-clamps. Determines distance from edge of workpiece to opening and distance between holes, and pulls levers, turns handwheel, and presses buttons to position bridge and spindle and to start and lower router bit to drill holes in composition board or route out sink opening. Observes ammeter to determine cutting resistance and lifts lever to reduce speed of drill or movement of bridge or spindle. Turns dial to set automatic control that stops and raises router when specified depth in board has been reached. Removes clamps and pushes workpiece from machine bed. Examines and measures slabs and pegboards to determine adherence to specifications and sands edges of sink opening, using sandpaper. Maintains production records.
GOE: 06.02.08 STRENGTH: H GED: R3 M3 L3 SVP: 3 DLU: 77

676.682-010 DRILL OPERATOR, AUTOMATIC (glass products) alternate titles: driller, multiple spindle
Sets up and operates drilling machine, equipped with vertically opposed hollow drills, that drill holes in glass and mirrors: Reads work ticket to determine size, quantity, and placement of holes to be drilled. Selects specified diamond-tipped hollow drill bits and installs bits in upper and lower spindles, using wrench. Turns knob to adjust depth of bore and rate of ascent and descent at which drill bits enter glass. Measures and clamps guide rail and stops on drill table according to specifications. Turns valve to start flow of coolant and presses button to start electric motor. Positions glass or mirror against stops on drill table. Depresses pedal or presses button to start drilling cycle that automatically clamps glass, drills hole, and releases glass. Repositions glass and repeats drilling procedure until specified number of holes have been drilled. Inspects holes for chips or cracks and verifies placement of holes according to specifications, using ruler. Places mirror or glass on pallet.
GOE: 06.02.08 STRENGTH: H GED: R3 M2 L1 SVP: 4 DLU: 77

676.682-014 STONE DRILLER (stonework) alternate titles: driller
Operates drill to bore holes in blocks or slabs of granite, slate, marble, or sandstone, according to specifications: Places block of stone on machine bed and secures it in position for drilling, using electric hoist, wedges, and wooden blocks. Measures and marks block for drilling, using rule or template and marking pencil. Selects and installs specified bit in drill and starts machine. Pulls lever and turns wheels to regulate speed of machine, flow of water (coolant), and drilling speed. May drill holes in stone, using pneumatic hand drill. May sharpen drill bits, using grindstone. May be designated according to type of machine operated as: Drill Operator, Pneumatic (stonework); Radial-Drill Operator (stonework); or according to material drilled as Slate Cutter (stonework).
GOE: 06.02.08 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 77

676.685-010 DRILLER, BRAKE LINING (nonmet. min.)
Tends single or multispindle drill press that drills rivet holes in asbestos brake linings: Places specified brake lining into template, fastens lid to secure lining and positions template under drill. Depresses pedal to lower drill through holes in template and drill holes in lining. Examines lining to detect surface or drilling defects. Discards defective linings and notifies supervisor of faulty material or drill press malfunction. Maintains production records.
GOE: 06.04.08 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

676.685-014 DRILLER, MACHINE (glass products)
Tends single-spindle drilling machine that drills holes in glass products, such as panes, mirrors, picture glass, furniture tops, and ornamental glass: Positions pattern on glass and marks glass for drilling, or measures and marks glass, using ruler and crayon. Positions glass on felt-covered table beneath drill, starts drill, and pulls lever to lower drill against glass. Squirts coolant from can onto drill during boring. Raises drill, removes glass, and wipes glass clean with cloth. May sharpen bits, using diamond grinding wheel. May nail or clamp stops to table to hold glass in position.
GOE: 06.04.08 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

676.686-010 STONE-DRILLER HELPER (stonework)
Feeds and positions sandstone slabs on bed of drilling machine and off bears drilled slabs: Pushes sandstone slabs from roller conveyor onto bed of drilling machine and positions slab against edge stop or places slab into position as directed by STONE DRILLER (stonework). Installs specified size carbide or diamond core drill bits, using handtool. Washes stone chips from drilled slab, using water hose, and pushes slab onto roller conveyor. Knocks cores from core drilled holes, using hammer, and pushes slab along roller conveyor for further processing.
GOE: 06.04.08 STRENGTH: H GED: R1 M1 L1 SVP: 2 DLU: 77

676.686-014 DRILLER AND DEBURRER, REFLECTOR (light. fix.)
Feeds and unloads machine that heats and drills holes in light bulb reflectors for lead wires: Removes and places glass reflectors from cartons onto conveyor

that feeds drilling machine. Removes drilled reflectors from discharge conveyor and places reflectors in tray and carries reflectors to deburrer. Aligns and places reflector holes over deburrer bit that smooths edges of holes. Inspects reflector to ensure that holes conform to specifications. Places reflectors in carton for shipment.
GOE: 06.04.08 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 86

677 CHIPPING, CUTTING, SAWING, AND RELATED OCCUPATIONS

This group includes occupations concerned with shaping material by cutting away flakes or fragments with a hatchet or chisel-like cutting tool, utilizing a percussive power source, and otherwise removing excess material or separating materials with cutting tools.

677.131-010 GLASS-CUT-OFF SUPERVISOR (glass mfg.) alternate titles: supervisor, automatic cutting machines

Supervises and coordinates workers engaged in cutting flat or sheet glass to length from continuous ribbon of glass to facilitate handling or cutting glass to size on automatic or semiautomatic cutting machines: Reviews production schedules to determine cutting dimensions and cutting sequence. Measures length and width of cut glass to ensure cutters are spaced correctly. Gauges thickness of glass with micrometer to ensure that glass thickness is within specifications, and notifies glass drawing or rolling department of measurements. Examines glass for flaws, such as stones, blisters, or cracks, to ensure maintenance of standards. Examines equipment for malfunction and orders repairs, such as change of cutter heads. Performs other duties as described under SUPERVISOR (any industry) Master Title. May perform test runs to ensure cutting program on computerized cutting equipment is correct. May supervise workers packing glass in shipping containers.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

677.382-010 BATTING-MACHINE OPERATOR, INSULATION (nonmet. min.)

Sets up and operates machine to slit and cut *mineral wool blanket* into batting of specified dimensions and enclose them in paper covering: Installs and adjusts slitting saws, edge cutters, dividers, flange sealing rollers, and paper guide rollers, using rule, wrenches, screwdriver, and hammer, or by turning handwheels and moving levers. Positions paper rolls in upper and lower machine racks, using hoist. Tightens collars on shaft to secure rolls, using wrench. Starts machine and turns wheel to align rolls, and threads paper into feed rollers. Raises and lowers blanket feed table under master roller to control thickness of batting. Stops machine to remove substandard material and make adjustments to correct defects.
GOE: 06.02.09 STRENGTH: M GED: R3 M2 L3 SVP: 5 DLU: 77

677.382-014 SAWYER, OPTICAL GLASS (optical goods)

Operates diamond-studded saw to cut slabs of optical glass into various sizes and shapes for molding into or direct use as blanks for making lenses, prisms, mirrors, and other optical elements for precision instruments: Reads work order or receives oral instructions regarding glass to be cut. Refers to chart to determine size of pieces to be cut for weight specified. Inspects glass for defects, such as bubbles, cracks, or striae, and determines cutting method to obtain maximum number of blanks. Marks cutting lines on glass, using marking pencil. Positions stock on bed of saw and sets guides for depth and width of cut. Starts machine and saws glass following markings. Removes, weighs, and measures glass blank to ensure conformance to specifications. Examines blanks to be molded for chips and sharp edges and removes defects, using grinder. May remove excess stock from cut or molded blanks, using surface grinder.
GOE: 06.02.08 STRENGTH: L GED: R3 M2 L2 SVP: 7 DLU: 77

677.382-018 CRYSTAL SLICER (electron. comp.) alternate titles: crystal cutter; saw operator; wafer slicer

Operates precision saws to slice wafers from semiconductor crystal ingots, such as silicon or gallium arsenide: Attaches mounted crystal to holding fixture of automatic feed on saw, using clamps. Adjusts saw controls to set speed and angle of saw blade, thickness of cut, and angle of holding fixture. Operates saw to cut sample wafer from crystal ingot. Measures *crystal orientation* of sample wafer, using x-ray machine, and measures thickness of sample wafer, using calipers or thickness gauge. Inspects sample wafer for flaws, such as saw marks, chips, bow, and taper. Readjusts saw controls based on measurements and inspection. Starts saw and observes operation of saw to ensure wafers are sliced according to specifications. Removes sliced wafers from saw and cleans wafers in sink or ultrasonic cleaner. May mount crystal ingot to mounting block [CRYSTAL MOUNTER (electron. comp.) 677.687-014]. May be designated according to type of saw operated as V-Block Saw Operator (electron. comp.); Wire Saw Operator (electron. comp.).
GOE: 06.02.09 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 86

677.462-010 CIRCULAR SAWYER, STONE (stonework) alternate titles: cut-off-saw operator; rotary-saw operator

Sets up and operates diamond-or silicon carbide-toothed circular saw to cut blocks of stone into specified dimension: Builds bed of timbers on car preparatory to positioning stone on car. Levels stone on bed, using crowbar, wedges, blocks, rule, and spirit level. Marks dimensions on stone according to diagram, using rule, square, straightedge, and chalked string or crayon. Traces along marks on stone, using chisel and hammer. Turns crank or presses button to move car under saw frame. Presses buttons to align saw blade with line traced on stone and lower blade to stone. Starts saw and pushes lever to move rotating blade across surface of stone or move stone under blade. Turns valve to circulate water (coolant) or abrasive on blade during cutting. Presses button to lower blade in stone as depth of kerf increases. Inserts bar under stone and lifts it to split stone not severed by blade. Verifies width or thickness of slab, using rule. May set saw for automatic reciprocation. May change blades as depth of kerf increases, using wrench. May attach abrasive grinding wheel to arbor to grind grooves in stone. May set end-stops according to width of cut. May read ammeter to determine resistance against blade and turn crank to adjust blade pressure against stone. May saw products, such as asbestos-cement sheets and pipes or concrete slabs. May be designated according to material cut as Marble-Cutter Operator (stonework); Slate-Cutter Operator (stonework); or according to saw operated as Diamond-Saw Operator (stonework).
GOE: 06.02.08 STRENGTH: M GED: R3 M2 L1 SVP: 4 DLU: 77

677.462-014 WIRE SAWYER (stonework) alternate titles: finishing wire sawyer; single-wire-saw operator; wire-saw operator

Sets up and operates one or more wire saws to cut blocks of stone into specified dimensions: Threads cables through machine pulleys and solders ends of cable together, using silver solder and torch. Builds bed of timbers on car preparatory to positioning stone on car. Signals OVERHEAD CRANE OPERATOR (any industry) 921.663-010 or operates crane to position stone on bed of car. Starts winch that pulls car onto track under sawing cable. Levels stone on timber bed, using crowbar, wedges, blocks, rule, and spirit level. Marks dimensions on stone according to diagram, using rule, square, straightedge, and chalked line. Presses button to lower sawing cable onto stone and moves car to align cable with line marked on stone. Positions abrasive hose on stone, and starts saw and pump that circulate abrasive and water under moving cables that cut stone by dragging abrasive across stone. Observes operation to detect uneven sawing and exhausting supply of abrasive. Tightens pulleys to increase tension on cables to restore even sawing. Dumps abrasive in abrasive pit to maintain cutting speed. Verifies width or thickness of cut stone, using rule. Replaces worn cables. May cut sheet metal pattern of design to be sawed. May drill holes in stone and insert saw cable through hole, using portable drill. May operate vertically mounted wire saw to cut out designs in stone. May be designated according to type of saw operated as Contour Wire Sawyer (stonework); Multiple-Wire Sawyer (stonework).
GOE: 06.02.08 STRENGTH: H GED: R3 M2 L1 SVP: 5 DLU: 77

677.486-010 CIRCULAR-SAWYER HELPER (stonework)

Feeds and off bears diamond circular saw to assist operator to cut slate slabs: Removes slate slab from truck bed and positions slab on machine bed, using electric crane. Measures and marks dimensions on slab, as directed by saw operator, using tape measure and grease pencil. Raises slab from machine bed, using crowbar, and places blocks and wedges under slab to level and support stone during cutting process. Pushes turntable mounted on machine bed to align slab with cutting marks for preliminary cut and each succeeding cut. Examines cut edge of stone for defects, such as splits or fractures. Lifts cut slabs from machine, assisted by operator and places slabs onto pallet. Places waste stone in waste bin or stacks stone for splitting into flagstone. Washes stone chips and dust slabs and work area, using water hose.
GOE: 06.04.08 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

677.562-010 GLASS-CUTTING-MACHINE OPERATOR, AUTOMATIC (glass mfg.) alternate titles: finishing-machine operator, automatic; multicut-line operator

Sets up and operates automatic cutting machine that scores and breaks flat glass into standardized sections: Positions trip switches to adjust stroke of cutting bridges for longitudinal and latitudinal scoring of glass. Manually positions sets of cutter heads on bridge or sets controls that position them to score glass into specific dimensions. Turns controls to change height of bridges to adjust depth of scoring cut. Adjusts timing mechanism to synchronize breaker bar to snap glass at score. Starts automatic vacuum-cupped crane that lifts and transfers cut glass. Starts machine to verify setup and to make necessary adjustments. Measures cut glass with tape to verify dimensions and observes glass for irregular breaks and uneven edges. Removes and replaces worn cutter heads, using handtools. Maintains record of production, using counter. May review work order to determine cutting sequence. May direct workers who are members of cutting team. May operate single cut machine.
GOE: 06.02.08 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

677.665-010 GLASS-UNLOADING-EQUIPMENT TENDER (glass mfg.) alternate titles: cut-off-machine helper; cut-off-machine unloader

Tends automatic vacuum crane that removes *lites* of glass from cutoff machine conveyor: Turns valves to activate vacuum cups on crane that hold glass during unloading-stacking cycle, and starts crane. Inspects glass for spalls (rough edges) as glass passes on conveyor. Trims spalls from glass with glass-cutting wheel and notifies GLASS-CUTTING-MACHINE OPERATOR, AUTOMATIC (glass mfg.) of glass condition for correction. Stops crane cycle to allow passage of broken or defective glass from conveyor into cullet waste glass chute. Counts glass stacked on turntable, and pushes switch to move turntable to next loading station. May use spotlight to highlight defects in glass. May work as member of team. May load lites on automatic, multicutting machine to cut lites into sections, using automatic vacuum-cupped crane, and be designated Glass-Loading-Equipment Tender (glass mfg.).

GOE: 06.04.08 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

677.666-010 SPLITTING-MACHINE-OPERATOR HELPER (stonework)

Feeds and off bears splitting machine that cuts stone slabs for further processing: Signals OVERHEAD CRANE OPERATOR (any industry) 921.663-010 to lower sling, places sling around slab, and signals crane operator to lift and transport slab from layout area to conveyor of splitting machine. Pushes stone slab along roller conveyor onto machine work surface (turntable) and rotates slab to align cutting marks on stone with blade of machine, as directed by operator. Turns stone on work surface of machine for additional cuts. Pushes stone from splitting machine along roller conveyor to holding area. Picks up broken fragments of stone and places them into rubble container, and directs crane operator to lower sling to lift large pieces of rubble for deposit in container. Attaches crane hook to rubble container to facilitate removal to spoil pile. Works as member of team.

GOE: 06.04.08 STRENGTH: H GED: R1 M1 L1 SVP: 2 DLU: 77

677.682-010 HEAD-SAW OPERATOR, INSULATION BOARD (wood prod., nec)

Operates multiple-circular-saw machine that automatically cuts insulation board into panels: Installs and adjusts saws on shaft, using rule and handtools. Starts machine that automatically feeds boards from conveyor into saws. Measures sample panels for conformance to specified dimensions. Inspects cut edge for indications of dulled saw blades. Readjusts or replaces blades.

GOE: 06.02.03 STRENGTH: L GED: R3 M2 L1 SVP: 6 DLU: 77

677.682-014 REFRACTORY-GRINDER OPERATOR (brick & tile)

Operates machines to cut and grind refractory clay blocks to specified dimensions: Measures and scribes cutting lines on block, using ruler and scribe. Lifts block onto bed on cutoff grinder and secures block to bed with holding attachment, using handtools. Turns handwheels to position block under cutting blade. Starts machines that cut block along scribed lines and grind it to specified dimensions. Shapes unmachinable blocks, using chisels, hammers, and hand stones.

GOE: 06.02.08 STRENGTH: M GED: R2 M2 L1 SVP: 2 DLU: 77

677.682-018 SINK CUTTER (stonework)

Operates diamond or carbon silicate saw to cut drain grooves and sink openings in sandstone countertops and smooths and rounds sink openings, using portable sander, metal bar, and sandpaper. Pushes countertop from conveyor onto saw bed and positions top under saw blade. Turns valve to start flow of coolant onto saw blade and pulls trigger to start rotation of saw blade. Lowers saw to stone surface and tightens wing nut to maintain cutting level and pushes saw through slab to cut sink opening, following predrilled holes as guides. Turns slab on bed to cut remaining sides of sink opening. Installs abrasive blade on saw, using wrench, to cut drain grooves in specified slabs. Pushes stone slab into sanding booth and completes cutting of sink openings, using portable, diamond-bladed circular saw. Rounds and smooths sink edges, using portable disc sander, iron bar, and sandpaper.

GOE: 06.04.08 STRENGTH: V GED: R2 M1 L2 SVP: 3 DLU: 77

677.682-022 STONECUTTER, MACHINE (stonework) alternate titles: surfacer operator; surfacing-machine operator

Operates pneumatic surfacing machine to shape and surface stone for building or monumental purposes: Aligns stone with surfacing machine head as stone is lowered on timber or stone bed, and levels stone, using crowbar, hammer, blocks, wedges, and spirit level. Lays out dimensions on stone surface according to diagram, using rule, square, crayon, or chalked line. Chips off stone in excess of stone required for finishing, using hammer and chisels or bull-set (wedge-shaped hammer). Inserts surfacing chisels or bushhammer into surfacing head according to finish specified or task being performed. Turns crank to lower surfacing head onto stone. Turns compressed air valve to activate cutting tool and guides tool over stone surface, following marks on stone and diagram of finished product, to chip fragments from stone surface and work surface down to an even finish. Scans specifications and verifies progress of surfacing, using straightedge, rule, and square. Finishes curved or irregular surfaces, using pneumatic handtools.

GOE: 06.02.08 STRENGTH: M GED: R3 M2 L1 SVP: 6 DLU: 77

677.682-026 TENONER OPERATOR (wood prod., nec)

Sets up and operates machine to cut mortises and tenons in fibrous insulating board and acoustical tile: Installs and adjusts flange, bevel, tongue and groove cutters, holddown rolls, and lug guides, using handtools. Turns wheel to position and adjust width of feed chains to ensure depth and squareness of cuts. Starts machine and automatic feeding conveyor, and observes each phase of processing. Measures sample products for squareness and depth of cuts, using square and jigs.

GOE: 06.02.09 STRENGTH: L GED: R3 M2 L1 SVP: 4 DLU: 77

677.685-010 ABRASIVE SAWYER (nonmet. min.)

Tends machine equipped with circular diamond saw that cuts abrasive sticks and stones for honing machines: Places abrasive bricks (blocks) against guide and clamps bricks onto holding fixture of machine. Starts machine and flow of coolant. Presses button to start feed mechanism that moves brick against diamond saw to cut abrasive sticks of specified dimensions. Measures cut stick, using micrometer. Removes burrs from stick, using file made of same material. May tend diamond saw to trim crust from abrasive brick to expose material for hardness testing.

GOE: 06.04.08 STRENGTH: L GED: R2 M2 L1 SVP: 2 DLU: 77

677.685-014 ASSEMBLER, LAY-UPS (toy-sport equip.)

Tends machine, equipped with circular cutting blade, that assembles fiberglass mats of various weights and textures from rolls into stacks and cuts stacks (lay-ups) to specified length for use in manufacture of skis: Selects color-coded rolls and mounts them on feeder-rack spools in specified order, and threads mats between feed rollers to load machine. Pushes knife trigger-mechanism to designated mark to establish cutting intervals. Starts machine and observes emerging lay-ups to detect tears in cut edges. Lifts lever-control of stone that sharpens blade to restore clean-cutting action during machine operation. Lifts and carries cut lay-ups from off bearing table to storage. Replaces worn-out blade, using hex-wrench.

GOE: 06.04.08 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

677.685-018 CARBON CUTTER (elec. equip.)

Tends circular abrasive saw to cut carbon or graphite stock to specified size or bevel: Measures carbon or graphite stock, using rule or micrometers and marks line of cut with rule or scribe. Turns setscrews to adjust guides and stops, according to size of stock. Positions and clamps stock against guides. Starts machine and pushes stock along machine bed through cutting disk.

GOE: 06.02.08 STRENGTH: L GED: R3 M2 L1 SVP: 4 DLU: 77

677.685-022 CRAYON SAWYER (mine & quarry)

Performs any combination of following tasks to cut and shape talc blocks into crayons: Removes block from chute and positions block onto saw bed. Pushes block into saw blade to cut and square edge for slabbing. Feeds squared block onto rotating slotted grate that moves block through multiple blade saw that cuts block into slabs of specified width. Stacks slabs in holding fixture of machine equipped with pneumatic plunger that pushes slab through blades that cut slabs into crayons of specified size, or places slab against guide and pushes slab into saw blade to cut individual crayons from slab. Feeds square crayons into V-shaped groove on grinding machine and pushes crayon between grinding wheels that grind edges and round crayon. Dumps boxes of crayons into bins or chutes for grading.

GOE: 06.04.08 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

677.685-026 CUT-OFF-SAW OPERATOR, PIPE BLANKS (nonmet. min.)

Tends machine equipped with multiple abrasive blades that cuts asbestos-cement pipe into blanks in manufacture of pipe couplings: Adjusts and spaces abrasive blades to cut pipe to specified lengths, using wrench. Turns crank to set hydraulic lifters that automatically raise blades that cut pipe. Measures diameter of pipe, using tape measure, and turns handwheel to adjust position of pressure-drive roll according to diameter of pipe being cut. Loads pipe onto feed rack by hand, or using monorail hoist, and rolls pipe into position over cutting blades. Moves lever to lower pressure-drive roll that holds and rotates pipe during cutting process. Presses buttons to start machine that cuts pipe into blanks. Moves lever and pushes button to lift pressure-drive roll and withdraw cutting blades. Moves lever to extend pivoted metal shaft through blanks to lift and remove coupling blanks from machine. Inspects and measures blanks to verify conformity to specifications. Marks identifying information onto blanks, using stencil, paint, and brush, and stacks pipe on steam tray. Records production data.

GOE: 06.04.08 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

677.685-030 GLASS CUT-OFF TENDER (glass mfg.) alternate titles: cut-off tender, glass; window-glass cutter off

Tends automatic equipment that burns, scores, and breaks continuous sheet of glass into specific lengths: Turns controls on panel to synchronize cutting heads with rise of vertically drawn glass sheet to score glass into specific dimensions. Pushes or pulls sheet to cap off (break) glass along scored line, and trims knurled edges with glass cutter wheel. Stacks cut glass sheets on rack and throws cullet (waste glass) down chute. Replaces dull cutting wheels on automatic scoring equipment. Periodically measures cut glass length and adjusts cutting heads. May record number of sheets produced per hour. May use vacuum-cupped crane to break off or move cut glass. May work as member of team.

GOE: 06.04.08 STRENGTH: H GED: R2 M2 L2 SVP: 2 DLU: 77

677.685-034 SAMPLE SAWYER (brick & tile)

Tends machine equipped with circular abrasive saw that cuts face from production brick for use as displays or sales sample panels: Sets saw table guides to specified length and width, using machine measuring scale and wrench. Places brick against guides and tightens holding device, using wrench. Starts abrasive saw and pushes table under saw blade and depresses pedal to control depth of cut. Places discard portion of brick into wheelbarrow and stacks cutoff face sample on bench. Carries stack of face samples to next work station and wheels discarded brick to scrap pile. May tend saw that cuts clay sewer pipe to salvage usable pipe from defective pipe and be designated Ceramic Saw, Tender (brick & tile). May tend saw that cuts kiln furniture used to support clay products during firing process and be designated Kiln Furniture, Saw Tender (brick & tile).

GOE: 06.04.08 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 78

677.685-038 SAWYER II (nonmet. min.)

Tends circular saw, equipped with automatic reciprocating or manually operated table, that cuts strip asbestos brake lining into lengths: Positions and bolts

stop on table at length specified on work order, using rule and wrenches. Installs roll of lining on spindle and positions end of lining against stop. Pushes button to start machine and holds lining on machine table that automatically travels under saw blade, or pushes table under saw blade to cut lining. Examines cut lining for defects, such as breaks, cracks, or rough edges, and places acceptable lining on rack or on conveyor. Places defective pieces in discard pile. Records number of linings meeting specifications on work order. May tend battery of automatic saws.
GOE: 06.04.08 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

677.685-042 SPLITTER OPERATOR (stonework) alternate titles: jackhammer-splitter operator; stone splitter

Tends pneumatic chipping machine to split rough slabs of stone: Marks dimensions on stone, according to specifications, using rule and chalk. Lifts guide track onto stone and aligns track with marks on stone. Positions wagon over track, inserts chisel in chuck of airhammer, mounts airhammer on wagon, and lowers chisel into opening in guide track. Presses lever to start airhammer and pushes wagon and airhammer back and forth over guide track to split stone.
GOE: 05.12.13 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

677.685-046 SPLITTING-MACHINE OPERATOR (stonework) alternate titles: guillotine cutter

Tends hydraulic machine that cuts stone slabs for further processing: Reads work order to determine dimensions of stone to be cut. Sets end-stops according to dimensions of desired cut, measuring distance from blade with rule, or lays out dimensions on stone, using rule, straightedge, and chalk. Starts conveyor that moves stone over blade and against stops, or directs coworkers to push stone along roller conveyor into cutting position. Depresses pedal to raise turntable of conveyor containing stone slab, and rotates slab manually to align cutting mark with blades or to straighten stone against stops. Presses button to raise blade against stone and moves levers to lower wedges mounted on pressure head against stone. Turns lever or presses button to build up pressure in pressure head, observing gauge to determine when pressure is sufficient to cut stone. Pulls lever to force wedges against stone, splitting stone into specified dimensions. Lowers blade and end-stops, raises pressure head, and starts conveyor to remove stone. May tend machine that cuts granite blocks into paving-blocks (cobblestones) and be designated Paving-Block Cutter (stonework) I.
GOE: 06.04.08 STRENGTH: L GED: R3 M2 L1 SVP: 3 DLU: 77

677.685-050 STONE SPLITTER (concrete prod.) alternate titles: splitter

Tends machine to split concrete stone into building blocks resembling ashlar: Sets end stops according to length or width of cut, measuring distance from blade with rule. Positions block under blade and against stops. Depresses pedal to lower blade and split block. Depresses pedal to raise stops and pushes split blocks into storage hopper.
GOE: 06.04.08 STRENGTH: L GED: R2 M2 L1 SVP: 2 DLU: 77

677.685-054 SAW OPERATOR (brick & tile)

Tends saw that cuts ceramic kiln furniture, such as posts and slabs to specified size: Reads work order to determine size according to customer specifications. Measures product, using tape measure, and marks cutting line with pencil. Positions kiln furniture on worktable and aligns cutting line with saw blade. Pulls switch to activate saw and pushes product against saw blade along cutting line. Stacks cut kiln furniture on storage pallet.
GOE: 06.04.08 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 86

677.686-010 SAWYER I (nonmet. min.)

Feeds machine that automatically cuts and trims asbestos tubes used to insulate pipe: Places tube on feed bed of circular saws that cut tube wall longitudinally and trim tube ends to specified length. Observes feed of tubes through saws and inspects tube for clean cut. Adjusts blades for specified depth and space cut, using wrench.
GOE: 06.04.09 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

677.686-014 GLASS-CUTTING-MACHINE FEEDER (glass products) alternate titles: statler operator

Feeds sheet glass into machine that scores and cuts glass to specified size: Positions glass onto feed rollers and against guides to align glass with cutters. Pushes glass into feed end of machine that conveys glass under cutters and cuts glass to specified size.
GOE: 06.04.08 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 86

677.687-010 LOG ROLLER (saw. & plan.) alternate titles: log handler

Performs any combination of following tasks to transfer logs and peeler blocks (logs cut to lathe length) from pond, trucks, or conveyor to log deck, barken deck, or lathe deck: Rolls logs from trucks or conveyor to deck, using peavy, or transfers peeler blocks from pond to barken deck, using electric hoist and conveyor. Arranges logs on deck for feeding logs to saws or positions blocks at lathe or barken deck, using conveyor. Marks center of blocks for lathe chucks, using scale. May attach hoist hooks to blocks and position block between lathe chucks. May move levers to activate mechanism that kicks logs from conveyor to deck. May use ax or pick to remove undesirable material from bark, such as stones or nails.
GOE: 06.04.40 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

677.687-014 CRYSTAL MOUNTER (electron. comp.)

Mounts crystal ingot onto mounting block of crystal saw preparatory to slicing semiconductor wafers from ingot: Sorts semiconductor crystal ingots according to size and *crystal orientation*. Mixes resin and hardening agent to form epoxy adhesive and spreads adhesive on graphite backing, using putty knife. Attaches crystal ingot(s) to adhesive and backing. Mounts crystal ingot attached to graphite backing onto mounting block of crystal saw, using epoxy adhesive. May mount crystal ingot directly onto mounting block, using epoxy as backing and adhesive. May mount crystal ingot to backing and mounting block, using wax.
GOE: 06.04.34 STRENGTH: H GED: R2 M2 L1 SVP: 2 DLU: 86

679 OCCUPATIONS IN MACHINING STONE, CLAY, GLASS, AND RELATED MATERIALS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with shaping materials or products by removing excess material from stock or objects.

679.130-010 SUPERVISOR (stonework)

Supervises and coordinates activities of workers engaged in sawing, planing, grinding, drilling, sandblasting, polishing, finishing, storing, crating, and loading stone used as monuments, stone products, or in building construction. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.01 STRENGTH: M GED: R4 M3 L4 SVP: 7 DLU: 77

679.130-014 SUPERVISOR, ASBESTOS PIPE (nonmet. min.)

Supervises and coordinates activities of workers engaged in testing, facing, boring, cutting, and grinding asbestos-cement pipe: Directs and assists subordinates in machine setup to ensure conformance of product to specifications. Trains new workers in setup and operation of plant machinery and equipment. Performs duties as described under SUPERVISOR (any industry) Master Title. May supervise workers engaged in fabricating specially designed shapes, such as elbows, bends, Y's, junctions, and S-curves, and be designated Supervisor, Molding (nonmet. min.).
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L2 SVP: 7 DLU: 77

679.130-018 SUPERVISOR, ASBESTOS-CEMENT SHEET (nonmet. min.)

Supervises and coordinates activities of workers engaged in machining and fabricating asbestos-cement sheet products: Inspects and measures products in process of fabrication to ensure conformance to specifications, using rules, templates, and straightedge. Demonstrates methods and procedures for setting up, operating, and adjusting controls of machines to obtain specified operational performance. Trains new workers in work procedures and machine operation. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

679.137-010 SUPERVISOR, FINISHING DEPARTMENT (nonmet. min.)

Supervises and coordinates activities of workers engaged in cutting, finishing, wrapping, and packing pipe and boiler covering moldings. Trains new workers. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 77

679.137-014 SUPERVISOR, MIRROR FABRICATION (glass products)

Supervises and coordinates activities of workers engaged in beveling, edging, and drilling holes in flat glass or mirrors: Analyzes production orders and assigns duties to workers, using knowledge of capacities of machines and equipment. Confers with other supervisors to coordinate interdepartmental activities. Observes fabrication of glass and mirrors for quality, and measures glass or mirrors to ensure accuracy of dimensions, using measuring tape. Directs workers to adjust machinery when quality or dimensions of glass or mirrors vary from company standards or customer specifications. Prepares requests for machinery repairs and requisitions supplies for department. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R4 M2 L2 SVP: 7 DLU: 77

679.362-010 CRYSTAL MACHINING COORDINATOR (electron. comp.) alternate titles: machine operator technician

Leads workers engaged in grinding, sawing, flatting, and inspecting crystal ingots used in semiconductor wafer manufacturing under direction of SUPERVISOR, ELECTRONICS PROCESSING (electron. comp.) 590.130-010: Discusses production objectives, work priorities, and workflow progress with SUPERVISOR, ELECTRONICS PROCESSING (electron. comp.). Reviews daily production logs, inventories ingots in each production stage, and assigns tasks to workers according to priorities. Trains new workers in equipment operation, company procedures, and safety practices and observes workers to ensure compliance with rules and policies. Occasionally operates grinding and sawing machines. Inspects crystal ingots for machining defects and machine malfunctions. Performs minor repairs and maintenance on grinding and sawing machines.
GOE: 06.02.09 STRENGTH: H GED: R3 M3 L3 SVP: 6 DLU: 86

679.384-010 SEED CORE OPERATOR (electron. comp.)

Performs following duties to produce seed cores from silicon crystal ingots for use in crystal growing process: Tends saw that cuts ingot into specified lengths. Determines *crystal orientation* of ingot sections, using x-ray equipment, and draws orientation lines on ingot. Positions ingot sections on chuck of drill according to crystal orientation and activates drill that automatically removes seed core from ingot. Grinds seed core to smooth rough edges, using sanding machine, and x rays and marks seed core to indicate crystal orientation. Tends machine that cuts groove in seed core. Cleans seed core to remove contami-

nants, using ultrasonic and etching equipment. Wraps finished crystal in protective paper. Records production information.
GOE: 06.02.09 STRENGTH: M GED: R3 M3 L2 SVP: 5 DLU: 86

679.567-010 STONE GRADER (mine & quarry) alternate titles: measurer
Inspects quarried stone for size and quality, and classifies stone according to standard schedule. Measures dimensions of stone, using rule. Marks measurements and quality classification on stone with chalk. Maintains production record.
GOE: 06.03.02 STRENGTH: L GED: R2 M2 L2 SVP: 4 DLU: 77

679.664-010 BED SETTER (stonework) alternate titles: banker; lumper; setter; stone banker
Aligns dimension stone on bed of timbers preparatory to grinding, polishing, sawing, or chipping: Builds bed of timbers on flatcar or bed of machine. Signals OVERHEAD CRANE OPERATOR (any industry) 921.663-010 to lower stone and guides stone onto timber bed, aligning stone with arm of polishing machine, surfacing machine, or saw. Determines when stone is level, using straightedge and spirit level. Signals crane operator to lift stone, or pries up stone with crowbar and levels stone by inserting or hammering wedges and blocks between stone and timbers. May assist crane operator to position grinding or polishing wheel on stone. May measure and mark blocks for cutting, using rule, straightedge, and crayon. May spread abrasive material over surface of stone. May shovel abrasive material from mill into storage hopper after grinding and polishing processes.
GOE: 05.12.12 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

679.665-010 LEVEL-GLASS-FORMING-MACHINE OPERATOR (cutlery-hrdwr.)
Tends battery of automatic machines that flame-cut and form vials for level from glass tubing: Inserts tubing in holder to feed machine. Replenishes tubing and replaces fill catch boxes. Examines formed glasses for defects, such as unclosed bottoms, elongated tops or misshapen vials, and notifies machine adjuster of machine malfunctioning. Removes formed glasses to workbench and files points from glasses to leave opening for filling, using half-round file.
GOE: 06.04.08 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

679.682-010 BANDING-MACHINE OPERATOR (pottery & porc.) alternate titles: gold bander, striper
Sets up and operates machine that applies bands of gold, platinum, or color glaze onto rim or surfaces of ceramic ware: Selects chuck to accommodate type of ware to be banded and attaches it to machine. Adjusts band applicator rollers and arm attachments according to width and location of band to be applied on ware. Pours premixed liquid gold or platinum into roller fonts. Positions ware in chuck and starts machine. Removes ware from machine.
GOE: 06.02.08 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

679.685-010 MACHINE OPERATOR, CERAMICS (pottery & porc.)
Tends preset automatic, semiautomatic, and manually operated machines to drill, mill, grind, saw, top, head, cut, thread, turn, or groove green technical ceramic pieces for electronic, mechanical, industrial, and other uses: Places pieces on feeder of machines that are preset and automatic. Places pieces in jig or chuck and starts semiautomatic machine. Positions pieces in front of bit or tap, moves piece around for boring, drilling, or tapping operations, and removes piece when machining manually. Inspects piece for defects, such as cracks and chips. Gauges piece on snap gauge or go-not-go gauge and discards defective pieces. Cleans pieces, using airhose and rotating brush. Stacks pieces on tray or handtruck and trucks lot to storage shelves. Records number of machined pieces for production purposes.
GOE: 06.04.08 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

679.685-014 PRODUCTION-MACHINE TENDER, GLASS CUTTING-OR-GRINDING (electron. comp.; glass mfg.)
Tends automatic machines that cut, grind, or polish glass products, such as glass tubes or glassware: Reads work orders to determine product specifications. Loads product onto machine holding and feeding devices, and starts machine that cuts, grinds, or polishes glass products. Monitors machine operation to detect malfunctions. Visually inspects parts for defects, such as cracks and chips. Removes finished product from machine after completion of cycle. May replace worn cutters or grinding and polishing wheels, using handtools. May adjust cutter spacing and fixtures to cut tubes to specified lengths. May manually grind, buff, or polish glass surfaces. May pack product for shipping. May clean machine and work area.
GOE: 06.04.08 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 89

679.685-018 THERMAL-SURFACING-MACHINE OPERATOR (stonework)
Tends machine that applies heat to surface of granite slab, causing surface of granite to flake and chip to impart pebbled texture to face of stone: Positions torch carriage over granite slab on roller-conveyor bed of machine. Turns thumbscrews to adjust trip switches on bridge of machine to set reciprocation limits of torch carriage. Turns knob to start flow of gas to torch and ignites gas. Turns knob to start flow of oxygen to torch and adjust gas-and-oxygen mixture to obtain specified flame. Turns knob to start spray of water to cool stone ahead of and behind flame. Presses button to start torch reciprocating over stone. Observes machine in operation to determine that texture of stone surface is pebbled uniformly. Observes gauges and lights on panel to detect faulty supply of gas, oxygen, water, or compressed air and turns knobs or presses buttons to make adjustments.
GOE: 05.12.10 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

679.685-022 TILE GRINDER (brick & tile)
Tends machine that grinds sides of ceramic wall or floor tile to specified size and squares tile preparatory to shipment: Turns crank to adjust spacing between opposed grinding wheels, according to specifications. Starts machine and places ceramic tile into feed device of machine or moves lever to grip and feed tile between grinding wheels. Periodically measures tile to determine conformance to specifications, using rule. Places tile onto bench for packaging.
GOE: 06.04.08 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

679.685-026 TURNING-AND-BEADING-MACHINE OPERATOR (button & notion)
Tends series of milling machines to machine crochet needles from bone blanks: Inserts end of blank into chuck of machine. Starts machine, and pushes lever to feed blank along milling cutter to turn it to cylindrical shape. Repeats operation on other machines to form ornamental handle and to cut hook in end of needle. Regulates speed of feed of blank to cutters, according to resistance felt in lever, to avoid burning or breaking blank.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

679.686-010 ASBESTOS-SHINGLE SHEARING-MACHINE OPERATOR (nonmet. min.) alternate titles: cutter operator, asbestos shingle
Feeds asbestos boards into hopper of power shearing and punching machine that cuts boards into shingles and punches holes in each shingle for installation.
GOE: 06.04.08 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

679.687-010 ASBESTOS-SHINGLE INSPECTOR (nonmet. min.)
Inspects asbestos shingles for defects, such as cracks, broken edges, and irregularly punched holes: Scrutinizes shingles to detect defects as they move on conveyor. Removes shingles that fail to meet plant specifications and sorts shingles according to standards for various grades.
GOE: 06.03.02 STRENGTH: S GED: R2 M1 L2 SVP: 3 DLU: 77

68 TEXTILE OCCUPATIONS

This division includes occupations concerned with shaping, joining, spinning, weaving, and otherwise fabricating textiles, textile products, fur, and hair.

680 CARDING, COMBING, DRAWING, AND RELATED OCCUPATIONS

This group includes occupations concerned with opening, separating, paralleling, and intermingling fibers; condensing, doubling, and lengthening them into a continuous, untwisted strand, and crimping fibers and strands.

680.130-010 SUPERVISOR, CARDING (textile)
Supervises and coordinates activities of workers engaged in processing natural and synthetic raw stock into lap sliver and roving for use in yarn spinning, utilizing knowledge of fiber-processing machines: Verifies setup and adjustment of such machines as carding machines and drawing frames, using gauges and handtools. Examines raw stock in storage to determine that specified fibers are available for processing. Inspects products through processing stages to maintain specified standards. Trains workers in operation of machines and equipment and evaluates worker performances. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to process supervised as Supervisor, Drawing (textile); Supervisor, Opening And Picking (textile); Supervisor, Roving (textile).
GOE: 06.02.01 STRENGTH: M GED: R4 M3 L4 SVP: 7 DLU: 78

680.130-014 SUPERVISOR, MIXING (textile)
Supervises and coordinates activities of workers engaged in blending synthetic fibers and other raw stock for use in yarn preparation: Selects or prepares batch sheets for specified fiber blend, using customer specifications, and directs workers to assemble batches for processing. Inspects machines for malfunctions and directs setup and repair of faulty machines and equipment. Trains workers in operations, such as sorting, weighing, mixing, garnetting, and baling raw stock. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

680.135-010 SUPERVISOR, MIXING (tex. prod., nec)
Supervises and coordinates activities of workers engaged in mixing hair for use in producing felt products: Trains workers in operation of machines and in procedures relating to hair types and amounts to be processed. Requisitions materials. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.04.01 STRENGTH: H GED: R4 M2 L3 SVP: 5 DLU: 77

680.367-010 ROVING SIZER (textile)
Weighs roving samples to detect variation in weight produced by tape condensers of woolen carding machines: Positions jackspool of roving in winding position and threads roving ends from spool through guides and takeup roller. Sets yardage counter at specified yardage and turns crank to wind sample of roving. Weighs sample on grain scales and records weight on chart. Plots weight of each end of roving produced by single carding machine on graph paper and compares graph with standard graph to isolate variations in roving. Reports variations from standards to MACHINE FIXER (textile).

GOE: 06.03.01 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 77

680.380-010 CARD GRINDER (nonmet. min.; textile) alternate titles: card fixer; card setter

Grinds wire teeth on drums and flats of carding machines to uniform height, and sets up machines according to specifications and fiber processing standards: Removes fibers adhering to wire teeth of cylinder and doffing drums, using card stripper. Removes belts and disengages gears not needed for grinding operation. Lifts grinding rollers onto brackets above flats and carding and doffing cylinders of machine. Places drive belt between carding machine drive mechanism and grinder rolls, and starts machine. Turns setscrews and listens to sound of grinder to regulate pressure of grinding roller on teeth of drum. Examines and feels teeth to verify that grinding meets specifications. Removes grinding rolls, and brushes emery dust from teeth of cylinder. Adjusts clearances between card rolls and flats to set up machine, using leaf, flat, and pin gauges, and listens for contact of surfaces. Replaces defective parts, using handtools. Cleans and oils machines. May replace worn cloth on cylinders of carding machine [CARD CLOTHIER (textile) 628.381-010]. May remove carding drum and grind drum on separate machine. May direct CARD TENDER (nonmet. min.; textile) 680.685-018 and other cardroom employees in setting up grinding equipment. May be designated according to machine repaired as Napper Grinder (textile).
GOE: 06.01.02 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 78

680.585-010 BATTING-MACHINE OPERATOR (tex. prod., nec; textile)

Tends machine that converts loose textile fibers into batting: Throws or dumps fibers into hopper of machine or moves lever to control automatic feeding by conveyor belt. Lifts roll of finished batting from machine and starts new roll winding onto takeup beam. Weighs and records weight of sample from each roll. Moves weight on lever to control amount of fiber fed into machine and weight of batting produced. May tend picking machine to open and fluff fiber. May cut batting into specified lengths with scissors and roll lengths into bundles. May wrap and pack bundles of batting.
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

680.585-014 STAPLE-PROCESSING-MACHINE OPERATOR (textile) alternate titles: attenuator

Tends machines that stretch tow, break tow into staple lengths, and crimp resulting sliver: Ties rope of filaments to filaments in machine or threads rope through guides and tension rollers, heating plates, breaking rollers, and crimping device and into receiving can. Observes operation of machines to detect fibers wrapping around rollers and cuts away tangled fibers. Adjusts yardage clock to stop machine when specified amount of fiber is in receiving can. Records production data, and writes identification tickets for cans of sliver. May tend machine that sets crimp in fiber [CRIMP SETTER (textile)].
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

680.665-014 DRAW-MACHINE OPERATOR (plastic-synth.)

Tends machines that draw out (stretch) continuous synthetic fiber filaments to impart strength and flexibility and combine filaments into tow: Positions can of filaments at machine, places bobbins of filament on spindle and threads filament through rolls, pins, traveler, and onto takeup bobbin or into can, or threads filament directly from spinning machine. Opens valve to admit steam to heat rolls. Inspects tow for conformance to standards. Doffs machine when bobbins or cans are full or when knots, breaks, or tangles occur in filament. May tend tandem units that crimp and dry tow preparatory to cutting tow into staple lengths.
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

680.665-018 MIDDLE-CARD TENDER (nonmet. min.; textile) alternate titles: alley tender; intermediate-card tender

Tends intermediate carding machines that open, clean, mix, and straighten wool, asbestos, or synthetic fibers and deliver carded stock to finisher card: Patrols area between breaker and finisher cards and observes intermediate carding to detect clogged rollers and breaks in carded web (thin, web-like film of fibers). Stops machine, removes fiber from clogged rollers, and *pieces up* broken web by rolling and twisting fibers between fingers. Signals FINISHER-CARD TENDER (nonmet. min.; textile) to restart carding machines. Oils machine. Cleans machine, using airhose and rake.
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

680.684-010 CARD GRINDER HELPER (textile)

Assists CARD GRINDER (nonmet. min.; textile) 680.380-010 in setting up and repairing cotton and synthetic fiber carding machines and picking machines: Cleans machines of waste and excess fibers from previous run, using airhose. Inspects machines and machine parts to detect wearing of or damage to parts. Replaces defective parts, such as rollers, belts and gears, using handtools. Adjusts clearance between carding and doffing cylinder and between flats, using leaf, flat, and pen gauges, and listening for contact of surfaces. Adjusts machine parts, such as prefeeders, evenfeeders, and levers, to regulate speed of machine, flow of fiber, and length of lap. Grinds wire teeth of flats and carding and doffing cylinders, using grinding device. Inspects teeth to verify grinding meets specifications. Lubricates wearing surfaces of machine, using oilcan.
GOE: 06.01.02 STRENGTH: V GED: R2 M2 L2 SVP: 3 DLU: 86

680.685-010 BLENDING-MACHINE OPERATOR (textile)

Tends machines that mix textile fibers into uniform blends: Sets sliding counterbalances into position on scale beams of automatic feeders to regulate weight of fiber deposited on conveyor, following lot sheet instructions. Opens chute to feed fibers into machine or deposits armfuls of various types of fiber into hoppers of appropriate feeders, according to blending instructions. Starts machines and observes flow of fiber through mixing picker machines to detect clogged rollers. Stops machines and unclogs rollers by hand. Cleans machines after each lot, using airhose. May mix oil lubricant. May turn valve to regulate flow of oil lubricant onto fiber, according to type of fibers being blended. May tend machines that mix colored wool fibers and be designated Gray Mixing Operator (tex. prod., nec); White Mixing Operator (tex. prod., nec).
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 79

680.685-014 CARD STRIPPER (textile)

Tends equipment that removes (strips) accumulated cotton fibers adhering to wire teeth of carding and doffing drums, using any of following methods: (1) Positions stripping roller in brackets of carding machine so that wire teeth of roller project between wire teeth of carding cylinder. Starts machine, allowing stripping roller to revolve rapidly and remove fiber from slowly revolving card cylinder. May use stripping roll hood and suction pipe leading to handtruck to dispose of dust and lint (dustless stripping). (2) Moves lever to position built-in stripping roll so that wire teeth contact teeth of cylinder. Opens suction line to draw away lint collected by roll. (3) Places stripper nozzles of vacuum stripper attachment at side of carding cylinder and doffing drum. Starts machine to move stripper across cylinder, drawing dust into nozzle. May tend carding machines [CARD TENDER (nonmet. min.; textile)]. May assist in grinding card rolls.
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

680.685-018 CARD TENDER (nonmet. min.; textile) alternate titles: alley tender; card hand; card operator

Tends carding machines that open, clean, and align cotton, asbestos, or other fibers, and convert *laps II* of fibers into sliver: Feeds loose fibers onto feeder apron or into hopper of machine, or mounts lap of fiber on bracket at feed end of machine and threads end of lap through feeder rollers or attaches end to lap in machine by pinching ends together with fingers. Patrols work area and observes machine operation to detect exhausting fiber or lap supply, machine malfunctions, sliver or lap breaks, and full cans of sliver at discharge end of machine. *Pieces up* broken sliver by rolling and twisting ends with fingers. Cleans machine, using brush, waste, and airhose. Replaces full cans of sliver with empty cans. May oil machine. May truck laps from picker room and hang laps on stands of machines. May tend machines that produce sliver from raw stock. May strip cards [CARD STRIPPER (textile) 680.685-014].
GOE: 06.04.09 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 79

680.685-022 CHOPPED-STRAND OPERATOR (textile)

Tends machine that cuts strands of fiberglass sliver into staple lengths: Pulls ends of sliver from creel and feeds sliver into feed rollers of cutter. Observes staple lengths falling from cutters into container on scales to detect defects, such as dirty strands and flared ends. Removes shipping containers from scales as specified weight is attained and seals container with gummed tape. Pastes label on shipping container and places container on pallet. Records weight on production records.
GOE: 06.04.08 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

680.685-026 CRIMP SETTER (textile) alternate titles: steam setter

Tends steam-heated machine that sets crimp in synthetic fibers used in high-bulk yarns: Lifts cans of sliver onto loading track of machine, by hand or using hoist. Starts machine that automatically loads, steams, vacuum dries, and unloads sliver. Removes cans of sliver from track on delivery side of machine. Feels sliver to determine if moisture has been removed. Inserts thermometer in can of sliver periodically to verify that fiber is being heated to specified temperature.
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

680.685-030 CRIMPING-MACHINE OPERATOR (textile)

Tends machine that crimps synthetic fibers to increase bulk and resiliency and to facilitate blending with natural fibers: Turns valves to regulate heat and to control pressure of feed rollers and V-shaped stuffing box according to specifications. Starts machine and feeds sliver between rollers that force fibers through stuffing box where they are compressed and discharges crimped fibers into receiving cans. Observes machine and emerging sliver to detect substandard crimping and adjusts steam heat and pressure of feed rollers and stuffing box accordingly. Doffs and replaces full receiving cans.
GOE: 06.04.09 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

680.685-034 DRAW-FRAME TENDER (tex. prod., nec) alternate titles: combing-machine tender

Tends one or more machines that comb, draw, and align sisal and hemp fibers into sliver preparatory to spinning into yarn used in production of rope or twine: Pulls specified number of fiber coils under feed tray of machine, using hook. Places ends of fibers on feed tray and into combing teeth. Starts machine and observes feeding, combing, and coiling operations to ensure that fibers are correctly straightened and blended to form sliver. Pulls coil of sliver from beneath coiling head and slides it to next machine. May weigh and segregate coils according to type and grade.
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

680.685-038 DRAWING-FRAME TENDER (textile) alternate titles: drawer; drawing tender

Tends drawing frames that combine several strands of sliver into one strand, distributing weight uniformly, and arranging fibers in parallel order: Pulls cans

of sliver to creeling position. Threads end of sliver through guides, stop-motion device, drawing rollers, condenser, and *coiler head*, and into revolving can, or attaches sliver to preceding end by overlapping and twisting ends with fingers. Presses button to start machines, and patrols machines to observe flow of sliver and signal lights indicating machine stoppage caused by sliver break. Repairs breaks in sliver by matting and rolling broken ends together between thumb and fingers. Replaces filled cans of sliver from coiler head with empty cans. Notifies repair personnel of machine malfunctions. Cleans rollers with airhose. May oil machine.
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 78

680.685-042 FINISHER-CARD TENDER (nonmet. min.; textile)

Tends finisher carding machine with tape condenser that cleans and straightens wool, asbestos, or synthetic fibers, and condenses fiber into roving. Observes carding and condensing to detect clogged rollers and breaks in roving ends. Laps broken roving ends over spool to resume winding. Removes broken roving ends that have wound on other than specified spools, using fingers. Doffs full spools of roving, places empty spool in winding position, and wraps roving ends around empty spool to continue winding process. Removes fibers from clogged rollers by hand. Cleans machine, using airhose and rake, and oils moving parts. May feed machine by hand when carding asbestos fiber.
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

680.685-046 FUR-BLOWER OPERATOR (hat & cap) alternate titles: blower; fur blower; fur-blowing-machine attendant; fur-blowing-machine operator; fur mixer

Tends machine that cleans and disentangles fur fibers used in making felt hats. Dumps fur into hopper of machine. Starts machine that forces fibers through sections (chambers) containing air blowers and toothed rollers that clean and disentangle fibers. Feels and examines fibers to determine conformance to quality standards and to detect presence of debris, such as sawdust and particles of pelt, requiring additional passes through machine. Cleans machine and removes debris, using brush, shovel, and compressed-air hose. May weigh and bag specified amounts of fibers. May be designated according to number of sections in fur-blowing unit as Eight-Section Blower (hat & cap); Six-Section Blower (hat & cap).
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

680.685-050 GARNETT-MACHINE OPERATOR (textile) alternate titles: carder; devil tender; garnetter; garnetting-machine operator; linting-machine operator; waste-machine operator

Tends machine that reduces rags and yarn waste to fiber for reuse. Feeds armfuls of waste into hopper of automatic feeder or opens and closes gates of blower pipes or conveyors when waste feeds from other machines. Starts machine and wraps end of garnetted web around takeup roller to form *lap II* or threads end of condensed web through *coiler head* to form sliver. Observes garnetting to detect clogged rollers or breaks in web. *Pieces up* breaks in web and disentangles clogged rollers by hand. Doffs laps or cans of garnetted material from delivery end of machine. Weighs laps or cans of material and records weight on production records. May tend *garnett machine* equipped with pneumatic conveyors that blow stock into storage bins or subsequent machine hoppers. May tend picking machine [PICKING-MACHINE OPERATOR (any industry)] in tandem with garnett machine.
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

680.685-054 GARNETTER (furniture; tex. prod., nec) alternate titles: felter; felting-machine operator

Tends machine that garnetts waste yarn and fibers and compresses garnetted fibers into rolls of felt, batting, or padding. Moves weight on lever of automatic feeder to control amount of waste material fed into machine and weight of product produced. Spaces knives on either side of delivery end of machine according to width specified for rolls. Turns handwheel to increase or decrease space between compressor roller according to thickness specified for product. Threads end of garnetted material through folding device that spreads layers of material on delivery table preparatory to winding web into rolls.
GOE: 06.04.06 STRENGTH: M GED: R3 M1 L2 SVP: 3 DLU: 77

680.685-058 GILL-BOX TENDER (textile) alternate titles: card-gill tender; gill tender; pin-drafting-machine operator; pin-machine tender

Tends machine that draws out and combines wool, synthetic, or blended sliver and aligns fibers preparatory to further processing. Places balls of sliver on holders or positions cans of sliver at feeding end of machine. Threads sliver through guides, gathering eye, rollers, and under *fallers*. Starts machine and guides sliver into receiving can, or wraps end around spindle that winds it into ball. Observes operation of machine to detect breaks and *pieces up* ends together by hand. Replaces exhausted supply cans or balls of sliver. Doffs can or balls of processed sliver. May weigh cans or balls of sliver and record weight. May weigh sample of sliver to determine quality of sliver produced by machine.
GOE: 06.04.06 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

680.685-062 MIXER (hat & cap) alternate titles: blender; devil tender; fur-mixer operator; mixing-machine operator

Tends machine that separates matted fur fibers and blends fibers for use in felt hats. Selects fibers according to quality, type, and weight specifications. Dumps fibers into hopper of machine. Starts machine that forces fibers against teeth of cylinders (picker rollers), that separate matted fibers, and into air-blending chamber that mixes fibers. Removes blended fibers from machine and places fibers in bags or boxes. Cleans machine, using brush, broom, and airhose. Lubricates machine, using oilcan and grease gun. May sort and weigh waste. May be designated according to type of machine tended as Conical Mixer (hat & cap); Cylindrical Mixer (hat & cap).
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

680.685-066 MIXING-MACHINE OPERATOR (fabrication, nec) alternate titles: blending-machine operator

Tends machine that cleans, straightens, and blends brush-filling materials, such as horsehair, nylon, vegetable fibers, and plastic filaments. Loosens wingnuts and adjusts conveyor guides to accommodate length of materials to be processed. Removes materials from container according to predetermined sequence and places them on machine conveyor with flag (split) ends together. Moves lever to set specified speed of machine cycle. Starts machine and observes material until blending conforms with prescribed standards. Removes and packs or wraps blended material. Cleans machine, using airhose. May apply antistatic lubricant to material, using brush.
GOE: 06.04.09 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

680.685-070 OPENER TENDER (textile) alternate titles: bale-breaker operator; breaker operator; opening-machine tender; stock blender

Tends series of machines in tandem that open, clean, fluff, and mix compressed cotton or synthetic fibers preparatory to picking process. Starts machines and feeds layers of fibers from several bales into machine hoppers to produce uniform blend. Observes processing of fibers and signal lights to detect clogged beaters. Stops machines and pulls fibers from clogged beaters. Cleans and oils machines. May weigh fibers preparatory to feeding machines.
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

680.685-074 PICKER TENDER (textile) alternate titles: picker

Tends battery of picker machines that break up and clean cotton or synthetic fibers, form them into *lap II*, and wind lap into rolls. Starts machine and pulls cord to open gate of hopper through which cotton tufts feed onto conveyor of machine or hand feeds cotton tufts onto conveyor. Moves levers to regulate weight, length of lap, and speed of machine. Observes and regulates speed of conveyor as conveyor feeds machine to prevent jamming. Inserts metal bar in lap arbor of automatic winding mechanism that winds and ejects lap rolls of specified size. Turns end of lap around lap forming bar by hand, when necessary. Lifts roll of lap from machine, weighs roll of lap, records weight, places roll on portable rack, and removes pin around which lap was wound. Marks lap to identify fiber type, using specified chalk. Cleans and oils machine. May tend machines that open, clean, fluff, and mix cotton or synthetic fibers prior to picking process [OPENER TENDER (textile) 680.685-070].
GOE: 06.04.06 STRENGTH: H GED: R2 M1 L2 SVP: 3 DLU: 78

680.685-078 PICKER-MACHINE OPERATOR (furniture) alternate titles: gin feeder; wooling-machine operator

Tends machine that fluffs and cleans new and used materials, such as cotton, kapok, and sisal used in pads, cushions, and mattresses, performing any combination of following tasks: Moves guide on machine to direct cleaned material into storage bins or *garnett machine*. Opens bales of material, such as cotton and sisal, using wirecutter and knife. Pulls bales apart, starts machine, and feeds specified grades of material into machine hopper. May weigh specified amounts of material according to grades, using platform scales. May tie mattress cover to filling spout and move guide to direct material into it. May be designated according to type of material picked as Cotton Picker (furniture); Excelsior Picker (furniture); Fiber Picker (furniture); Sisal Picker (furniture); Tow Picker (furniture). May tend machine that produces rolls of felt from fluffed and cleaned fiber [GARNETT-MACHINE OPERATOR (textile)].
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

680.685-082 PICKING-MACHINE OPERATOR (any industry) alternate titles: blender operator; shredder; willower

Tends picking machine that opens or shreds and fluffs raw or used materials, such as wool, kapok, foam rubber, or hair to facilitate further processing. Cuts open bales of raw materials. Starts machine and deposits handfuls of raw material on feeding apron that conveys material into picking or shredding rollers. Observes machine to detect clogged rollers. Stops machine, and strips fiber from rollers, using knife, scissors, or hands. May spray raw material with oil emulsion. May be designated according to material processed as Hair-Picking-Machine Operator (furniture; tex. prod., nec); Tow-Picker Operator (furniture); Wool-Picker Operator (textile).
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

680.685-086 RIBBON-LAP-MACHINE TENDER (textile) alternate titles: carding doubler; lap-machine tender; lap winder

Tends machines that draw out and combine four to six *laps II* into one of uniform weight and texture preparatory to combing. Places rolls of lap on feed rolls of machine. Threads ends through stop-motion device and rollers, and around takeup spool, or presses end to end of preceding lap. Patrols machines to detect exhausted ends and to observe lights indicating machine stoppage caused by lap break. *Pieces up* broken ends and restarts machine. Turns handle to release roll for doffing. Removes lap from machine and replaces with empty takeup spool.
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

680.685-090 SILK SPREADER (textile) alternate titles: spreading-machine operator

Tends machine that fluffs and combines silk fibers: Weighs cleaned, raw silk to separate it into small bunches of specified weight. Starts machine and feeds bunches of silk between machine rollers that fluff and combine bunches.
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

680.685-094 SLIVER-LAP-MACHINE TENDER (textile) alternate titles: carding doubler; lap regulator; lap-winding-machine operator

Tends machines which combine strands of sliver (usually 12 or more) into *lap II* and winds sliver into rolls: Pulls cans of sliver to creeling position. Threads ends of sliver through guides, stop-motion device, and rolls, and onto takeup pin, or attaches end to preceding end by overlapping and twisting sliver with fingers. Patrols machine area to detect exhausted ends and observe lights indicating machine stoppage caused by sliver break. *Pieces up* broken ends. Removes lap and replaces empty pins. May depress pedal to raise roll of lap for doffing or loosen holders by hand. May tend combers [COMBER TENDER (textile) 680.685-118], ribbon lappers [RIBBON-LAP-MACHINE TENDER (textile) 680.685-086], or drawing frames [DRAWING-FRAME TENDER (textile) 680.685-038].
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 78

680.685-098 SLUBBER TENDER (textile) alternate titles: roving tender; slubber; slubber hand

Tends *slubber* machines that draw out and loosely twist sliver into roving to strengthen sliver for subsequent drawing and twisting operations: Fastens ends of sliver from full cans to preceding ends by overlapping and twisting ends with fingers, or threads sliver over guide, through rolls and flyers, and onto bobbins. Patrols machines to detect exhausted ends and to observe signal lights indicating machine stoppage caused by sliver breaks. *Pieces up* broken ends by threading sliver through rollers and flyer and twisting sliver to end on bobbin. Doffs bobbin of roving, placing flyers on top of frame and roving in box truck. Sets empty bobbins on spindles, winds end of roving around bobbins, and replaces flyers. Brushes lint and dust from rollers and oils machine. May mark spools of roving with colored chalk to denote weight and texture.
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 79

680.685-102 STAPLE CUTTER (textile) alternate titles: chopper feeder; sliver chopper; stock cutter; waste chopper

Tends machine that cuts tow, sliver, or waste fibers into staple lengths preparatory to blending and subsequent processing into yarn: Places cans of sliver or bales of raw stock at feed-end of machine. Cuts bale bands, using hand snips. Places loose fiber on belt which conveys fiber to cutting blades or pulls ends of sliver or tow from cans and guides them into feed rolls at cutter. Examines fiber falling from cutter to detect fusing of fibers due to dull cutting blades. Measures cut fiber with ruler to verify length. Notifies MACHINE FIXER (textile) when cut fiber does not meet specifications. May stock from several bales to blend fibers. May sort loose stock by size and color.
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

680.685-106 STRAND-AND-BINDER CONTROLLER (nonmet. min.)

Tends feed end of mat-making range that cuts fiberglass sliver into staple lengths and binds staple lengths together to form continuous sheets of fiberglass insulation material: Scoops powdered binder from barrel into hopper of binder sprayer. Gathers specified number of sliver ends from creel and threads ends through guides and rollers into staple cutting units. Observes flow of sliver from creel through staple cutters to verify number of ends being fed into cutters and to detect jam-up of sliver in cutters. Stops cutter and disentangles jam-up, using knife. Drops marker onto conveyor, signifying beginning and end of defective mat. Increases or decreases number of sliver ends fed into cutters as directed by MAT-MACHINE OPERATOR (concrete prod.).
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

680.685-110 STRETCH-BOX TENDER (textile)

Tends machines that stretch synthetic fibers in sliver or tow form to control elasticity and prevent uneven stretching during subsequent processing: Turns knob to set air pressure control on stretch rolls according to amount of stretch specified. Guides sliver into feed rolls so that it passes over heating element, between stretch rolls, and drops into receiving can. *Pieces up* broken sliver and replaces empty cans. Doffs and weighs cans of stretched sliver. May tend stretch box with crimping and steam-setting attachments.
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

680.685-114 WASTE-MACHINE TENDER (tex. prod., nec; textile) alternate titles: waste-cotton cleaner; waste duster; willow-machine operator; willow-machine tender

Tends machine that opens, cleans, fluffs, and reduces soft waste yarn, sliver, and roving to fiber for reuse: Spreads armfuls of waste material on feeder apron of machine. Starts machine, and wraps web of processed material around takeup roller or positions truck beneath delivery apron of machine. Observes processing of waste to detect clogged rollers and disentangles rollers by hand. Doffs, laps, or trucks material from delivery end of machine.
GOE: 06.04.06 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

680.685-118 COMBER TENDER (textile)

Tends machines that comb *lap II* or sliver to remove short fibers, neps, and dirt and to straighten and align fibers: Lifts lap onto holders or positions cans of sliver at rear of machine. Threads lap or sliver between feeder rollers, combing and drawing rollers, through gathering eyes, *coiler head*, and into cans. *Pieces up* fresh lap or sliver to end of preceding one. Pieces up breaks, and replaces cans of sliver or rolls of lap. Removes full cans of processed sliver from coiler head and pushes cans to designated area to await further processing. Observes signal lights to detect sliver breaks, machine malfunctions, and exhausting cans of unprocessed sliver. Pulls *lap-ups* of fibers from rollers, using hook. May empty bin of waste materials combed out of fibers.
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 78

680.686-010 CAN DOFFER (textile) alternate titles: can pusher

Doffs and transfers sliver cans among carding, drawing, and slubbing machines: Pushes or drags full sliver cans from carding to drawing, and from drawing to slubbing machines to maintain workflow. Removes empty cans from drawing and slubbing machines and places them in position for reuse at carding machines. May sweep work area or clean machines. May be designated according to machine area worked as Card Doffer (textile).
GOE: 06.04.40 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

680.686-014 FIRST-BREAKER FEEDER (tex. prod., nec)

Feeds fiber, such as hemp or sisal, into machine that breaks up matted bundles, and oils and straightens fibers to form sliver: Places bundles of fibers on machine feed conveyor. Observes sliver emerging from machine and varies rate of feeding to maintain production of uniform sliver of specified weight. Turns valve to start flow of oil that lubricates, softens, and preserves fibers. When feeding armfuls of short hemp fibers into machine, is designated Tow Feeder (tex. prod., nec).
GOE: 06.04.16 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

680.686-018 MACHINE FEEDER, RAW STOCK (tex. prod., nec; textile) alternate titles: feeder tender; guillotine operator; hopper feeder; shredder picker

Feeds raw fiber stock into machines that loosen, shred, separate, clean, form nubs, or straighten fibers: Reads work ticket to determine amount and type of stock to be processed. Records amount of materials processed, during work shift. Places fibers on conveyor belt or into machine hopper for processing by machine. Opens and closes gates of belt and pneumatic conveyors on machines fed directly from preceding machines. Loosens material before dumping material into hoppers by pulling fibers apart. Moves stock from storage or other departments to machine, using industrial truck or handtruck. May tend automatic machines and equipment that process fiber stock. May feed polyurethane foam into machines. May feed fiber stock into drum to apply oil to stock prior to further processing. May be designated according to type of machine fed as Carding-Machine Feeder (textile); Garnett Feeder (tex. prod., nec); Nub-Card Tender (textile); Picker Feeder (tex. prod., nec; textile).
GOE: 06.04.16 STRENGTH: H GED: R1 M1 L1 SVP: 2 DLU: 79

680.686-022 WASTE-MACHINE OFFBEARER (tex. prod., nec)

Removes strands of waste cotton that wind around separating cylinder of waste machine, to prevent jams and maintain flow of waste from machine, using wire hook. Carries waste to storage bins.
GOE: 06.04.16 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

680.687-010 APRON CLEANER (nonmet. min.) alternate titles: apron scratcher; card-apron cleaner

Cleans dirt or foreign matter from carded asbestos fibers, using wire studded scratchboard.
GOE: 06.04.34 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

680.687-014 ROLLER CLEANER (textile) alternate titles: draft-roller picker; frame cleaner; roll picker; top cleaner

Cleans lint and dust from drawing rollers of spinning or roving frames while machines are in operation, using pneumatic *roll picker* or handbrush. Removes roving wound on rollers , using fingers or hook. Feels rubber covered rollers for surface defects, replaces defective rollers, and routes defective rollers for resurfacing. May brush lint and dust from ring rail. May *piece up* roving or yarn breaks.
GOE: 06.04.39 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 79

680.687-018 ROVING-WEIGHT GAUGER (textile)

Weighs roving samples from wool carding machines and adjusts machines to produce roving of specified weight: Measures roving with ruler to obtain sample of specified length. Weighs sample and compares weight with standard chart to detect variations. Moves weight on weight-control lever of carding machine to regulate rate at which raw stock is fed into machine, altering weight of roving produced. May weigh rolls of fibrous web and be designated Web Sizer (textile).
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 4 DLU: 77

681 TWISTING, BEAMING, WARPING, AND RELATED OCCUPATIONS

This group includes occupations concerned with twisting together yarn, thread, twine, or cordage, to impart such characteristics as strength, texture, resistance, and color tone; collecting the material upon beams or other devices, or gathering it into balls, bulk, coils, or skeins.

681.130-010 SUPERVISOR, PREPARATION DEPARTMENT (textile)

Supervises and coordinates activities of workers engaged in preparation of warp and filling yarn for weaving: Analyzes production schedule to determine

size, type, texture, and quantity of yarn required to meet production demands. Prepares order sheets, warp pattern sheets, and formula sheets and issues them to MATERIAL HANDLER (any industry), to workers tending warping-machines, to CREELER (any industry), and to CHEMICAL MIXER (textile). Schedules changes in machine setups to meet requirements of production schedule, informing workers tending slashers, quilling-machines, and warping-machines of type, size, color, quantity, and number of yarn ends to be wound on quills or loom beams. Examines creel setup of warping machines to detect errors in number of yarn ends and arrangement of yarn in creel, and instructs CREELER (any industry) to alter setup to correspond with warp pattern sheet. Examines yarn on bobbins, quills, or beams to ensure conformance to standards. Trains workers in operation of machines and evaluates work performance. May be designated according to specific process supervised as Supervisor, Drawing-In Department (textile); Supervisor, Slashing Department (textile); Supervisor, Warping Department (textile). Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

681.130-014 SUPERVISOR, WINDING AND TWISTING DEPARTMENT (textile)

Supervises and coordinates activities of workers engaged in winding yarn or thread from one package to another and in twisting yarn or thread. Reads production schedule to obtain information, such as size, type, texture, quality, and quantity of yarn required to meet production demands. Schedules winding of yarn onto suitable packages for subsequent processes, such as twisting, warping, dyeing, knitting, or weaving. Informs machine tenders of yarn type and size, winding speed, number of ends wound per package, and size of packages. Determines direction and amount of twist to be put into yarn, based on size of yarn, number of ends being plied, twists per inch and direction of twist in single yarn, and ultimate use of yarn. Computes gear size required to effect required twist, using mathematical formulas and tables. Schedules changes in production to meet requirements of production schedule, issuing new instructions to SECTION LEADER AND MACHINE SETTER (textile) 689.260-018. Examines yarn to detect variations from standards. Performs other duties as described under SUPERVISOR (any industry) Master Title. May supervise workers engaged in winding and twisting continuous filament yarns and be designated Supervisor, Throwing Department (textile). May be designated according to specific activity as Supervisor, Twisting Department (textile); Supervisor, Winding Department (textile). May supervise workers engaged in twisting yarn around rubber strands to produce elastic yarn and be designated Supervisor, Rubber Covering (textile).
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 80

681.380-010 ROPE-MACHINE SETTER (tex. prod., nec)

Sets up and maintains battery of automatic machines that make hemp rope: Installs and aligns dies and gears to produce specified type and size rope, using handtools. Turns setscrews to adjust machines. May operate and adjust rope-laying machine to make rope.
GOE: 06.01.02 STRENGTH: M GED: R3 M2 L3 SVP: 6 DLU: 77

681.387-010 QUALITY CONTROL CHECKER, TEXTURING PROCESS (textile)

Inspects yarn texturing machines and packages of textured yarn to appraise quality of texturing process: Inspects doff yarn to ensure processing of yarn by texturing machines meets company performance standards. Reads temperature from gauges on thermal unit of texturing machines, records number of malfunctioning thermal units, and calibrates temperature gauges, using thermometer. Monitors spindle speed on texturing machines, using strobe tester, and notifies MACHINE FIXER (textile) 689.260-010 or SUPERVISOR, WINDING AND TWISTING (textile) 681.130-014 of malfunctioning spindle speed. Transports defective yarn package to YARN CLEANER (textile) 681.687-026 for salvaging of yarn. Fabricates needles used by YARN-TEXTURING-MACHINE OPERATOR (textile) I 681.685-158, using handtools.
GOE: 06.03.01 STRENGTH: L GED: R3 M2 L2 SVP: 7 DLU: 86

681.485-010 ROVING WINDER, FIBERGLASS (textile)

Tends machine that winds several strands of fiberglass sliver into a single strand of roving: Gathers strands of fiberglass sliver from creels to form roving, threads roving through guides, and attaches roving to takeup package or laps roving around spindle of winder to form coreless package. Starts machine and observes winding units to detect broken ends and variations in number of ends being wound into roving. Ties broken ends and notifies CREELER (any industry) to increase or decrease ends according to specifications. Observes signal light to determine when package is full. Doffs full packages from machine and packs roving into shipping containers. Weighs roving and records weight on shipping list and production records. Pastes label on container and seals container, using gummed tape. Places containers onto pallet or conveyor. May creel machine [CREELER (any industry)].
GOE: 06.04.06 STRENGTH: H GED: R2 M1 L2 SVP: 3 DLU: 77

681.585-010 BEAMER (textile) alternate titles: dry-slasher tender; rebeamer

Tends machine that winds yarn from several section beams I simultaneously onto single *loom beam* preparatory to weaving: Positions section beams on creel with aid of BEAMER HELPER (textile), using chain hoist. Lays individual yarn ends from each section beam between dents of reed and teeth of expansion comb, following leases in section warps. Tapes yarn ends to loom beam or ties groups of yarn ends into knots and inserts knots into slots of loom beam. Turns knob to set yardage clock as specified. Starts machine and observes yarn to detect slubs, breaks, and tangles. Removes slubs with scissors, straightens tangles, and ties broken yarn ends with fingers. Inserts *lease string* in warp yarn and secures yarn ends with tape. Doffs full loom beam onto handtruck and replaces beam with empty beam with aid of BEAMER HELPER (textile), using chain hoist. Records style number, number of yarn breaks, machine stops, and yardage beamed.
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

681.585-014 BOBBIN WINDER, MACHINE (tex. prod., nec; textile)

Tends machine that transfers yarn, thread, or twine from spools to large bobbins used on knitting and weaving machinery. Mounts spools on spindles over winding arbors of machine. Unwinds length of yarn, thread, or twine from spool and winds onto bobbin. Places bobbin on winding arbor and rotates bobbin to take up slack. Slides thread into eye of winding traveler and starts arbors rotating to wind thread onto bobbins. Observes bobbins as they are winding and cuts thread to remove loaded bobbins. Records number and types of bobbins wound.
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 86

681.585-018 SINGE WINDER (textile)

Tends machine that singes lint and fuzz from yarn and winds yarn onto bobbins or *cones*: Places yarn packages on spindles and threads yarn through guides, tension device, slub catcher, heating unit, and grooves of traverse roller. Inserts end of yarn in takeup cone or bobbin and places cone on spindle. Pulls switches to start machine, exhaust fans, and burners. *Pieces up* yarn breaks. Doffs full cones or bobbins and places yarn in handtruck. Records production on work ticket. Cleans rails and burners of machine, using brush, airhose, and cloth.
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

681.682-010 DRESSER TENDER (textile) alternate titles: thread dresser; warp dresser; warper tender; warping-mill operator

Operates machine to wind yarn from packages onto reel and from reel onto *loom beams* to prepare multiple colored warps for weaving. Moves portable reel into position in front of creel and draws yarn from packages on creel, according to specified pattern. Ties yarn ends into loop and places loop over hook on reel to secure ends for winding. Sets yardage meter to stop machine when specified yardage for section is wound on reel. Inserts *lease strings* in wound section to keep threads in position for weaving. Cuts yarn, using scissors, and places ends under section wound to prevent raveling. Moves reel to front of creel to facilitate winding of additional sections of yarn. Positions loom beam on brackets, using hoist, and secures ends from all sections onto beam. Pulls lever to reverse reel and pushes button to start yarn winding onto beam. Doffs full loom beam, using hoist. Turns valves to fill size box and to regulate temperature in drying cabinet when machine is equipped with slashing attachment. May creel machine.
GOE: 06.02.06 STRENGTH: H GED: R3 M1 L2 SVP: 4 DLU: 77

681.682-014 ROPE-MAKER, ROPEWALK (tex. prod., nec)

Operates track-mounted machine in ropewalk to lay rope-fiber strands into heavy line, such as marine hawser and towline. Lays strands on guide arms parallel to track. Anchors ends of strands to stationary fixture at end of ropewalk. Secures other end of strands in self-propelled machine at opposite end of ropewalk, that lays strands into rope and coils rope onto reel as it moves along track. Moves levers to start machine and to produce specified degree of hardness in rope. Binds ends of finished rope to prevent raveling and removes full reel, using hoist.
GOE: 06.02.09 STRENGTH: H GED: R3 M1 L2 SVP: 4 DLU: 77

681.682-018 RUG SETTER, AXMINSTER (carpet & rug) alternate titles: color-setting-machine operator

Operates machine to wind yarn from short spools onto longer spools in specified color arrangement to prepare yarn for weaving into rugs: Positions spools of yarn on creel as specified by pattern chart. Threads ends of yarn through reeds, tension devices, and guides, as specified by pattern chart. Adjusts tension on thread. Clamps ends to takeup (long) spool. Starts machine and observes winding for yarn tangles and breaks. *Pieces up* broken ends. Stops machine when specified amount of yarn has been wound, cuts yarn with cutting blade, places clamp onto spool to hold yarn in place, and replaces spool with empty one. May be designated according to machine for which yarn is prepared as Rug Setter, Six-Quarter Machine (carpet & rug); Rug Setter, Three-Quarter Machine (carpet & rug). May operate machine to wind yarn onto *loom beams* and be designated Rug Setter, Velvet (carpet & rug).
GOE: 06.02.06 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

681.685-010 BALL-WARPER TENDER (textile) alternate titles: baller tender; ball-thread-machine tender; ball winder

Tends warping machine that gathers and winds strands of yarn in rope form into ball form preparatory to mercerizing, dyeing, or bleaching: *Pieces up* ends from supply package to leader to thread machine. Sets yardage counter to record amount of yarn wound and starts machine. Inserts and ties *lease strings* at prescribed intervals. Observes operation to detect yarn breaks. Locates and ties broken ends. Doffs *ball warps*. May tend machine with singeing attachment to remove lint from yarn.
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

681.685-014 BALLING-MACHINE OPERATOR (textile) alternate titles: ball winder

Tends machine that winds thread, twine, or yarn into balls preparatory to shipping or further processing: Places supply *cones* or spools on creel rack and threads yarn ends through guides and tension device. Pushes core over spindle of machine or wraps end of thread around shaping device of coreless winder. Pulls lever to start machine to wind specified amount of thread. Doffs balls of thread, using knife to cut thread. Inspects balls for defective winding or soiled thread. May insert labels under thread. May place ball on device to crush center and wrap end of thread around center as binder. May pack balls into boxes for shipment.
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

681.685-018 BEAM-WARPER TENDER, AUTOMATIC (knitting; narrow fabrics; nonmet. min.; textile) alternates titles: beam warper; section beamer; section warper; tricot-warper tender; warper tender

Tends high-speed warpers that automatically wind yarn in parallel sheets onto beams preparatory to dyeing, weaving, or knitting: Examines yarn in creel to ensure that yarn corresponds to warp pattern sheet specifications, for number of yarn ends, arrangement of yarn in creel, yarn size, and color. Requests CREELER (any industry) 689.687-030 to alter creel setup to correspond with warp pattern sheet. Pulls yarn ends from packages mounted on creel, through *drop wires*, and tension, measuring, and spreading devices, and fastens ends to empty warp beam to thread machine. Sets yardage counter to record amount of yarn wound and starts machine. Observes operation to detect yarn breaks which cause machine to stop. Turns beam back to point of break, locates and ties broken ends, and cuts excess yarn, using scissors. Stops machine when specified yardage is wound on beam, cuts yarn, and places gummed tape over ends or loops ends together to secure ends. Doffs full beams and sets in empties [BEAM RACKER (textile) 681.686-010]. May wrap beam with paper. May replace empty yarn packages [CREELER (any industry) 689.687-030].
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 80

681.685-022 BOBBIN WINDER, MACHINE (boot & shoe)

Tends machine that winds thread onto bobbins for use on sole-stitching machines: Places bobbins on spindle and inserts spindle into bobbin-winding machine. Wraps thread around first bobbin. Pushes lever to start machine. Holds spindle in place with hand, allows spring to move spindle, and positions next bobbin for winding. Cuts thread between bobbins, using knife. Removes spindle from machine and bobbins from spindle.
GOE: 06.04.05 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

681.685-026 BOBBIN WINDER, SEWING MACHINE (textile)

Tends machine with multiple winding units that wind thread onto shuttle bobbins for use on sewing machines: Places empty tube on spindle of winding unit, wraps ends of thread around tube, and cuts off excess thread. Pushes lever to start winding unit which automatically stops when thread breaks or tubes are full. Cuts thread with scissors and removes tube. Removes and discards partially wound bobbins. Measures bobbin periodically, using gauge and turns screws to adjust tension if bobbin is not of specified size.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

681.685-030 CARDING-MACHINE OPERATOR (tex. prod., nec)

Tends machine that winds binding, rickrack, and braid on paperboard cards: Clamps card and end of material in machine. Starts machine which makes predetermined number of revolutions to wind specified length of material on card. Cuts end of material with scissors and removes card from machine.
GOE: 06.04.38 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

681.685-034 COILER (tex. prod., nec) alternate titles: reeler

Tends machine that winds rope onto reel to form coil: Selects reel according to size of rope and mounts reel on spindle, using wrench. Trims loose strands from end of rope with knife and binds end with tape to prevent unraveling. Ties end of rope to reel and starts machine. Guides rope onto reel to ensure even winding. Stops machine and ties coil with cord to prevent unwinding. Lowers coil onto dolly, using chain hoist. Slides winding reel out of coil. May weigh coils. May splice rope ends.
GOE: 06.04.06 STRENGTH: V GED: R2 M1 L1 SVP: 2 DLU: 77

681.685-038 COVERING-MACHINE OPERATOR (textile) alternate titles: elastic-yarn twister; rubber coverer; rubber-covering-machine operator

Tends covering machine that twists one or more strands of yarn around rubber or synthetic yarn cores to produce elastic yarn: Threads narrow strip (ribbon) of rubber through feed rollers and splitting mechanism, or separates partially cut strands of rubber, or places *cones* of core yarn or rubber thread on holders. Draws ends of core yarn or rubber through guide and hollow spindles, using hook, and laps ends around takeup package. Positions yarn supply packages on spindles, threads ends through guides and tensions, and wraps ends around yarn or rubber core. Observes operation to detect defective twisting caused by taut or slack yarn and turns setscrew to adjust tension. Ties broken ends. Replaces exhausted supply of yarn or rubber and ties ends to ends in machine. Doffs machine and places empty takeup packages on holders. May compare measurements of relaxed and stretched covered rubber, and adjust speed of takeup mechanism that controls rubber tension to ensure stretch of specified length.
GOE: 06.04.09 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

681.685-042 COVERING-MACHINE-OPERATOR HELPER (textile) alternate titles: elastic-yarn-twister helper

Observes operation of covering machines to detect defective spindle action: Scrutinizes size and shape of twisting strand blur or places small celluloid sheet in path of whirling traveler to determine if spindles are performing as specified. Stops nonproductive spindles for repair or for replenishment of *cones* of rubber or fiber strands.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

681.685-046 DOUBLING-MACHINE OPERATOR (textile) alternate titles: doubler; multiple-tube-winding-machine operator

Tends machine that winds two or more strands of yarn parallel onto bobbin or tube preparatory to twisting: Places supply packages in creel and draws yarn ends through machine guides and tensions onto takeup tube. Starts machine and observes operation to detect yarn breaks, exhausting yarn supply and full packages on takeup tubes. *Pieces up* yarn breaks, using knotter. Replaces supply packages in creel. Doffs full packages.
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

681.685-050 FLOOR WINDER (textile)

Tends several single-spindle winding frames that wind strands of bonded glass fiber produced on fiber machines onto tubes for further processing: Slips empty tubes on spindles of winding machines, and fastens ends of fiber strand, handed down from floor above by FIBER-MACHINE TENDER (glass mfg.), to each tube. Starts machines. Stops spindles when winding tubes are full, breaks off strand of fiber, and slides full winding tube from spindle. Observes strands being wound and ties together broken fiber ends.
GOE: 06.04.06 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

681.685-054 LEASING-MACHINE TENDER (textile)

Tends machine that inserts *lease strings* to keep warp strands separated in specified arrangement to facilitate drawing-in: Positions warp beam in holders, using hoist. Pulls warp ends over lease rod and turns rod to make warp threads taut. Places cone of string on holder and draws string through guides and needle to thread machine. Starts machine that raises and lowers warp threads and inserts string to keep threads in place and prevent tangling. Observes counter on machine to ensure that specified number of warp ends are wound on beam. Removes warp ends from rod, turns warp beam to rewind ends, and secures ends with tape. Removes warp beam from holder, using hoist.
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

681.685-058 LONG-CHAIN BEAMER (textile) alternate titles: beamer hand; beaming-machine operator; section beamer

Tends machine that winds yarn in chain form from skeins or *ball warps* onto beams in parallel sheets: Laces end of skein around rollers and pulls end through dividers in separate skeins or inserts rod through center of ball warp and lifts warp onto stand for unwinding. Guides end of yarn chain around tension drums and lays individual strands of yarn between teeth of expansion comb. Turns crank to adjust comb to width of beam. Knots section of warp ends and inserts knots in slots of beam to hold yarn for winding. Starts, stops, and controls speed of machine with pedal. Observes yarn to detect slubs and broken or tangled ends; cuts out slubs, using scissors, and ties broken yarn ends with fingers. Inserts *lease strings* at intervals to preserve arrangement of yarn. Secures ends of yarn on beam with gummed tape. May doff beam, using hoist. May be designated according to type of yarn wound as Silk Beamer (textile).
GOE: 06.04.06 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

681.685-062 LOOM-WINDER TENDER (textile)

Tends winding units attached to looms that automatically wind yarn onto quills, transfer quills to loom shuttles, and strip bunch yarn from expended quills: Positions yarn packages on machine creel and threads yarn end through guides, tensions, and yarn carrier. Places empty quills in feed tray of winding unit. Patrols aisles between looms to detect malfunctions, such as jammed quills, broken yarn ends, exhausted yarn packages, and unstripped quills in reject tray. Straightens or removes jammed quills, ties broken yarn ends, replaces exhausted yarn packages, strips yarn from rejected quills by hand, and places stripped quills in feed tray. Notifies LOOM FIXER (narrow fabrics; nonmet. min.; textile) of mechanical defects. Important variables may be indicated by trade name of machines used.
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

681.685-066 PRECISE WINDER (textile)

Tends machine that winds *cones* or tubes of yarn or thread to specified size and lay: Places supply packages in creel and draws yarn ends through machine guides and tensions onto takeup tubes to thread winding units. Turns dial of yardage clock to control amount of yarn wound. Turns gear to set lay, using wrench. Starts machine and observes operation to detect yarn breaks and exhausting supply packages. *Pieces up* broken ends. Doffs yarn when package reaches specified size. May weigh yarn package and remove or wind yarn to bring package to specified weight. May tend machine equipped with troughs to draw yarn or thread through solutions specified by processing instructions.
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 80

681.685-070 QUILLER OPERATOR (textile) alternate titles: long-chain-quiller tender; quill-machine tender

Tends quiller that winds strands of yarn from *ball warps* onto bobbins or quills after bleaching, mercerizing, or dyeing: Divides new warp into sections to facilitate handling, using twisting hook or ring to hold yarn parallel. Twists

each new strand to preceding strand in machine with fingers to draw yarn through reed and guides without rethreading. Starts machine and depresses pedal board to control winding speed. Feels warp for tangles and observes yarn for breaks. Stops machine to straighten warp, remove *lease strings*, or thread broken ends through reed and guides. Doffs bobbins or quills from spindles and replaces with empties. Brushes dust and lint from machine and oils spindle bearings.
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

681.685-074 QUILLING-MACHINE OPERATOR, AUTOMATIC (textile) alternate titles: filling winder; quiller; quiller hand; quiller tender

Tends machine equipped with automatic quill loading and doffing device that winds yarn from *cones* or tubes onto quills for use in loom shuttle. Loads hopper with empty quills by hand or electric hoist. Places supply packages of yarn on holders, according to yarn count, blend, and color of label inside packages, and ties yarn ends from packages to ends in machine and cuts excess yarn at knots with scissors. Observes winding units to detect breaks in yarn. Removes quills when yarn breaks, rethreads yarn through guides, and ties yarn ends. Removes full boxes or pinboards (boards with upright spindles), which receive wound quills ejected by machine, and separates partially filled quills. Keeps production records. May inspect quills for defects, such as broken filament and dirty or damaged yarn. May mark quills of yarn according to style of yarn being processed, using colored chalk.
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 80

681.685-078 REELING-MACHINE OPERATOR (textile) alternate titles: reeler; reel tender; skein reeler; skein winder

Tends machine that winds yarn, thread, or textile selvage from bobbins, *cones*, cops, or tubes into skeins for dyeing or shipment. Places supply package of yarn, thread, or selvage on spindles. Threads ends of yarn through guides and wraps or ties them around swift (long collapsible reel). Starts machine and observes yarn for breaks. Stops machine to tie or sew broken ends together and replace exhausted supply packages. Cuts yarn with knife or scissors when specified amount of yarn is reeled, and ties ends of skein together. Laces string through and around skein to prevent tangling. Pulls levers to collapse reel and slides skeins off end of reel or observes automatic discharge to detect tangles. May set dial of revolution counter to measure yardage wound. May tie several skeins into bundle. May be designated according to material wound as Twine-Reeling Machine Operator (tex. prod., nec).
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

681.685-082 ROPE MAKER, MACHINE (nonmet. min.)

Tends former machine that twists strands of asbestos roving to form *wick*, and rope-twisting machine that twists strands of wick to form rope. Creels spools of asbestos roving or wick on machines and threads material through guides, flyer, and around winding spindles. Starts machines and observes twisting to detect breaks in material. *Pieces up* broken roving ends, or ties broken wick ends. Doffs full package of wick and rope from machines.
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

681.685-086 ROPE-LAYING-MACHINE OPERATOR (tex. prod., nec) alternate titles: rope-coiling-machine operator; rope-twisting-machine operator

Tends one or more machines that lay (twist) fiber strands or twine into rope and wind rope onto reels. Selects and mounts reels of ready (strands) or twine on machine according to rope size specified, using hoist. Threads strands or twine from reels through guides to twisting mechanism, and splices strands or twine to lead rope attached to reel. Starts machine and monitors operation to detect defective laying or winding of rope. Stops machine when counter shows specified length is wound. Cuts rope with knife and binds coil with cord to prevent unwinding. Hammers pin from end of reel and pulls it from coil. May weigh coils. May install gears and tubes to produce specified types and sizes of rope, using handtools. May burn or cut rough spots from rope, using soldering iron or scissors. May tend machine that forms and twists fiber strands into rope.
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

681.685-090 RUBBER-THREAD SPOOLER (toy-sport equip.) alternate titles: thread spooler

Tends machine that winds strands of rubber used in golf ball cores onto spools. Pulls strands from container and draws strands along winding area to machine. Runs each strand through separator, wraps ends around spools, and clamps spools to spindles. Holds strands in hand, presses pedal to start spools winding, and feeds and guides strands of rubber from container, along winding area, and to machine. Pulls twisted strands to remove snarls or tangles, and stops machine to untwist knots. Stops machine when length markers reach separators, cuts off strands at marker, removes spools from spindles, and handwraps remainder of strand.
GOE: 06.04.07 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

681.685-094 SELVAGE-MACHINE OPERATOR (textile)

Tends machine that winds sheets of selvage yarn onto spools. Positions yarn packages on creel and threads yarn from comb, through guides, stop motions, and expansion comb and laps yarn ends around takeup spool. Starts machine and observes flow of yarn to detect breaks in yarn. Stops machine and *pieces up* broken ends. Doffs full spools of selvage yarn from machine.
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

681.685-098 SKEIN WINDER (textile) alternate titles: coner; spooler; swift tender

Tends machine that simultaneously winds yarn from skeins onto spools or *cones*. Hangs skeins of yarn on rack and beats out (shakes or pulls) skeins to straighten yarn and facilitate winding. Inspects yarn to detect soil, color spots, or defective twisting and discards faulty skeins. Removes reel (swift) from machine, wraps skein of yarn around reel, and replaces reel. Cuts card holding yarn in place, using scissors. Threads end of yarn through guides and turns it around spool or cone and starts unit winding. *Pieces up* broken ends or ties new skeins with knotter. Observes winding operation and removes cones when full. Sets in empty cones. May be designated according to type of yarn wound as Lastex-Thread Winder (textile).
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

681.685-102 SKEINER (narrow fabrics) alternate titles: skein winder

Tends machine that winds narrow fabrics, such as tape, into skeins for dyeing or shipment. Draws fabric ends from box, threads each end through traverse guide, and ties end to reel. Turns dial to set yardage counter that stops machine when specified yardage has been wound. Presses pedal to start machine. Laces string through and around each skein to preserve arrangement and prevent tangling. Pulls lever to contract reel, slides skeins to end of reel, and removes skeins.
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

681.685-106 SPEEDER TENDER (textile) alternate titles: roving-frame tender

Tends machines that draw out, combine, and twist two strands of roving into single strands. Observes machines to detect breaks in roving or nearly exhausted bobbins in creels. Replaces nearly empty bobbins on creels with full bobbins. Stops machine, threads flyer, and *pieces up* broken roving. Removes flyers and doffs bobbins of roving when machine stops automatically. Sets empty bobbins on spindles, replaces flyers, and starts machine.
GOE: 06.04.16 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

681.685-110 SPINNING-MACHINE TENDER (tex. prod., nec)

Tends one or more machines that twist combed hemp or sisal fiber or yarn into strands and winds strands onto bobbins. Threads sliver (combed fiber) or yarn through guides to twisting mechanism of spinning machine. Opens safety cover to inspect twisting die, places empty bobbin on spindle, and fastens end of yarn or strand to bobbin. Starts machine and observes operation to detect unsteady flow of material into spinning head, and uneven winding on bobbin.
GOE: 06.04.16 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

681.685-114 SPOOLING-MACHINE OPERATOR (tex. prod., nec) alternate titles: spooler; winder; winding-machine operator

Tends machine that winds bias binding, cloth, cording, piping, or tape onto cardboard spools. Clamps spool onto spindle of machine. Starts machine and guides material onto revolving spool by hand. Cuts material with scissors when spool is full. May wrap rolls or spools in paper.
GOE: 06.04.38 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

681.685-118 STRAND-FORMING-MACHINE OPERATOR (tex. prod., nec)

Tends machine that forms (twists) rope-fiber yarn into strands preparatory to being laid into rope. Installs specified size tubes that gather and compress yarn preparatory to twisting. Places specified number of full yarn bobbins on creel. Threads yarn ends from bobbins through holes in register plates that align yarn through gathering tubes around capstan that maintains tension on strand, and ties end to reel that revolves to twist and form strand. Stops machine to repair yarn breaks. Removes full reel, using hoist.
GOE: 06.04.06 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

681.685-122 THREAD WINDER, AUTOMATIC (textile) alternate titles: spool winder

Tends semiautomatic machine that winds thread from *cones* onto spools or tubes used on sewing machines. Places full cones on rack, and passes threads through guides, tension device, yardage counter, and *drop wires*. Loads tubes or spools into machine hopper. Observes operations of machine to detect breaks or *lap-ups*. Removes spools having winding defects, or *pieces up* broken ends, using knotter. Inspects spools for defects in winding and color as they are discharged by machine. May verify spool size, using gauge. May pack filled tubes or spools in boxes.
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

681.685-126 TWISTER (tex. prod., nec)

Tends battery of machines that twists together two or more yarn strands into twine or produce plied yarn for use in rope making. Transfers filled spools of yarn to adjoining twister frame that twists two or more strands together to make twine. Doffs machine and packs filled spools of twine and empty cylinders in cartons. May tend machines that spin roving into yarn preparatory to twisting operation.
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

681.685-130 TWISTER TENDER (glass mfg.; nonmet. min.; plastic-synth.; textile)

Tends machines that twist together two or more strands of yarn or insert additional twist into single strand of yarn to increase strength, smoothness, and uniformity of yarn. Creels machine with bobbins of yarn [CREELER (any industry) 689.687-030], following work ticket specifications for color and type of

yarn, or notifies change crew of exhausting yarn supply. Pulls ends of yarn over rollers, through *tension guides*, traveler, or flyer, and laps yarn onto takeup spool. Patrols machines to detect yarn breaks and exhausted supply packages. Ties broken ends by hand or with knotter, rethreads stopoffs, and untangles yarn. When twisting fiberglass sliver or yarn, repairs breaks with splicing fluid. May doff takeup packages [DOFFER (textile) 689.686-022] and replace them with empty spools. May tend twisting machine that combines yarn with wire. May record production and worker identification on ticket. May inspect yarn for defective twisting and remove defective takeup packages. May tend machines that produce irregular effects or patterns in yarn by actions of pattern chain or by setup of rolls and be designated Novelty-Twister Tender (textile).
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 79

681.685-134 TWISTER TENDER, PAPER (tex. prod., nec) alternate titles: paper twister

Tends single or multiple spindle machine that twists paper strips into twine: Slides roll of paper of specified width onto spindle of machine. Wraps twine leader around spool and threads end through guide and twisting die. Untwists end of leader and splices it to end of paper strip. Starts machine and observes operations to detect uneven twisting and winding of twine. Verifies diameter of twine against specifications, using micrometer, and turns wheel to adjust pressure on twisting die. Cuts twine with cutters and removes filled spool. May thread two or more strands of twine through twisting die to make ply twine.
GOE: 06.04.04 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

681.685-138 UPTWISTER TENDER (textile) alternate titles: uptwist spinner

Tends machines that twist single strands of silk or synthetic yarn: Places bobbin in holder and draws yarn from supply package through traverse guide and laps yarn around takeup bobbin. Starts machine and observes operation for yarn breaks. *Pieces up* yarn breaks. Doffs full packages. May fit wire guide onto supply package and thread yarn through guide to retain twist in yarn coming off supply package.
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

681.685-142 WARP SPOOLER (narrow fabrics; textile) alternate titles: jackspooler; spooler

Tends machine that winds yarn in sheets onto spools used on narrow-fabric looms or dresser machines. Places yarn packages on creel of machine and draws yarn ends through guides and tension devices. Lifts spool onto machine brackets and laps yarn ends around spool. Doffs spool when specified yardage has been wound. When warping glass yarn, repairs yarn breaks with splicing fluid.
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

681.685-146 WARPER (narrow fabrics)

Tends table-type rotary warping machine that winds warp yarn onto pegs or spools for use in weaving narrow fabrics: Places spool of warp yarn over revolving spindle of machine. Mounts spools on spindles or positions wooden pegs in holes of machine table to produce warp of specified dimensions. Threads warp through eye of spindle and horizontal warping arm attached to spindle, and ties warp to hook holder. Starts machine to rotate warping arm and wind warp around pegs and through hook holder. Places weaving hook in hook holder after each revolution of warping arm to separate warp. Stops machine when specified number of yarn strands have been wound and cuts yarn, using scissors. Turns thumbscrew to secure yarn and hooks in hooks holder. Doffs wound yarn.
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

681.685-150 WINDER OPERATOR, AUTOMATIC (textile)

Tends automatic yarn-winding machine, equipped with stationary or traveling knotter and traveling winding units that move around machine, to transfer yarn from bobbins to *cones* or tubes: Places bobbins in pockets of feeder magazine and pulls ends of yarn over suction tube opening through which yarn is drawn into knotter. Observes machine operation and signal lights to detect machine malfunctions, exhausting supply packages, full packages of yarn, and tangled yarn. Doffs packages when light indicates package is filled. Replaces tubes or cones on spindles. Laps strands of yarn around cones or tubes to start yarn winding. Presses pedal or button to stop and control speed of machine, according to flow of work. Notifies MACHINE FIXER (textile) 689.260-010 when malfunction occurs.
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 79

681.685-154 YARN WINDER (tex. prod., nec; textile) alternate titles: back winder; package winder; rewinder; spooler; winder; winding-machine operator

Tends machine that winds strands of yarn from bobbins, *cakes*, pirns, and other yarn packages into packages specified for further processing, shipment, or storage: Places supply packages on spindles or holders. Threads ends of yarn from each package through guides and tension device and attaches them to takeup package. Moves lever, depresses pedal, or flips switch to start machine. Observes winding units to detect breaks in yarn and ties broken ends by hand or with knotter. Stops machine or winding unit and doffs packages. Inspects yarn for defects. Reports malfunction of machine to MACHINE FIXER (textile) 689.260-010. May weigh yarn package or keep production records. May tend machine that winds yarn through emulsion-filled trough or against paraffin disk to soften or strengthen yarn. May be designated according to package wound or supply package used as Bobbin Winder (textile); Cake Winder (textile); or according to material wound as Worsted Winder (textile). When winding continuous filament yarn to or from packages used in throwing processes, is known as Redraw Operator (textile). When rewinding tangled or short lengths of yarn, is known as Salvage Winder (textile). Important variables may be indicated by trade names or machines used. May be designated Brass-Bobbin Winder (tex. prod., nec); Cone Spooler (any industry); Cone Winder (textile); Cop Winder (textile); Muff Winder (textile); Piece Hand (textile); Pirn Winder (textile); Quill Winder (narrow fabrics); Spool Winder (textile); Tailing-Machine Operator (textile); Tube Winder (any industry); Twine Winder (tex. prod., nec).
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 80

681.685-158 YARN-TEXTURING-MACHINE OPERATOR I (textile)

Tends twisting machine frames equipped with thermal units and *false-twist spindles* to produce stretch yarn: Threads yarn through guides, feed rollers, and heating unit, around entrance wheel of false-twist spindle, through traverse guide, and onto takeup bobbin, utilizing suction lines along path yarn travels, extension rods, and wire threader. Observes signal lights that indicate yarn breaks and malfunction of specified sections of machine. Records information regarding malfunction on flag card and places card on machine unit to signal maintenance crew. Reads doff schedule or uses gauge to determine when packages should be doffed. Doffs full takeup packages.
GOE: 06.04.16 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 79

681.686-010 BEAM RACKER (textile) alternate titles: beam doffer; warp clamper; warp hanger; warp placer; warp trucker681687010 forming-tube selector

Removes and replaces warp beams on looms, warpers, and slashers. Conveys full and empty beams to and from machine, using handtruck. May place harness assembly attached to new warp yarn with corresponding ends left in loom to facilitate tying-in process. May work as member of team to mount beams on looms.
GOE: 06.04.05 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

681.686-014 BEAMER HELPER (textile)

Assists BEAMER (textile) to tend machine that winds yarn from section beams onto *loom beams*: Mounts section beams on creel of beamer, using handtruck and chain hoist. Helps doff and wrap loom beams. Observes warp to detect breaks and ties broken threads. May drive industrial truck to transport beams to and from storage area. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

681.686-018 SPOOLER OPERATOR, AUTOMATIC (textile)

Feeds and off bears section of spooling machine that ties yarn ends automatically and transfers yarn from bobbins to cheeses: Places starter cheeses (spools containing small amount of yarn) on winding spindles. Places full bobbins in individual magazines of machine. Pulls end of yarn over guides or into suction device of machine to be picked up and tied to end of starter cheese by knotter which travels on track over machine. Doffs full cheeses and places cheeses on trident (three-pronged tray) on handtruck, or into trough located beside machine. May sort bobbins ejected by machine according to amount of yarn on bobbin. May strip defective yarn from bobbins, using knife, or by winding yarn on revolving spindle. May attach pregummed labels to inside of cones to identify cheeses or packages.
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 78

681.687-010 END FINDER, FORMING DEPARTMENT (textile)

Examines tubes of fiberglass sliver to detect defects and unwinds defective sliver and short lengths from tube: Removes tubes from monorail conveyor onto table. Examines tubes for defects, such as dirt and grease, and to locate end of sliver. Inserts end of sliver in tube of air suction device to unravel defective portion and short lengths. Breaks excess sliver from tube or cuts sliver, using scissors. Weighs tubes of sliver to determine if weight is within tolerances and places tubes on truck. Tags and places underweight tubes on monorail conveyor.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

681.687-014 LOOSE-END FINDER, BOBBIN (knitting)

Observes operation of winding machines to detect loose ends of broken thread and ties them.
GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

681.687-018 THREAD INSPECTOR (plastic-synth.)

Examines synthetic-fiber thread, passing continuously in front of electric light, for such defects as weak spots, lumps, irregular twisting, grease stains, and snags. Rejects lots of thread not meeting plant standard. May inspect washed and dried *cakes* of yarn for loose ends and remove excess thread with scissors and be designated Cake Inspector (plastic-synth.). May grade skeins of yarn by weight or presence of irregularities and be designated Sorter (plastic-synth.).
GOE: 06.03.02 STRENGTH: L GED: R3 M1 L1 SVP: 3 DLU: 77

681.687-022 WARP-YARN SORTER (textile)

Sorts yarn packages into sets of specified numbers to be placed on creel of warper. May convey yarn from storage or other department, using handtruck. May distribute yarn.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

681.687-026 YARN CLEANER (tex. prod., nec; textile) alternate titles: bobbin fixer; filling inspector; repairer; tangled-yarn-spool straightener; yarn salvager

Examines packages (or pirns) of wound yarn for defects, such as bruises, cuts, tangles, or soil and removes defective yarn to salvage usable yarn, using one of following methods: (1) Pulls yarn from package by hand. (2) Places yarn in holder, and inserts yarn end in nozzle of vacuum tube that draws defective portion from package. (3) Places defective yarn package on holder and draws yarn end over revolving reel, observing yarn to determine when defective portion is removed. Cuts yarn from reel and segregates yarn according to type. (4) Cleans soiled packages, using cloth and detergent. (5) Cuts through packages, using hooked knife or heated knife. Writes information, such as plant number, worker number, and yarn type on cards and places cards with usable packages. May rewind salvaged yarn by hand or using winding machine.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 79

681.687-030 YARN EXAMINER (glass mfg.; plastic-synth.; textile) alternate titles: cone inspector; filling inspector; finished-yarn examiner; quill inspector; yarn inspector

Inspects yarn for defects preparatory to shipment or storage. Examines bobbins, *cones*, cops, or tubes of yarn by sight and touch for defects, such as broken threads, cross threads, dirty yarn, and excessively loose or tight winding. Places defective yarn on trays or bobbin carts for reprocessing. Wraps yarn in paper or other material to prevent soiling and damage during shipment or storage. Packs and weighs yarn after inspection. Records amount of yarn packed and number of cones rejected. May stamp shipping carton with identification data. May push loaded racks of yarn into steam cabinet to condition yarn.
GOE: 06.03.02 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 79

682 SPINNING OCCUPATIONS

This group includes occupations concerned with twisting together short fibers to form a continuous length of yarn.

682.130-010 SUPERVISOR, SPINNING (textile)

Supervises and coordinates activities of workers engaged in spinning yarn. Reads production schedule for information, such as quantity of yarn, type of fiber, staple length, yarn size, quality and texture desired, and ultimate use of yarn. Computes draft required to reduce roving to specified yarn size and drafting gear size to effect draft, using mathematical formulas and tables. Determines spacing of drafting rollers according to staple length of fiber. Analyzes yarn specifications to determine amount of twist to put into yarn. Computes twist gear size, using mathematical formulas and tables. Schedules changes in machine setup to produce yarn according to production schedule, issuing change instructions to SECTION LEADER AND MACHINE SETTER (textile) 689.260-018. Examines yarn to detect variations from standards. Schedules doffing of frames to avoid excessive downtime. Trains new employees. Participates in setup and adjustment of machines and equipment. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 79

682.684-010 ROLLER CHECKER (textile)

Verifies speed of drafting rollers on spinning frames, using tachometer. Presses tachometer button against rollers and observes dial indicator to obtain r.p.m. readings. Examines rollers for surface damage and replaces defective rollers or flags malfunctioning machines. *Pieces up* broken ends. Changes travelers [TRAVELER CHANGER (textile)].
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

682.685-010 SPINNER, FRAME (nonmet. min.; textile) alternate titles: spinner; spinning-frame tender

Tends spinning frame that draws out and twists roving or sliver into yarn. Patrols work area and observes spinning to detect nearly exhausted supply packages and breaks in yarn, roving, and sliver. *Pieces up* breaks in yarn, roving, and sliver and replaces nearly exhausted supply packages with full packages [CREELER (any industry) 689.687-030]. Twists end of material from supply package to material in machine or threads material from supply package through machine guides and drawing rollers. Brushes yarn or lint from drawing rollers, guides, and rails. Notifies designated personnel of machine malfunction. May doff machine [DOFFER (textile) 689.686-022]. May change travelers [TRAVELER CHANGER (textile) 682.687-010]. May be designated according to machine tended as Spinner, Cap Frame (textile); Spinner, Open-End (textile); Spinner, Ring Frame (textile).
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 79

682.685-014 SPINNER, MULE (nonmet. min.; textile)

Tends mule-spinning frame that spins roving into yarn and winds yarn onto bobbins: Creels machine and threads roving through guides, between feed rollers, and onto bobbins. Starts machine and patrols work area to detect breaks in roving. Stops machine and *pieces up* broken roving ends. Turns crank to increase or decrease tension of *faller wires* on yarn according to fullness of bobbins. Doffs full bobbins from machine and replaces them with empty bobbins.
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

682.687-010 TRAVELER CHANGER (textile)

Changes travelers on ring-spinning frames according to style or size of yarn being processed or at regular intervals because of wear, using fingers, hammer, or hook. Threads yarn through traveler and restarts machine. May replace supply packages of roving on spinning frame.
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 78

683 WEAVERS AND RELATED OCCUPATIONS

This group includes occupations concerned with interlacing two sets of yarn to form a fabric.

683.130-010 FLOOR SUPERVISOR, ENDLESS-BELT-WEAVING DEPARTMENT (narrow fabrics)

Supervises and coordinates activities of workers engaged in weaving narrow fabric products, such as endless belts. Inspects woven material during weaving process to detect loom malfunctions. Adjusts looms to obtain belts of specified pattern. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.04.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

683.130-014 LOOM-FIXER SUPERVISOR (narrow fabrics) alternate titles: fixer supervisor

Supervises and coordinates activities of workers engaged in operating looms to weave cloth: Sets up loom and adjusts tension and timing of parts, using handtools and following diagrams and manuals. Aligns parts, such as shuttle boxes, race plates, and reeds, using straightedge, level, and square. Replaces defective parts, such as harness straps and shuttles. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: M GED: R4 M3 L4 SVP: 7 DLU: 77

683.130-018 WEAVE-ROOM SUPERVISOR (carpet & rug)

Supervises and coordinates activities of workers engaged in weaving and related operations in manufacture of carpets and rugs. Directs warp drawing-in, twisting-in, and repair activities. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

683.130-022 WEAVING SUPERVISOR (nonmet. min.; textile)

Supervises and coordinates activities of workers engaged in weaving cloth: Prepares and issues instructions to drawing-in department, indicating harness size, number of harnesses required, type of heddles, number of warp ends per inch, and sequence in which warp ends are to be drawn through harness and reed. Prepares loom change instructions indicating changes in loom shedding, picking, beating-up, warp letoff, and cloth takeup motions according to weaving design. Scans cloth during weaving for defects in yarn, design, and loom setup. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 80

683.132-010 PATTERN-CHAIN MAKER SUPERVISOR (textile)

Supervises and coordinates activities of workers engaged in cutting, lacing, and duplicating pattern cards used to control weaving operations of *jacquard looms*. Analyzes customer orders and design drafts (pattern diagrams) to determine number of pattern chains required to meet production schedule. Directs workers to cut and lace new pattern chains or to duplicate specified patterns. Trains workers in cutting, lacing, and duplicating operations. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

683.222-010 INSTRUCTOR, WEAVING (textile)

Teaches workers to operate looms, employing knowledge of weaving techniques: Explains application and utilization of *drawing-in draft*. Identifies and describes functions of loom parts to familiarize trainee with loom. Demonstrates weaving techniques, such as tying weaver's knot, threading shuttle, loading loom magazine or battery, and drawing-in broken warp threads. Examines work of trainees to detect defective weaving and suggests methods to correct defective work. Recommends transfer from trainee status to WEAVER (nonmet. min.; textile) as trainees become proficient.
GOE: 06.02.01 STRENGTH: L GED: R3 M2 L3 SVP: 7 DLU: 77

683.260-010 BRAID-PATTERN SETTER (narrow fabrics) alternate titles: braid maker

Sets up braiding machines to produce braid of specified size, style, or design, according to analysis of samples or pattern-card guides: Studies guide or sample to determine machine settings and size, color, and arrangement of yarn on carrier spindles. Changes gears to set up machine for flat or tubular braid, using handtools. Removes or replaces carrier spindles to alter crossing order of threads. Adjusts let-off motion to control closeness of threads. Replaces weights in carrier spindles or adjusts springs to control thread tension for different styles. Tends machine and examines braid to verify setup. Records settings made for new styles or designs.
GOE: 06.01.02 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

683.260-014 CARPET-LOOM FIXER (carpet & rug)

Sets up looms equipped with pile-wire mechanism to weave piled carpeting and repairs looms to ensure production conforms to quality standards, employing knowledge of weaving and loom construction: Inspects loom of woven carpeting to determine adjustments or repairs needed. Repairs or replaces defective parts, using handtools and precision instruments. Changes gears on pile-wire mechanism to alter number of *pile wires* inserted into shed to correspond with

number of picks per inch, following charts. Synchronizes motion of pile wires with motion of lathe, using handtools.
GOE: 06.01.02 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

683.260-018 LOOM FIXER (narrow fabrics; nonmet. min.; textile) alternate titles: fixer; loom repairer

Sets up, adjusts, and repairs looms to weave cloth of specified quality and design, using knowledge of loom function and weaving, diagrams, and manuals: Inspects loom or woven cloth to determine adjustments or repairs needed. Repairs or replaces defective parts, such as harness straps and shuttles, and adjusts tension and timing of parts, using handtools. Levels and aligns parts, such as shuttle boxes, race plates, and reeds, to prevent excessive wear, using straightedge, level, and square. May change setup of loom to weave different pattern or different type yarn [LOOM CHANGER (textile) 683.360-010]. May be designated according to type of loom serviced as Dobby-Loom Fixer (textile); Jacquard-Loom Fixer (textile); Narrow-Fabric-Loom Fixer (narrow fabrics); Rapier-Insertion Loom Fixer (textile); Water-Jet Loom Fixer (textile).
GOE: 06.01.02 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 80

683.260-022 SWATCH CHECKER (textile)

Inspects sample cloth swatches for weaving defects and adjusts setup of loom, using knowledge of weaving, to correct cause of defects: Examines loom to detect mistakes in setup, such as defective drawing-in, filling, and warp. Compares swatch of first woven cloth with standard swatch, using pick counter and flashlight equipped with magnifying lens, to detect defects in style, yarn, weaving, or color. Determines adjustments needed to correct defects and makes adjustments or notifies LOOM FIXER (narrow fabrics; nonmet. min.; textile). Examines swatch from cloth woven after adjustments. Records number of swatches examined and defects detected. May boil swatch to remove size to permit examination of threads. May dye swatch or have swatch dyed to ascertain dye retention of threads and to detect weaving defects. May test warp tensions, using tensiometer.
GOE: 06.01.02 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

683.360-010 LOOM CHANGER (textile) alternate titles: warp changer

Sets up loom to change pattern of cloth woven, according to work order and supervisor instructions: Removes warp beam, harnesses, *drop wires*, and reed, using handtools. Inspects loom components, such as gears, cams, stop-motion devices, and shuttle-throwing assembly to determine adjustments needed. Repairs defective components and adjusts tension and timing of loom parts, using handtools [LOOM FIXER (narrow fabrics; nonmet. min.; textile) 683.260-018]. Positions full warp beam, harnesses, drop wires, reed, and pattern chain on loom. Levels and aligns shuttle boxes and reed. Ties group of warp ends to cloth beam. *Pieces up* thread breaks. Redraws threads through harness to correct misdraws, using *reed hook*. May clean and oil loom. May remove and replace shuttle-box assembly, using handtools. May repair pattern control device on looms that weave cloth with patterns. May start loom and inspect woven cloth to detect defects [LOOM STARTER (textile) 683.360-014].
GOE: 06.01.02 STRENGTH: M GED: R3 M2 L2 SVP: 7 DLU: 80

683.360-014 LOOM STARTER (textile) alternate titles: starter, weaving; warp starter

Examines loom parts, warp and filling thread, and cloth being woven to ensure that loom is set up to weave specified pattern: Inspects pattern chains, order in which warp threads are drawn through harness assembly, and color of warp and filling thread to detect errors in loom setup. Makes adjustments such as changing pattern chains and redrawing warp threads. Starts loom and examines cloth being woven to detect defects. Determines cause of defective weaving and makes adjustments or notifies LOOM FIXER (narrow fabrics; nonmet. min.; textile). Notifies WEAVER (nonmet. min.; textile) to continue operation of loom after adjustment.
GOE: 06.01.02 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 77

683.380-010 HARNESS BUILDER (textile) alternate titles: harness preparer; harness repairer

Reconditions and prepares *harness frames* for looms preparatory to drawing-in or storage: Inspects and replaces damaged heddles, slide rods, side hooks, and frame hooks. Removes or inserts heddles in harness frame for change in cloth style, according to pattern. Counts, measures with gauge, or connects harness to electric counting machine to determine number of heddles. Spaces heddles in sections between heddle rod hooks. May clean harnesses. May convey harnesses to drawing-in department, using handtruck.
GOE: 06.01.02 STRENGTH: M GED: R4 M2 L3 SVP: 6 DLU: 77

683.381-010 CHAIN BUILDER, LOOM CONTROL (textile) alternate titles: chainer; chain maker, loom control; chain pegger; chain splitter

Assembles pattern chains that control movement of *harness frames* and shuttle boxes during weaving: Arranges rolls and separator tubes on cross bars of links, according to pattern diagram, and connects links, using handtools. May hammer or screw pegs in wooden pattern chain.
GOE: 06.01.04 STRENGTH: L GED: R3 M1 L2 SVP: 5 DLU: 77

683.384-010 PATTERN-LEASE INSPECTOR (textile) alternate titles: misdraw hand

Examines warp threads in loom harness to determine if they are drawn in according to pattern chart: Turns wheel on head of loom to raise *harness frames*, and inspects threads drawn through frames to detect mistakes. Redraws threads through drop wires, heddle eyes, and reed dents to correct misdraws, using reed hook. May start loom and examine woven cloth for defects caused by misdraws, correct misdraws, and mark defects in cloth, using chalk or thread.
GOE: 06.03.01 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

683.487-010 BELTING-AND-WEBBING INSPECTOR (narrow fabrics)

Inspects woven belting and webbing to detect weaving defects and variations from specified size and quality: Counts number of warp and filling threads per square inch, using pick counter. Measures width and gauge of belting, using ruler and calipers. Examines belting for knotted, loose, or broken threads. Rejects belting not meeting specifications.
GOE: 06.03.01 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

683.582-010 CARD CUTTER, JACQUARD (narrow fabrics; textile) alternate titles: piano-machine operator

Operates machine to punch holes in *Jacquard loom* pattern cards, following design draft (pattern diagram): Clamps paper design draft to frame on front of machine, and positions blank pattern cards in guide under punches (cutting dies). Places automatic marker in line with first row of design marks. Engages clutch to start punching head. Presses keys that control cutting dies following arrangement of holes indicated on design draft. Compares punched card with pattern to detect cutting errors, and pastes squares of paper over holes punched in error. Numbers cards in consecutive order.
GOE: 06.02.04 STRENGTH: L GED: R3 M1 L2 SVP: 5 DLU: 77

683.662-010 JACQUARD-LOOM WEAVER (textile)

Operates battery of *Jacquard looms* to weave yarn into cloth of intricate design: Observes weaving to detect exhausted filling packages and defects in cloth resulting from worn cards in pattern chain. Pulls out filling to remove defects in cloth. Notifies CARD CHANGER, JACQUARD LOOM (textile) if worn cards are causing weaving defects. Pulls cord to reverse pattern chain and card cylinder so that weaving will resume at place where defect occurred to maintain pattern continuity. Marks or cuts cloth when sufficient yardage has been woven.
GOE: 06.02.06 STRENGTH: L GED: R3 M1 L1 SVP: 5 DLU: 77

683.665-010 WEAVER, NEEDLE LOOM (narrow fabrics) alternate titles: shuttleless-loom weaver

Tends shuttleless looms, equipped with filling-carrier needle, that weave narrow fabrics, such as ribbon, tape, and elastic: Places filling-yarn package on holders and threads ends through guides, tensions, and needle carriers, using hook. Presses button to start looms and patrols area to examine woven fabric for defects and to determine cause of loom stoppage, such as warp or filling breaks. Ties broken warp or filling ends. Notifies LOOM FIXER (narrow fabrics; nonmet. min.; textile) of defective weaving caused by mechanical defects. Cuts or marks fabric when specified yardage has been woven and doffs loom or notifies CLOTH DOFFER (textile). May thread warp yarn through harness to change weave pattern or replace warp [DRAWER-IN, HAND (textile)].
GOE: 06.02.06 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

683.680-010 HARNESS PLACER (textile) alternate titles: harness tier; warp hanger; warp tier

Places new harness assembly and *loom beam* in loom to prepare loom to weave different pattern: Unbolts reed and *drop wires*, wires, and unhooks pattern control cords from *harness frames* to release harness assembly in loom. Removes harness assembly and loom beam from loom, using hoist. Bolts or screws new reed and drop wires in place on loom. Positions harness frames in loom and connects pattern control cords to frames. Positions loom beam on brackets, using hoist. May level harness frames. May place pattern chain on loom.
GOE: 06.01.02 STRENGTH: M GED: R3 M1 L2 SVP: 4 DLU: 77

683.680-014 HEDDLES TIER, JACQUARD LOOM (narrow fabrics; textile)

Attaches harness parts to head of *Jacquard loom* to prepare pattern control mechanism for weaving process: Ties neck (tail or tug) cords to hooks in head of loom or connects cords with wire link. Draws neck cords through bottom board (holed board) to prevent tangling, and ties neck cords to harness cords which have been threaded through comber board. Places leveling board on loom and reties harness cords to heddles to align heddle eyes. Brushes varnish on cord knots to prevent slipping and clips ends of cord close to knots, using scissors. May draw harness cords through comber board holes in specified order, gathering ends of harness cords in bunches and tying heddles and lingos (small weights) to other ends of cords. May place *drop wires* on warp threads [DROP-WIRE HANGER (textile)].
GOE: 06.01.02 STRENGTH: L GED: R3 M1 L1 SVP: 5 DLU: 77

683.682-010 CARPET WEAVER (carpet & rug)

Operates one or more looms equipped with *pile-wire* mechanism to weave carpeting: Moves lever to open shed and inserts specified number of pile wires through shed in sequence to produce pile. Forces cop of filling into shuttle using mallet, and inserts shuttle into loom. Places wax in holder to lubricate pile wires as wires enter and are withdrawn from shed. Starts loom and observes weaving to detect exhausted filling packages, mispicks, and irregular cutting of pile. Replaces exhausted filling, inserts pile wires into missed loops, and replaces dull cutting blades. May be designated according to type of carpet woven as Velvet Weaver (carpet & rug).

GOE: 06.02.06 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

683.682-014 CARPET WEAVER, JACQUARD LOOM (carpet & rug)

Operates one or more *Jacquard looms* equipped with pile-wire mechanism to weave carpeting of intricate design: Moves lever to open shed, and inserts specified number of *pile wires* through shed in sequence to produce pile. Forces cop of filling into shuttle, using mallet, and inserts shuttle into loom. Places wax in holder to lubricate pile wires as wires enter and are withdrawn from shed. Starts loom and observes weaving to detect exhausted filling packages, misspicks, and irregular cutting of pile. Replaces exhausted filling, inserts pile wires into missed loops, and replaces dull cutting blades. Pulls out filling to remove defects in carpeting. Pulls cord to reverse pattern chain and card cylinder so that weaving will resume at place where defect occurred to maintain pattern continuity. Notifies CARD CHANGER, JACQUARD LOOM (textile) as pattern cards become worn or damaged. May be designated according to type of carpeting woven as Wilton Weaver (carpet & rug).
GOE: 06.02.06 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

683.682-018 DRAWING-IN-MACHINE TENDER (textile)

Sets up and operates machine to draw warp threads automatically from warp beam through harness assembly to prepare warp for weaving: Bolts setup stand containing beam and harness assembly to frame of drawing-in machine. Attaches pattern strip to keps (slender wires) that are threaded through heddles to set up machine to draw-in specified pattern. Starts machine and observes operation of automatic threading device to ensure drawing-in according to pattern. Examines drawn warp for mistakes. Corrects misdraws and draws-in selvages, using *reed hook*. Loops warp ends together to prevent ends slipping from harness assembly. Unbolts setup stand and pushes stand from frame of machine. Feeds metal strips into pattern cutting machine, and depresses button to cut holes at designated places. May prepare setup stand for use on machine.
GOE: 06.02.06 STRENGTH: H GED: R3 M1 L2 SVP: 5 DLU: 77

683.682-022 JACQUARD-LOOM WEAVER (narrow fabrics)

Operates battery of *Jacquard looms* to weave multiple widths of intricately designed narrow fabrics, such as labels and ribbon. Observes weaving to detect exhausted filling packages and defects in cloth resulting from worn cards in pattern chain. Replaces exhausted filling packages and notifies CARD CHANGER, JACQUARD LOOM (textile) of worn cards. Pulls out filling to remove defects in weaving. Pulls cord to reverse pattern chain and card cylinder so that weaving will resume at place where defect occurred to maintain pattern continuity. Replaces defective shuttles, tension springs, and shuttle eyes, using handtools. May operate loom equipped with automatic stop motions to stop loom as yarn breaks or after weaving specified number of picks. May draw-in warp yarn [DRAWER-IN, HAND (textile)].
GOE: 06.02.06 STRENGTH: L GED: R3 M1 L2 SVP: 5 DLU: 77

683.682-026 LEVERS-LACE MACHINE OPERATOR (tex. prod., nec) alternate titles: jacquard-lace weaver; lace-machine operator; twisthand

Operates loom, known as Levers-Lace Machine, to weave lace: Throws power rod to start loom and pushes wheel to activate pattern chain. Observes lace being woven to detect weaving defects. Examines loom to determine cause of loom stoppage, such as yarn breaks or mechanical defects. Pulls out broken filling and pushes shuttle through shed to insert new pick. Records number of racks woven and cuts completed lace from loom.
GOE: 06.02.06 STRENGTH: M GED: R3 M1 L2 SVP: 6 DLU: 77

683.682-030 PLUSH WEAVER (textile)

Operates battery of looms to weave plush fabric: Observes fabric being woven to detect weaving defects, such as exhausted filling, yarn breaks, or mechanical defects. Pulls out broken filling and pushes shuttle through shed or pulls yarn through guides for rapier pickup to insert new pick. Replaces exhausted packages with supply packages in creel. Examines cloth for uneven cutting after automatic knife separates double-woven pile fabric. Notifies LOOM FIXER (narrow fabrics; nonmet. min.; textile) 683.260-018 if pile is not cut smoothly, or raises flags on looms to signal breakdown or that cloth needs cutting. Marks or cuts fabric when specified yardage has been woven. Records pick clock readings of assigned looms at beginning and end of shift to maintain plant control form. May be designated according to type of loom operated as Weaver, Rapier-Insertion Loom (textile); Weaver, Wire Loom (textile).
GOE: 06.02.06 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 80

683.682-034 WEAVER (carpet & rug)

Operates power looms equipped with rollers and shuttles adapted for bobbins or cops to weave twisted coir, sisal, or paper yarns to produce items, such as mesh, scrim, and fiber rugs, according to specified color, type, pattern, and size: Positions shuttles and inspects looms for broken strands. Releases brake and pulls lever to start loom. Stops loom when breaks and defective weaving are observed or watches for looms stopped by automatic stop-motion device. Threads warp through guides and heddles, over rollers and wax bars, and ties or splices ends, to repair breaks in warp. Breaks out imperfect strands of filling or turns back roll and removes filling up to defect to repair defects or breaks in filling. Stops loom and replaces empty shuttle. Starts loom and clips off end of filler close to selvage. Clears jams in bobbin-type shuttle by removing bobbin and rewinding snarled yarn or by inserting new bobbin. Inserts full cop into empty shuttles manually while loom is running. Installs specified spools in creel when pattern is changed. Cuts and removes full roll of fabric, and tapes end of fabric (discharging from machine) onto tube, or places fabric end under canvas flap and turns roller until fabric is wound tightly onto tube to start new roll, with assistance of CREELER (any industry). May operate loom equipped with three heddles which twist two warp yarns together between each filling yarn to produce leno (open mesh) weave.
GOE: 06.02.06 STRENGTH: M GED: R3 M1 L2 SVP: 5 DLU: 77

683.682-038 WEAVER (nonmet. min.; textile) alternate titles: loom operator; weaver, broadloom

Operates battery of looms to weave yarn into cloth: Observes cloth being woven to detect weaving defects. Removes defects in cloth by cutting and pulling out filling. Adjusts pattern chain to resume weaving. Examines looms to determine cause of loom stoppage, such as warp, filling, harness breaks, or mechanical defects. Ties piece of yarn to broken end and threads yarn through *drop wires*, heddle eyes, and reed dents to repair warp breaks, using *reed hook*. Pulls out broken filling and pushes shuttle through shed to insert new pick and repair filling breaks. Notifies LOOM FIXER (narrow fabrics; nonmet. min.; textile) 683.260-018 of mechanical defects. Marks or cuts cloth when sufficient yardage has been woven and notifies CLOTH DOFFER (textile) 689.686-058. May place quills or bobbins in battery or magazine of loom [BATTERY LOADER (textile) 683.686-010]. May replace empty bobbins in shuttle with full ones on nonautomatic looms [SHUTTLE HAND (textile) 689.686-038]. May tend winding units attached to looms that wind filling onto quills [LOOM-WINDER TENDER (textile) 681.685-062]. May be designated according to type of loom operated as Weaver, Dobby Loom (textile). When weaving samples, is known as Sample Weaver (textile).
GOE: 06.02.06 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 80

683.682-042 WEAVER APPRENTICE (nonmet. min.; textile) alternate titles: loom operator apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 06.02.06 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

683.682-046 WEAVER, NARROW FABRICS (narrow fabrics; nonmet. min.)

Operates battery of looms to weave multiple widths of narrow fabric, such as ribbon or tape: Observes weaving to detect exhausted filling packages and replaces exhausted packages with full packages. Replaces defective shuttles, tension springs, and shuttle eyes, using handtools. May operate looms equipped with automatic motions to stop loom as yarn breaks or after weaving specified number of *picks*. May draw-in warp yarn [DRAWER-IN, HAND (textile) 683.684-014]. May tend machine to wind filling [YARN WINDER (tex. prod., nec; textile) 681.685-154]. May be designated according to type of fabric woven as Ribbon Weaver (narrow fabrics); Tape Weaver (narrow fabrics; nonmet. min.).
GOE: 06.02.06 STRENGTH: L GED: R3 M1 L2 SVP: 5 DLU: 77

683.682-050 WEAVER, TIRE CORD (tex. prod., nec)

Operates battery of looms to weave cotton yarn between strands of tire cord to form loosely woven tire cord fabric: Observes fabric being woven to detect weaving defects. Examines looms to determine cause of loom stoppage, such as warp and filling breaks or mechanical defects. Ties piece of yarn to broken end and threads yarn through loom parts to repair warp breaks, using hook. Pulls out broken filling and pushes shuttle throughshed to insert new *pick*. Marks or cuts fabric when sufficient yardage has been woven.
GOE: 06.02.06 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

683.684-010 CHAIN REPAIRER (carpet & rug)

Adjusts, changes, and repairs endless chains that carry spools of yarn for weaving on axminster looms: Places chain on frame sprockets, using chain hoist. Inserts or removes links to lengthen or shorten chain, following loom setup specifications and using handtools. Inserts rivets to join end links together to form endless carrier chain. Turns screws and nuts and slides sprockets into slots to adjust chain tension. Replaces defective parts and rebuild chains to specifications.
GOE: 06.02.24 STRENGTH: M GED: R3 M1 L2 SVP: 5 DLU: 77

683.684-014 DRAWER-IN, HAND (textile) alternate titles: drawer; drawing-in hand; draw-in hand; warp drawer

Draws warp yarn through loom parts to arrange warp for weaving specified pattern, following pattern chart: Reads pattern chart to determine information, such as type warp to be drawn, number of *harness frames*, and type of reed required for pattern. Positions warp, harness frames, *drop wires*, and reed on or in proximity of *drawing-in frame* or loom to facilitate drawing-in process. Selects warp yarn according to lease, color, and sequence indicated by pattern chart. Pulls yarn through drop wires, heddle eyes, and reed dents, using *reed hook*. May repair warp yarn on loom when numerous threads are broken [SMASH HAND (narrow fabrics; textile) 683.684-026]. May be handed warp yarn by coworker, during drawing-in process. May be designated according to type of loom on which drawing-in is performed, as Drawer-In, Dobby Loom (textile); Drawer-In, Jacquard Loom (textile); Drawer-In, Plain Loom (textile).
GOE: 06.02.06 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 80

683.684-018 HARNESS PULLER (textile) alternate titles: warp starter

Inspects and adjusts warp ends in loom to ensure accuracy of warp position as specified by warp pattern: Pulls warp ends from reed to verify that each thread is located in harness as specified in pattern and in corresponding slot in reed. Reties warp ends to correct errors and ties warp ends to beam in bunches to prepare warp for weaving.

GOE: 06.03.02 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

683.684-022 LEASE-OUT WORKER (textile)

Arranges yarn ends from full *loom beam* with corresponding warp ends in loom preparatory to tying of warp ends and resumption of weaving: Mounts beam in brackets of loom, using jack. Separates alternate ends of new warp and warp left in loom according to lease arrangement and inserts lease rod strands so their position of strands will be maintained. Ties thread to broken end and draws thread through harness to *piece up* breaks. Transfers loom beam to and from loom, using dolly.
GOE: 06.04.27 STRENGTH: H GED: R2 M1 L2 SVP: 3 DLU: 77

683.684-026 SMASH HAND (narrow fabrics; textile)

Repairs warp yarn on loom when numerous threads are broken (breakout): Ties short piece of thread to each end of broken warp yarn and cuts off ends close to knot with scissors. Draws repaired warp yarn through *drop wires*, heddle eyes, and reed dents, using *reed hook*. Picks out filling yarn when defective weaving is observed, using fine metal comb. Starts loom and observes operation to detect defective setup or weaving. May start loom after warp change and repair breaks resulting from knots passing through drop wires, heddle eyes, and reed dents.
GOE: 06.02.27 STRENGTH: L GED: R3 M1 L2 SVP: 3 DLU: 77

683.684-030 WEAVER, HAND LOOM (carpet & rug; textile)

Weaves rugs or woolen cloth, using hand loom: Draws warp yarn through loom parts to arrange warp for weaving specified pattern. Inserts bobbin of filling in shuttle and depresses pedals to start loom. Observes cloth to detect weaving defects, such as broken filling or warp. *Pieces up* broken warp ends. Pulls out broken or defective filling and pushes shuttle through shed to insert new pick. Doffs loom.
GOE: 06.02.27 STRENGTH: M GED: R4 M1 L2 SVP: 6 DLU: 77

683.684-034 WEAVING INSPECTOR (carpet & rug; textile) alternate titles: cloth inspector; loom inspector

Inspects woven fabric during weaving process to detect grease spots and weaving defects, such as broken ends, slubs, and coarse yarn: Patrols work area and scans cloth on loom for defects. Stops loom, ties length of yarn to broken warp yarn, and draws yarn through harness and reed, using *reed hook*. Picks out slubs and coarse yarn, using burling iron, and reweaves cloth, using needle. Marks grease spots and irreparable defects with crayon to indicate yardage allowance. Trims loose threads with scissors.
GOE: 06.02.06 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

683.685-010 BRAIDING-MACHINE OPERATOR (narrow fabrics; nonmet. min.) alternate titles: braider tender

Tends battery of machines that braid yarn into flat or tubular narrow fabrics: Creels machine according to work ticket and threads yarn through guides, tensions, braiding point (round or elliptical hole), and tension rollers. Starts machine and laps end around *takeup roll* or places end into receiving can. Observes braiding to detect breaks in yarn and ties or glues broken yarn ends. Doffs full rolls or cans of braided material from machine. May braid jacket around articles, such as rope or wire. May tend yarn rewinding machine [YARN WINDER (tex. prod., nec; textile) 681.685-154].
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

683.685-014 CARD CHANGER, JACQUARD LOOM (textile) alternate titles: card hanger; jacquard-pattern servicer; pattern changer and repairer; pattern hanger

Changes pattern chain on *Jacquard loom* to alter weave design and replaces worn parts: Cuts lacing connecting first and last cards of pattern chain on loom. Lifts pattern chain from holder brackets onto handtruck and positions new pattern chain in holder. Positions pattern chain over card cylinder of Jacquard head and ties end cards together to form endless chain. Examines pattern chains for worn cards or lacing. Cuts lacing from cards and ties in duplicate cards or new cord.
GOE: 06.04.27 STRENGTH: M GED: R2 M1 L2 SVP: 4 DLU: 77

683.685-018 CARD LACER, JACQUARD (narrow fabrics; textile) alternate titles: lacing-machine operator, jacquard cards

Tends machine that automatically laces Jacquard pattern cards with cord to form pattern chain for use on *Jacquard loom*: Stacks punched pattern cards in sequence or blank cards in automatic feed mechanism or places cards individually on feed belt. Observes machine operation to ensure that cards are spaced evenly and fed singly according to numerical sequence into lacing mechanism. Replenishes spools of lacing cord. May tend machine that duplicates sets of cards [PATTERN DUPLICATOR (textile)]. May number cards according to prescribed sequence, using pencil or hand-numbering device.
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

683.685-022 DRAWING-IN-MACHINE-TENDER HELPER (textile)

Assists DRAWING-IN-MACHINE TENDER (textile) to tend drawing-in machine: Positions warp beam on brackets of stand, using chain hoist, and hangs *harness frames* in specified order on arms of stand. Attaches reed and *drop wires* to stand, using handtools. Threads heddles eyes with keys (slender wires) that control order in which machine will draw in warp threads. Pushes stand into frame of machine. Removes drawn warp assembly from setup stand and places assembly on handtruck, using chain hoist. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 06.04.05 STRENGTH: H GED: R2 M1 L1 SVP: 4 DLU: 77

683.685-026 PATTERN DUPLICATOR (textile) alternate titles: repeater operator

Tends machine that duplicates sets of pattern cards used to control weaving operations of *Jacquard loom*: Places set of blank cards and set of punched cards into mechanisms that simultaneously feed cards under repeating cylinder where reeler rods locate holes on punched card and activate corresponding punches that punch duplicate holes in blank card. Observes operation of machine to verify accuracy of punching and removes bent or jammed cards. May operate lacing machine to tie punched cards into chain [CARD LACER, JACQUARD (narrow fabrics; textile)].
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

683.685-030 THREADING-MACHINE TENDER (carpet & rug)

Tends machine that threads axminster loom frames with pile yarn for weaving process: Mounts loom frame and loom spools in machine brackets and aligns frame tubes with machine needle guides. Inserts clamp in holder to lay yarn parallel in guides. Moves lever and presses pedal to lower lock bar and activate needle bar to draw yarn ends through guides and tubes. Examines frame for missed or crossed yarns. Corrects faulty threading, using *reed hook*. Presses lever and button to activate blowers and rotary blade that trims protruding yarn ends from frame tubes. Loads completed assembly onto handtruck for removal to weaving area.
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

683.685-034 WARP-TYING-MACHINE TENDER (narrow fabrics; textile) alternate titles: knotting-machine operator, portable; knot-tying operator; tying-in-machine operator; warp-tying-machine knotter

Tends portable or stationary automatic warp-tying-in machine that ties warp ends from full warp beam to warp in loom in order to resume weaving without repeating drawing-in process: Reads work order or confers with supervisor to determine looms needing warp-tying-in process. Divides, combs out, straightens, and applies warp softener to ends of warp from full beam and from exhausted beam, and clamps ends in position in tier. Presses button or turns crank to start tying mechanism. Observes and controls tying-in process as machine picks up corresponding strands from warp beam and from *loom beam*, ties strands together, and cuts off excess yarn above knot. Stops machine, corrects misalignment of warp yarn, and releases joined strands from machine. Manually ties ends not tied by machine. May pull warp through *drop wires*, harnesses, and reed so knots will not jam assembly and break when loom is started. May repair tying machine. May doff exhausted warp beams and position full beams prior to warp-tying-in process, using hoist.
GOE: 06.04.06 STRENGTH: M GED: R3 M1 L2 SVP: 4 DLU: 80

683.685-038 WEAVER, AXMINSTER (carpet & rug)

Tends automatic looms simultaneously that weave pile yarn, filling yarn, and warp yarn material to produce carpets and rugs with various colored designs: Starts previously set up loom and observes weaving to detect breaks in yarn and weaving defects. Stops loom, *pieces up* broken ends, and removes filling yarn back to point where defect begins to correct imperfections. Pulls lever to actuate endless chain that moves spools of pile yarn into position for weaving.
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

683.686-010 BATTERY LOADER (textile) alternate titles: battery filler; battery hand; magazine filler

Loads batteries or magazines of automatic looms with quills or bobbins of filling: Conveys quills or bobbins of filling to loom, using handtruck, and places them in battery or magazine of loom. Draws loose ends of filling through guides and winds ends around thread holder on side of battery or magazine.
GOE: 06.04.06 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

683.687-010 DRAWER-IN HELPER, HAND (textile)

Assists DRAWER-IN, HAND (textile) to prepare warp for weaving: Conveys beams of warp from warper, slasher, or storage to *drawing-in frame*, and removes completed draw-in assembly, using handtruck. Assists DRAWER-IN, HAND (textile) to position harness, reed, and *drop wires* on drawing frame, and fastens ends of warp on frame with clamp bar. May place warp beam on brackets of loom, using hoist, and lay ends in position for drawing-in with *reed hook*. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 06.04.05 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

683.687-014 DROP-WIRE HANGER (textile) alternate titles: wire dropper

Places *drop wire* on each warp thread in loom to complete drawing-in process for weaving. Job occurs where warp thread is not drawn through eyes of drop wires in drawing-in process.
GOE: 06.04.06 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

683.687-018 HANDER-IN (narrow fabrics; textile)

Assists DRAWER-IN, HAND (textile) to draw warp yarn through loom harness and reed: Sits behind harness at *drawing-in frame* or loom, selects warp ends according to lease and places warp ends on *reed hook* held by DRAWER-IN, HAND (textile) who draws ends through heddles and reed. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 06.04.05 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

683.687-022 HOOK PULLER (narrow fabrics)

Removes weaving hooks from finished endless belts to prepare belts for inspection. Places hooks in tray.

GOE: 06.04.40 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

683.687-026 LINGO CLEANER (textile)

Cleans metal lingos (weighted heddles) used in *Jacquard loom* harness. Cuts harness cords from lingo, using curved, flexible knife, and lays lingos in tray. Places tray of lingos in tub filled with cleaning solution, boils solution to remove dirt and oil from lingos, and rinses lingos in adjoining tub. Places tray of cleaned lingos in drying cabinet. Removes trays from drying cabinet and ties lingos in bunches with cords.

GOE: 06.04.39 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

683.687-030 LOOM CHANGEOVER OPERATOR (carpet & rug) alternate titles: changeover operator

Replaces spools of fiber yarn on loom, according to changeover chart for new pattern of woven fiber rug. Removes old spools from spindles of creel, places spools on pallet for removal to stockroom. Places new spools of yarn of specified color on spindles and threads individual strands through loom.

GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

683.687-034 WARP-TENSION TESTER (textile) alternate titles: tension checker

Tests and adjusts tension of warp on looms or other textile machines, using tensiometer. Presses arm of tensiometer against several threads of warp and reads gauge. Removes or adds weights, or turns adjustment nut with wrench to adjust tension, according to specifications. May test accuracy of tensiometer with known weights and adjust tensiometer, using screwdriver.

GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

684 HOSIERY KNITTING OCCUPATIONS

This group includes occupations concerned with interlacing a strand of yarn or thread in a series of connected loops to make hosiery.

684.137-010 SUPERVISOR (knitting)

Supervises and coordinates activities of workers engaged in one or more phases of hosiery or sock production, such as knitting, dyeing, finishing, mending, and packaging. May set up and repair machines, such as boarding, looping, or seaming machines. May distribute materials to workers. Performs duties as described under SUPERVISOR (any industry) Master Title. May be designated according to department as Supervisor, Boarding (knitting); Supervisor, Knitting (knitting) I; Supervisor, Looping (knitting) I; Supervisor, Mending (knitting) I; Supervisor, Pairing And Inspecting (knitting); Supervisor, Seaming (knitting); Supervisor, Transferring And Boxing (knitting).

GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 83

684.384-010 QUALITY-CONTROL TESTER (knitting)

Tests hosiery to verify conformance to plant quality standards or to obtain data for use in establishing quality standards for new styles. Measures overall length, and length of toe, foot, heel, welt, and after welt, with scale. Determines stretch of welt, knee, ankle, and instep, using weighted stretch machine. Tests tensile strength of hose at knee on stretch flex machine. Ascertains number of stitches per inch, using stitch counting machine. Examines samples of hose in production and defective hose returned by purchasers to find knitting, seaming, looping, or dyeing defects, using magnifying glass. Determines cause of defect, basing judgment on knowledge of production methods. Records results of findings.

GOE: 06.03.01 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

684.682-010 KNITTING-MACHINE OPERATOR, FULL-FASHIONED HOSIERY, AUTOMATIC (knitting)

Operates knitting machines to knit hose to shape of foot and leg. Places spools of yarn on spindles of machine and threads machine. Places *welt rod* in retaining notch of *welt bar* and turns lever to lower welt bar to knitting position. Pushes yarn carrier into position and turns bar to start machine to knit welt. Hooks draw-off straps from takeup roller to welt rod to hold welt and leg taut during knitting. Turns handwheels to position *picot bar* to knit stitches joining welt to leg of hose and to raise picot and welt bars after welt is knitted. Stops machine and clips loose threads at welt and toe of completed hose, using scissors. Removes welt rods and hose from machine. Counts, bundles, and attaches identifying ticket to hose. Replaces and aligns needles and points of machine, using pliers. May clean and oil machine.

GOE: 06.02.06 STRENGTH: L GED: R3 M2 L1 SVP: 5 DLU: 77

684.682-014 SEWER AND INSPECTOR (knitting)

Inspects seamless hose for knitting defects and operates sewing machine to close openings in toes of hose. Pulls hose over inspection board to turn hose inside out and inspects hose for defects, such as holes, runs, and dropped stitches. Revolves inspection board by hand to inspect both sides of hose. Slides toe portion of hose off end of inspection board and positions toe of hose under presser foot of sewing machine. Presses pedal to start machine and guides toe of hose under needle of machine to close toe. Strips defective hose from inspection board by hand and places hose aside for mending. Pushes hose without defects from left to right off board, where hose is sucked through opening in end of board to turn hose right side out and stack hose in rack. Threads and cleans lint from sewing machine. May examine stitch markings on defective hose to identify malfunctioning knitting machines and flip switch under corresponding machine number on panelboard to stop machine and notify fixer. May attach toe of hose to mechanical device that automatically feeds toe of hose under needle of sewing machine to close toe.

GOE: 06.03.02 STRENGTH: L GED: R3 M1 L1 SVP: 3 DLU: 77

684.684-010 STOCKING INSPECTOR (knitting) alternate titles: grey inspector; inspector and clipper

Inspects unfinished hose or socks for defects and conformance to specifications: Draws hose or socks over inspection board and inspects items for defects, such as holes, runs, torn threads, dropped stitches, and defective looping or seaming. Turns form to inspect both sides of items. Clips loose threads from items, using scissors or electric clipper with suction attachment that removes loose threads. Strips items from board if board is not equipped with automatic turning and stripping device. Sorts items according to type of imperfection. Marks production ticket. May bag first quality items for dyeing. May mark defective area of items for mending, using crayon. May inspect items conveyed by pneumatic tube to inspection station and press control to stop and flag specific machine causing defects in items. May depress pedal to rotate inspection board during inspection of items. May inspect items by hand. Where inspection is performed after each operation, may be designated Knitting Inspector (knitting); Looping Inspector (knitting); Seaming Inspector (knitting). May be designated according to type of item inspected as Sock Examiner (knitting).

GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 81

684.684-014 SIZER (knitting) alternate titles: length control tester; seamless sizer; size tester

Measures undyed hose to determine if size meets specifications: Pushes stretch measuring devise to machines and collects sample hose from storage bag under ejection chute of each machine. Pulls hose onto closed parallel leg-shaped hydraulic form of stretch measuring device, moves lever to release air into form to spread form and stretch hose, and reads scale device to determine whether hose meets product stretch specifications. Repositions hose on form and repeats process to measure stretch of specified sections of hose, according to procedure. Records results and informs KNITTING-MACHINE FIXER (knitting) 689.260-026 of any machine malfunctions. Adjusts knitting machine to correct minor malfunctions.

GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 81

684.685-010 SEAMLESS-HOSIERY KNITTER (knitting) alternate titles: knitter; knitting-machine operator, automatic; knitting-machine operator, seamless hosiery; sock-knitting-machine operator

Tends circular knitting machines with automatic pattern controls that knit seamless hose: Places yarn spools on creel; threads and starts machine. Observes operation of machines and notifies KNITTING-MACHINE FIXER (knitting) 689.260-026 of any malfunction. Removes knitted hose from machines. Pulls hose over inspection form or over hand to examine for defects, such as holes, runs, or picks. Classifies hose according to specifications into grades, such as first quality, rejects, and mends. Counts, bundles, ties, and labels each grade of hose. Clips loose or connecting threads on or joining socks, using scissors. May measure overall length of hose, using scale on inspection form. May mark defective portion of hose for HOSIERY MENDER (knitting) 782.684-030, using crayon. May be designated according to type of hose knitted as Sock Knitter (knitting).

GOE: 06.04.06 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 81

684.686-010 CLIPPER, MACHINE (knitting) alternate titles: automatic clipper and stripper; clipper, automatic

Feeds machine that clips threads, turns, and strips hose automatically. Pulls hose over forms that carry hose through machine. May strip hose from forms of machine that is not equipped with turning and stripping device.

GOE: 06.04.06 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

684.687-010 PAIRER (knitting) alternate titles: examiner; pairer-inspector

Inspects, grades, and pairs finished surgical hose, panty hose, stockings, leotards, and socks, according to grade, color, size, and length: Spreads hose on pairing table or over inspection forms and examines hose for defects, such as pulls, snags, holes, mends, and dye streaks. Classifies hose into grades, following specifications. Positions graded hose over scale on table to measure overall length and length of toe, foot, heel, and welt. Selects pair of identical hose of same grade and stacks hose on table. Tallies each pair in lot by grade. May be designated according to grade or type hose paired as Pairer, Odds (knitting); Pairer, Substandard (knitting).

GOE: 06.03.02 STRENGTH: L GED: R2 M2 L1 SVP: 3 DLU: 80

684.687-014 REINSPECTOR (knitting) alternate titles: reexaminer

Inspects samples of surgical hose, panty hose, stockings, leotards, and socks of specified styles, or samples previously examined by PAIRERS (knitting) 684.687-010, to ensure that specifications are met. Records findings on each sample, noting quantity and types of defects found and whether sample met specifications. May train and supervise PAIRERS (knitting). May inform supervisors and workers responsible for defective samples.

GOE: 06.03.02 STRENGTH: L GED: R3 M2 L1 SVP: 3 DLU: 81

684.687-022 COLLECTOR (knitting)

Removes collection bags filled with knitted hosiery from knitting machines: Marks work tickets with information, such as style and size of hosiery being knitted on machines, and attaches tickets to machines. Scans collection bags to detect bags filled with hosiery, removes bags from machines, and ties bags, using knitted loops attached to tickets. Places full bags in handcart and attaches

empty bags to machines. Pushes handcarts containing full bags to designated area for further processing.
GOE: 06.04.40 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 86

685 KNITTING OCCUPATIONS, EXCEPT HOSIERY

This group includes occupations concerned with interlacing a strand of yarn or thread in a series of connected loops to make a fabric or a knitted product other than hosiery.

685.130-010 SUPERVISOR, KNITTING II (knitting)

Supervises and coordinates activities of workers engaged in knitting fabrics, shaped garments, and other articles from yarn: Schedules changes in machine set up to produce knitted fabric, garment, or article according to production schedules and issues instructions to KNITTING-MACHINE FIXER (knitting). Verifies machine setup and directs repair and adjustment of malfunctioning machines. Directs training of workers in setup and operation of machines and equipment. Examines knitted fabric, garment, or article produced to detect variations from standards. May be designated according to department supervised as Supervisor, Inspecting (knitting); Supervvisor, Looping (knitting) II; Supervisor, Mending (knitting) II. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

685.360-010 KNITTER MECHANIC (knitting) alternate titles: pattern-and-chain maker

Builds metal chains, consisting of multisize pattern plates, or installs pattern tapes that control operation of *jacquard loom* and link-and-link flat knitting machines and sets up machines to produce specified design in knitted fabric: Obtains specifications for new knitting pattern from supervisor. Studies number, type, and arrangement of stitches in sample and determines arrangement of pattern plates on chains, employing knowledge of machine operation. Connects plates to form chain. Studies sample to determine which perforations in pattern plates are to be covered to produce specified knit and informs JACQUARD-PLATE MAKER (knitting). Installs chains and pattern plates in machine and makes trial run to determine if knitting meets specifications. May make minor repairs to knitting machines.
GOE: 06.01.02 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

685.380-010 LINK-AND-LINK-KNITTING-MACHINE OPERATOR (knitting) alternate titles: knitter, machine; knitting-machine operator, automatic

Sets up and operates battery of automatic, link-type (Jacquard) knitting machines to knit garments of specified pattern and design: Places chains that control operation of machine on machine sprockets. Places cones of yarn on machine spindles and threads end of yarn through machine guides, tension devices, and needle eyes. Turns screws to set carrier stops and adjust stroke of yarn carrier. Pushes lever to separate needle plates of machine and hooks stitches of knitted piece of fabric onto needles to serve as base for knitting. Starts machine and observes operation to detect defective knitting. Ties ends of broken yarn with weaver's knot. Separates needle plates and removes finished fabric from machine.
GOE: 06.01.03 STRENGTH: L GED: R3 M2 L3 SVP: 6 DLU: 77

685.381-010 JACQUARD-PLATE MAKER (knitting) alternate titles: patternmaker

Covers designated perforations of metal pattern plates with metal pieces (snappers) to control operation on needles in automatic knitting machines: Selects and links together specified number of pattern plates or cards to form continuous chain. Arranges snappers over perforations designated by KNITTER MECHANIC (knitting). Aids KNITTER MECHANIC (knitting) to install plates in machine and starts machine for trial run to determine if plates have been prepared as specified. May perforate blank pattern strips to correspond to needle-bed spacing.
GOE: 06.02.23 STRENGTH: L GED: R3 M3 L2 SVP: 5 DLU: 77

685.382-010 SURGICAL-ELASTIC KNITTER, HAND FRAME (protective dev.)

Knits fabric from silk and elastic thread for use in surgical supports, using hand-and-foot-operated knitting machine: Marks width measurements of fabric to be knitted, needles, adjusts machine. Places cones of silk and elastic thread on spindles, and draws thread through machine guides and between needles. Moves levers to activate machine and knit fabric. Depresses pedal of elastic thread-carrier to lay elastic thread between stitches. Passes elastic thread through each end stitch of knitted fabric and knots thread to prevent raveling, using darning needle.
GOE: 06.02.06 STRENGTH: L GED: R4 M2 L1 SVP: 5 DLU: 77

685.665-010 KNITTER, FULL-FASHIONED GARMENT (knitting) alternate titles: transfer knitter

Tends knitting machine that increases and decreases stitches at designated places to knit shaped garment parts onto ribbed cuffs or waist bands: Creels machine and threads yarn through guides, stop-motion devices, and *yarn carriers*, using hook. Positions *transfer bar* containing several ribbed parts over needle bed of machine, pushes stitches from *transfer points* onto machine needles and removes transfer bar. Pulls one ribbed part up to needle eyes and attaches outer edge of rib to hooked bar of *takeup roll*. Starts machine that automatically increases stitches to knit garment part. Turns handle or presses pedal, when machine automatically stops, to activate *narrowing* fingers that cause needles to decrease stitches to shape portions, such as shoulders and neck. Replaces defective needles, using pliers. Notifies KNITTING-MACHINE FIXER (knitting) of machine malfunction.
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

685.665-014 KNITTING-MACHINE OPERATOR (knitting) alternate titles: knitter; knitter, machine

Tends one or more machines that knit fabrics, garment parts, or other articles from yarn: Creels machine and ties end of yarn to yarn in machine or threads yarn through guides, tension springs, stop-motion devices, and *yarn carrier* or needles, using hook. Starts machine and laps end of tubular or flat knitted goods around *takeup roller*. Observes knitting to detect yarn breaks, exhausted yarn packages, and knitting defects. Ties broken yarn ends, replaces exhausted yarn packages, and notifies KNITTING-MACHINE FIXER (knitting) 689.260-026 of mechanical defects. Cuts knitted fabric, using scissors, and doffs roll of cloth from machine. May mark ticket to indicate number of holes in knitted goods. May replace defective needles, using needle pliers or wrench. May weigh roll of knitted goods and record weight. May oil machine. May be designated according to type of machine tended as Circular Knitter (knitting); Flat Knitter (knitting). May be designated according to type of fabric knitted as Jersey Knitter (knitting); Pile-Fabric Knitter (knitting); Rib-Cloth Knitter (knitting), or garment part as Collar Knitter (knitting); Cuff Knitter (knitting).
GOE: 06.04.06 STRENGTH: M GED: R3 M1 L1 SVP: 3 DLU: 79

685.665-018 WARP-KNITTING-MACHINE OPERATOR (knitting) alternate titles: knitter

Tends battery of warp-knitting machines to knit diverse products, such as tulle, lace, net, fabrics for outer and undergarments, elastic fabric for foundation garments, and carpet material: Patrols knitting area and inspects cloth for defects, such as holes, yarn breaks, and discolorations. Ties broken yarn ends with fingers. Stops machine and notifies supervisor when unable to determine cause of defects. Records number and type of defects. Hand-weaves new threads over and under lease rods, threads yarn through guides, using hook, and ties warp ends with fingers to attach new warp to corresponding threads of old warp. Cuts excess thread from knots, using scissors. May replace defective needles, using hook and wrench. May help position warp beams I on machine and doff rolls of knitted cloth from machine, using chain hoist and handtools. May lubricate machines, using oilcan and brush. May tend machines that knit milanese, raschel, or tricot fabrics and be designated according to machine type as Milanese-Knitting-Machine Operator (knitting); Raschel-Knitting-Machine Operator (knitting); Tricot-Knitting-Machine Operator (knitting).
GOE: 06.02.06 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

685.680-010 THREADER (knitting)

Threads warp yarn through needles to prepare warp-knitting machine for knitting: Removes paper covering from warp spools or beam mounted on machine, and turns spools or beams to align yarn ends. Cuts tape holding warp threads at intervals, using scissors. Loops yarn ends over sley points (yarn guides) and pulls ends to front of machine. Draws yarn through open hooks of needles, using threader and *dobber*, and ties ends in bunches to facilitate handling. Starts machine and winds end of cloth on *takeup roll*. Ties broken threads with fingers, and assists in hanging warps and cleaning machine.
GOE: 06.02.27 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

685.682-010 CROCHET-MACHINE OPERATOR (knitting) alternate titles: crocheter

Operates machine to crochet trimmings on knitted garments: Selects spools of thread according to specifications, or color of garment, and mounts spools on holder of machine. Threads needle and yarn carrier or looper of machine. Depresses pedal to clamp edge of material under presser foot of machine. Starts machine and guides material under crocheting needle. Stops machine, turns handwheel to raise needle from garment, and cuts threads with scissors.
GOE: 06.02.06 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

685.684-010 PATTERN WHEEL MAKER (knitting) alternate titles: pattern puncher; wheel blocker

Installs *needle jacks* in pattern wheels that control operation of needles in circular knitting machines, following pattern chart. Removes top of pattern wheel and inserts jacks in notches of wheel. May paint mark on top of pattern wheels to indicate where pattern begins. May punch out grooves in metal blades and install blades or metal pins in pattern drums and be designated Pattern-Drum Maker (knitting).
GOE: 06.02.27 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

685.685-010 KNITTING-MACHINE OPERATOR (tex. prod., nec) alternate titles: loom operator; netting machine operator

Tends knitting machine that makes netting from twine: Adjusts twine guides and tension rollers to conform with width, length, and mesh specification, using handtools and rule. Places spools of twine on machine spindles and inserts wound bobbins in shuttle containers. Threads twine from bobbins and spools through guides and rollers. Starts machine and monitors operation. Stops machine to tie ends of broken twine and to replace empty spools and bobbins. May wind twine on bobbins [YARN WINDER (tex. prod., nec; textile)]. May inspect net and correct defects [NETTING INSPECTOR (tex. prod., nec)].
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L2 SVP: 4 DLU: 77

685.685-014 PATTERN ASSEMBLER (knitting)

Assembles pattern chains that control pattern-forming motion of guide bar (flat metal bars on which yarn guides are attached) on knitting machines: Se

lects pattern-chain links according to pattern diagram. Marks links according to sequence in chain, using bevel square and scriber. Holds link against electric grinder to bevel end down to marking so link will adjust guide bars smoothly. Inserts connecting pins through holes in links to assemble links that form pattern chain.
GOE: 06.04.06 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

685.686-010 FRINGING-MACHINE OPERATOR (knitting) alternate titles: muffler fringer

Feeds knitted mufflers under needle of machine that automatically forms fringes.
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

685.686-014 KNITTING-MACHINE OPERATOR HELPER (knitting) alternate titles: knitter helper

Assists KNITTING-MACHINE OPERATOR (knitting) to knit cloth: Creels machines and ties yarn ends from each supply cone to yarn ends on exhausted cones. Cuts knitted cloth with shears and doffs cloth rolls from machines. Trucks cloth rolls from knitting area. Replaces broken knitting machine needles, using needle pliers, wrench, and screwdriver. Cleans machine and work area, using airhose, rags, and brooms and performs other duties described under HELPER (any industry) Master Title. May be designated according to worker assisted as Circular-Knitter Helper (knitting); Flat-Knitter Helper (knitting); Tie-Knitter Helper (knitting); Warp-Knitter Helper (knitting).
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 77

685.687-010 CLOTH INSPECTOR (knitting) alternate titles: assembler

Examines cloth for knitting defects and rejects cloth not meeting specifications. Measures cloth and sews thread marker into material to indicate length required by specifications. Folds and ties inspected cloth with cord. Records routing information on paper and attaches paper to cloth. May mark knitting defects on cloth with chalk.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 4 DLU: 77

685.687-014 CUFF FOLDER (knitting) alternate titles: cuff turner

Folds cuffs preparatory to sewing cuffs to sleeves of knitted garments: Lays flat cuff on table and folds cuff in half or pulls tubular cuff over cone-shaped form and turns cuff half-way back, matching edges. Stacks folded cuffs.
GOE: 06.04.27 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

685.687-018 LACE WINDER (tex. prod., nec)

Tends machine that winds lace on cards: Inserts card in machine holder with end of lace next to margin and manually turns card to start winding. Depresses pedal to start machine and control speed, guiding lace across card until specified number of layers are wound. Examines lace for defects during winding and rejects unsatisfactory material.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

685.687-022 PATROLLER (knitting)

Patrols knitting area to inspect cloth being knitted on warp or circular knitting machines: Walks continuously between machines and observes cloth for defects, such as yarn breaks, holes, discolorations, and stop marks. Stops machine with hand lever or button and marks defects for WARP-KNITTING-MACHINE OPERATOR (knitting) or CIRCULAR KNITTER (knitting). May tie ends of new warp to corresponding ends of warp in machine. May doff rolls of cloth.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

685.687-026 TOPPER (knitting)

Loops stitches of ribbed garment parts on points of *transfer bar* to facilitate transfer of garment part to needles of knitting machine. Cuts several stitches and pulls yarn out by hand to unravel rows of surplus fabric between points and edge of fabric. May assist KNITTER, FULL-FASHIONED GARMENT (knitting) to doff machine.
GOE: 06.04.27 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

686 PUNCHING, CUTTING, FORMING, AND RELATED OCCUPATIONS

This group includes occupations concerned with piercing textiles by means of rigid cutting tools advanced into the material to make, enlarge, or thread holes; shaping the material by means of rigid or rotary cutting tools; and otherwise giving shape or form to material.

686.462-010 DIE-CUTTING-MACHINE OPERATOR, AUTOMATIC (tex. prod., nec; textile) alternate titles: die cutter

Operates automatic die-cutting machine to cut various specified shapes from roll of felt: Positions dies into machine, and aligns upper cutting die with surfaces of bed. Inserts shims between die and bed to set specified gap, and locks dies into position, using wrenches. Places rolls of felt in feed holders, turns knobs to synchronize action of feed rolls with ram, and threads end of felt through feed rolls and die bed to takeoff conveyor. Starts machine and inspects sample cuts to determine conformity to specifications. May sew or glue together ends of rolls to form continuous feed. When cutting specified shapes from rolls of foam rubber, may be designated Die-Cutting-Machine Operator, Automatic (rubber goods).
GOE: 06.02.05 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

686.585-010 CUTTING-MACHINE OPERATOR (tex. prod., nec) alternate titles: sheet-cutting operator

Tends machine equipped with electric knife or rotary shear that cuts cloth into specified lengths and folds lengths for use in making bags: Places roll of cloth on brackets of machine and threads cloth between feed rollers or sews cloth to leader in machine, using portable sewing machine. Cuts cloth, using either of following methods: (1) Moves slotted bar specified distance from folding bar to obtain length of cut and tightens setscrew to secure bar. Starts machine that moves cloth over slotted bar. Pushes electric knife along slot to cut cloth into lengths. (2) Changes gears of machine, using wrenches, or turns dial to set feeding speed of machine that controls length of cut. Starts machine that automatically cuts cloth into lengths, folds lengths, and deposits folded cloth on catch-bar of machine. Periodically removes folded cloth accumulated on catch-bar and stacks cloth on handtruck. Measures cloth lengths, using rule. Records yardage cut. May be designated according to type of bag cut as Cotton-Bag-Cutting-Machine Operator (tex. prod., nec.); Jute-Bag-Cutting-Machine Operator (tex. prod., nec); Waterproof-Bag-Cutting-Machine Operator (tex. prod., nec).
GOE: 06.04.05 STRENGTH: H GED: R2 M1 L2 SVP: 2 DLU: 77

686.662-010 RUG CUTTER (carpet & rug)

Controls table equipped with electric rotary cutter and other powered equipment to cut rolls of woven fiber rug material to specified lengths: Positions roll in hanger of table, using power hoist. Pulls lever to start power puller that moves material across table or draws carpet along calibrated scale on table by hand. Examines material for flaws and pushes cutter along track to cut out faulty sections. Smooths, squares, and cuts material to make ends even and to avoid waste.
GOE: 06.02.05 STRENGTH: M GED: R3 M1 L2 SVP: 4 DLU: 77

686.682-010 BAND-SAW OPERATOR (tex. prod., nec)

Operates bandsaw to cut felt pads to pattern: Tacks cardboard pattern to pad. Pushes pad against revolving blade, following outline of pattern. Stacks and ties together bundles of finished shapes. Collects scraps for shredding by PICKING-MACHINE OPERATOR (any industry).
GOE: 06.02.05 STRENGTH: M GED: R3 M1 L2 SVP: 4 DLU: 77

686.682-014 BIAS-CUTTING-MACHINE OPERATOR (tex. prod., nec)

Operates machine to cut tubular cloth into narrow widths for use as bias tape or binding: Positions roll of cloth on shaft or truck of flat-folded cloth on stand at feeding end of machine. Places tubes on takeup roller. Turns setscrew to space circular knives on cutting shaft according to width specified for tape. Pulls open end of tubular cloth over arm of machine, under guide bars, through feed rollers, and under rotary knives. Laps ends of bias-cut cloth around tubes. Depresses pedal to start, stop, and control speed of machine and guides cloth under guide bars and through feed rollers to cut cloth on bias. Removes rolls of bias tape or binding from machine. May wrap rolls in paper for storage or shipment.
GOE: 06.02.05 STRENGTH: M GED: R3 M1 L2 SVP: 4 DLU: 77

686.682-018 FELT-CUTTING-MACHINE OPERATOR (tex. prod., nec) alternate titles: power-cutting-machine operator

Operates machine to cut rolls of felt into pieces of specified length and width: Pulls felt from roll onto table, measures specified length, and clamps transverse bar to felt at point where cut is to be made. Clamps circular cutting knives to crossbar at measured intervals to cut or trim felt to specified width. Starts machine and presses foot treadle, when transverse bar reaches cutting-off knife, to cut felt to length. Collects strips cut from edges of felt by circular knives and puts strips in waste baskets for repicking by PICKING-MACHINE OPERATOR (any industry).
GOE: 06.02.05 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

686.685-010 CHIN-STRAP CUTTER (hat & cap)

Tends machine that cuts rolls of material to form chinstraps and punches eyelet holes in straps to facilitate attachment to helmets: Positions roll of material, such as fiber, leather, or plastic, on machine spindle. Threads material through feed guide and under blade of machine. Turns setscrews to adjust cutting feed guide to produce strapping cut to specified size. Starts machine that cuts and punches material, forming and perforating chinstraps.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

686.685-014 CONTINUOUS PILLOWCASE CUTTER (tex. prod., nec) alternate titles: pillowcase cutter

Tends machine that cuts rolls of tubular cloth into pillowcase lengths: Mounts roll of cloth on rack at entry end of machine. Turns handwheel to set width guides according to width of cloth. Threads end of cloth through width guides and feed rollers. Turns dial to set stroke of rotary knife according to length specified for pillowcases. Starts machine that automatically cuts cloth into pillowcase lengths and blows lengths free from machine. Removes lengths with stains or defective stitching. Places bundles of pillowcase lengths on skid.
GOE: 06.04.05 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

686.685-018 CUFF CUTTER (glove & mit.) alternate titles: knit-wrist cutter

Tends battery of machines that cut and fold knit tubing for use as cuffs on gloves: Pushes box of knit tubing from storage to machine, using handtruck. Turns screws on cams that control speed and motion of cutting blade and feeding mechanism to cut tubing to specified length, using handtools. Threads end of tubing through guides and feeder rollers, over spreader arms, and under cutting blade. Starts machine that automatically cuts and folds cuffs. Removes tray or box of cut and folded cuffs from delivery end of machine. Replaces dull cutting blades, using handtools.

GOE: 06.04.05 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

686.685-022 CUTTER (tex. prod., nec)

Tends machine that cuts strands of yarn into specified lengths for use as mopheads: Mounts roll of yarn on machine spindle. Sets stops along scale of cutting table according to length and weight specified for mopheads. Threads yarn through machine guides, pulls yarn to stops, and pushes yarn against rotating knife or presses pedal to raise rotating knife through slot in table to cut yarn into lengths. Loops rubberband over ends of each length to prevent ends from tangling. Periodically weighs mopheads to detect variations from specifications and adjusts stops to restore cutting to specifications. May thread sponge-mop yarn through steam cabinet for softening before cutting.
GOE: 06.04.05 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 77

686.685-026 FELT CUTTER (ordnance)

Tends slitting machine that cuts sheets of hair-felt board into strips which are fed into presses that stamp out filler wads for shotgun shells: Turns handwheel to adjust feed rollers to accommodate thickness of sheets to be slit and feed guide bar to specified strip width. Starts machine and pushes sheets against guide bar into feed rollers to obtain desired number of sheets. Measures width and thickness of cut strips to verify conformance to specifications, using ruler and fixed gauge.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

686.685-030 FOLDER (narrow fabrics)

Tends machine that cuts canvas to specified widths and folds and presses strips for use as belting: Threads end of canvas roll through cutting mechanism, fold guides, and between pressing rolls. Starts machine and observes processing for defective cutting, folding, or pressing. Cuts folded belting to specified length, using knife, and stacks belting on handtruck.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

686.685-034 HANDLE-AND-VENT-MACHINE OPERATOR (furniture)

Tends machine that automatically punches holes and crimps grommets in mattress borders to insert ventilators and attach handles: Slides border into marked position under machine head and depresses pedal to punch holes in boxing (mattress border). Places grommets and ventilating grids over holes and depresses another pedal to crimp grommets and grids into fabric. Inserts handles in grommeted holes.
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

686.685-038 PERFORATING-MACHINE OPERATOR (hat & cap) alternate titles: clicker-machine operator; crown-perforator operator; eyelet cutter; perforator; perforator operator; punching-machine operator; sweatband perforator

Tends machine that punches holes in hats or hat parts to ventilate or decorate hats or facilitate assembly, utilizing one of following methods: (1) Positions article beneath multiheaded punch on ram of machine, depresses pedals to lower ram and feed guide that automatically moves article across machine bed as punch perforates article. (2) Positions article on mold in machine bed; pushes lever that forces punches, mounted on rams, against article, to punch holes in article. (3) Positions part against machine guide and under punch; depresses and releases pedal to clamp part in place; starts machine that lowers punch onto material to perforate part. May be designated according to type of hat perforated as Helmet-Hat Puncher (hat & cap); or part perforated as Brim Slotter (hat & cap); Helmet-Hat-Sweatband Puncher (hat & cap).
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

686.685-042 PINKING-MACHINE OPERATOR (boot & shoe; garment) alternate titles: pinker

Tends machine that cuts serrated designs along edges of garment or shoe seams to decorate edges and prevent raveling: Positions raw edge of seam or hem between pressure and pinking rollers of machine. Depresses pedal to start machine. Guides edge between rollers or moves edge against pin guide on machine bed and feeds edge between rollers. May tend machine equipped with lever-type blade to cut sample swatches of cloth.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

686.685-046 PREPLEATER (tex. prod., nec)

Tends machine that folds pleats into top of drapery panels and staples folded pleats in position for sewing: Inserts staples in machine. Positions drapery on bed of machine according to marks on machine. Presses button or pedal to start machine that forces material between machine dies to form pleats and staple pleats. May work as member of team when tending machine that forms more than one pleat at a time.
GOE: 06.04.05 STRENGTH: L GED: R3 M1 L2 SVP: 3 DLU: 77

686.685-050 PRESS OPERATOR (protective dev.)

Tends machine that joins and perforates adhesive and felt strips to make corn and bunion plasters: Positions adhesive strip over felt strip fed from spools. Inserts ends of strips into machine and depresses starting pedal.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

686.685-054 RIVET-HOLE PUNCHER (garment) alternate titles: rivet-hole-machine operator

Tends machine that punches holes in garments for insertion of reinforcing rivets: Places garment or garment part on bed of machine with section to be punched, such as pocket corner, under punch. Depresses pedal to lower punch and pierce hole in material.

GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

686.685-058 SCALLOP CUTTER, MACHINE (tex. prod., nec)

Tends machine that cuts lengths or belts of embroidered fabric into scalloped strips for use as decorative trimming: Inserts blade in machine head and turns setscrews to raise or lower blade, according to thickness of fabric. Places fabric on machine table, aligns prestitched line on fabric with edge of blade, and sets machine guide according to fabric alignment. Starts machine and observes flow of fabric to detect damage and irregular scalloping as fabric passes under blade. Replaces blade or adjusts height of blade to restore scalloping to specifications. Positions fabric for subsequent runs through machine and repeats process until fabric has been cut into specified number of scalloped strips. Lubricates machine. May sharpen blades.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

686.685-062 SHOELACE-TIPPING-MACHINE OPERATOR (narrow fabrics) alternate titles: shoelace tipper; tipping-machine operator, automatic

Tends one or several machines that wrap plastic, fiber, or metal bands at intervals around strands of braid to form tips of shoelaces and cut braid into laces: Sets measuring device to cut laces of specified length, using handtools and rule guide on machine. Threads end of braid through guides and carrier, and around measuring device and feeder wheels, or ties end of braid to braid in machine. Positions container of glue or solvent solution on machine or pours solution into container attached to machine. Places roll of tipping material in holder and draws end through guides and feeder roller of tipping mechanism. Starts machine that feeds braid through gluing, tipping, and cutting mechanisms and drops laces onto racks. Removes laces from rack, picks out defective laces, and ties laces in bundles.
GOE: 06.04.20 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

686.685-066 STRIP-CUTTING-MACHINE OPERATOR (textile) alternate titles: slicer; slitter

Tends machine that cuts rolls of textile material into narrow rolls of specified width: Lifts roll of material onto machine bar and hammers wedge into core of roll to secure roll to bar. Turns handwheel to move rotary blade into cutting position, following markings on calibrated scale to obtain specified cutting width. Starts machine that rotates blade and roll in opposite directions. Presses lever to move rotating blade forward and cut through roll of material. Releases lever and positions blade for subsequent cut. Removes narrow rolls of material from machine and stacks rolls on shelf according to width. When cutting rolls of bias material into narrow widths, is designated Bias-Binding Cutter (tex. prod., nec). May be designated according to product cut as Band-Cutting-Machine Operator (garment; knitting); Binding Cutter (garment; textile); Facing-Cutting-Machine Operator (garment); Handkerchief Cutter (textile); Piping-Cutting-Machine Operator (garment); Suspender Cutter (garment); Tape-Cutting-Machine Operator (garment; tex. prod., nec).
GOE: 06.04.05 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

686.685-070 TUBULAR-SPLITTING-MACHINE TENDER (knitting)

Tends machine that splits tubular knitted cloth into open-width form: Changes spreader attachments according to width specifications. Positions handtruck under *swing folding attachment* at delivery end and starts machine. Guides cloth along cutting line, over spreader, and under circular cutting blade. Observes cloth for defective splitting and reports malfunctions to supervisor.
GOE: 06.04.05 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 77

686.685-074 WELT-TRIMMING-MACHINE OPERATOR (hat & cap) alternate titles: brim-edge trimmer; welt cutter

Tends machine that trims excess welting material from inside edge of hat body or brim: Turns screws to adjust depth of cut of machine blade, using screwdriver. Positions edge of hat body or brim against machine guide and pulls lever to lower presser foot onto material. Depresses pedal to start machine that cuts inside welt of hat body or brim. Removes cut welt from inside edge of hat body.
GOE: 06.04.05 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

686.686-010 FELT-TIPPING-MACHINE TENDER (pen & pencil) alternate titles: tipping-machine operator

Feeds machine that shapes felt tips for stencil marking pens: Fills hopper of machine with felt tips and presses switch to start machine that automatically shapes sides and bevels or rounds end of tips for marking pens.
GOE: 06.04.09 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

686.686-014 RUG-CUTTER HELPER (carpet & rug)

Feeds fiber material into machine that cuts material into rugs of specified sizes: Pushes handtruck or dolly loaded with rug material to cutting table. Places roll in rack on cutting table. Inserts end of material under pressure roll. Smooths, pulls, and squares material on cutting table. Rolls cut rugs on tube and places rugs on truck. Pushes trucks to next department.
GOE: 06.04.05 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 77

687 TUFTING OCCUPATIONS

This group includes occupations concerned with inserting tufts or loops of yarn through backing material to produce tufted articles, such as carpets and rugs, without interlacing or interlocking yarn as accomplished in weaving, knitting, and sewing.

687.132-010 SUPERVISOR, TUFTING (carpet & rug)

Supervises and coordinates activities of workers engaged in tufting, finishing, inspecting, and mending carpets and rugs: Analyzes work orders to determine need for supplies and sequence of operation. Coordinates flow of materials to winding, tufting, finishing, and inspecting areas. Trains workers in operation and adjustment of machines and equipment. Examines carpets and rugs during processing to verify conformance to specifications and to detect defects. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to department supervised as Supervisor, Broadloom (carpet & rug); Supervisor, Finishing (carpet & rug).
GOE: 06.02.01 STRENGTH: L GED: R3 M3 L4 SVP: 6 DLU: 77

687.464-010 RUG-FRAME MOUNTER (carpet & rug)

Mounts backing material (loosely woven fabric or burlap) on frame to facilitate tufting. Hooks specified backing over frame spikes and clamps metal side bars onto frame to secure material in position for tufting. Moves backing on frame periodically to facilitate completion of tufting process. Measures and marks carpet dimensions on backing, using tape measure and chalk-line reel. May stencil designs on sample backing, using brush and lamp black solution.
GOE: 06.04.27 STRENGTH: H GED: R2 M1 L2 SVP: 3 DLU: 77

687.682-010 FLOWER-MACHINE OPERATOR (tex. prod., nec) alternate titles: flower chenille

Operates machine to tuft flowered design on articles: Places yarn packages on spindles and draws ends through machine guides, tensions, and needle eyes. Presses knee lever to raise hoop-shaped presser foot, positions material on movable portion of machine bed, and lowers presser foot to hold material taut. Starts machine and turns machine bed to rotate material beneath needles that automatically tuft flower design on material. Observes tufting to detect defects, such as broken yarn and needles. Rethreads machine or replaces damaged needles.
GOE: 06.02.05 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

687.682-014 TUFT-MACHINE OPERATOR (carpet & rug; tex. prod., nec) alternate titles: chenille-machine operator; needle-punch operator; overlay operator

Operates machine to tuft designs on articles, such as rugs and bedspreads: Places yarn packages on spindles and draws ends through machine guides, tensions, and needle eyes. Depresses pedal to activate tufting mechanism and guides material under tufting needles, following design specifications. Observes tufting to detect defects, such as broken yarn and needles. Rethreads machine or replaces damaged needles. Rethreads machine needle with specified color of yarn to tuft multicolor design. Workers who tend machines that tuft continuous lengths of cloth are classified under TUFTING-MACHINE OPERATOR (carpet & rug; textile).
GOE: 06.02.05 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

687.684-010 RUG HOOKER (carpet & rug)

Tufts yarn through backing material (loosely woven fabric or burlap) to fabricate carpets and rugs, using portable, electric-powered hooking device: Presses trigger of device to start reciprocating action of needle that punches yarn through material to form pile on rug surface. Guides device along stenciled outline on backing material to tuft design in rug according to specifications. Changes yarn color as specified by pattern. May insert missing tufts in rugs. May tuft rugs by hand, using hooked needle, and be designated Rug Hooker, Hand (carpet & rug). When tufting samples, is known as Sample Maker (carpet & rug).
GOE: 06.02.27 STRENGTH: L GED: R3 M1 L2 SVP: 5 DLU: 77

687.684-014 TUFTER (furniture) alternate titles: button tufter; pad tufter; tufter operator

Tufts pads and mattresses with metal pins, using press: Sets pins upright in holders in press bed. Lays pad in place over tops of pins and sets cover form over pad in alignment with pins. Starts motor and pushes lever to press cover form over pad and force pins through pad. Clamps cover form to press bed with hand clamps and raises press head from form. Slips metal washers over projecting ends of pins and spreads and flattens ends of pins over washers, using handtools. Releases clamps and lifts pad from form and press when tufting is complete.
GOE: 06.04.05 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

687.685-010 NEEDLE-CONTROL CHENILLER (tex. prod., nec)

Tends tufting machine equipped with pattern roller and solenoids that control machine needles to tuft intricate designs: Selects pattern according to specifications and positions pattern on machine, using handtools. Pulls yarn ends through machine guides, tensions, and needle eyes to thread machine. Draws material under machine needles, through cut-pile mechanism, and laps end around takeup rod. Starts machine and observes operation to detect broken yarn or faulty pile cutting. Rethreads broken yarn or replaces broken needles. Replaces dull knives for cut-pile mechanism, using handtools. Removes dull rolls from machine.
GOE: 06.04.05 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 77

687.685-014 TUFTING-MACHINE OPERATOR (furniture) alternate titles: button-tufting-machine operator

Tends machine that button-tufts mattresses: Adjusts needle stroke and button tying mechanism to thickness of mattress. Fills machine hopper with tufting buttons. Places mattress on movable table of machine and turns wheel to adjust distance between mattress and machine head. Presses button to start machine and moves table laterally, forward, and backward to space tufts as machine head inserts tufts into both sides. May tend machine that automatically moves table and tufts mattress, or semiautomatic machine that requires lever operation for each stroke. May tend machine that tufts with knots. May tuft by hand [TUFTER, HAND (furniture)].
GOE: 06.04.05 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

687.685-018 TUFTING-MACHINE OPERATOR (carpet & rug; textile) alternate titles: chenille-machine operator; yardage-tufting-machine operator

Tends multiple-needle machine that tufts material to be used for articles, such as rugs, robes, and bedspreads: Requests CREELER (any industry) to change yarn styles in creel or mounts supply packages on spindles and *pieces up* ends to leaders in yarn guides (plastic tubes). Draws ends through guides leading to machine, using suction device, and threads ends through guides, tensions, *drop wires*, and needle eyes. Places roll of backing material on brackets at entry end of machine, draws backing under machine needles, and attaches end to *takeup roll*. Moves lever that engages or disengages cam wheel to adjust machine to insert tufts in straight or irregular design. Observes tufting to detect yarn breaks and machine malfunctions. Rethreads broken yarn ends and replaces bent or broken needles and hooks (loopers). Replaces dull knives on cut-pile tufting machines, using handtools. Unthreads needles and ties up extra drop wires to adjust machine to accommodate narrower material. Increases or decreases speed of cloth feed and inserts or removes shims between needle plate and machine bed to adjust space between tufts and length of tufts. Workers who operate tufting machines are classified under TUFT-MACHINE OPERATOR (carpet & rug; tex. prod., nec).
GOE: 06.04.05 STRENGTH: M GED: R3 M2 L3 SVP: 3 DLU: 77

687.685-022 TUFTING-MACHINE OPERATOR, SINGLE-NEEDLE (carpet & rug)

Tends single-needle machine that tufts yarn through material to produce rugs: Measures, marks, or traces rug dimensions or outline on backing material (loosely woven fabric or burlap), using tape measure, marking pencil, and rug patterns. Mounts yarn packages on creel spindles and draws ends through guides, tensions, and needle eye. Positions roll of backing on machine brackets at entry end and threads material through feed rollers onto spiked *takeup roll*. Presses buttons and lever to start machine that inserts tufts in singular rows through material. Observes tufting to detect broken yarn ends and malfunctions. Rethreads broken yarn ends and reports malfunctions to repair personnel. Cuts material with scissors when specified carpeting has been tufted.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

689 TEXTILE OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with combining, spinning, weaving, knitting, and otherwise working textiles, textile products, fur, and hair.

689.130-010 EMBROIDERY SUPERVISOR (tex. prod., nec) alternate titles: supervisor, production

Supervises and coordinates activities of workers engaged in operating machine to embroider designs on fabric. Sets up and repairs machines. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

689.130-014 FELT-GOODS SUPERVISOR, NEEDLE PROCESS (tex. prod., nec) alternate titles: kersey-department supervisor

Supervises and coordinates activities of workers engaged in manufacturing needle (punched) felt: Sets up machines to make experimental samples. Observes operation of machines to detect malfunction and adjusts machines, using handtools. Trains new workers. Requisitions materials. Inspects work of operators to verify conformity to specifications. Directs delivery of finished goods to coating or shipping department. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

689.130-018 KNITTING-MACHINE FIXER, HEAD (knitting)

Supervises and coordinates activities of KNITTING-MACHINE FIXER (knitting). Verifies setup and adjustment of machines and equipment. Trains workers in operation of machines and assigns work stations. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

689.130-022 SUPERVISOR, CLOTH WINDING (tex. prod., nec)

Supervises and coordinates activities of workers engaged in winding burlap onto tubes for use in textile bag manufacturing: Requisitions bales of burlap for processing. Trains workers in machine operation. Directs machine adjustments as needed to maintain production level or adjusts machines, using handtools. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

689.130-026 SUPERVISOR, ROVING DEPARTMENT (textile)

Supervises and coordinates activities of workers engaged in cutting fiberglass sliver into staple lengths, bonding staple lengths into mats of insulation material, waxing strands of fiberglass yarn together to form cord, dyeing sliver for

tracer yarn, and winding strands of sliver into roving: Examines product and observes processing operations to detect machine malfunctions. Determines cause of malfunction, using knowledge of machines and processes in department. Directs CREELERS (any industry) to increase or decrease number of fiberglass ends fed to staple-cutting machines, mat machines, or winding machines, according to specifications for various products. Trains new workers. Requisitions supplies. Confers with other SUPERVISORS (any industry) Master Title to coordinate activities of individual departments. Performs other duties as described under SUPERVISOR (any industry).
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

689.130-030 SUPERVISOR, WEAVING (carpet & rug)

Supervises and coordinates activities of workers engaged in creeling, weaving, and rewinding fiber products, such as cloth, rugs, scrim, and binding: Sets up and adjusts looms and winding machines. Directs loom changeover to accommodate new patterns. Inspects in-process and finished materials to ensure attainment of specified levels of quality. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

689.130-034 SUPERVISOR, YARN PREPARATION (textile)

Supervises and coordinates activities of workers engaged in processing cotton and synthetic raw stock fibers into yarn, applying knowledge of fiber and yarn types, machines, and any combination of processes, such as picking, carding, combing, drawing, roving, spinning, twisting, spooling, and winding: Confers with other department heads to coordinate activities of different departments, determine processes underway and possible changes in production schedule, and availability of workers for shifts. Examines yarn at various processing stages to detect variations from standards and inspects machines to detect malfunctions and damage to weaving surfaces. Directs repair personnel to alter machine setup or to repair or overhaul processing machines to maintain product standards. May creel and doff machines. May set up, adjust, and repair machines. Performs other duties as described under SUPERVISOR (any industry) Master Title. Supervisors of workers engaged in specific yarn processing activities are classified accordingly [SUPERVISOR, CARDING (textile) 680.130-010; SUPERVISOR, PREPARATION DEPARTMENT (textile) 681.130-010; SUPERVISOR, ROVING DEPARTMENT (textile) 689.130-026; SUPERVISOR, SPINNING (textile) 682.130-010; SUPERVISOR, WINDING AND TWISTING DEPARTMENT (textile) 681.130-014].
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 86

689.130-038 SUPERVISOR, SPINNING AND WINDING (plastic-synth.)

Supervises and coordinates activities of workers engaged in spinning and winding synthetic fibers, and sets up takeup machines that wind newly extruded synthetic fibers onto pirns: Observes machines, equipment, personnel, and work areas to detect faulty work habits, and to examine synthetic fibers for conformance to standards. Inspects machine parts cleaned and assembled by designated worker to ensure conformance of parts to standard. Confers with specified supervisory personnel regarding production and possible changes in process, personnel, or machines. Interviews vendors and consults catalogs to obtain information on price and availability of parts and equipment. Prepares and submits purchase orders to designated personnel. Checks level of nitrogen in tanks outside plant and telephones supplier to order more nitrogen to maintain nitrogen at specified level. Develops training manual to be used in training of workers. Times roller and chuck speeds of takeup machines that wind newly extruded synthetic fibers onto pirns, using timing light and stopwatch. Confers with and assists other workers in changing gear ratios of winding drive mechanism, using handtools, according to style of yarn to be processed and setup specifications. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R4 M2 L3 SVP: 7 DLU: 86

689.132-010 SUPERVISOR, BURLING AND JOINING (textile)

Supervises and coordinates activities of workers engaged in inspecting base cloth for weaving defects, and in manually weaving ends of length of papermaker's felt together to facilitate further processing: Trains workers in burling cloth, hand weaving cloth, and operating sewing machine to join ends together. Reviews production schedules to determine felt type to be joined or base cloth to be inspected. Confers with other supervisors to resolve work problems that slow production. Pulls cloth length over roller and examines cloth for defects, such as mispicks and filling breaks. Pulls defective yarn from cloth and reweaves defective area, using needle, yarn, and scissors. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R4 M3 L4 SVP: 6 DLU: 86

689.132-014 SUPERVISOR, FIBER-LOCKING (textile)

Supervises and coordinates activities of workers engaged in fiberlocking (needle punching) materials, such as batting and base cloth, to produce papermaker's felt: Reviews production schedule to determine processing priorities. Trains workers in operation of equipment, such as *garnett machines*, blending machines, and fiberlock machines. Patrols work area to ensure processing of fabric is according to specifications. Listens to machines to detect malfunctioning parts and reports malfunction to maintenance personnel. Confers with other supervisory personnel to ensure even flow of work through departments. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L4 SVP: 6 DLU: 86

689.134-010 CLOTH-GRADER SUPERVISOR (textile)

Supervises and coordinates activities of CLOTH GRADERS (textile) engaged in classifying cloth according to number of defects. Trains workers in inspecting and grading cloth according to company standards. Maintains production records. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

689.134-014 SUPERVISOR, LACE TEARING (tex. prod., nec)

Supervises and coordinates activities of workers engaged in separating, inspecting, and winding lace bands: Trains workers in machine operation. Verifies setup and adjustment of machines and equipment. Examines lace to determine first quality products, following standards for various types. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

689.134-018 SUPERVISOR, PRODUCT INSPECTION (textile)

Supervises and coordinates activities of workers engaged in inspecting textile products for weaving, printing, and finishing defects: Trains workers in work methods and procedures. Examines malfunctioning machines and requisitions replacement for defective equipment. May supervise packaging of products [PACKAGING SUPERVISOR (any industry)]. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M2 L3 SVP: 6 DLU: 77

689.134-022 SUPERVISOR, QUILTING (textile)

Supervises and coordinates activities of workers engaged in quilting material used for articles, such as quilts, sleeping bags, and work gloves: Trains workers in operation of machines. Inspects machines to detect malfunctions and notifies SEWING-MACHINE REPAIRER (any industry) of repairs and adjustments. Replaces damaged parts, such as needles and bobbins, using handtools. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R4 M2 L3 SVP: 6 DLU: 77

689.134-026 SUPERVISOR, LABORATORY (textile)

Supervises and coordinates activities of workers engaged in testing lap, sliver, roving, and yarn for conformance to processing standards and assists workers in performing laboratory tests: Confers with plant personnel to develop testing schedule and to modify processing standards for producing new yarn types requested by customer. Coordinates activities, such as resolving customer complaints of defective yarn, inspecting, calibrating, and maintaining laboratory equipment, and identifying causes of substandard lap, roving, sliver, and yarn. Performs laboratory procedures to test lap, sliver, roving, and yarn for conformance to processing standards, such as evenness of lap and tensile strength of yarn. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 02.04.01 STRENGTH: M GED: R4 M3 L4 SVP: 6 DLU: 86

689.137-010 SUPERVISOR, SEWING DEPARTMENT (carpet & rug)

Supervises and coordinates activities of workers engaged in winding, braiding, and sewing operations in manufacture of braided rug: Schedules winding of yarn onto suitable packages for braiding process. Issues instructions, such as color of thread and type of stitch to use and size of completed rug. Examines products during fabricating for conformance to customer specifications. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

689.137-014 SUPERVISOR, TUBING (textile)

Supervises and coordinates activities of workers engaged in inspecting and winding printed fabric in tubing department: Confers with PRODUCTION PLANNER (profess. & kin.) 012.167-050 and consults work order to determine sequence of cloth styles to process. Directs delivery of specified fabric to work stations. Informs CLOTH EXAMINER, MACHINE (textile) 689.685-038 of quantity of cloth to wind onto tubes and of customer quality specifications. Oversees inspection of cloth being processed to ensure detection of defects, such as wrinkles, seams, and color variations. Submits samples of cloth to COLORIST (profess. & kin.) 022.161-014 for shade matching. Occasionally weighs and labels special orders for shipping. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: H GED: R3 M2 L2 SVP: 6 DLU: 86

689.260-010 MACHINE FIXER (textile) alternate titles: fixer; machine repairer

Sets up, and adjusts yarn-manufacturing and processing machines, using charts, oral instructions, and knowledge of machine operation: Changes and adjusts gears, pulleys, rollers, thermal units, *false-twist spindles*, and guides according to type of sliver or yarn processed, type of wind, draft, or number of twists per inch, using handtools. Verifies adjustments, using gauges and instruments, such as voltage and calibrating machines, tensiometer, tachometer, and densimeter. Patrols work area to detect operating defects. Inspects machine to determine cause of faulty operation, utilizing report on defects, and adjusts machine. Replaces worn and broken parts, such as spindles, rollers, guides, gears, pulleys, tape, and belts, using handtools. Lubricates moving parts and wearing surfaces, using oilcan and grease gun. Cleans machines, using airhose, cleaning solution, and rags. May overhaul machines and plumb spindles, following plant schedule. May erect new machines [MILLWRIGHT (any industry) 638.281-

018]. May be designated according to machines maintained as Card Fixer (textile); Comber Fixer (textile); Garnett Fixer (tex. prod., nec); Gill-Box Fixer (textile); Quiller-Machine Fixer (textile); Spinning-Frame Fixer (textile). May be designated: Tufting-Machine Fixer (carpet & rug); Twisting-Frame Fixer (textile); Winder Fixer (textile); Yarn-Texturing Machine Fixer (textile).
GOE: 06.01.02 STRENGTH: M GED: R4 M2 L3 SVP: 6 DLU: 80

689.260-014 QUILTER FIXER (tex. prod., nec)

Sets up, repairs, and adjusts quilting machines, utilizing knowledge of machine construction and function, and charts: Analyzes charts to determine adjustments necessary to effect change in quilting design. Selects cams that will alter movement of machine bed and needle stroke to produce specified design, and installs cams on machine, using wrenches. Synchronizes looper or shuttle motion with needle stroke, using screwdriver. Listens to machine, and observes stitching to locate defects in machine operation. Dismantles machine and repairs broken or defective parts, such as motors, bobbins or loopers, needles, and feed dogs. Turns screws to regulate tension on thread, length of needle stroke, and rate of feed, according to type of fabric or thread. Cleans and oils machines.
GOE: 06.01.02 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

689.260-018 SECTION LEADER AND MACHINE SETTER (textile)

Sets up, adjusts, and repairs group of textile machines (usually of one type, called section): Transmits orders of SUPERVISOR (any industry) Master Title of section to workers and ensures that orders and safety rules are followed. Patrols section to inspect work for quality and to determine operating condition of machinery. Reads production meters or tickets and records total number of units produced. Examines laboratory sample reports to determine machine adjustments needed to meet company specifications. Adjusts and repairs machines [MACHINE FIXER (textile) 689.260-010]. Trains new workers and assigns workers to stations. May be designated according to section as Section Leader And Machine Setter, Cards (textile); Section Leader And Machine Setter, Drawing And Combers (textile); Section Leader And Machine Setter, Opening And Picking (textile); Section Leader And Machine Setter, Roving Frames (textile); Section Leader And Machine Setter, Spinning (textile); Section Leader And Machine Setter, Winding And Twisting (textile).
GOE: 06.01.02 STRENGTH: M GED: R4 M2 L4 SVP: 6 DLU: 80

689.260-022 SECTION LEADER AND MACHINE SETTER, POLISHING (textile)

Sets up, repairs, and adjusts yarn polishing (glazing) machines. Mixes finishing solutions [CHEMICAL MIXER (textile)]. Separates thread packages according to color and type to prevent faulty mixing of customer orders.
GOE: 06.01.02 STRENGTH: M GED: R3 M3 L3 SVP: 5 DLU: 77

689.260-026 KNITTING-MACHINE FIXER (knitting)

Sets up, adjusts, and repairs knitting machines to knit hose, garments, and cloth according to specifications, using knowledge of machine function: Reads work order and confers with supervisor or engineer to determine knitting machine setup. Inserts cams, links, *buttons*, or *needle jacks* in pattern chain to set up machine to knit hose, garment, or cloth according to pattern design chart. Observes operation of machine and examines knitted material to detect defects. Turns setscrews and handwheels to adjust machine parts, such as gears and cams, and to synchronize *yarn carriers*, needles, dividers, and *sinkers*. Repairs and replaces machine parts, using handtools. Aligns and straightens needles, sinkers, and dividers, using pliers. Cleans and oils machines. May only repair and adjust knitting machines and be designated Line Fixer (knitting).
GOE: 06.01.02 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 81

689.280-010 BOX TENDER (plastic-synth.)

Patrols aisle between rayon-spinning (forming and winding) machines to detect malfunctions. Diagnoses causes of failures. Sets up, adjusts, repairs, or replaces units, using handtools.
GOE: 06.01.02 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

689.324-010 INSTRUCTOR (textile)

Instructs workers in operation of textile machines and in product inspection techniques, using knowledge of machines and processes: Plans training schedule to ensure workers achieve standard production in specified time. Demonstrates methods of threading and operating machines, examining product for defects, and grading product according to quality standards. Evaluates worker performances to ensure achievement of production standards and maintains progress reports. Observes machines to detect operation malfunctions and notifies designated personnel. May be designated according to specialty as Instructor, Knitting (textile); Instructor, Looping (textile); Instructor, Product Inspection (textile); Instructor, Creeler (textile); Instructor, Warper (textile).
GOE: 06.02.01 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 79

689.360-010 NEEDLE-LOOM SETTER (tex. prod., nec)

Sets up and adjusts looms that produce needle (punched) felt: Selects specified needle boards and bolts them to holders, using wrenches. Changes driving gears to adjust speed of automatic feed and punching mechanisms, using wrenches or turning knobs. Threads *bat* through needle board, attaches bat to rewind spindle, and starts machine. Makes adjustments to maintain weight specifications, and replaces worn or broken needle boards.
GOE: 06.01.02 STRENGTH: L GED: R3 M2 L3 SVP: 6 DLU: 77

689.362-010 NEEDLE-FELT-MAKING-MACHINE OPERATOR (tex. prod., nec)

Sets up and operates battery of machines in tandem to produce needle (punched) felt products from raw materials: Turns screws to adjust comb and stripper rolls of *garnett machine* to produce specified *bat*. Installs specified needle board into needle loom to punch together loose bats into needle (punched) felt. Turns handwheels to adjust tension between steam heated calender rolls which press down nap and firm felt. Turns handwheels to lower circular knives to trim felt to specified width. Fills size tank, positions automatic spray gun, and turns valve handle on airhose to spray size onto felt. Turns knobs to regulate temperature and blower of drying oven. Aligns and bolts cutting dies in ram and bed of automatic diecutting machine to cut felt into specified forms. Turns knobs to synchronize speed of machines and conveyors. Aligns feed guides. Starts machine, observes operations to detect malfunction, and examines work to determine conformity to specifications. Replaces worn needle boards. Sharpens circular knives with hone. May repair needle boards [NEEDLE-BOARD REPAIRER (tex. prod., nec)]. May assist MAINTENANCE MECHANIC (any industry) in repairing machines.
GOE: 06.02.06 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

689.364-010 STROBOSCOPE OPERATOR (textile) alternate titles: stroboroma operator; strobotac operator

Verifies speed of spindles and travelers on yarn twisting and spinning frames, using stroboscope, and makes minor adjustments: Turns knob to adjust stroboscope setting to spindle speed specifications. Directs stroboscope light beam onto revolving bobbin. Observes bobbin and traveler to detect illusion of movement indicating variance between spindle speed and speed setting of stroboscope. Turns knob to synchronize stroboscope light oscillations with speed of malfunctioning spindle, and records incorrect spindle speed as shown on stroboscope r.p.m. dial. Makes adjustments, such as tightening screws and removing waste from travelers. Notifies MACHINE FIXER (textile) of machines requiring repairs, such as replacement of spindles and travelers. May use twist-test machine to determine twist (number of turns per inch) in yarn to verify accuracy of machine setup. May test yarn tension, using tensiometer.
GOE: 06.03.01 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

689.364-014 PROCESS CONTROLLER (textile)

Verifies performance of yarn texturing machines for conformance to specifications, using test equipment and instruments. Reviews work order to determine machine to be checked and type of inspection required. Inspects machines for threading problems, such as incorrect placement of yarn and opened feed rollers. Measures operation of machine components, such as oil roller, transverse bar, and rotating shaft of feed roll, to measure operation of machine, using counter, speed indicator, and stopwatch. Observes and records factors, such as heat setting and package tube color of yarn. Determines amount of tension on yarn, using tensioner. Examines friction unit to ensure positioning of belt and to identify defects on unit, and measures speed of unit, using stroboscope. Measures level of humidity, using psychrometer. Compiles data of measurements taken of machine and machine operations and compares actual measurement with measurements from specifications book. Notifies specified personnel of deviations from specifications.
GOE: 06.03.01 STRENGTH: L GED: R3 M3 L3 SVP: 4 DLU: 86

689.366-010 HEAD DOFFER (textile)

Leads activities of workers engaged in doffing spinning frames, applying knowledge of yarn types and duration of spinning process: Transmits instructions from supervisor to workers and observes workers to ensure that procedures, rules, and regulations are followed. Reports work rule infractions to supervisory personnel for resolution. Explains and demonstrates doffing techniques to train new employees, and assists workers in resolving problems. Patrols work area to determine frames requiring doffing. Observes taper (build-up) of yarn on bobbins to determine frame doffing priority, utilizing knowledge of yarn types being processed and length of processing cycle. Posts frame numbers on chalkboard to inform workers of doffing schedule. Verifies accuracy of doffing production reports and submits report to supervisory personnel. *Pieces up* yarn breaks detected. Maintains supply of spinning bobbins and doff boxes (attachments for handtrucks) for workers to facilitate doffing of frames. May perform duties of absent workers.
GOE: 06.01.01 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 86

689.380-010 EMBLEM DRAWER-IN (tex. prod., nec) alternate titles: wrapper

Sets up loom preparatory to embroidering emblems on uniforms or other items: Arranges needles according to spacing designated by operator of loom and tightens lock bolt, using wrench. Removes spools of thread from machine spindles and replaces spools with thread of specified weight and color. Wraps (loops) thread around tension bar specified number of times. Guides threads through series of rods and threads needle, using hooked instrument. Pulls out loose ends of thread by hand after several stitches have been made. Repeats operation each time uniform, emblem, or color of thread is changed.
GOE: 06.01.02 STRENGTH: L GED: R3 M2 L3 SVP: 3 DLU: 77

689.382-010 AUTOMATIC-PAD-MAKING-MACHINE OPERATOR (tex. prod., nec) alternate titles: border-machine operator

Sets up and operates battery of machines to produce quilted and laminated padding from batting: Places rolls of batting and burlap base in feed holders of machine. Aligns and threads ends of material through machine. Turns handwheels to heat calender roll. Threads needles of quilting machine that binds batting to base to form padding. Turns air valve that activates stationary spray gun to spray binder to surface of padding. Aligns end of second roll of batting to sprayed surface under pressure roll to form laminated padding. Turns

handwheels to position circular knives that trim padding to specified width. Turns knobs to adjust electric eye controlled mechanism which automatically cuts padding to specified length, drops on layer of gauze, and cuts and laps gauze over pads. Starts spray gun that sizes pad to hold covering in place. Turns knobs to synchronize speed of machine and starts machine. Replaces broken needles. Fills tanks with specified size. Places rolls of narrow reinforcing batting in holder and guides under needles when specified. Sews together burlap and gauze, and laps together batting to form continuous roll.
GOE: 06.02.18 STRENGTH: M GED: R3 M2 L3 SVP: 4 DLU: 77

689.384-010 CLOTH TESTER, QUALITY (textile) alternate titles: laboratory assistant

Determines physical properties of greige and finished cloth, employing standardized tests, equipment, and procedure: Measures width of cloth with ruler. Guides electric knife along markings on cloth to cut fabric samples for testing. Weighs sample on grain scales and converts grain weight into desired units, using mathematical tables. Counts number of warp and filling per unit space, using pick counter. Positions cloth sample between jaws of testing machine and moves machine controls to apply force necessary to rupture sample and determine tensile strength of cloth. Sews across sample, using portable sewing machine, and examines stitching through magnifying lens to detect threads broken by sewing machine needle. Creases sample under controlled conditions and places sample in clamp on crease recovery tester to determine cloth resiliency to creasing. Records test results and reports variation from standards to MANAGER, QUALITY CONTROL (profess. & kin.). In addition, may perform other tests, such as tear test, crimp test, fabric bow test, abrasion test, bursting test, heat transmission test, permeability test, and water repellency test.
GOE: 06.03.01 STRENGTH: L GED: R3 M3 L3 SVP: 4 DLU: 77

689.384-014 LABORATORY TESTER (textile) alternate titles: roving tester, laboratory; yarn tester

Tests textile fibers and yarn at any stage in yarn-manufacturing process to determine conformance to standards. Collects samples from machines, gathers samples from carts, or receives samples at work station. Records information regarding samples on company forms, and identifies samples with tags prior to testing. Computes twists per inch in yarn samples, using formula and readings from twist counter. Feeds yarn, roving, or sliver into evenness tester that detects and records variations in weight on printout sheet. Winds specified length of yarn onto skein winder and removes skeins from winder. Weighs skeins of yarn on balance scale and obtains yarn number (measure of fineness) from dial or chart. Breaks individual strands or skeins of yarn with break tester to determine strength of yarn. Winds yarn on black panel for inspection, compares evenness and number of slubs and neps in yarn with standard photographs, and assigns grade. Weighs fiber sample on balance scale before and after drying and determines percentage of water content (moisture regain) by computation or by consulting chart. Records results of tests, compares results with company standards, and reports variations from standards to lab supervisor or MANAGER, QUALITY CONTROL (profess. & kin.) 012.167-014. Records waste produced by departments. May receive defective yarn returned by customer and test yarn to determine whether company purchased defective materials, defects occurred during company processing, or customer caused defects to occur. May perform standardized chemical tests to determine amount of oil or size in yarn. May be designated according to specialty as Yarn-Weight-And-Strength Tester (textile).
GOE: 06.03.01 STRENGTH: L GED: R3 M3 L3 SVP: 4 DLU: 79

689.387-010 CLOTH GRADER (textile) alternate titles: cloth classer; hand inspector; seconds grader; seconds inspector; table inspector

Classifies cloth into grades according to number of defects: Examines cloth for defects marked in previous inspection and determines whether corrections can be made to restore cloth to standard quality. Cuts defects from cloth with scissors or routes cloth to mending, dyeing, or refinishing department for reprocessing. Classifies cloth that cannot be restored to first quality according to standards for various grades. Records disposition of cloth rehandled. May inform weaving room of repeated imperfections requiring loom adjustments.
GOE: 06.03.01 STRENGTH: L GED: R3 M1 L2 SVP: 5 DLU: 77

689.564-010 CARPET INSPECTOR, FINISHED (carpet & rug)

Examines finished carpeting for weaving or tufting defects, variations in color and finish, soil, and uneven shearing: Pulls carpeting from roll onto floor to facilitate inspection. Walks or crawls over carpeting, feeling and scanning carpeting for defects. Repairs weaving defects and cleans soiled areas or notifies BURLER (carpet & rug; textile) to make repairs. Marks finishing and shearing defects with chalk. Notifies respective departments of defects. Measures length of carpeting or pile height for conformance to specifications, using ruler and tape measure. Records yardage on work ticket. Compares carpeting with standard swatches and grades carpeting according to standards for various grades.
GOE: 06.03.02 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

689.582-010 PUNCHER (tex. prod., nec)

Operates punching machine, equipped with pantograph mechanism, to punch pattern designs in rolls of paper or plastic which control stitching operations of automatic embroidery machines: Positions and tacks cartoon (enlarged drawing of pattern) onto pantograph pattern board and mounts roll of paper in holder. Pulls levers to start and to regulate speed of machine, and to move needles against pattern roll. Guides pantograph pointer over cartoon to activate punching needles that perforate paper roll to form embroidery pattern roll. Marks identifying information on punched roll, using crayon. May place roll of paper in holder. May operate machine equipped with mechanism that simultaneously stitches sample design and punches pattern in paper. May place punched roll in machine that automatically produces copies of design.
GOE: 06.02.09 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

689.585-010 BLANKET-CUTTING-MACHINE OPERATOR (tex. prod., nec)

Tends machine that spreads cloth and cuts it into blanket lengths, folds each piece, and stacks folded lengths onto handtruck: Pushes truck of cloth into feeding position and threads cloth through scray, under knife, and into cloth-spreading attachment. Turns thumbscrew to adjust cloth-spreading attachment for specified blanket length. Positions empty truck over hydraulic jack at delivery end of machine and moves lever to elevate truck into receiving position. Releases safety catch from knife and pushes button to start machine. Straightens unevenly piled blankets and adjusts height of truck to facilitate stacking. Records style, color, and number of blanket lengths cut. Works as member of team.
GOE: 06.04.05 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

689.585-014 FOLDING-MACHINE OPERATOR (textile) alternate titles: cloth folder, machine; flat-folding-machine operator; folder, machine; hooking-machine operator

Tends machine that folds cloth into uniform lengths preparatory to inspecting, wrapping, or packing: Pushes roll of cloth onto machine brackets and threads cloth through feed rollers, over and under tension rollers, and through slot of folding bar. Inserts end of cloth under clamps on machine tables and sets yardage clock at zero. Starts machine and observes folding to detect seams in cloth. Stops machine and ravels seams with fingers. Depresses pedal to raise clamps, releasing cut of cloth, and removes cloth from machine. Records yardage on production ticket and attaches ticket to cloth. May count folds to determine yardage in each cut of cloth. May be designated according to material folded as Silk Folder (textile).
GOE: 06.04.05 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

689.585-018 STRINGING-MACHINE TENDER (tex. prod., nec) alternate titles: clipping, stringing, and turning machine tender

Tends machine that inserts gathering strings in hem of bags and turns bags. Pulls bags joined by connecting threads across feed trough and hooks end bag on feeding apron of machine. Moves lever to start machine that automatically clips joining thread between bags, inserts gathering strings in hems, and turns bags. Removes bags from discharge end of machine, examines bags for stringing flaws, and stacks bags in carton for packing. Places defective bags aside for repair. Draws thread from cones through machine guides and eyes of needles to thread stringing needles. Records number of bags processed.
GOE: 06.04.05 STRENGTH: S GED: R2 M1 L2 SVP: 2 DLU: 77

689.587-010 NUMBERER AND WIRER (textile) alternate titles: card-cutter helper

Numbers punched and laced *Jacquard loom* pattern cards according to prescribed sequence, using pencil or hand numbering device. Wires together series of cards in prescribed sequence to make pattern chain, using handtools.
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

689.662-010 NEEDLE-LOOM OPERATOR (tex. prod., nec)

Sets up and operates loom with assistance of NEEDLE-LOOM OPERATOR HELPER (tex. prod., nec) 586.686-022 to produce needle (punched) felt: Selects and bolts specified needle boards to loom holders, according to work order, using wrenches. Installs speed gears or turns knob to synchronize speed of feeder with action of needle board. Threads *bat* through needle board and attaches bat to rewind spindle. Starts machine, watches feed gauge, and stops machine when specified length of felt is produced. Measures thickness and width of felt, using gauge and tape, to ensure product meets specifications. Cuts finished felt from roll with knife or shear. Replaces worn or broken needle boards. May place roll of textile base into feed holder and textile base roll with felt bat to produce textile backed felt. May glue or sew together ends of base to form continuous roll.
GOE: 06.02.06 STRENGTH: M GED: R3 M2 L3 SVP: 5 DLU: 80

689.662-014 STRIPE MATCHER (knitting)

Operates machine to cut, align, and sew stripes parallel in tubular cloth: Turns screw to secure circular cutting blade (horizontal or vertical) in cutting position and adjusts guides according to specified cloth width. Positions cloth at feed-end of machine and threads cloth through machine units onto *swing folding attachment*, or joins supply end to leader, using portable sewing machine. Starts machine that cuts cloth to open width, aligns stripes parallel, seams edges together, and trims excess cloth from edges. Observes operation for defective cutting, stitching, or misalignment of stripes. Repairs sewing defects, using sewing machine, and reports malfunctions to maintenance personnel. Ravels seams to separate cloth lots and records yardage processed onto cloth ticket.
GOE: 06.02.05 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 77

689.665-010 STRAP BUCKLER, MACHINE (garment)

Tends machine that threads lingerie or foundation garment shoulder strap material through buckle (slide) and link to make adjustable shoulder straps: Places

tubes of buckles and links on machine racks and presses pedal to push buckle and link into holders under vertical threading rod. Positions strap between rod and holders and presses pedal to lower rod that forces material through openings in buckle and link. Loops strap over hook in rod and presses pedal to raise rod that pulls strap back through buckle. Ties specified number of straps into bundle.
GOE: 06.04.05 STRENGTH: S GED: R2 M1 L2 SVP: 3 DLU: 77

689.665-014 THREAD-CUTTER TENDER (tex. prod., nec)

Tends machine that cuts and removes threads which connect designs on machine-embroidered fabrics or bands of knitted lace: Stitches length of embroidered fabric to leader, using stitching machine, or wraps draw threads around takeup bar and inserts ends of bands between stop-motion devices, guides, and rollers. Adjusts clearances, starts machine, and guides fabric so as to break threads. Pulls out loose thread and turns fabric over to repeat operation. Cleans threads from machine, using brush. May be designated according to operation performed as Lace Breaker (tex. prod., nec); Lace Separator (tex. prod., nec); Lace Stripper (tex. prod., nec).
GOE: 06.04.05 STRENGTH: L GED: R3 M1 L2 SVP: 2 DLU: 77

689.665-018 VACUUM-TANK TENDER (textile)

Tends vacuum tanks that collect fiber and lint stripped from carding and other textile machines: Obtains information from CARD STRIPPER (textile) concerning type of fiber stripped to prevent mixing of different fibers. Pulls lever to create vacuum in tank and to relieve vacuum when tank is filled or stripping is completed. Opens door at bottom of tank to dump fiber and lint into handtruck. Pushes handtruck onto scales and records weight.
GOE: 06.04.16 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

689.667-010 RUG INSPECTOR I (carpet & rug)

Examines finished fiber rugs for defects: Examines selvage and binding and inspects rug for discolorations, mispicks, loose weaves, creases, dirt, grease, knots, and loose ends. Determines when rugs cannot be repaired and classifies rugs as seconds. Prepares report on flaws and number of rugs in load.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

689.682-010 LOOPER (knitting)

Operates *looping machine* to close opening in toe of seamless hose or join knitted garment parts: Pulls lever or depresses pedal to rotate horizontal dial containing looping points and start trimming and seaming mechanism. Places each stitch along *looping line* of garment part or one side of toe over looping points, working against movement of dial. Places stitches of second garment part or side of toe over looping points holding corresponding stitches of first garment part or side of toe. Removes looped articles from dial of machine. Examines looped seams for defects. May mark defects with crayon. May thread machine, using tweezers. When looping contour collars to body of garment, places stitches on looping points in sequence which will curve collar to body of garment. May be designated according to article looped as Garment Looper (knitting); Hosiery Looper (knitting).
GOE: 06.02.06 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

689.682-014 NEEDLE-PUNCH-MACHINE OPERATOR (textile)

Operates machine and equipment to *stitch-bond* synthetic fibers to scrim (webbing) to produce nonwoven fabric: Turns dials on control panel to regulate conveyor speeds, feed rate of scrim and fiber stock through machine, roll pressure, and steam in rollers. Adjust compression rollers following thickness specifications. Starts machine and observes operation to detect defects, such as broken needles, folds or lines in webbing, and fabric contamination. Moves mechanism on hopper to regulate flow and weight of fiber stock feeding into machine. Replaces broken needles, using handtools.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

689.682-018 SPLICING-MACHINE OPERATOR (tex. prod., nec) alternate titles: splicer

Operates sewing machine to splice (join) ends of partially filled spools of tire cord: Places spools of spliced cord on spindles of machine that winds cord from one spool to another. Pushes and pulls sewing machine along overhead tracks to each machine spindle. Positions ends of cord under sewing head. Depresses pedal to activate machine and splice ends of cord together.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

689.682-022 STITCHER (tex. prod., nec)

Operates machine to embroider decorative design on fabric: Positions and tacks pattern sheet onto pantograph drawing board. Pulls levers to engage needle and shuttle rails against cloth and to regulate stitching speed. Depresses pedal to start machine and guides pantograph pointer over pattern. Removes embroidered cloth from machine. Inserts thread, needles, cloth, and backing into embroidery machine frame and applies protective and stiffening solutions to cloth, using brush.
GOE: 06.02.05 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

689.684-010 BURLER (carpet & rug; textile) alternate titles: cloth picker; knot picker, cloth; slub picker; string picker

Examines fabric for weaving defects, using power-driven examining machine, and repairs defects, using burling iron (tweezers), needle and thread, tufting device, and scissors: Pulls fabric over rollers, down over inspection board, and wraps cloth end around powered takeup beam or tube. Depresses pedal to start machine that moves fabric over inspection board, and scans and feels fabric for defects, such as burls, slubs, loose threads, mispicks, defective pile or soils. Stops machine and trims loose threads with scissors and pulls out defective yarn and pile with burling iron. Reweaves mispicks and inserts pile or tufts as specified, using needle or tufting device. Removes soils from carpeting, using brush and cleaning chemicals. May record yardage inspected and repaired. May doff rolls of fabric from machine, using hoist.
GOE: 06.03.02 STRENGTH: L GED: R3 M1 L2 SVP: 3 DLU: 77

689.684-014 DRAWER-IN, STITCH-BONDING MACHINE (textile)

Pulls thread through machine parts to arrange ends for *stitch-bonding*, according to company standards and instructions: Mounts specified spools of thread on spindles and draws ends through guides and stop-motion devices, using hook. Observe threads to ensure ends are positioned as directed.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

689.684-018 LEASE PICKER (textile)

Separates sections of tangled threads from salvaged beams to establish lease and strips defective filling from quills: Positions beam onto holding rack, using electric overhead chain hoist. Pulls and cuts knotted sections of yarn to align and separate layers of yarn on beam, using hand shears. Tapes yarn ends to secure alignment on beam prior to establishing lease. Separates alternating strands of yarn between thumb and index finger and places *lease strings* between sheds and repeats process to establish specified lease. Ties lease strings to secure yarn. Wraps protective paper around beam and attaches identifying tag to beam. Removes defective filling from quills [BOBBIN-CLEANING-MACHINE OPERATOR (textile) 689.686-014].
GOE: 06.04.27 STRENGTH: M GED: R3 M1 L2 SVP: 3 DLU: 86

689.685-010 BALL-FRINGE-MACHINE OPERATOR (tex. prod., nec)

Tends machine that automatically cuts bunch of yarn ends, ties ends with wire to loops woven in tape, and winds completed material on spools to form ball fringe.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

689.685-014 BLOCKER (narrow fabrics; nonmet. min.)

Tends blocker (winding) machine that winds narrow fabrics, such as tape or braid, into rolls: Moves flange into position on winding shaft to block (even) fabric as fabric winds onto shaft, or guides fabric onto shaft by hand. Depresses pedal to start and control speed of machine. Scans fabric for weaving defects, holes, and soils. Cuts out defects, using scissors. Secures end of roll with staple, gummed tape, or label. Records number of cuts in each roll. May press blocking stick against fabric to hold fabric firm during winding. May wind paper liner between layers of fabric. May tend machine equipped with traverse guide or wind lace onto spools and be designated Spooler (narrow fabrics; tex. prod., nec). May be designated according to material blocked as Ribbon Blocker (narrow fabrics); Tape Winder (narrow fabrics; nonmet. min.).
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

689.685-018 BOBBIN PRESSER (tex. prod., nec)

Tends hydraulic power press, steam oven, and blowers that shrink threads and temper brass bobbins for use on Levers lace machines: Loads yarn-filled bobbins on fixture posts, fastens cover in place, and positions loaded fixture on press bed. Pulls lever that lowers ram to compress thread and straighten bobbin. Tightens cover nut to prevent expansion when pressure is removed. Sets temperature controls and deposits damp cloths in oven to produce humidity. Places loaded fixture in oven to shrink threads and temper bobbin metal. Removes and cools fixture, using blowers. Removes and delivers bobbins to THREADER (tex. prod., nec).
GOE: 06.04.19 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 77

689.685-022 BOBBIN STRIPPER (tex. prod., nec)

Tends stripper that removes thread residue from brass bobbins to prepare bobbins for rewinding: Loads bobbins on shaft of stripping device and ties thread ends to reel at bottom of stripper. Pulls lever to start device that strips thread from bobbins and winds thread onto reel. Removes bobbins from shaft and holds bobbins in front of light to detect thread particles clinging to base or sides of bobbin. Inserts *searcher* between disks to remove thread particles.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

689.685-026 BOUFFANT-CURTAIN-MACHINE TENDER (tex. prod., nec)

Tends automatic sewing machine that fabricates novelty curtains: Mounts rolls of ruffle material on machine holders and threads material through machine guides and under sewing mechanisms. Selects thread according to curtain color and threads machine. Positions curtain panel under sewing mechanisms and depresses pedal that gathers and stitches ruffles to panel and hems curtain top to form rod insert. Observes sewing to detect defective stitching and reports machine malfunctions. Works as member of three person team to fabricate curtains.
GOE: 06.04.05 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

689.685-030 BOW-MAKER-MACHINE TENDER, AUTOMATIC (tex. prod., nec)

Tends automatic machine that fabricates decorative bows from ribbons: Turns setscrews to adjust machine according to bow type and size, fills machine hopper with staples. Places roll of ribbon on spindle and draws ribbon through machine guides and rollers. Turns valve to activate pneumatic bow ejection device. Presses button to start machine that forms, staples, and ejects bows.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

689.685-034 BUFFING-WHEEL FORMER, AUTOMATIC (tex. prod., nec)

Tends forming machine that folds, gathers, and presses cloth into groove of *facing* to produce buffing wheels: Lifts roll of cloth on holder or draws end from box and threads it through guides and over steam pipes. Removes front section of winding drum, places facing on rod in center of rear section, and positions front section on rod at specified distance from rear section. Pulls cloth over drum and centers it over space between drum sections. Secures cloth edges to pins set across drum. Turns valve to admit steam to pipes to soften material. Turns crank to wind specified amount of cloth around drum. Cuts cloth, using hand shears, and pushes drum between jaws of machine. Presses button to activate jaws that fold and gather cloth into space between drums and press gathered edge between points of facings. Removes laced buffing material when pressing cycle is complete. Turns dial to control length of pressing cycle, according to style of buffing wheel.
GOE: 06.04.16 STRENGTH: M GED: R2 MI L2 SVP: 2 DLU: 77

689.685-038 CLOTH EXAMINER, MACHINE (textile) alternate titles: cloth inspector; final inspector; inspection-machine tender; percher; perch-machine inspector

Inspects finished or unfinished cloth for weaving or finishing defects, using power-driven examining frame: Pulls fabric over rollers, down over inspection board, and wraps cloth end around takeup beam or tube, or positions supply truck under *swing-folding attachment*. Sets yardage clock at zero and presses button or pedal that starts movement of cloth over inspection board. Scans cloth for defects, such as grease spots, slubs, mispicks, uneven selvages, and irregularities in color. Marks defects with chalk, thread, or adhesive sticker. Records information, such as defects, cloth style, and yardage inspected. May correct reparable defects, such as soils, slubs, or loose ends, using steel pick, scissors, knife, or cleaning solution. May cut irreparable defects from cloth, using scissors, and sew cloth ends together, using needle and thread or sewing machine. May mount and doff rolls of cloth, using hoist. May grade cloth according to quality, using written standards. May cut or tear strip from end of cloth for sample. May count number of picks per inch, using pick counter. May feel cloth to compare texture with that of sample. When reexamining cloth to verify defects marked by other workers, is designated Rechecker (textile). May be designated according to fabric examined as Asbestos-Cloth Inspector (nonmet. min.); Base-Cloth Inspector (carpet & rug); Greige-Goods Examiner (textile); Knitted-Cloth Examiner (knitting); Lace Inspector (knitting). May be designated: Finished-Cloth Examiner (textile); Inspector, Coated Fabrics (tex. prod., nec); Silk Examiner (textile); Tire-Fabric Inspector (tex. prod., nec); Woolens Examiner (textile).
GOE: 06.03.02 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 80

689.685-042 CLOTH REELER (textile) alternate titles: reeling-machine operator

Tends machine that spreads cloth from rope to open form and reels it preparatory to drying or other processing: Positions drum of roped cloth in front of machine. Draws end of cloth from top of drum and ties or stitches end of cloth to cloth in machine. Starts machine and turns drum by hand to ensure that cloth emerges from drum and winds untwisted onto reel.
GOE: 06.04.06 STRENGTH: M GED: R2 MI LI SVP: 2 DLU: 77

689.685-046 CLOTH WINDER (textile) alternate titles: cloth beamer; cloth-roll winder; roller; rolling-machine operator; tuber; winding-machine operator

Tends machine that winds cloth from one form to another to facilitate further processing: Threads cloth from supply truck, bale, or roll through guides and rollers to *takeup roll*, tube, or rod, or sews cloth to end of leader in machine, using sewing machine. Turns handwheel to adjust width guides. Starts machine and observes cloth to detect irregular seams and torn selvages. Pushes lever to control tension on cloth and speed of machine. Cuts out flaws and combines several cuts of cloth to form one roll, sewing ends with portable sewing machine. Records yardage clock reading on order ticket. Removes full rolls from machine onto handtruck by hand or using hoist. May wrap cloth roll for storage or shipping [ROLL COVERER, BURLAP (textile) 929.687-042]. May be designated according to process for which cloth is being wound as Boiling-Off Winder (textile); type of material wound as Carpet Winder (carpet & rug); or type of winding machine used as Reeling-And-Tubing-Machine Operator (textile).
GOE: 06.04.06 STRENGTH: M GED: R2 MI LI SVP: 2 DLU: 77

689.685-050 CLOTH-DOUBLING-AND-WINDING-MACHINE OPERATOR (textile) alternate titles: doubling-and-rolling-machine operator; doubling-machine operator; wide-cloth folder

Tends machine that folds (lengthwise) and winds cloth around cardboard center or tube for shipment: Mounts roll of finished cloth onto brackets of machine, and threads end through guide rollers and over triangular folding device, or joins ends to form continuous lengths, using sewing machine. Places cardboard center or tube on winding spindles and starts cloth around cardboard center or tube. Starts machine and pulls uneven selvages into alignment as cloth is folded and wound. Turns handwheel to adjust folding attachment. Cuts out seams and defects marked by CLOTH EXAMINER, MACHINE (textile), using scissors or knife. Doffs full rolls when specified yardage has been wound. Feeds paper measuring tape into roll when winding cloth that stretches. May tend machine fed directly from another machine. May paste sticker showing yardage on outside of each bolt. May fold special lots of cloth by hand.
GOE: 06.04.06 STRENGTH: M GED: R2 MI LI SVP: 3 DLU: 77

689.685-054 CRUSHER-AND-BINDER OPERATOR (tex. prod., nec)

Tends machine that grooves balls of twine: Inserts wooden peg through ball of polished twine and places peg with ball into machine. Starts machine and holds end of peg while machine presses groove around ball. Stops machine and removes ball. Unwinds length of twine and ties twine around groove in ball to bind twine. Tucks end of twine under binder, using grooved knife.
GOE: 06.04.06 STRENGTH: L GED: R2 MI LI SVP: 2 DLU: 77

689.685-058 DRAWSTRING KNOTTER (tex. prod., nec)

Tends machine that automatically knots and cuts cordage to form drawstrings for laundry bags: Mounts spool of cordage on spindle and threads cordage through knotting and cutting mechanisms. Presses button to start machine that knots and cuts cordage into specified lengths. Hangs drawstrings on rack for further processing.
GOE: 06.04.05 STRENGTH: L GED: R2 MI LI SVP: 2 DLU: 77

689.685-062 DROP-WIRE ALIGNER (textile)

Tends machine that aligns *drop-wires* used on loom harnesses: Loads drop wires in machine chutes. Turns handwheel to secure electrostatic bar in machine bed. Starts machine and observes operation for clogs. Clears jams, using screwdriver. Removes bar and wires from machine and replaces damaged wires. Slides metal strip through drop wire eyelets to facilitate attachment to loom harness.
GOE: 06.04.06 STRENGTH: L GED: R1 MI LI SVP: 2 DLU: 77

689.685-066 FISHING-LINE-WINDING-MACHINE OPERATOR (tex. prod., nec)

Tends machine to wind fishing line onto spools: Places spool of line on spindle. Slides empty spools on shaft of machine. Turns setscrews to hold spools in place. Threads line through machine handle, over blade and onto empty spools. Depresses pedal to start machine and wind line onto spools. Moves machine handle to guide line back and forth across spool.
GOE: 06.04.05 STRENGTH: L GED: R2 MI LI SVP: 2 DLU: 77

689.685-070 HEDDLE CLEANER, MACHINE (textile)

Tends machine that brushes lint from heddles in *harness frames*. Positions frame on feeding mechanism and starts machine that draws frame under brushes. Reverses position of frame on mechanism to complete cleaning cycle. Cleans machine and work area, using rags, broom, and airhose.
GOE: 06.04.39 STRENGTH: H GED: R2 MI LI SVP: 2 DLU: 77

689.685-074 HELMET COVERER (hat & cap) alternate titles: cloth-covered-helmet puller; cloth coverer; crimping machine operator

Tends machine that presses and joins cloth covering onto fiber helmet bodies, using either or both of following methods: (1) Positions precemented helmet bodies over mold on machine bed. Positions precut cloth over helmet and pulls cloth taut to remove wrinkles, assisted by co-worker. Depresses pedal that raises machine bed to force helmet into heated head of machine, pressing cloth onto crown of helmet. Releases pedal to lower machine bed and removes helmet. Trims excess cloth from edge of helmet brim, using knife or pinking shears. (2) Inserts covered crown of helmet in mold on bed of machine. Depresses pedal that raises machine bed, to force helmet brim into slot of heated head of machine, pressing cloth over rolled edge of helmet to inside of brim. May be designated according to part of helmet covered as Helmet-Brim Coverer (hat & cap); Helmet-Crown Coverer (hat & cap).
GOE: 06.04.20 STRENGTH: L GED: R2 MI LI SVP: 3 DLU: 77

689.685-078 HOOKER INSPECTOR (textile) alternate titles: cloth folder, machine; folding-machine operator; hooker operator; measuring-machine tender; yardage-machine operator; yarding-and-folding-machine operator

Examines cloth for weaving or finishing defects, using *hooker machine* that folds cloth into yard lengths: Pushes roll of cloth onto machine brackets and threads cloth through feed rollers, over and under tension rollers, through slot of folding bar, and inserts end of cloth under clamps on machine table. Turns knob to set yardage counter or counts folds to determine yardage of cloth inspected. Depresses pedal to raise clamp, releasing cut of cloth, and removes cloth from machine. May complete folding of cloth by hand.
GOE: 06.03.02 STRENGTH: M GED: R3 MI L2 SVP: 3 DLU: 77

689.685-082 KAPOK-AND-COTTON-MACHINE OPERATOR (tex. prod., nec)

Tends machines that automatically clean, dry, cut, and separate raw kapok and cotton fibers for use as pillow, cushion, and quilt filler: Removes wire and burlap from bales and pushes material into hopper of machine. Fastens cloth bag to machine outlet pipe and opens air duct to blow material through machine and into bag. Ties filled bag and transports bag to storage area.
GOE: 06.04.16 STRENGTH: M GED: R2 MI L2 SVP: 2 DLU: 77

689.685-086 LABEL-CUTTING-AND-FOLDING-MACHINE OPERATOR, AUTOMATIC (narrow fabrics)

Tends machine that cuts, folds cut edges, presses, counts, and packs labels in box: Positions roll of labels on holder and inserts end in feeder mechanism. Positions box at discharge end of machine and turns dial to set counter that stops machine when specified number of labels have been processed. Presses lever to start machine and observes labels to detect defective cutting, folding,

or pressing. Removes defective labels and notifies machine fixer to adjust machine. Removes filled box of labels from machine.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

689.685-090 NEEDLE-LOOM TENDER (tex. prod., nec)

Tends loom that produces needle (punched) felt: Places roll of felt *bat* into feed holder of loom. Aligns bat on conveyor, threads end of bat through needle bed of loom, and attaches felt to rewind spindle. Starts machine, watches feed gauge, and stops machine when specified length of felt is produced. Cuts felt from roll with shears. May glue or sew together ends of base to form continuous roll. May place roll of textile base into feed holder and align with bat to produce textile backed felt. May replace defective needle boards, using handtools.
GOE: 06.04.06 STRENGTH: L GED: R3 M1 L2 SVP: 3 DLU: 77

689.685-094 PICK-PULLING-MACHINE OPERATOR (textile) alternate titles: float remover; waste filling remover

Tends machine that pulls *false selvages* and waste filling floats from looped pile fabric: Lifts roll of cloth into feeding position and pins end of cloth to leader in machine. Positions false selvage between feed rollers on each side of machine. Starts machine and observes flow of cloth to detect oblique twist due to unequal tension on cloth. Depresses pedal to release tension on leading selvage and allow lagging selvage to catch up. Doffs rolls of cloth and full boxes of filling waste.
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

689.685-098 PICK-UP OPERATOR (textile)

Inspects greige corduroy or velvet cloth to detect uncut filling floats, and cuts floats, using pickup knife. Positions truck of cloth at entry end of examining frame and pins end of cloth to leader in machine. Depresses pedal to start machine that passes cloth over inspection board, and scans cloth for uncut floats missed by CORDUROY-CUTTER OPERATOR (textile). Inserts point of pickup knife under floats and cuts threads. Doffs cloth from *swing-folding attachment* onto handtruck. Records yardage of cloth inspected.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

689.685-102 QUILT STUFFER, MACHINE (tex. prod., nec)

Tends automatic machine that fills (stuffs) quilt, comforter, and sleeping bag covers with padding: Fastens cover, sewn on three sides, over frame that holds cover open, and places padding on movable track. Presses button to activate mechanisms that stuffs and encloses padding in cover. Works as member of team to stuff covers.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

689.685-106 QUILTING-MACHINE OPERATOR (glove & mit.; tex. prod., nec) alternate titles: stitcher

Tends one or more automatic, multiple-needle sewing machines that quilt layers of material used to make articles, such as work gloves, quilts, or padding: Places supply packages on thread holders and draws ends through guides, tensions, and needle eyes, using tweezers. Inserts bobbins in shuttle and draws thread through guides and looper eyes. Pulls boxes of flatfolded material into feeding position or mounts rolls of material onto machine with aid of another worker, using chain hoist or electric lift truck. Threads ends of material under yardage counter and needles, and laps end around takeup rod. Starts machine and observes material sewn to detect broken threads, uneven edges or wrinkles, and defective stitching or stitch design. Rethreads needles, straightens edges of material layers, and regulates tension on material or thread, or notifies maintenance department to adjust machine or alter setup. Cuts material when specified yardage has been quilted, using hand shears or electric knife, and doffs roll. Replaces defective or broken needles. Feels needles to detect rough places and smooths rough area, using sandpaper. May unroll bolts of material onto machine table in specified order of layers and draw ends between feeder rollers.
GOE: 06.04.05 STRENGTH: M GED: R3 M1 L2 SVP: 4 DLU: 77

689.685-110 ROLL TURNER (knitting) alternate titles: tube turner; turner; turning-machine operator

Tends machine that turns circular knitted cloth (knit tubing) inside out and winds cloth into rolls: Pulls end of cloth through turning pipe (slotted metal form). Opens and pulls end of cloth over turning pipe and circular spreader. Inserts turned end under feed rollers and laps end around *takeup roll*. Shifts lever to activate feed and winding rollers. May mount roll of tubing on stand and remove turned rolls.
GOE: 06.04.06 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

689.685-114 ROLLING-MACHINE TENDER (knitting) alternate titles: batcher tender

Tends machine that spreads knit tubing from *rope form* to full width and winds it into rolls preparatory to further processing: Pulls knit tubing over spreader and wraps end around *takeup roll*. Starts machine and observes cloth to detect splices. Stops machine and separates joined ends, using shears, or by raveling seams with fingers. Lifts roll out of machine.
GOE: 06.04.05 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

689.685-118 SEWING-MACHINE OPERATOR, SPECIAL EQUIPMENT (furniture)

Tends machine that automatically stitches designs to decorate mattress covers and to hold padding in place: Places spools of thread on spindles and draws ends through guides, tensions, and needle eyes. Inserts bobbin in shuttle and draws thread through slot in shuttle wall. Clamps covering material and padding in frame and places frame in rack under sewing head of machine. Bolts pilot pattern plate on platform beneath frame, using wrench. Places pilot or guide bar extending from frame in guide channels of pilot pattern and starts machine. May move pilot or guide bar by hand. May attach framed cover to pulleys that draw it away from machine as cover is stitched, and guide cover under presser foot by hand to stitch design.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

689.685-122 SPLICING-MACHINE OPERATOR, AUTOMATIC (tex. prod., nec) alternate titles: automatic-splicing-machine operator

Tends machine that splices (joins) ends of partially filled spools of tire cord and winds cord from one spool to other: Places spools of cord on machine spindles and pulls ends of cord through holding device under needle of sewing machine. Depresses pedal to start sewing machine that automatically sews ends of cord together, cuts thread at end of sewing cycle, and trims excess ends of cord. Removes spliced ends from holding device. Pulls lever to start spindle that winds spliced cord from one spool to another and to turn table, moving succeeding spindles into splicing position. Doffs full spools of cord as table turns complete circle. Mounts cones of thread on machine spindles, ties thread from spindle to thread in machine, and pulls thread through machine guides, tension springs, and needle to thread sewing machine.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

689.685-126 STITCH-BONDING-MACHINE TENDER (textile)

Tends machine that *stitch-bonds* fibrous web to produce reinforced nonwoven fabric. Positions *laps II* at feed end of machine and mats supply end to tailing end in machine. Starts machine and observes operation to detect defective stitching, thread breaks, and exhausting laps. Centers lap on feed apron to prevent lap edge from straying from stitching area. *Pieces up* thread breaks. Doffs machine. Cleans and lubricates machine.
GOE: 06.04.05 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

689.685-130 SURGICAL-DRESSING MAKER (protective dev.) alternate titles: pad maker

Tends machine that automatically cuts and folds gauze backing around absorbent cotton to form surgical dressings: Starts machine that cuts gauze and absorbent cotton to size, folds gauze around cotton in prescribed manner to form surgical pad, and ejects pad. Examines ejected pads for size, folding of gauze and defects in absorbent cotton. May pack specified quantity of pads in bags or cartons.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

689.685-134 TAPE-FOLDING-MACHINE OPERATOR (rubber goods; tex. prod., nec) alternate titles: bias-binding folder

Tends machine that folds, creases, and winds bias binding tape onto spool or reel: Selects folding guide according to width of tape and fastens guide on machine, using screwdriver. Threads tape through folding guide and pressing rolls, and onto takeup reel. Starts machine and observes folding, creasing, and winding of tape.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

689.685-138 TAPE-MAKING-MACHINE OPERATOR (tex. prod., nec) alternate titles: string-glue-and-printing-machine operator; twine operator

Tends machine that glues together strands of paper twine to form tape used for tying packages: Places bobbins of twine on creel. Threads ends of twine through guides, glue rollers, and dryer, and fastens taps to reel. Turns drier thermostat knob to regulate temperature. Starts machine and monitors operation to ensure uniform gluing and drying. May adjust printing device to imprint specified data on tape. May adjust guides to regulate width of tape.
GOE: 06.04.04 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

689.685-142 TASSEL-MAKING-MACHINE OPERATOR (tex. prod., nec)

Tends automatic machine that makes tassels for use on draperies and tapestries: Inserts braid strip to which tassels will be tied into machine and fills tube in machine with mixture of rayon and cotton. Depresses pedal to start machine. Removes automatically ejected tassels.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

689.685-146 TURNING-MACHINE OPERATOR (tex. prod., nec) alternate titles: turner

Tends machines that turn textile bags right side out by either of following methods: (1) Pulls bag over flattened end of pneumatic pipe. Turns valve to start air suction that turns bag. Drops bag between rollers that convey bag to next process. (2) Turns crank to expand or contract jaws and horizontal sticks of machine according to width of bag. Starts machine and pulls open end of bag over jaws of machine that hold bag open while reciprocating sticks invert bag through open end. May straighten and stack turned bags. May be designated according to type of machine tended as Air-Turning-Machine Feeder (tex. prod., nec); Horizontal-Stick-Turning-Machine Operator (tex. prod., nec).
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

689.685-150 WATCHER, AUTOMAT (tex. prod., nec) alternate titles: automatic embroidery machine tender

Tends machine that automatically embroiders designs on fabric: Threads roll of perforated cardboard that controls stitching operation through guide rollers and attaches end to automatic control mechanism or inserts punched cards in

machine. Aligns pointers on cloth frame with marks on machine chassis to position frame within prescribed stitching action limits. Turns handwheel to make first stitch, observing needle and shuttle action, thread tension, and alignment of stitch. Makes needed adjustments, such as replacing or rethreading needles and inserting new shuttles. Starts machine. May be designated according to product embroidered as Watcher, Automat, Frame Goods (tex. prod., nec); Watcher, Automat, Long Goods (tex. prod., nec).
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 4 DLU: 77

689.685-154 WATCHER, PANTOGRAPH (tex. prod., nec)

Tends machine that reproduces embroidery designs on fabric: Stretches lengths of fabric on machine or clamps frames of fabric onto machine. Replaces broken needles and threads, threads needles, and locks needles in holders. Aligns pantograph mechanism, starts machine, and observes operation. Marks stitching errors with pins or tape. May pin applique on fabric to obtain variation in design. May fill and replace shuttles.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 4 DLU: 77

689.685-158 YARN-TEXTURING-MACHINE OPERATOR II (textile) alternate titles: bulking-machine operator

Tends machine equipped with air-jet chambers through which continuous filament yarn is processed to change texture and increase bulk of yarn: Creels machine and threads yarn ends through machine guides, over feed rollers, air-jet chambers, *tension guides*, and *drop wires*. Loops end of yarn around takeup spool. Turns valve to start compressed air through jets to blow loops into yarn filaments, changing physical structure of yarn. Observes processing of yarn to detect breaks in yarn and filled takeup spools. Ties broken yarn ends. Pulls lever to stop spindle and doffs full package. Important variables may be indicated by trade name of texturing process or machine used.
GOE: 06.04.16 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

689.685-162 TOE PUNCHER (knitting)

Tends toe-punching machine that flattens toe seams of knitted seamless socks, and turns socks right-side out: Slides socks over machine mandrel wrong-side out, aligns toe seam of socks across end of mandrel, and moves lever to activate punch that strikes end of mandrel to flatten toe seam of socks. Inserts hand through opening at end of mandrel, and strips socks from mandrel right-side out. Inserts socks into pneumatic tube for collection in bags.
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 86

689.685-166 UTILITY TENDER, CARDING (textile) alternate titles: spare hand, carding

Tends any machine in carding department used in converting cotton and synthetic raw stock into laps, sliver, and roving, working as replacement for absent worker: Tends picking machine that cleans and transforms cotton raw stock into laps [PICKER TENDER (textile) 680.685-074]. Tends cotton carding machine that cleans lap and transforms remaining fibers into sliver [CARD TENDER (nonmet. min.; textile) 680.685-018]. Tends breaker and finish drawing frame that draws out and combines sliver into one of uniform size and weight [DRAWING-FRAME TENDER (textile) 680.685-038]. Tends lap winder that combines several slivers into lap roll for use on combing machines [DRAWING-FRAME TENDER (textile) 680.685-038]. Tends synthetic fiber carding machine that opens and transforms raw stock into sliver [CARD TENDER (nonmet. min.; textile) 680.685-018]. Tends combing machine that cleans lap rolls and transforms remaining fibers into sliver [COMBER TENDER (textile) 680.685-118]. Tends roving frame that draws out and slightly twists sliver into roving [SLUBBER TENDER (textile) 680.685-098]. Feeds bobbin-stripping machine that strips excess roving from bobbins.
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 86

689.686-010 AUTOMATIC-PAD-MAKING-MACHINE OPERATOR HELPER (tex. prod., nec) alternate titles: quilting-machine helper

Performs any combination of following tasks in making padding: Carries or trucks *bats I*, burlap, and size to machines, lifts bats to feed holder of machine and fills tanks with size. Laps gauze over pads, using rod. Stamps identification on pads. Removes finished pads or waste from conveyor and places pads or waste in boxes. May assist operators to set up machine.
GOE: 06.04.05 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

689.686-014 BOBBIN-CLEANING-MACHINE OPERATOR (textile) alternate titles: bobbin-stripper; cop breaker; quill cleaner; quill-cleaning-machine operator; quill skinner; quill stripper; tailing hand

Feeds machines that strip unused yarn or roving from packages (bobbins, pirns, and quills): Dumps packages in hopper of machine, using chain hoist, or feeds individual packages into machine that strips yarn or roving from packages with knives, brushes, or compressed air. Presses button to start machine. Pushes or pulls packages with rake or rod to regulate flow of packages from hopper onto feed conveyor. Forces jammed packages into position for processing, using handtool, or removes jammed packages from machine. May dump packages into tumbler that removes yarn from packages by agitation, using chain hoist. May transfer cleaned packages to storage area, using handtruck.
GOE: 06.04.06 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 79

689.686-018 CUTTING-MACHINE OFFBEARER (tex. prod., nec)

Removes cut pieces of textile bag material from cutting machine and places material on handtruck. Measures random samples to determine if machine is cutting material as specified. Stops machine if cutting does not meet specifications and notifies CUTTING-MACHINE OPERATOR (tex. prod., nec). Folds bags if machine is not automatic. May be designated according to type of material handled as Cotton-Bag-Cutting-Machine Offbearer (tex. prod., nec).
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

689.686-022 DOFFER (textile)

Doffs bobbins of yarn from spindles of spinning, twisting, or roving (slubber) frames: Pushes button to stop machine and depresses pedal to lower ring bar, allowing yarn to wind around base of spindle to facilitate restarting. Removes full bobbins of yarn from machine spindles, deposits yarn in handtruck, and places empty bobbins on spindles of machine. Releases pedal to raise ring bar, starts machine, and *pieces up* breaks in roving or ties breaks in yarn ends. Records information, such as doff time, date, and initials to complete company form. Applies grease or oil to rings, using finger or oilcan. May change travelers [TRAVELER CHANGER (textile) 682.687-010]. May brush waste from machine. May be designated according to machine doffed as Slubber Doffer (textile); Spinning Doffer (textile); Twister Doffer (textile).
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 79

689.686-026 FRAME CHANGER (textile) alternate titles: roving changer; slubber-frame changer; speeder-frame changer; spinning-frame changer; twisting-frame changer

Replaces sliver cans or bobbins to change type of sliver, roving, or yarn to be run on slubber, speeder, spinning, or twisting frames. Threads end of sliver, roving, or yarn through rollers and guides of machine. May change gears or travelers on spinning frames.
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

689.686-030 HAIR-SPINNING-MACHINE OPERATOR (leather mfg.)

Feeds and unloads various machines that winnow, shred, fluff, card, spin, or otherwise process animal hair performing any of following duties: Opens bales of hair and places hair in hopper. Forks hair into hopper by hand. Hand feeds hair rope stock into machine. Unloads bales, mats, rope stock, or other products from machines. Cleans machines and work area.
GOE: 06.04.05 STRENGTH: H GED: R1 M1 L1 SVP: 1 DLU: 77

689.686-034 NEEDLE-PUNCH-MACHINE-OPERATOR HELPER (textile)

Off bears rolls of nonwoven fabric (blanketing) from *stitch-bonding* machine: Observes fabric winding into rolls to detect defects. Cuts defective fabric from roll, using scissors, and joins ends together with needle and thread. Doffs full rolls, using chain hoist.
GOE: 06.04.05 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

689.686-038 SHUTTLE HAND (textile) alternate titles: magazine hand; shuttle filler; shuttle threader

Inserts bobbins of filling into shuttles. Threads yarn end through each shuttle eye and loads threaded shuttles into loom magazine. May replenish yarn supply on narrow fabric looms and be designated Quill Changer (narrow fabrics).
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

689.686-042 STITCH-BONDING-MACHINE-TENDER HELPER (textile)

Creels and doffs *stitch-bonding* machines: Mounts rolls of *bat* on machine supply racks. Reports machine malfunctions to maintenance personnel. Doffs rolls following stitching and weighs and records weight of rolls. Cleans machine area, using airhose.
GOE: 06.04.05 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

689.686-046 THREAD-PULLING-MACHINE ATTENDANT (garment)

Feeds and off bears vacuum equipment that removes loose threads from shirts. Inserts collar of shirt in slot of conveyor belt that conveys shirt through cabinet. Removes shirts from conveyor. Folds and stacks shirts in handtruck.
GOE: 06.04.05 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

689.686-050 UTILITY WORKER, WOOLEN MILL (textile)

Performs any combination of following duties in weaving, spinning, carding, and finishing departments of woolen mill: Threads or laps cloth between or over rolls of processing equipment, such as washers, dryers, and dye vats. Cuts tacking stitch that secures top and bottom layers of folded cloth with scissors and pulls out threads. Transports wool, yarn, and cloth between operations and departments, using handtruck or hoist. Replaces empty spools with full spools of roving on creel of roving or spinning machines. Cleans machines and floor area of grease, dirt, and lint, using air and vacuum hose, broom, and rags. May be designated according to task performed as Tacking-Stitch Remover (textile).
GOE: 06.04.40 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

689.686-054 WASTE CHOPPER (tex. prod., nec)

Feeds or off bears machine that chops waste thread into lengths for use in making wiping rags: Deposits handfuls of loose thread on belt that conveys material to cutting blades. Removes tangles from blades, using scissors or knife. May pack material into containers preparatory to baling. May feed or off bear machine equipped with mechanism that compresses waste into mats following cutting operation.
GOE: 06.04.16 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

689.686-058 CLOTH DOFFER (textile) alternate titles: cloth handler; loom doffer; short piece handler

Removes rolls of cloth from looms or knitting machines and trucks cloth to storage: Pulls lever or presses button to stop machine when roll has sufficient

yardage as indicated by yardage clock, mark on cloth, or color-coded card flag. Turns handle to lower roll of cloth, cuts cloth, using scissors, and places cloth roll on handtruck. Places empty takeup beam on bracket of machine, attaches cloth to beam, and restarts machine. Writes identifying information, such as lot and style number, on ticket and attaches ticket to cloth roll. Trucks cloth to storage or inspection department. May weigh and keep record of cloth beams doffed.
GOE: 06.04.06 STRENGTH: H GED: R2 M1 L2 SVP: 2 DLU: 80

689.687-010 BAGGING SALVAGER (textile) alternate titles: sack-cleaning hand

Salvages sacks and bagging used as covering for raw stock fiber. Removes adhering stock fibers from sacks and bagging by hand. Places bagging in sacks or folds and stacks bagging for reuse. May straighten and place metal tie bands in bundles. May dip tie bands in paint for reuse.
GOE: 06.04.38 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

689.687-014 BOBBIN CLEANER, HAND (textile) alternate titles: quill cleaner, hand; spool cleaner, hand

Removes unused yarn or roving from bobbins, *cones*, quills, or spools, using knife and removing yarn with fingers. Separates and places waste yarn in containers according to type. May stack spools in storage racks for reuse.
GOE: 06.04.39 STRENGTH: H GED: R1 M1 L1 SVP: 2 DLU: 77

689.687-018 BUNDLE BREAKER (tex. prod., nec) alternate titles: band cutter; bundle cutter; hands parter

Cuts binding cord from bundles of hemp fiber, using knife. Separates bundle and places fibers on conveyor or table to facilitate feeding operations.
GOE: 06.04.40 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

689.687-022 CLOTH EXAMINER, HAND (narrow fabrics) alternate titles: inspector

Inspects narrow woven fabrics, such as labels, ribbon, and tape, to detect defective weaving, color variations, and damaged or soiled fabric. Cuts out defective sections, using hand shears. Ties cut ends together, splices ends with adhesive tape, or secures ends of roll with metal pins, using hammer. May operate sewing machine to sew cut ends together. May measure width of fabric with ruler or guide to determine conformance with standards. May tend winding device (blocker) to wind fabric into rolls [BLOCKER (narrow fabrics, nonmet. min.)].
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

689.687-026 CLOTH FRAMER (textile) alternate titles: framer

Winds pile fabric onto frames (reel) to prevent crushing of pile during storage or shipment. Places frame on winding brackets of worktable. Turns frame by hand and catches cloth selvages on hooks of frame, spacing cloth around frame in layers. Bolts precut wooden slats to outside of frame, using wrench. Places frame of cloth in box and trucks box to storage area. Works as member of team to frame cloth.
GOE: 06.04.38 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

689.687-030 CREELER (textile)

Creels looms, twisters, warpers, tufting, or other textile machines to change style of yarn or to replace exhausted yarn packages. Places yarn packages on spindle of creel, according to supervisor's instructions, color-coded spools, or number on yarn packages. Threads yarn through eyelet plate (yarn guides) or ties yarn ends to ends of yarn from preceeding package to maintain continuous yarn supply. Cuts yarn ends from knots, using scissors, and discards yarn ends in waste container to prevent entanglement of yarn while moving through creel. Removes old yarn from machines before changing to different size or type of yarn. Cleans dust and lint from creel. May repair yarn breaks in creel. May replace yarn packages or spools when faulty yarn appears.
GOE: 06.04.05 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 80

689.687-034 DROP-WIRE BUILDER (textile) alternate titles: drop-wire stringer

Cleans and rebuilds *drop wire* assemblies. Cleans drop wires with solvent, compressed air, and brushes. Replaces defective drop wires and adds or removes drop wires in assembly, according to specifications. May clean *harness frames* [HARNESS CLEANER (textile)].
GOE: 06.01.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

689.687-038 END FINDER, ROVING DEPARTMENT (glass mfg.) alternate titles: creel selector; mat selector; roving selector

Removes tubes from packages of baked fiberglass sliver and locates inside end of coreless package. Unravels portion of sliver to verify location of end and cuts raveled sliver, using scissors, or breaks sliver by hand. May position coreless packages in creels [CREELER (any industry) 689.687-030].
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

689.687-042 END FINDER, TWISTING DEPARTMENT (textile) alternate titles: twisting-tube selector

Unwinds tubes of fiberglass sliver rejected by TWISTER TENDER (glass mfg.; nonmet. min.; plastic-synth.; textile) to remove short lengths and find end of continuous strand. Holds tube of sliver and inserts end into tube of air suction raveling device. Breaks or cuts excess sliver from tube, using scissors, and places tube on truck.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

689.687-046 FRAME HAND (tex. prod., nec)

Performs any combination of following tasks related to embroidering fabric: Carries frames to and from embroidery machines. Installs and removes frames from machine. Threads needles and changes threads. Replaces empty shuttles. Pins or ties overlapping fabric to frame.
GOE: 06.04.27 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

689.687-050 OIL-SPOT WASHER (tex. prod., nec; textile) alternate titles: spot washer

Removes oil and grease spots from cloth by either of following methods: (1) Washes spots from cloth, using handbrush, detergents and water, or prepared chemicals. (2) Dissolves and removes spots from cloth, using spray gun filled with cleaning chemicals. May use illuminated inspection frame to facilitate detection of oil and grease spots. May be designated according to articles cleaned as Pillowcase Cleaner (tex. prod., nec); Sheet Cleaner (tex. prod., nec).
GOE: 06.04.39 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

689.687-054 PEGGER, DOBBY LOOMS (narrow fabrics; textile) alternate titles: dobby-loom chain-pegger

Screws or hammers metal pegs into holes of wooden pattern chain that controls weave pattern on *dobby loom*, following pattern diagram. Removes and relocates pegs with peg wrench or pliers. May replace worn leather on *shuttle binders*.
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

689.687-058 PICK REMOVER (textile) alternate titles: thread puller

Removes *false selvages* and filling floats from looped pile fabric by hand. Lifts roll of cloth onto brackets at end of table and unrolls cloth onto table. Trims false selvage from one edge of cloth, using scissors. Secures trimmed edge of cloth on pins set along edge of table. Pulls false selvage on opposite edge of cloth to remove selvage and floats. Folds and piles cloth on handtruck.
GOE: 06.04.27 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

689.687-062 RAW-SILK GRADER (textile)

Inspects raw silk samples to determine if silk meets specified quality standards. Places silk on grading frame. Examines silk, using various lighting effects, and compares shade of silk to standard examples on master panel.
GOE: 06.03.02 STRENGTH: S GED: R3 M2 L2 SVP: 4 DLU: 77

689.687-066 RUG CLEANER (carpet & rug)

Removes grease spots, stains, and similar manufacturing blemishes from rugs, using solvent, such as carbon tetrachloride, and rags, brushes, pads, and sponges. Loads rugs in extractor for drying. Works as member of team to clean and dry rugs.
GOE: 06.02.16 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

689.687-070 SHUTTLER (tex. prod., nec)

Threads and replaces shuttles in shuttle rail of embroidery machine to maintain embroidery operation. Inserts thread, needles, cloth, and backing in machine. Inserts and threads prewound bobbins into empty shuttles. Places shuttles into slots of machine shuttle rail to maintain embroidery operation.
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

689.687-074 SPANNER (tex. prod., nec)

Attaches fabric to frames for installation in embroidery machines. Clips garment piece to top of frame, pulls fabric taut, and clamps or pins overhanging material under frame. Adjusts frame on machine and aligns needles and shuttle rails, using spanner wrench. May pin applique cloth strips over spanned fabric. May cut threads and excess applique material from embroidered garment section before removing pieces from frame. May thread needles, replace depleted bobbins, and cut threads between needles and embroidered fabric.
GOE: 06.04.06 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

689.687-078 THREADER (tex. prod., nec)

Assembles and threads brass bobbins into carriages of Levers lace machines. Places yarn-filled bobbin in carriage. Loops bobbin threads over hooked needle and draws thread through carriage eye. Sorts and separates carriages according to spring strength to ensure required placement in machine.
GOE: 06.04.06 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

689.687-082 YARN EXAMINER, SKEINS (textile) alternate titles: finished-yarn examiner; skein inspector; yarn inspector

Examines skeins of yarn to detect flaws, such as soils, slubs, breaks, and uneven dyeing or twisting. Shakes skeins to straighten yarn, hangs skeins on rod and spreads and pulls yarn around rod to locate imperfections. Cuts out slubs and ties yarn ends together. Examines winding and tying of skein to determine if skein has been made according to job order. Weighs skein from each lot and records weight. Records number and type of flaws found in each lot of yarn. Knots hank of yarn around several skeins to form bundle and packs bundles into boxes for shipment. May remove soils with cleaning fluid.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

689.687-086 YARN SORTER (textile) alternate titles: filling separator; filling sorter and hauler

Sorts yarn according to type, size, weight, color, blend, and quality for storage or distribution to other departments. May doff winding machines. May convey yarn to storage or other departments, using handtruck. May store yarn in bins.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

689.687-090 LAPPER (textile)

Cuts and removes waste yarn entangled around machine parts of yarn texturing machine, using knife. Observes machine positions to ensure yarn ends

are running through automatic cutters and that drop wires are set, and to detect defective cutters or uncut waste yarn left from previous shift. Cuts waste yarn caused by yarn breaks from machine parts, such as feed rollers and takeup packages, using knife. Removes feed rollers to cut waste yarn, and realigns and tightens rollers, using wrench. Sweeps waste yarn from around machines and catwalks, using broom, and deposits yarn in receptacles. Pushes cart loaded with textured yarn to yarn cleaning area. Transports boxes filled with empty color-coded takeup rolls from storage area to machine area, using handtruck.
GOE: 06.04.16 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 86

69 MACHINE TRADES OCCUPATIONS, N.E.C.

This division includes occupations, not elsewhere classified, concerned with feeding, tending, operating, controlling, and setting up machines to work various materials and products.

690 PLASTICS, SYNTHETICS, RUBBER, AND LEATHER WORKING OCCUPATIONS

This group includes occupations concerned with machining plastics materials, synthetic resins, synthetic rubber, cellulosic and manmade organic fibers, and leather, including artificial leather.

690.130-010 SUPERVISOR III (button & notion)

Supervises and coordinates activities of workers engaged in production of buttons: Sets up, repairs, and adjusts machines, using handtools. Examines buttons to ensure conformance to specifications. Trains and assigns workers. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R3 M2 L3 SVP: 6 DLU: 77

690.130-014 SUPERVISOR, SLITTING-AND-SHIPPING (plastic-synth.)

Supervises and coordinates activities of workers engaged in slitting rolls of plastics sheets into strips, rewinding strips into rolls of specified size, and in packaging, storing and shipping rolls. Trains new employees. Directs workers in setting up slitting machine, and in packaging finished rolls and marking rolls with data, such as lot number and size. Performs duties as described under SUPERVISOR (any industry) Master Title. May supervise workers engaged in packaging and shipping only and be designated Supervisor, Shipping (plastic-synth.).
GOE: 06.02.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

690.130-018 SUPERVISOR (plastic prod.)

Supervises and coordinates activities of workers engaged in setting up and tending machinery and equipment that punches, stamps, screen-prints, and paints plastic products: Inspects production operations to verify conformance with establishment specifications, using precision measuring instruments and blueprints. Trains new workers. Requisitions materials, supplies, and replacement parts. Repairs machinery and equipment, using power tools and handtools. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L4 SVP: 6 DLU: 86

690.130-022 SUPERVISOR, FOAM CUTTING (tex. prod., nec)

Supervises and coordinates activities of workers engaged in cutting foam rubber used in manufacture of furniture cushions, and sets up and operates foam cutting machines to cut loaves of foam into specified sizes: Explains and demonstrates work procedures and material saving techniques to new workers. Confers with plant personnel to expedite flow of foam products. Transports loaves of foam to and from machines, using dolly, and positions loaves of foam on table of machine. Turns handwheels, setscrews, and bolts, using handtools, to set stops and position patterns under ram of machine and to set up and operate cutting machines, such as vertical slicing and horizontal slicing machine, to cut loaves of foam into specified sizes. Examines sliced foam to verify product size and conformance to product specifications, using tape measure. Records information on work order, such as date of cut, quantity of products, and time of order. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: H GED: R3 M2 L2 SVP: 6 DLU: 86

690.280-010 DEBURRING-AND-TOOLING-MACHINE OPERATOR (office machines)

Sets up and controls operation of computerized deburring and tooling machine to perform series of machining operations, such as drilling, chamfering, and deburring, on ball-shaped plastic *typing element* for use in electric typewriters: Reads blueprints, job order, and tooling instructions to determine cutting tools and sequence of operations. Positions and secures deburring and cutting tools onto holding fixtures of machine, using handtools. Loads plastic elements into feed mechanism of machine. Depresses switch to actuate machine and observes machining operation to detect feeding and tooling malfunctions as typing element is automatically fed through series of tooling stations. Adjusts and changes machine tools to ensure deburring meets company specifications. Repairs or replaces parts, such as cylinders and air lines, using handtools. Inspects machined typing elements at discharge end of machine to ensure conformance to quality specifications, using gauges and microscope. Notifies engineering personnel when corrective action is required. Maintains stock of machined parts and cutting tools.
GOE: 06.01.03 STRENGTH: M GED: R4 M4 L3 SVP: 8 DLU: 86

690.360-010 WAD-BLANKING-PRESS ADJUSTER (ordnance)

Sets up battery of punch presses to stamp out hair-felt and cardboard wads for shotgun shells: Removes, replaces, and adjusts cutters, punches, bushings, dies, ratchets, pawls, web choppers, springs, and chains, using handtools. Turns setscrews and stop nuts to synchronize feeding and punching mechanisms and to position tools. Measures sample wads after each tool change or adjustment to verify specified diameter, using ring gauge. Notifies MAINTENANCE MECHANIC (any industry) when machines, conveyors, or screening barrels require major repairs. Trains new workers in tending machines.
GOE: 06.01.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

690.362-010 LEAD OPERATOR, AUTOMATIC VULCANIZING (rubber goods)

Operates machine that automatically vulcanizes continuous lengths of rubber hose: Pulls wire protruding from end of hose and bends hose into hook to attach several lengths of hose to provide continuous feed to vulcanizer. Moves controls of machine to specified settings to regulate temperature, pressure, feed rate, and vulcanizing time. Lubricates, adjusts, and makes running repairs to machine, using grease gun, welding equipment, and handtools. Records hose footage processed and vulcanizing time in production log. Transfers filled boxes of vulcanized hose to inspection department, using handtruck.
GOE: 06.02.07 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

690.380-010 MACHINE SETTER (button & notion)

Sets up and adjusts automatic machines that shape and drill buttons: Obtains specified button-holding chucks, abrasive wheels, cutting tools, and drill-bits and installs them in machine, using wrenches, screwdrivers, micrometers, and gauges. Adjusts cams to synchronize feeding mechanism with tool action and positions cutting tools in holders to control depth of pattern on button. Selects approximate settings and test-operates machine. Examines and gauges button to determine need for further adjustment. Replaces worn or broken machine accessories, using handtools. May operate *bench grinder* and lathe to sharpen drill bits and cutting tools, and reshape worn button-chucks. May instruct new employees in operating procedures.
GOE: 06.01.02 STRENGTH: M GED: R3 M2 L3 SVP: 5 DLU: 77

690.380-014 MACHINE SETTER-AND-REPAIRER (plastic prod.)

Sets up and repairs variety of plastic fabricating machines that weld and assemble components into plastic products and print decorative logos onto products: Mounts, aligns, and bolts fixtures, dies, and welding heads onto plastic fabricating machines, such as hot-stamping, silk-screening, ultrasonic welding, and automatic assembling and stamping machines, following verbal instructions and using variety of wrenches. Turns knobs or dials to set controls, such as pneumatic stamping pressure, dwell time, conveyor speed, and ram and horizontal stroke of machines. Positions rolls of foil onto feed reels and threads foil around guides onto takeup reels to secure foil on machines. Starts machines to obtain sample products, and examines samples for production defects. Readjusts machine controls or realigns dies or fixtures as necessary to correct detected defects in products, utilizing knowledge and experience of machine operations. Examines moving machine parts during production operations and removes and replaces worn and frayed machine parts as needed to ensure that machines function smoothly. May fabricate replacement dies, using bandsaw, knife, hand file, and drill press.
GOE: 06.01.02 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 86

690.382-010 SHEETER OPERATOR (plastic-synth.) alternate titles: slitter operator

Operates sheeting machine to slice cakes of baked plastics into sheets of uniform thickness: Turns crank to adjust cutting position of knife. Adjusts feed rolls of machine to regulate pressure of cake against knife, using wrenches. Turns steam valves to regulate temperature of heating chamber. Loads cake onto conveyor of machine manually or by using hoist, and starts machine. Observes gauges to verify machine temperatures. Measures thickness of sheets with micrometer. Examines surface of sliced sheets for imperfections and replaces knife, using wrenches. Turns crank to adjust tension on knife. May sharpen knife, using whetstone. May count and record number of sheets cut.
GOE: 06.02.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

690.382-014 WEATHERSTRIP-MACHINE OPERATOR (rubber goods) alternate titles: windlace-machine operator

Sets up and operates machine to mold and vulcanize sponge rubber beading onto wire mesh strip to form weatherstripping for automobiles: Selects and installs machine parts, such as engraved rolls, rotary gang knives, folding and forming channels, and tubes of specified size and measurement to produce beading of diameter ordered, using wrenches. Mounts reels of canvas carrier strip and wire mesh in creels beneath and above machine table. Threads carrier strip and mesh through rollers, guides, folding channels, and into forming tubes for pick up by metal fingers that carry them through vulcanizing tubes for each row of rubber strip. Turns wingnuts and bolts, using pliers and wrenches, to adjust rollers and guides, to center rubber strip on canvas carrier, to position mesh vertically in crease of imprinted rubber strip at specified depth, and to ensure even folding of carrier canvas around rubber and rubber around bottom half of wire mesh. Adjusts rheostat for each vulcanizing tube to designated setting and observes heat indicators. Starts machine and feeds roll of uncured rubber stock between engraved rolls. Measures sample of imprinted strip for conformance to thickness specifications, using dial micrometer and turns capstan

screws to adjust width between rolls. Adjusts rheostats to maintain vulcanizing heats within allowable degree limits. Calculates length of running time required to produce footage ordered on work ticket. Staples end of supply strip onto leader to replenish carrier strip and wire mesh. Turns wheel of variable speed motor to adjust speed of rollers and metal finger sprockets according to diameter of beading.
GOE: 06.02.09 STRENGTH: M GED: R3 M2 L3 SVP: 4 DLU: 77

690.385-010 PLATEN GRINDER (office machines) alternate titles: grinder; grinding-machine operator

Tends pair of semiautomatic cylindrical grinders that grind typewriter and adding machine rubber platens and feed rollers to specified diameter and finish. Mounts platen between driving head and tailstock and trips lever causing carriage to bear platen against and across grinding wheel for coarse grind and rough finish. Removes platen, mounts it in second machine equipped with finer grit wheel, and grinds platen to specified diameter and desired finish. Examines finished platen for smoothness and for defects in rubber, such as scratches, graining, or holes. Measures platen for conformance to specified diameter, using C-gage. May tend double-bladed cutting device to trim excess rubber from ends of platen. May tend machine that grinds and finishes platens and rollers in single operation.
GOE: 06.04.07 STRENGTH: L GED: R3 M1 L2 SVP: 3 DLU: 77

690.462-010 OUTSOLE CUTTER, AUTOMATIC (rubber goods)

Sets up and operates machine that automatically cuts outsoles for rubber footwear from slabs of uncured rubber or compressed cork. Bolts selected follower (template) on machine and mounts cutting blade in traveler against follower, using handtools. Starts machine and feeds slabs onto conveyor that carries them beneath follower, overlapping ends to form continuous strip. Lifts scrap rubber (web) from cutout outsoles and threads it through rollers that automatically strip it from outsoles and carry it off by conveyor to scrap truck. Calculates from work ticket, number of pairs and books required for each size sole ordered and advises BOOKER (rubber goods; rubber tire), to remove cutout outsoles from other end of conveyor belt. Observes cut outsoles for ragged edges, indicating dulled blade.
GOE: 06.02.09 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

690.482-010 SAWYER (plastic prod.; plastic-synth.)

Sets up and operates power-driven circular and abrasive saws and bandsaw to cut plastic sheets, rods, or tubes to specified dimensions. Installs blade in saw and sets guide bars and stops. Positions plastic material on saw table. Starts saw and feeds material to blade. Verifies dimensions of pieces, using micrometer, gauges, and rule. Examines pieces for defects, such as chipped edges and marred surfaces, and sorts defective pieces according to defect. May mark cutting lines on material. May sharpen blade, using abrasive wheel.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

690.482-014 TRIMMER (plastic prod.)

Operates machines to finish preformed plastic parts. Trims part to size and shape following template and using power grinder or power saw. Clamps template to part or positions part in jig and slots and drills part, using table or portable router and drill press or power hand drill. Sands edges and rough surfaces of part, using power sander. May trim, shape, and assemble metal or wood components of plastic part. May adjust and repair machines, using handtools.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

690.485-010 BAND-SAWING-MACHINE OPERATOR (fabrication, nec) alternate titles: cutter; material cutter

Tends bandsawing machine that cuts pieces of specified shape from sheets of materials, such as fiberglass, foam rubber, or parchment. Positions pattern on material and marks cutting lines. Stacks specified number of sheets and clamps them together. Starts saw and guides stock against blade, following cutting lines. Drills guide holes in stock to mark location for attachment of trim, using power drill.
GOE: 06.04.09 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

690.580-010 HIDE SPLITTER (leather mfg.)

Sets up machine to split hides into layers. Turns setscrews on machine table to adjust rollers according to specified thickness of hide, using wrench. Verifies thickness of layers split from hides, using micrometer. Realigns or replaces parts, such as machine belt, knife, and rollers. Reads counter and records number of hides split by SPLITTING-MACHINE FEEDER (leather mfg.).
GOE: 06.02.05 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

690.585-010 MILL-ROLL REWINDER (plastic-synth.)

Tends machine that winds cellophane from one roll to another to remove folds, wrinkles, and slack. Positions roll on machine mandrel, using chain hoist, and wraps end of sheet around empty core. Moves controls to regulate machine speed and film tension. Passes hand over moving sheet to remove wrinkles and folds. Cuts defects, such as holes and tears from roll, and splices ends, using tape and hot iron. Removes rewound roll from machine and weighs and places it in rack, using chain hoist. Records number and weight of rolls wound.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L2 SVP: 4 DLU: 77

690.585-014 MOTTLE-LAY-UP OPERATOR (plastic-synth.) alternate titles: lay-up operator

Tends electric shear-type cutting machine that cuts sheets of plastic materials into specified sizes. Adjusts cutting blade, guides, and stops, using handtools. Stacks sheets on machine bed and presses control to start machine. Assembles cut pieces in containers or cake-press frame to form specified color combination or configuration. Records amount of materials used and orders completed.
GOE: 06.04.02 STRENGTH: L GED: R2 M2 L2 SVP: 4 DLU: 77

690.662-010 TIRE-REGROOVING-MACHINE OPERATOR (automotive ser.)

Sets up and operates machine to regroove tread surface of pneumatic tires without removing tire from vehicle. Raises front or rear of vehicle, using hydraulic jack. Positions regrooving machine beneath tire and secures in place. Measures depth of usable tread rubber, using awl. Sets cutting blades of machine to maximum depth consistent with safety. Guides blade to cut desired pattern in tread surface as machine automatically revolves tire. May groove tires by hand (TIRE GROOVER (automotive ser.)).
GOE: 05.12.15 STRENGTH: M GED: R3 M2 L3 SVP: 4 DLU: 77

690.662-014 TUBER-MACHINE OPERATOR (rubber goods; rubber tire) alternate titles: extruder operator

Sets up and operates tuber machine to extrude rubber in specified form. Selects and installs die in machine, using handtools. Turns steam valve or lights gas burner to heat machine to desired temperature. Starts machine, turns dial for specified extrusion speed, and turns die screws to extrude stock of specified size. Feeds rubber stock into machine by hand or conveyor. Verifies dimensions of extruded rubber with gauge, calipers, and ruler. Turns wheels or pulls levers to synchronize conveyor with extruding speed. May be designated according to product extruded as Garden-Hose Tuber-Machine Operator (rubber goods); Inner-Tube Tuber-Machine Operator (rubber tire); Rim-Strip Tuber-Machine Operator (rubber tire); Rubber-Flap Tuber-Machine Operator (rubber tire); Solid-Tire Tuber-Machine Operator (rubber tire); Tread-Tuber-Machine Operator (rubber tire). May cover braided fabric hose with rubber and be designated Covering Machine Operator (rubber goods).
GOE: 06.02.07 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

690.665-010 SLASHER (plastic-synth.) alternate titles: cutter, plastics rolls

Tends equipment that cuts plastic materials to specified lengths. Mounts roll of plastic sheeting material on cutting-machine holding stand, using hoist. Sets cutting guides and moves knife to slice materials being unreeled across table. Examines sheets for defects and scraps and weighs unusable ones.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

690.680-010 RUBBER-GOODS CUTTER-FINISHER (rubber goods) alternate titles: rubber-goods finisher

Sets up and operates variety of machines to cut, drill, punch, and grind molded and extruded rubber goods. Changes dies, drills, knives, abrasive wheels, and cutter bars as specified. Adjusts equipment, such as boring machine, tubing cutter, notch cutter, washer cutter, and grinding lathe, using handtools. Positions material, such as molded rubber parts, gaskets, tubing, and office machine rolls, in specified machine and starts machine to bore or punch holes in parts, cut washers from tubing, cut tubing to length, or grind tubing and machine rolls to size. Verifies size of rubber goods with calipers, ruler, plug gauge, and template. Inspects material and rejects defective items. May be designated according to machine operated as Boring-Machine Operator (rubber goods); Cutting-Machine Operator (rubber goods); Lathe Operator (rubber goods); Notch-Machine Operator (rubber goods); or product finished as Gasket Notcher (rubber goods); Roll Grinder (rubber goods); Washer Cutter (rubber goods).
GOE: 06.01.03 STRENGTH: M GED: R3 M2 L3 SVP: 4 DLU: 77

690.682-010 ARCH-CUSHION-SKIVING-MACHINE OPERATOR (rubber goods)

Operates machines to cut arch cushions from sponge rubber sheeting for rubber footwear, using either of following methods: Selects die plate or drum to produce specified size cushions and bolts die in feeder slide or locks die in cradle, using wrenches. Turns setscrews to adjust distance between hold-down roller, belt knife, and plate or drum, verifying clearances, using feeler gauges. (1) Pulls plate length of sheeting from roll, cuts material, using knife, and places sheeting on die plate. Moves lever to open suction valve that draws rubber sheeting into die plate cavities. Depresses pedal causing sheeting on plate to be carried through belt knife to cut cushions flush with plate surface. Returns plate to starting position. Removes excess stock for scrap or turns over salvable stock for second cut. Removes cut out cushion from die cavity and throws into storage box. (2) Mounts roll of sheeting in cradle, threads around hold-down and guide rollers, over rotary die drum and belt knife, and onto takeup reel. Starts automatic machine to cut cushion from sheeting. Positions carton under discharge end of conveyor to catch cushions. Weighs filled cartons to count number of cushions, using conversion chart, and adds or removes cushions to obtain specified amount.
GOE: 06.02.07 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

690.682-014 BALL-TRUING-MACHINE OPERATOR (toy-sport equip.)

Sets up and operates battery of ball-truing machines to grind bowling balls spherically to size and smooth them preparatory to finishing and polishing. Installs conical grinding rings on opposing spindles and adjusts clearances and angle of cut, using wrenches and gauges. Places rough cast ball on holding pad between grinding rings and turns valve to start cooling water to flow over ball. Starts machine and moves dial pointer to preset running time cycle on each quadrant of ball. Removes ball from holding pad and gauges it with ring or

calipers and rule to ensure specified size tolerances. May mark imperfections on ball to be drilled and plugged, using crayon.
GOE: 06.02.09 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

690.682-018 BED LASTER (boot & shoe) alternate titles: lasting-machine operator, bed; toe and heel laster

Operates *lasting* machine to press and shape toe or heel sections of upper on last: Places upper on last in steamer to soften leather. Removes upper from steamer, places last on *pin jack*, and stretches edges of upper over last, using *lasting tool*. Moves controls to close heel clamp and raise toe or heel into wiping (smoothing) position. Moves controls to cause wipers to press upper edges against insole. May press heated toe iron against upper edges to flatten wiped edges. May trim excess box toe and lining, using knife. May tack upper or counter insole in place to be stitched or to hold edges until cement dries.
GOE: 06.02.05 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

690.682-022 BIAS-MACHINE OPERATOR (rubber tire) alternate titles: bias-cutting-machine operator; ply cutter

Operates machine to cut rubberized (calendered) fabric on bias for use as plies or other components in tire construction. Turns thumbscrew or setscrew to adjust measuring arm, protractor, and liner roll to feed and cut fabric according to specified width and angle of bias. Pulls fabric from roll mounted on *letoff rack*, inserts through liner roll, and positions under knife on bias-machine table. Starts machine and adjusts speed of feed and cutting action. Starts conveyor that carries material to SPLICER (rubber tire). Measures plies to verify width and angle, using ruler and protractor. May be designated according to purpose of fabric cut as Band-Bias-Machine Operator (rubber tire); or type of machine as Bias-Cutting-Machine Operator, Vertical (rubber tire).
GOE: 06.02.09 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

690.682-026 CUTTER, BARREL DRUM (tex. prod., nec) alternate titles: drum-reel cutter; reel slitter

Operates machine to wind plastic material onto reel and cut wound material into lengths for use in making articles, such as curtains, draperies, and table covers: Positions roll of plastic material on machine brackets, threads end of material through tension rollers, and clamps or tapes material to rod on reel. Turns handwheel or loosens bolts and moves rods to increase or decrease diameter of reel according to length specified for material. Depresses pedal to start, stop, and control speed of machine. Observes material as it winds on reel to detect uneven winding and straightens uneven edges by hand. Stops machine at specified intervals during winding cycle and cuts material on reel by drawing knife through slot in reel rod. Removes lengths of material from reel. May operate machine equipped with knives to slit material in specified widths as it winds.
GOE: 06.02.02 STRENGTH: M GED: R3 M1 L2 SVP: 4 DLU: 77

690.682-030 EMBOSSER (leather mfg.; leather prod.) alternate titles: embossing-machine operator; embossing-press operator; finished-leather presser; plating-press operator; printer; smooth plater

Operates machine to imprint designs on leather or leather articles, such as wallets and key cases: Selects specified embossing plate, bolts plate into chase, and positions and secures chase onto ram of machine. Turns switch or steam valve to heat plate to specified temperature according to type of leather. Pulls lever that lowers ram to impress designs on leather or article. May make bed for embossing plate, using cardboard and paper.
GOE: 06.02.05 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 77

690.682-034 EMBOSSING-PRESS OPERATOR, MOLDED GOODS (fabrication, nec)

Sets up and operates press to emboss designs on molded hard-surface floor covering: Installs press pads and embossing plate on press, using handtools. Places molded hard-surface floor covering in press at designated point on pattern to make crosswise alignement of material with embossng plate and lengthwise alignment with press guidelines. Regulates controls to move material into press and to actuate plate. Examines floor covering after each impression to detect embossing defects. Changes press pads and adjusts temperature and pressing cycle to improve impression. Observes pressure gauges and guide markers as material progresses through press to ensure maintenance of required pressure and alignment.
GOE: 06.02.09 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

690.682-038 FOXING-CUTTING-MACHINE OPERATOR, AUTOMATIC (boot & shoe)

Sets up and operates machine that automatically cuts strips of foxing from continuous sheeting of rubber coated fabric and drops them onto conveyor belt for making into books : Pushes A-frame, containing reel of sheeting, and empty takeup reel in front of machine. Attaches castor-mounted driving motor to end of takeup reel shaft, using collar and wrench. Threads sheeting through series of holddown bars and rollers to cutting blades. Adjusts angle of diagonal, scissors-like blades to increase or decrease length of foxing strip according to work ticket specifications. Regulates rate of feed of sheeting to adjust width of strip. Turns valves to drip water onto blades for lubrication and starts machine. Cuts into edge of sheeting on each side, using knife, and pulls off strips of uneven selvages to provide straight even edges to cut foxing. Measures samples of foxing for conformance to length, width, and thickness specifications, using steel tape and dial micrometer. Adjusts machine by trial and error to produce acceptable foxing. Cuts across sheeting and wrapper, using knife, when sufficient quantity of foxing has been booked.
GOE: 06.02.05 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

690.682-042 HEEL BREASTER, LEATHER (boot & shoe)

Sets up and operates machine to trim and shape breast of leather heels according to specifications: Sharpens cutting blade on grinding wheel and locks blade to ram of machine with wrench. Turns wheel to adjust cutting stroke of machine to height of heel. Sets lasted shoe on movable *pin jack* and pushes pin jack under or against cutting blade to trim and shape heel. May buff heel to prepare for varnishing.
GOE: 06.02.05 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

690.682-046 HEEL-SEAT FITTER, MACHINE (boot & shoe) alternate titles: cutter-in; heel fitter, machine; wood-heel fitter, machine

Sets up and operates machine to cut heel seat of leather sole preparatory to mounting heel: Adjusts guides and stops on machine by using sample wood heel and handtools. Adjusts rotary cutting blade on machine for specified width, depth, and bevel, using wrench and rule. Starts machine and positions shoe between guides. Pushes shoe into machine that makes marginal cut around heel seat to provide snug fit when heel is attached.
GOE: 06.02.05 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

690.682-050 HOT-DIE-PRESS OPERATOR (boot & shoe)

Operates press that automatically cuts soles for rubber footwear from slabs of cork or crepe: Selects numbered die plate from storage rack according to size and style numbers on worksheet and places die in preheated oven for designated time. Removes heated dies from oven and slides dies into die holder of press. Switches on current to keep dies hot and starts press and conveyor belt. Positions slab of stock on conveyor belt that carries stock between reciprocating dies and press table to cut soles from slab. Lifts and discards web (scrap stock) from cut out soles. Maintains tally of work performed on report form. May heat dies, replenishing oven according to sequence on work ticket, and be designated Hot-Die Picker (boot & shoe); or may feed slabs and remove web and be designated Hot-Die-Press Feeder (boot & shoe).
GOE: 06.02.09 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

690.682-054 ORNAMENTAL-MACHINE OPERATOR (wood prod., nec)

Operates machine to form and attach ornamental putty designs to picture frame moldings: Measures out, heats, and mixes rosin, linseed oil, glue, and water to make putty. Installs specified die roller in machine and adjusts die, guides, and scrapers, using handtools. Pours putty into feed hopper and starts machine. Places molding on feed roller and observes feeding, shaping, and attaching of putty to molding.
GOE: 06.02.09 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

690.682-058 PLANISHING-PRESS OPERATOR (plastic-synth.) alternate titles: plastics-sheet-finishing-press operator; press operator; sheet-combining operator; shell-press operator

Operates planishing press to impart finish to plastic sheets: Selects metal plates according to finish desired. Places plastic sheets between metal planishing plates. Slides plates into platens of hydraulic press. Moves controls or inserts circular graph into controlling mechanism of press to heat press to specified temperature and compress plastic sheets between plates. Removes plates from platens after specified time and strips plastic sheets from metal plates, using knife. Examines sheets for defects. Cleans metal plates, using cloths, solvents, or scrapers, or dips plates into vat of hot water, using chain hoist. May adjust heat and pressure controls. May be designated according to purpose of pressing as Sheet Straightener (plastic-synth.).
GOE: 06.02.02 STRENGTH: H GED: R3 M2 L2 SVP: 5 DLU: 77

690.682-062 PRESS OPERATOR (plastic prod.) alternate titles: plate worker

Operates hydraulic press to emboss, laminate, or draw plastic sheets: Clamps sheet to overhead rack and pushes rack into oven to soften sheet for forming. Bolts dies or plates to bed of press and adjusts length of travel of ram arm, using handtools. Positions softened sheet or layers of sheets on press bed and lowers pressure plate to hold sheets in place. Moves controls to lower ram that draws sheet through open die to specified shape, embosses sheet with specified design, or compresses layers of sheets to form laminated plastic board. Turns valves to regulate flow of water or steam through dies or plates to maintain specified forming temperature of plastic. Trims plastic, using shears, power saw, or knife. May be designated according to operation performed as Laminating-Press Operator (plastic prod.); Straightening-Press Operator (plastic prod.).
GOE: 06.02.02 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 77

690.682-066 RING-ROLLING-MACHINE OPERATOR (rubber goods)

Operates machine to roll rings on mouths of balloons prior to curing: Spaces parallel revolving brush arms of machine to correspond with neck size of balloon forms. Turns wheel to adjust height of turntable that holds *form board*, and to align brushes with edge of latex of forms. Pushes machine forward to roll latex on forms into rings.
GOE: 06.02.07 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 77

690.682-070 SOLE-CONFORMING-MACHINE OPERATOR (boot & shoe) alternate titles: archer; molder; outsole or insole molder; sole-molding-machine operator

Operates machine to mold outsoles or insoles to conform to shoe last at shank and arch: Turns thumbscrews or moves lever along calibrated dial to adjust last and size guides to specifications. Sponges grained surface of sole at

arch to soften leather. Positions sole on die and against guides. Pulls lever to lower mold that presses sole against die, shaping arch and shank. Replaces dies and molds when last or shoe sizes change.
GOE: 06.02.05 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

690.682-074 SPAGHETTI-MACHINE OPERATOR (plastic prod.) alternate titles: dip-tube assembler, machine

Operates machine to assemble dip tubes and plugs used in plastic squeeze bottles: Places reel of plastic tubing onto spindle and feeds tubing through retaining wheels and channel to edge of razor blade. Loads plugs into bowl on machine. Pushes button to start machine that assembles tubes and plugs and ejects tube assemblies into tote box. Removes filled tote box from machine. Loosens and tightens razor blade holder to return blade to cutting position, using screwdriver. Replaces dull and unusable blades. Inserts dip tube assembly into plastic bottle containing water, and squeezes tube assembly to test for defects. Adjusts machine to correct faulty operation.
GOE: 06.02.20 STRENGTH: M GED: R3 M2 L3 SVP: 4 DLU: 77

690.682-078 STITCHER, SPECIAL MACHINE (boot & shoe) alternate titles: inseamer; stitcher; vamper; welter

Operates stitching machine to perform specific function, such as to reinforce shoe parts or attach buckles: Places specified spool of thread or prewound bobbin on spindle or in shuttle and draws thread through guides, slots, and needles. Aligns parts to be stitched, following seams, edges, or markings. Positions parts under needle and depresses pedal to start machine. Cuts excess threads, using scissors or knife. May guide parts past machine head during stitching cycle. May be designated according to type of stitch used or part stitched as Lockstitcher (boot & shoe); Platform Stitcher (boot & shoe); Plug Stitcher (boot & shoe); Rapid-Outsole Stitcher (boot & shoe); Sole Stitcher (boot & shoe). Important variables may be indicated by trade names of machines used.
GOE: 06.02.05 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

690.682-082 STITCHER, STANDARD MACHINE (boot & shoe) alternate titles: closer; fitter; joiner; maker; seamer; sewer; stayer; stitcher; stitching-machine operator

Operates single, double, or multiple-needle stitching machine to join or decorate shoe parts, or to reinforce edges: Selects spool of thread or prewound bobbin, places spool or bobbin on spindle or looper, and draws thread through guides and needles. Aligns parts and presses knee control or pedal to raise presser foot or roller. Positions parts under needle and lowers presser foot or roller. Presses foot or knee control to start machine and guides parts under needle, following seams, edges, or markings, or moves edges of part against guide. Cuts excess thread or material from shoe parts, using scissors or knife. When operating double or multiple-needle machine, may turn setscrew on needle bar and position one or more needles as specified. May be designated according to shoe parts stitched as Back-Seam Stitcher (boot & shoe); Box-Toe Stitcher (boot & shoe). May be designated according to machine operated as Flatbed Stitcher (boot & shoe); Zig-Zag Stitcher (boot & shoe). May be designated according to number of needles in machine operated as Double-Needle Stitcher (boot & shoe); Multiple-Needle Stitcher (boot & shoe); Single-Needle Stitcher (boot & shoe). May be designated: Backstay Stitcher (boot & shoe); Barrer And Tacker (boot & shoe); Binding Stitcher (boot & shoe); Buckle Sewer, Machine (boot & shoe); California Seamer (boot & shoe); Counter-Pocket Sewer (boot & shoe); Cover Maker (boot & shoe); Cut-Out Stitcher (boot & shoe); Edge Stitcher (boot & shoe); Fancy Stitcher (boot & shoe); Flare Stitcher (boot & shoe); Gore Inserter (boot & shoe); Insole Tape Stitcher, UCO (boot & shoe); Label Stitcher (boot & shoe); Lining Closer (boot & shoe); Lining Stitcher (boot & shoe); Lining-Strap Closer (boot & shoe); Lining Vamper (boot & shoe); Neverslip Stitcher (boot & shoe); Postbed Stitcher (boot & shoe); Quarter-Lining Stitcher (boot & shoe); Rand Sewer (boot & shoe); Saddle Stitcher (boot & shoe); Saddle-Lining Stitcher (boot & shoe); Seam-Stay Stitcher (boot & shoe); Shank Stitcher (boot & shoe); Sock-Lining Stitcher (boot & shoe); Stitcher, Utility (boot & shoe); Strap Stitcher (boot & shoe); Tape Stitcher (boot & shoe); Tip Stitcher (boot & shoe); Toe-Lining Closer (boot & shoe); Tongue And Quarter Stitcher (boot & shoe); Tongue-Lining Stitcher (boot & shoe); Tongue Stitcher (boot & shoe); Top Stitcher (boot & shoe); Underlay Stitcher (boot & shoe); Upper Stitcher (boot & shoe); Vamp Stitcher (boot & shoe); Welting Stitcher, Front (boot & shoe); Wrapper Stitcher (boot & shoe).
GOE: 06.02.05 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 81

690.682-086 TRIMMER, MACHINE II (boot & shoe)

Operates machine to trim *flash* from molded rubber heels, soles, or arch cushions or from tops of rubber footwear: Starts machine and positions edge of workpiece on feed roller beneath cutter guard. Holds and turns workpiece against guard, presenting all edges to reciprocating or rotating blade to remove excess material. Depresses pedal to raise guard so that seams will not be jagged or torn. Turns setscrews to adjust height of guard to thickness of material processed and to replace dull blades. May trim heels by setting them on base plate and turning heels by hand against matching circular knives. May be designated according to material trimmed as Cushion Trimmer (boot & shoe); Heel Trimmer (boot & shoe) II; Sole Trimmer (boot & shoe); Top Trimmer (boot & shoe) II.
GOE: 06.02.07 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

690.682-090 TRIMMING-MACHINE OPERATOR (button & notion) alternate titles: button broacher

Sets up and operates automatic machine to force steel pins through thread-holes of plastic buttons to remove molding *flash*: Selects numbered dial feed-plate and pin-holding chuck according to size and type of button and installs them in machine, using wrenches. Turns setscrews to align dial plate and pin-holder to ensure that pins will be centered in thread-holes of buttons. Pours buttons into hopper, using hand scoop. Observes feeding of buttons into dial pockets and action of pin-driving and ejecting mechanism. Examines buttons for defects and adjusts machine as required. Removes filled containers from beneath ejection chute and places them on bench or handtruck.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

690.685-010 ASSEMBLER FOR PULLER-OVER, MACHINE (boot & shoe) alternate titles: counter and upper tacker; machine assembler

Tends machine that tacks shoe parts to last, to prepare shoe upper for further *lasting*: Places counter and tip support (box toe) on rack, immerses rack in liquid cement, and drains excess cement from parts. Inserts precemented parts between lining and upper. Pulls and aligns upper on last. Sets last on *pin jack* of machine. Pushes pin jack and upper into machine that tacks upper to last at heel seam and heel seat.
GOE: 06.04.05 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

690.685-014 ASSEMBLY-PRESS OPERATOR (any industry) alternate titles: bench-press operator

Tends hand or power press that shapes or assembles metal, plastic, rubber, or glass parts by crimping, shaping, locking, staking, or press fitting: Aligns workpiece against fixtures under ram as specified. Moves controls to lower ram that shapes parts or presses parts together. May tend machine to separate parts or punch, face, cut, chamfer, or compress parts preparatory to assembly. May tend machine equipped with multiple rams or automatic positioning device. May be designated according to type of press tended as Arbor-Press Operator (any industry) II; Kick-Press Operator (any industry) II; or according to parts assembled as Handle Attacher (any industry); Lens Mounter (optical goods) I.
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 86

690.685-018 BACK-STRIP-MACHINE OPERATOR (boot & shoe)

Tends machine that rolls strips of friction tape onto continuous sheeting of uncured rubber stock and cuts assembly into specified widths and lengths to form backstays (backseam reinforcing strips) for rubber footwear: Selects stock and tape of specified color and thickness. Mounts parallel rolls of tape in individual holders and roll of sheeting on machine frame, using hoist. Installs reel in cradle for winding sheeting wrapper and attaches mobile electric motor to drive shaft, using collar and wrenches. Threads sheeting and friction tape around rollers that guide and press materials together. Fastens end of wrapper to reel for rewinding. Starts machine and rewinding motor, and conveyor that pulls assembly under rotary gang knives and under guillotine to slit sheet into strips and cuts strips to length. Winds friction tape around cardboard tubing to form stick, presses stick across row of strips on conveyor, and places strips between cloth leaves to form book. Examines strips for wrinkles and other defects and discards rejects.
GOE: 06.04.07 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

690.685-022 BALER (plastic-synth.)

Tends automatic machine that bales rubber pellets: Observes machine compressing, wrapping, and sealing rubber pellets into bales. Reads meters to verify weights of bales. Observes coating mechanism and distribution of dope, talc, or film on bales. Removes wet bales from machines. Examines metal detector and wrapping mechanism for defects. Turns valves and presses button that resets baling operations when automatic controls malfunction. May tend automatic machine that stacks bales on pallets for storage or shipment.
GOE: 06.04.07 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

690.685-026 BAND CUTTER (rubber goods)

Tends machine that cuts cured rubber tubing into rubberbands: Changes gears that regulate speed of cutting machine feed rolls, using handtools. Rinses tubing in water to facilitate cutting and guides tubes into feed rolls. Starts machine that cuts tubing into bands and blows bands from machine to conveyor that drops bands into tote box.
GOE: 06.04.07 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

690.685-030 BAND-MACHINE OPERATOR (rubber goods)

Tends machine that forms rubber strips into tubing used to produce rubberbands: Sets and adjusts guides, knives, seam hammer, and cement roller on band machine to form and cut tubing to specified length. Lifts and positions roll of rubber stripping on *letoff rack*. Pulls end of rubber strip from roll, places on conveyor, and threads through machine. Starts machine and observes operation. Measures tubing to ensure that specifications are met. Dumps soapstone into blower unit that dusts tubing to prevent sticking.
GOE: 06.04.07 STRENGTH: H GED: R2 M2 L2 SVP: 4 DLU: 77

690.685-034 BOTTOM PRESSER (boot & shoe) alternate titles: bottom ironer; burnisher

Tends bottom-pressing machine that smooths wrinkles from bottom of lasted shoe upper: Turns contour-control dial to adjust shape of heated pressing plate according to specifications stamped on last. Inserts guide jack pin of machine into last, and places lasted shoe on heated pressing plate. Depresses pedal to lower guide jack that presses lasted shoe against pressing plate.
GOE: 06.04.05 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 77

690.685-038 BOWLING-BALL FINISHER (toy-sport equip.) alternate titles: plastic ball buffer; rubber ball finisher

Tends buffing machine that removes scratches and polishes surface of bowling balls: Places ball in holding fixture, pad, or cup of buffer and coats buffing

wheel and pad with abrasive compound. Changes position of ball against revolving wheel to remove grinding and sanding scratches on surface of ball. Removes ball after specified time and holds ball against finish buffing wheel, moving ball with hands to expose all surfaces to wheel. Examines ball for scratches and specified finish. May dress ball with waterproof sandpaper or rubbing compound to remove nicks, pits, and scratches prior to engraving or polishing and be designated Hand Finisher, Bowling Balls (toy-sport equip.).
GOE: 06.04.09 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 78

690.685-042 BRANDING-MACHINE TENDER (rubber goods) alternate titles: machine printer, hose

Tends machine that prints brand name on rubber hose: Bolts specified printing plate on machine fixture. Adjusts guides and feed rollers to accommodate hose, using wrench. Fills feed tank with specified color ink and starts machine. Lifts hose to table by hand or with hoist and starts hose into feed rollers. Examines hose to ensure that printing meets specifications.
GOE: 06.04.07 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

690.685-046 BUFFER (boot & shoe) alternate titles: brusher; buffing-machine operator; cuffer; polisher; rasper-machine operator; remover; roughener; ruffer; sander; sander and polisher; scourer

Tends machine that smooths or roughens shoe parts by either of following methods: (1) Holds and presses part against abrasive cylinder that polishes and sands part or against wire roughing wheel to clean and prepare part for cementing. (2) Feeds sole between rubber presser roll and abrasive-covered roller that roughens part for cementing. May feed part to trimming cutter to trim part. May tape parts to protect masked areas during buffing or inking. May pad off rough surfaces from hair side of hides and be designated Hide Buffer (boot & shoe). May be designated according to part buffed, roughened, or sanded as Box-Toe Buffer (boot & shoe). May be designated according to type of material brushed or sanded as Crepe-Sole Scourer (boot & shoe); Crepe-Sole Wire Brusher (boot & shoe). May be designated according to purpose for which part is roughened as Rougher For Cement (boot & shoe). May be designated: Bottom Buffer (boot & shoe); Breast Buffer (boot & shoe); Channel Rougher (boot & shoe); Counter Buffer (boot & shoe); Heel Buffer (boot & shoe); Heel-Centers Buffer (boot & shoe); Heel Sander, Rubber (boot & shoe); Heel-Seat Sander (boot & shoe); Heel Slicker (boot & shoe); Insole Buffer (boot & shoe); Insole Sander (boot & shoe); Joint Sander (boot & shoe); Shank Sander (boot & shoe); Sole Buffer (boot & shoe); Sole Rougher (boot & shoe); Top-Lift Scourer (boot & shoe); Welt Rougher (boot & shoe).
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 78

690.685-050 BUFFER, AUTOMATIC (boot & shoe)

Tends pair of automatic machines that grind edges of soles to remove sprues left by molding and roughen edges for foxing: Starts machines. Depresses pedal of first machine to separate toothed feeder wheels. Clamps sole between wheels and against rotating, vertical buffing wheel that grinds excess material from sole edge as feeder wheels automatically turn sole. Observes sole edge after one rotation for complete removal of sprue and removes sole or leaves sole on for second turn. Loads second machine while first is operating and alternates between both.
GOE: 06.04.05 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

690.685-054 BUFFER, INFLATED-PAD (boot & shoe)

Tends buffing machine equipped with inflated pad that buffs shoe soles: Presses sole against inflated buffing pad which scours and smooths shank and breast. Removes worn pads, using handtools.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

690.685-058 BURNISHER (boot & shoe) alternate titles: brusher; finisher; polisher

Tends machine that waxes and burnishes shoes to protect leather and give smooth finish: Starts burnishing machine and coats revolving burnishing wheel with wax, using wax block. Holds shoe against waxed wheel to apply wax to shoe, then against bristle and cloth brushes to polish. May use hand burnishing tools. May be designated according to part of shoe burnished as Bottom Burnisher (boot & shoe); Heel Burnisher (boot & shoe); Shank Burnisher (boot & shoe); Tip Burnisher (boot & shoe). May hold shoe against corrugated wheel to knurl edge of heel seat to improve appearance and be designated Heel Wheeler (boot & shoe).
GOE: 06.04.05 STRENGTH: L GED: R1 M1 L1 SVP: 3 DLU: 77

690.685-062 BUTTON-DECORATING-MACHINE OPERATOR (button & notion) alternate titles: automatic-fancy-machine operator

Tends automatic machines that cut ornamental designs into face of nonmetallic button blanks: Loads blanks into machine hopper, using hand scoop. Starts machine and observes feeding, cutting, and *indexing* mechanisms. Removes jammed blanks from feed chute, using wire pick. May remove and replace worn cutters and abrasive wheels, using wrenches. May place blanks by hand in chucks of semiautomatic, manually indexed machine. May examine samples for finishing defects.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

690.685-066 BUTTON-FACING-MACHINE OPERATOR (button & notion)

Tends battery of automatic machines that drill thread holes and shape surface of nonmetallic button blanks: Loads workpieces into machine hopper, using hand scoop. Starts machine and observes blanks feeding into rotating chucks on transport mechanism that conveys blanks to cutting tools and drills. Stops machine and notifies setup mechanic of malfunction. May hand feed pearl button blanks into machine to ensure that blanks are positioned face-up in chucks. May place single blank in chuck of manually controlled machine and pull on leverage bar to force blank against cutting tool or drill.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

690.685-070 CEMENTER AND FOLDER, MACHINE (boot & shoe) alternate titles: french-binding folder; plastic-machine folder; quarter folder; thermo-cementing-folder operator

Tends machine that cements and folds *french binding* or skived edge of shoe uppers to form smooth edge: Moves lever to lower machine head and guides shoe part under head to cement, fold, and press edge of upper. Raises and presses folded edge flat, using awl, to repair rough folds. May depress pedal to lower blades that notch and crease folds on curves. May turn knobs to regulate temperature of heating element and flow of heated plastic cement.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

690.685-074 CEMENTER, MACHINE JOINER (boot & shoe) alternate titles: attacher; beater; folding-machine operator; joiner; layer; setter; taper

Tends one of various pressing machines that join precemented shoe parts, performing any of following tasks: Turns setscrew that adjusts distance between pressure rollers, feeds aligned parts between rollers, and observes joining of parts. Positions parts on machine bed and depresses pedal that forces heated presser head against parts to join them. Moves lever that adjusts contour of pad on lower jaw of machine or changes pad, following contour of parts to be joined. Positions parts on pad and depresses pedal that closes jaws to join parts. Positions cemented parts on shoe and places shoe in oven to soften cement. Positions shoe parts on bed of machine and moves lever to start machine that presses and cements parts. May bound toe and shank area of shoe to improve adhesion or waterproofing strip to inner and outer sole parts, using hammer. May brush solvent on precemented parts to soften cement prior to joining parts. May apply cement to parts. May be designated according to parts joined as Insole Coverer (boot & shoe); Insole-Lip Turner (boot & shoe); Platform Presser (boot & shoe); Sole Layer (boot & shoe). May tend machine that uses conveyor-carried air inflated pads to join precemented parts and be designated Compo-Conveyor Operator (boot & shoe). May be designated: Heel Layer (boot & shoe); Insole Taper (boot & shoe); Open-Shank Coverer (boot & shoe); Welt-Sole Layer (boot & shoe).
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

690.685-078 CENTER-PUNCH OPERATOR (recording)

Tends punch press that punches center holes in phonograph records or stamper: Removes stack of records or stampers from conveyor and places them on machine holder. Positions record in slot over punch die of machine or centers disk under punch die, using calibrated microscope and starts machine. Removes punched record, and simultaneously positions unpunched record in machine or removes and places stamper on sanding spindle for further processing. Places punched records in trays.
GOE: 06.04.02 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

690.685-082 CHANNEL OPENER, OUTSOLES (boot & shoe) alternate titles: channel turner

Tends machine that flares slit in preslit edge of shoe outsoles to form channel and facilitate stitching of welt to outsole. Pushes and guides edge of outsole against tapered revolving roller to flare slit.
GOE: 06.04.05 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

690.685-086 CHANNELER, INSOLE (boot & shoe) alternate titles: lockstitch channeler; welt-insole channeler

Tends machine that cuts two parallel grooves near edge of insole prior to welting: Positions insole against machine guide. Depresses pedal to raise machine bed against cutting blades that cut grooves (channels) in insole. Adjusts lever to control width of cut, following work ticket. May turn handwheel to regulate speed of cutting blades. May tend machine to bevel outer edge of insole. May channel outsoles and be designated Channeler, Outsole (boot & shoe).
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

690.685-090 CONTACT-LENS MOLDER (optical goods)

Tends heating equipment and hydraulic casting press that casts plastic contact lenses: Lays separate top and bottom sections of previously set up mold on heated metal block for specified time. Fills lens cavities in heated mold with plastic powder. Aligns guide pins and holes to join top and bottom sections of mold. Places filled mold on bed of press, sets timer, and starts press to lower ram until dial indicates mold sections are under specified pressure. Removes mold from press. Inspects first run of lenses to verify accuracy of lens power, using power determining and optical centering instrument. Reports defects in new molds.
GOE: 06.04.13 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

690.685-094 COUNTER CUTTER (boot & shoe) alternate titles: counter maker

Tends machine that cuts counters for shoes from leather, fiberboard, or other materials: Selects materials and cutting dies according to work ticket. Positions leather, sheets of fiberboard, or other material on bed under beam of machine

Positions die on material to obtain maximum number of parts. Depresses pedal to lower beam onto top of die, cutting out counters.
GOE: 06.04.09 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

690.685-098 COUNTER FORMER (boot & shoe) alternate titles: forming-machine operator

Tends forming machine that restores shape to heel counters of finished shoes. Adjusts temperature of forming iron and positions shoe on iron. Depresses pedal that moves presser arms, forcing counter against iron to restore shape to counter. May remove wrinkles, using hand iron. May shape one-piece quarters by similar method and be designated Quarter Former (boot & shoe).
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

690.685-102 COUNTER MOLDER (boot & shoe)

Tends machine that molds shoe counter into shape of heel: Places counter on head of mold. Regulates temperature of mold as specified for material being used, such as cloth, fiber, or *lumite*. Depresses pedal to exert pressure on mold and form counter. May be designated according to type of counter material as Ciao-Counter Molder (boot & shoe).
GOE: 06.04.05 STRENGTH: L GED: R3 M1 L2 SVP: 3 DLU: 77

690.685-106 COUNTER ROLLER (boot & shoe)

Tends machine that skives (shaves), corrugates, and waxes precut counters to prepare them for further processing: Stacks counters in feeding device. Presses button to start machine that moves counters under presser rollers and knife blade to shave them to uniform thickness, then under roller that corrugates edges, and applicator that coats counters with wax. May change cutting knives, using wrench.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

690.685-110 CUT-OUT-AND-MARKING-MACHINE OPERATOR (boot & shoe)

Tends machine that simultaneously trims leather shoe parts to size, punches perforations, and marks stitching outline: Bolts specified die to ram or bed of machine, using wrench. Brushes ink on roller which marks stitch outline on part. Positions part on machine and presses pedal to start machine. Stacks processed parts.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

690.685-114 CUT-OUT-MACHINE OPERATOR (boot & shoe) alternate titles: cut-out-press operator; die-out-machine operator; gang-punch operator; puncher

Tends machine that cuts out decorative designs or ventilating holes in shoe parts by any of following methods: (1) Clips guide plate on machine bed and turns knobs to adjust position. Clamps hammer block or punch in machine head. Aligns part, such as saddle, strap, or vamp on guide plate and starts machine that cuts designs or holes in part. May adjust machine to accelerate reciprocal action of punch or to regulate cutting pressure of head. (2) Positions die plate on machine and clips shoe part on plate. Pushes plate on rails under machine head and starts machine that cuts designs or holes in parts. When operating machine equipped with punch, may be designated Perforator (boot & shoe). May be designated according to part cut as Buckle-Strap Puncher (boot & shoe); Hole Puncher, Strap (boot & shoe); Tip Puncher (boot & shoe).
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

690.685-118 CUTTER I (fabrication, nec)

Tends machine that automatically cuts cartridges (strips) from continuous sheet of plastic floor covering material emerging from calender machine. Places cartridges, separated by cloths, on buggy for transportation to floor covering press.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

690.685-122 CUTTING-MACHINE TENDER (any industry)

Tends power shear that cuts sheets of material, such as paper, pressboard, foil, cardboard, cork, or plastic material to specified dimension for items, such as cartons, wrappers, labels, business forms, or gaskets: Adjusts guides on machine to regulate width of cut according to work order, following calibrated scale on machine bed or using ruler. Positions and aligns sheets against guides and presses lever to clamp sheets to bed of machine prior to cutting. Presses button(s) or moves lever controls to force shear blade through sheets. Adjusts guides and repositions material to trim or square edges to specifications. May change shear blade, using handtools. May be designated according to type of material cut as Cardboard Cutter (any industry); Cutter, Plastic Sheets (plastic prod., plastic-synth.); Paper Cutter (any industry). May cut material manually, using hand-powered shear, and be designated Paper Cutter, Hand (any industry).
GOE: 06.04.09 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 89

690.685-126 DESKIDDING-MACHINE OPERATOR (boot & shoe)

Tends automatic machine that cuts wavy or zigzag designs in outsoles for rubber footwear to provide nonskid surface: Positions sole on slide carriage under blade and between spring clamps that hold ends of sole to carriage. Starts machine and moves lever to depress cutter that automatically cuts single row to set depth in vertical reciprocating action. Moves lever to raise cutter, depresses pedal to return carriage to starting position, and repeats process to cut additional rows. Releases clamps to replace finished workpiece. Examines depth of cut, using mold mark on sole edge as guide, and raises or lowers blade, using wrench to adjust depth.
GOE: 06.04.07 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

690.685-130 DICER OPERATOR (plastic-synth.)

Tends machine that cuts sheets or strands of plastic material into cubes or pellets for packaging: Observes feed of material from cooling unit into machine, and adjusts speed of cutters to cut pellets to specified size. May tend auxiliary equipment, such as tumbler dryer. May bag pellets.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

690.685-134 DUAL-HOSE CEMENTER (rubber goods) alternate titles: hose cementer; hose finisher

Tends machine that cements lengths of rubber hose together to form dual hose for use in oxyacetylene torches: Pours rubber cement into machine dispenser and turns valve to regulate flow of cement. Adjusts buffing wheel that smooths sides of hose to be joined. Verifies diameter of hose, using gauge. Threads hose through feed rollers and starts machine. Examines dual hose to ensure that joint is cemented evenly. Ties identification tag on hose. May tend machine that prints brand on hose (BRANDING-MACHINE TENDER (rubber goods)).
GOE: 06.04.07 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

690.685-138 EDGE BURNISHER, UPPERS (boot & shoe) alternate titles: edger; upper edger

Tends machine that rolls and presses edges of shoe uppers to smooth and finish edges: Positions edge of shoe upper against guides and under heated burnishing iron. Presses lever to start machine, and guides edge under iron and edge-rolling wheel to roll and press edge of upper.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

690.685-142 EDGE GRINDER (plastic prod.)

Tends machine that squares and smooths edges of plastic floor tile: Adjusts guide shoes for squareness, using wrenches and tile gauge. Places stack of tile on table of machine. Taps edges with mallet to align tile edges against guide shoes. Presses buttons to engage guide shoes and move stack of tile between grinding wheel. Rotates tile on table to grind edges. Places finished tile on conveyor.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

690.685-146 EDGE SETTER (boot & shoe) alternate titles: edge burnisher; edge kitter

Tends machine that polishes and shapes edges of heel lifts and shoe soles through vibrating action of heated irons: Selects irons according to thickness of heel lift or sole and clamps them in chuck of machine. Turns dial to heat and regulate temperature of irons, according to work ticket. Pushes lever that rotates chuck to bring heel lift or sole into working position. Presses and guides heel or sole against vibrating iron to burnish edges. May brush, dye, ink, or wax edges. May be designated according to part burnished as Edge Setter, Heel Lift (boot & shoe).
GOE: 06.04.05 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

690.685-150 EDGE TRIMMER (boot & shoe) alternate titles: apex trimmer; edge-trimming-machine operator; margin trimmer; outsole trimmer; sole pretrimmer

Tends machine that trims sole and heel edges of lasted shoes to remove excess material and to impart finished appearance: Positions and guides edges against revolving cutter to trim them. May replace cutters or guides, using handtools. May sharpen cutters.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

690.685-154 ELECTRIC-SEALING-MACHINE OPERATOR (any industry) alternate titles: bonding-machine operator; dielectric-heat-sealing-machine operator; heat-seal operator; plastic-welding-machine operator

Tends machine that heats and seals precut or predesigned plastic material or film to form book covers, eyeglass cases, baby pants, tubing, and other plastic-coated products: Moves controls on machine to adjust temperature, pressure, and time cycle. Loads feeding mechanism with rolls of plastic material. Aligns edges of continuous plastic strips and guides them into position under electrode. Starts machine and depresses pedal to lower electrode that heats and seals edges of material. Removes product from machine and stacks it in rack or on table. May position plastic strip over article preparatory to heat sealing article.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

690.685-158 EMBOSSER (boot & shoe) alternate titles: printer; stamper

Tends machine that imprints trade name or other identifying symbols on shoe parts: Obtains embossed plate specified on work ticket and positions it in heated upper stamping beam of machine. Positions spool of colored embossing ribbon on machine spindle and draws it through guides, under stamping beam, and between feed rollers. Positions shoe part on machine bed. Depresses pedal that lowers stamping beam and embossed plate, pressing colored ribbon against shoe part and imprinting trade name or other symbols on part. May remove embossing ribbon from machine to imprint trade name without color. May be designated according to part stamped as Bottom Stamper (boot & shoe); Sock-Lining And Heel-Pad Embosser (boot & shoe).
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

690.685-162 FASTENER, MACHINE (boot & shoe) alternate titles: anchor tacker; fastener; nailer; puncher and fastener; puncher; riveter; sewer; stapler; tacker

Tends nailing, slugging, stapling, or tacking machine that attaches shoe parts, such as heel, insole, and shank to partially assembled shoes: Aligns parts on

bed of machine, or positions them under machine head. Depresses pedal that lowers holding device, or holds parts against guide. Depresses pedal or lever that drives fasteners into parts. Fills hopper of nailing or tacking machine, or replaces wire spool on spindle of slugging or stapling machine. May brush cement onto parts prior to joining. May be designated according to part joined as Heeler, Machine (boot & shoe); Insole Tacker (boot & shoe); Ornament Stapler (boot & shoe); Top-Lift Nailer (boot & shoe). May be designated: Bow Stapler (boot & shoe); Buckle Stapler (boot & shoe); Fiber-Heel-Piece Shaper (boot & shoe); Gore Stapler (boot & shoe); Heel-Seat Filler (boot & shoe); Heel-Seat-Flap Stapler (boot & shoe); Nail Welter (boot & shoe); Outsole Tacker (boot & shoe); Platform Stapler (boot & shoe); Rand Tacker (boot & shoe); Shank Stapler (boot & shoe); Sole Stapler, Welt (boot & shoe); Toe Stapler (boot & shoe).
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

690.685-166 FEATHEREDGER AND REDUCER, MACHINE (boot & shoe) alternate titles: featheredge-machine operator; forepart reducer; outsole beveler; outsole skiver

Tends machine that shaves shank, heel seat, forepart, or edges of shoe outsole to reduce thickness and increase flexibility of outsole by any of following methods: (1) Feeds edge of outsole against guide and between rollers that force edge against machine blade. Turns crank to regulate speed of rollers along curved edges. May depress pedal to separate rollers to accommodate thickness of outsole. (2) Positions specified die rollers on machine shaft. Positions outsoles against guides on machine bed. Depresses pedal that starts rollers that force shank, heel seat, forepart, or edges of outsole against machine blade. Turns handwheel to set cutting gauge according to outsole size. May reduce thickness of insoles at edges. May be designated according to part of outsole reduced or beveled as Heel Reducer (boot & shoe); Shank Beveler (boot & shoe).
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

690.685-170 FINISHER, MACHINE (plastic prod.)

Tends sanding-and-buffing machine that smooths and polishes surface of plastic sheets to specified finish: Installs sandpaper belt in machine and sets tension of buffer springs to regulate pressure of buffers on sheets, using wrench. Starts machine and feeds sheets into machine. Observes ammeter to verify machine load specified for sanding. Verifies thickness of finished sheets, using dial indicator micrometer. Examines surface of sheets for defects, such as scratches, dull spots, and cracks.
GOE: 06.04.02 STRENGTH: M GED: R2 M2 L2 SVP: 2 DLU: 77

690.685-174 FOLDER, MACHINE (boot & shoe) alternate titles: cover creaser; edge beader; folding-machine operator; wrapper laster

Tends machine that folds precemented edges of shoe parts, such as insoles, platforms, quarters, and vamps to strengthen and smooth edges: Positions part against guide and under presser foot and folding finger, or between rollers of machine. Releases pedal that lowers presser foot, starts machine, and guides part under presser foot and folding finger or between rollers to fold and press edges of part. May repair uneven folds by pressing with hot iron. Important variables may be indicated by trade name of machines used.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

690.685-178 FOLDING-MACHINE OPERATOR (leather prod.) alternate titles: gusset folder; zipper-lining folder

Tends machine that folds precemented edges of leather handbag, wallet, coin purse, or key case parts to strengthen and smooth edges: Positions part, such as gusset or zipper lining, against machine guide and under presser foot. Depresses pedal to move part edge against folding bar of machine that forms folded edge.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

690.685-182 FORCE-VARIATION EQUIPMENT TENDER (rubber tire)

Tends battery of machines that test or grind tires for conformance to radial balance specifications: Lifts and positions tires in machine. Starts machine that inflates tires and activates sensory roller rotating against tire. Observes panel indicators to determine tires meeting specifications. Places defective tires on conveyor leading to automatic machine that locates and grinds excess rubber from tires. Drops defective tires in scrap truck and stacks balanced tires on shipping pallet.
GOE: 06.03.01 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 77

690.685-186 FOREPART LASTER (boot & shoe) alternate titles: ball laster

Tends *lasting* machine that presses edges of precemented uppers onto insole and shapes forepart section of shoes: Positions last on machine. Moves lever to cause machine pincers to stretch upper, and to cause wipers to press edges of upper onto insole. Presses machine button to release last. Turns handle to reverse pincer grip according to shape of right or left shoe.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

690.685-190 FOUNTAIN PEN TURNER (pen & pencil)

Tends multiple-spindle automatic screw machine that bores, turns, or threads plastic or rubber tubing stock to form barrels of pens and pencils: Positions and secures tools in toolholders following job order and verbal instructions, using wrenches. Positions and secures bar stock in chuck. Starts machine and engages automatic feed. Spot checks conformance of completed workpiece to specifications, using dial and fixed gauges.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

690.685-194 GRINDING-MACHINE OPERATOR, AUTOMATIC (button & notion) alternate titles: belt back operator

Tends machine that removes bark (rough exterior of pearl-shell) from back of pearl button blanks, and levels back and face of blanks: Places blanks face-down on conveyor belt that feeds blanks between steel plate and abrasive wheel. Inverts blanks by hand, and repeats operation to level faces. May tend machine that inverts blanks automatically. May insert blank in holder of manually controlled machine and pull on leverage bar to force blank against abrasive wheel.
GOE: 06.04.08 STRENGTH: S GED: R2 M1 L2 SVP: 2 DLU: 77

690.685-198 GROOVER AND TURNER (boot & shoe)

Tends machines that cut heel blanks (rough forms) of wood, leather, or fiberboard into heels: Inserts blank in holding device. Pushes heel against revolving knife blades to shape outside of heel. Positions shaped heel in holding device of second machine that hollows out face of heel. May sharpen and insert cutting blades in machines. May be designated according to material grooved or turned as Wooden-Heel Beveler (boot & shoe).
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

690.685-202 GROOVING-LATHE TENDER (plastic prod.)

Tends lathe-type machine that cuts grooves (knurls) in plastic tubes and cuts tubes to size to form flashlight covers. Slides tubing over mandrel attached to chuck and starts machine. Moves cutting tool against workpiece that knurls tubing and cuts tubing into specified lengths.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

690.685-206 HEEL BUILDER, MACHINE (boot & shoe) alternate titles: heel former; lift builder, whole; push-up machine operator

Tends machine that cements, nails, and holds lifts to form heel or heel bases. Inserts and pulls leather or fiberboard lifts through cement-covered rollers of machine according to material, size, and style of heel specified on work ticket. Stacks cement-covered lifts against faceplate (mold) of machine. Places nail in holding device on ram of machine and depresses pedal to start machine that drives nail into stacked lifts and holds heel in conveyor or press until dry. May be designated according to type of heel built as High-Heel Builder (boot & shoe); Low-Heel Builder (boot & shoe). Important variables may be indicated by trade name of machines used.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

690.685-210 HEEL COMPRESSOR (boot & shoe) alternate titles: heel molder

Tends machine that compresses heels to give them better wearing quality. Feeds precut heels of leather or composition material into machine and observes operation. May change dies and adjust stroke of ram. May tend machine equipped with blades that trim and shape breast of heel during operation. May compress top lifts and be designated Top-Lift Compressor (boot & shoe).
GOE: 06.04.05 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

690.685-214 HEEL GOUGER (boot & shoe)

Tends machine that cuts cavity to form heel seat in heels: Bolts specified cutting disk to machine. Turns setscrews to adjust machine for length and depth of cut. Loads heels into feeding device or positions heel under machine guide and depresses pedal to start machine that cuts gouge in heels and ejects them into storage container. May cut gouge in heel lifts and be designated Heel-Lift Gouger (boot & shoe).
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

690.685-218 HEEL PRICKER (boot & shoe)

Tends machine that pricks holes in leather heels to facilitate nailing: Selects pricking device according to number of holes to be pricked. Inserts awls of specified size and length through holes in faceplate of device. Positions device in machine and places heel on feed channel. Depresses pedal to start machine that drives awls into heel and pulls them out again.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

690.685-222 HEEL SCORER (boot & shoe)

Tends machine that scores insole of shoe to provide guideline for installation of heel and indicate where channel of insole begins: Turns setscrews and moves guides on machine to hold specified insoles. Positions insole against guides and presses switch to start machine that cuts score across heel seat of insole. May make cut in toe of welt insole to prevent puckering when stitched to shoe upper and be designated Insole-Toe-Shipping-Machine Operator (boot & shoe).
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

690.685-226 HEEL-NAILING-MACHINE OPERATOR (boot & shoe)

Tends nailing machine that attaches wooden or plastic heels to nonleather footwear: Inverts shoe and places heel section over metal rest and against stop guide. Depresses pedal to drive hopper-fed nails automatically around edge of counter into insole to prepare seating for heel. Sets screwhead in hole of machine fixture, holds inverted shoe and heel in assembly position against stop guides, and depresses pedal that presses shoe and heel together and automatically drives screw into heel (pressure turns thread into heel). Pushes knob to load nail-driving device with nails from hoppers, inverts shoe with attached heel over nail holder and against stop guides, and depresses pedal to drive nails automatically into heel.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

690.685-230 HEEL-SEAT LASTER, MACHINE (boot & shoe)

Tends *lasting* machine that shapes and attaches heel section edges of upper to insole: Places and holds last on machine spindle. Pulls edges of shoe upper over insole, using *lasting tool*. Depresses pedals that activate wipers that press upper edges against insole and tack drivers that fasten edges onto insole. Turns handwheel to adjust spacing of wipers and tack drivers. May nail down exposed edges and tacks, using hammer. May soften and remove wrinkles from uppers, using hand iron.

GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

690.685-234 INKER, MACHINE (boot & shoe) alternate titles: edge blacker, machine; edge dyer; edge stainer, machine; heel stainer; sole blacker; sole dyer

Tends machine that applies ink or stain to color edges of shoe soles or heels, by any of following methods: (1) Inserts and guides outsole or midsole between pressure roller and ink-covered rollers of machine. (2) Depresses pedal that separates feed rollers, releases pedal that closes and starts rollers that hold and turn sole edge against inked wheel. (3) Positions and guides soles under machine nozzle that applies ink or stain to edge of attached outsole. (4) Positions heel against machine guide and turns heel against revolving brush that applies ink to heel edge. May be designated according to part colored as Heel-Edge Inker, Machine (boot & shoe); Sole-Edge Inker, Machine (boot & shoe).

GOE: 06.04.21 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

690.685-238 INSEAM TRIMMER (boot & shoe) alternate titles: inner seamer; inseam-trimming-machine operator; margin trimmer; side trimmer; welt trimmer

Tends machine that trims edges of inseam to remove excess material prior to attachment of midsole or outsole: Turns setscrew that locks reciprocating blade onto machine shaft. Turns knobs that position machine guide. Depresses pedal that withdraws presser device, permitting alignment of excess material with cutting edge of blade. Releases pedal that recoils presser device, forcing excess material under blade. Guides shoe against cutting edge of blade to trim off excess material.

GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

690.685-242 INSOLE BEVELER (boot & shoe)

Tends machine that cuts bevel along channeled stitching lip on top edge of insole: Positions edge of insole under knife. Moves lever to drop knife and pressure foot onto edge of insole and move presser roller against inner surface of channeled lip. Pushes treadle to start machine and guides insole through machine.

GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

690.685-246 INSOLE REINFORCER (boot & shoe) alternate titles: insole-cloth trimmer; insole gemmer; trimmer and reinforcer

Tends machine that presses precemented canvas lining into channel area of insole and trims lining: Positions insole between horizontal disks. Depresses pedal to cause disks to press lining into insole channel, and to cause revolving blade to trim lining flush with insole edge.

GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

690.685-250 JOINT CUTTER, MACHINE (boot & shoe) alternate titles: joiner; jointer, machine; joint maker, machine

Tends jointing machine that trims edge of shoe sole at joint of shank and heel. Positions and guides lasted shoe against cutter that trims sole edge to impart finished appearance at joint.

GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

690.685-254 LACER II (boot & shoe)

Tends machine that laces string through shoe eyelets to close throat prior to *lasting*: Turns knob that adjusts length of string according to specifications. Pushes or pulls lever to adjust distance between protruding needles on machine bed to correspond with eyelet spacing. Positions part on machine bed extending needles through eyelets. Starts machine that laces string through eyelets, and ties and cuts string.

GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

690.685-258 LAMINATOR I (leather prod.)

Tends machine that laminates precemented leather and plastic parts used in making leather products, such as wallets, coin purses, and key cases: Presses button to start conveyor and heating elements. Turns knob to adjust distance between presser rollers. Places aligned parts on conveyor leading to machine that laminates parts. Removes parts from machine and ties parts into bundles for further processing.

GOE: 06.04.05 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

690.685-262 LAST SAWYER (wood prod., nec)

Tends variety of saws that cut plastic shoe last forms to specified size and shape: Positions and clamps last form on machine jig. Starts saw and pushes jig against saw to make specified cut on last. Pulls jig from saw, removes last from jig, and places last aside for further processing.

GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

690.685-266 LEATHER-BELT MAKER (leather prod.) alternate titles: belt puncher; cartridge belt puncher; puncher

Tends machines that cut, punch, rivet, or staple parts to leather to make apparel belts: Positions leather in machine. Starts machine, and depresses pedal to cut leather into specified strips for body of belt or belt loops. Places leather strip against guides in stapling or riveting machine or punch press. Depresses pedal to punch buckle or tongue holes in belt, shear and shape belt ends, staple belt loops onto belt, rivet buckle to belt, or attach snap fasteners to join parts. May be designated according to operation performed as Leather-Belt-Loop Cutter (leather prod.); Leather-Belt Puncher (leather prod.); Leather-Belt Shaper (leather prod.); or according to type of belt made as Leather-Cartridge-Belt Maker (leather prod.); Men's Leather-Dress-Belt Maker (leather prod.); Women's Leather-Belt Maker (leather prod.).

GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

690.685-270 LIP CUTTER AND SCORER (boot & shoe)

Tends machine that stamps shoe size and cuts or creases shoe insoles: Installs specified cutting or creasing blade in machine head, using handtools. Turns knob and pushes or pulls slide in groove in machine bed to select shoe size stamp. Positions insole, grain side down, against guide on bed. Depresses pedal that lowers head, cutting or creasing insole to indicate starting and stopping points for subsequent ribbing operations, and forcing insoles against heated size stamp to imprint shoe size.

GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

690.685-274 LIP-OF-SHANK CUTTER (boot & shoe)

Tends machine that cuts lip (inside edge) of shank on insole of shoe to improve flexibility: Adjusts screw to set gauge for size of cut determined on basis of size of insole. Sets insole, inner side up, on machine bed with lip of shank against gauge stop. Depresses lever to activate vertical plunger that makes cuts on insole at lip of shank.

GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

690.685-278 LUMITE INJECTOR (boot & shoe) alternate titles: compound-machine operator; squirt-machine operator

Tends machine that injects *lumite* into counter pocket of shoe to form rigid back: Sets control valve to regulate flow of lumite into counter pocket. Pushes shoe onto injection needle and depresses pedal to inject lumite. Guides back of shoe through rollers to spread lumite within counter pocket. May be designated according to material used to form counter as Cuio-Lumite Injector (boot & shoe).

GOE: 06.04.05 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 77

690.685-282 MARKER, MACHINE (boot & shoe) alternate titles: machine tracer; stitch marker

Tends marking machine that stamps lines on upper shoe parts to serve as guides for subsequent operations: Selects machine guide and top plates according to work ticket. Positions and attaches guide and top plates on machine. Aligns shoe part in guide plate on machine bed. Depresses pedal that lowers machine head or pulls machine head down to mark lines on part. May mark vamp to indicate where vamp and tip should be joined and be designated Vamp Marker (boot & shoe).

GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

690.685-286 MAT PUNCHER (rubber goods) alternate titles: die-press operator

Tends machine that punches out and trims automobile floor mats from rubber sheeting: Bolts die to ram or seats die on movable table of press. Positions uncured rubber sheeting or cured rubber mats on moveable table or on die. Pushes table under ram of press, and starts machine. Places punched and trimmed mats on skid. May measure and mark guidelines on moveable table.

GOE: 06.04.07 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 77

690.685-290 MOLDED-RUBBER-GOODS CUTTER (rubber goods)

Tends machines that cut and trim cured rubber articles, such as ear plugs, water goggles, and automotive parts, from molded rubber sheets: Selects cutting die and fastens to bed of cutting machine with clamps or bolts. Positions molded rubber sheet over die, feeling with fingers to determine that each article in sheet is evenly aligned with cutting edges of die. Places fiberboard over rubber sheet to prevent damage to die cutting edges from ram. Pushes buttons to lower ram and cut out parts. May be designated according to type of machine used as Hydraulic-Punch-Press Operator (rubber goods); Roller-Die-Cutting-Machine Operator (rubber goods).

GOE: 06.04.07 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

690.685-294 MOLDER, LABELS (boot & shoe)

Tends machine that imprints identifying data, such as company name, trademark, or design, onto continuous strip of uncured rubber for labels on rubber footwear: Selects specified die, slides into holder on ram, and locks die in place, using wrench. Mounts roll of strip on spindle, and threads end between feeder rolls and under diehead. Starts machine and observes pressed labels for height of imprint. Stops machine and changes die or adjusts length of ram stroke for clearer imprint. Books finished strip as strip comes from press, cutting strip off at book length, using scissors. Stacks filled book on storage pile.

GOE: 06.04.07 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

690.685-298 NICKER (boot & shoe) alternate titles: snipper

Tends machine that nicks curved edges of shoe parts, such as vamps, tongues, quarters, and bindings, to facilitate folding of edges, using either of following methods: (1) Turns machine head to bring designated multiedged die into position. Positions part under die and depresses pedal that forces die downward, nicking edge; or (2) Places part on machine post against guide and presses part against reciprocating knife to nick edge. May be designated according to part nicked as Binding Nicker (boot & shoe).

GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

690.685-302 PAD CUTTER (plastic prod.)

Tends machine that slices foam rubber blocks to specified thickness for use in making chair, cushion, and ironing board pads. Turns handwheel to adjust height of roller conveyor under machine knife according to thickness specifications. Pushes block against knife that slices article from block.
GOE: 06.04.07 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

690.685-306 PLUG CUTTER (pen & pencil) alternate titles: cut-off-machine operator

Tends machine that cuts rubber rods or bars into pencil erasers. Adjusts guides on machine to specified length and size of rods or bars to be cut. Starts machine and feeds prescribed colored rods or bars manually into device that feeds them to knives which cut them to specified size. Observes machine operation and spot checks length and size of plugs (erasers), using hand gauge to ensure conformity to specifications.
GOE: 06.04.07 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

690.685-310 POINTING-MACHINE OPERATOR (plastic prod.; rubber goods)

Tends machine that rounds points on comb teeth. Starts machine and observes combs being fed into machine for proper positioning, allowing shaping wheels to automatically point teeth.
GOE: 06.04.02 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

690.685-314 POUNDER (boot & shoe) alternate titles: jollier

Tends machine that pounds down and buffs edges of leather uppers to provide smooth base for outsole. Starts machine and moves bottom of lasted shoe against wheel that pounds out puckers on edges of upper. Buffs bottom of lasted shoe on emery wheel to provide smooth surface. May be designated according to area of shoe pounded as Bottom Pounder, Cement Shoes (boot & shoe); Heel-Seat Pounder (boot & shoe); Toe Pounder (boot & shoe).
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

690.685-318 PRESSER (rubber goods)

Tends pneumatic presses that bond and make watertight parts or seams of uncured rubber footwear by either of following methods: (1) Positions last, with partially assembled footwear, between ram and press table or fixture. Depresses pedal to lower ram or raise table and press workpiece around its edges, bonding tacky parts together. (2) Places workpiece between pads. Moves lever to lower upper pad and cover workpiece. Moves lever to pump air from between pads and draw rubber sheeting around surface of workpiece, forcing tacky parts together. Observes gauges and turns valves to maintain required air pressure. Examines workpiece for defects, such as loose edges or misaligned parts.
GOE: 06.04.07 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

690.685-322 ROLL CUTTER (rubber goods) alternate titles: lathe operator

Tends lathe that cuts roll of rubberized fabric or gum stock into specified widths. Loads roll of fabric or gum stock on lathe mandrel and starts chuck that revolves stock. Cuts roll of stock by holding knife in slots of guide bar and pressing it against revolving stock. Removes cut roll from mandrel and sorts it into designated boxes.
GOE: 06.04.07 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

690.685-326 ROLL-OVER-PRESS OPERATOR (optical goods)

Tends machine that rolls over edge of plastic sunglass frames to secure lenses. Removes frames from heat conveyor and positions in fixture of press. Starts press that rolls over edge of plastic frames to secure lenses. Removes frames and examines for defects, such as cracked or distorted lenses, or cracked frames. Stacks completed frames in rack or places rejected frames in salvage container. Keeps production and rejection records.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

690.685-330 ROUGH-AND-TRUEING-MACHINE OPERATOR (toy-sport equip.)

Tends grinding machines that smooth and true bowling balls. Lifts ball onto work bench. Removes excessive molding from ball, using hand power grinder. Places ball between abrasive jaws of grinding machine. Starts machine and observes grinding operation. Stops machine and measures size of ball, using gauge. Removes ball from machine at end of grinding and smoothing cycle, and places ball in rack.
GOE: 06.04.09 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

690.685-334 ROUGH-ROUNDER, MACHINE (boot & shoe) alternate titles: forepart rounder; rounder; sole rounder

Tends machine that trims edges of outsole and welt to conform to outline of lasted shoe upper. Adjusts width gauge, following size specifications. Starts machine and depresses pedal that withdraws knife from cutting position. Positions shank or heel seat against machine guide. Releases pedal that forces reciprocating horizontal knife against outsole and welt. Presses and turns outsole and welt against machine guide and cutting edge of knife. Presses control that regulates width of cut at toe, ball, and shank of shoe while edge is being trimmed. May cut channel (groove) in bottom of outsole near edge.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

690.685-338 ROUNDER (boot & shoe) alternate titles: insole rounder; sole rounder; sole-rounding-machine operator

Tends machine that trims unfinished shoe soles to pattern size. Selects pattern from stock bin, following work ticket. Positions pattern on machine guide pins and places sole on pattern. Depresses pedal or pushes lever that clamps sole onto pattern and starts knife blades rotating around outside edge of pattern to cut sole in conformity with pattern. Removes and sharpens blades, using hone.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

690.685-342 RUBBER-CUTTING-MACHINE TENDER (rubber goods)

Tends guillotine-type machine that automatically cuts rubber stock into slabs. Starts machine, catches cut slab as it reaches end of conveyor, and throws slab onto pallet. Sprays each layer of slabs with chemical solution to prevent sticking, using hose, and covers layer with canvas sheet. Replaces filled pallet with empty one, using hand-controlled lift truck.
GOE: 06.04.07 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

690.685-346 SANDER (toy-sport equip.)

Tends machine that sands and smooths golf club grips, skis, and other sports equipment. Inserts article to be sanded in roller carriage brackets or grip in holding device of machine. Starts machine that automatically feeds article to sanding belt or rotates article against moving abrasive wheel to remove excess stock, paint, and blemishes from article.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

690.685-350 SEAM-RUBBING-MACHINE OPERATOR (boot & shoe) alternate titles: counter molder; rubber and pounder; seam roller; shoe hammerer; smoothing-machine operator

Tends machine that smooths and presses seams of shoe parts, such as counters, quarters, and joints of uppers by following methods: (1) Positions part under pounder or roller and guides part while machine pounds or rolls seams flat and smooth. (2) Positions part over or under preheated form and depresses pedal that lowers head of machine over part, pressing part to smooth seam. (3) Positions part on anvil under power hammer and depresses pedal that raises anvil and starts reciprocating hammer, flattening, and smoothing seam. May soften parts, using water-soaked sponge. May be designated according to type of machine operated as Power-Hammer Operator (boot & shoe); Seam Press Operator (boot & shoe); or according to part of shoe smoothed as Heel-Seam Rubber (boot & shoe); Quarter-Lining Smoother (boot & shoe); Vamp Presser (boot & shoe).
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

690.685-354 SHAPING-MACHINE OPERATOR (plastic prod.)

Tends machine that cuts spheres, cones, and other shapes from plastic foam blocks. Positions block on machine table and clamps block in holding device. Starts machine and pushes block against curbed blades to cut shapes in block. Removes block from machine and breaks shaped object from block.
GOE: 06.04.02 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

690.685-358 SIDE LASTER, CEMENT (boot & shoe)

Tends *lasting* machine that presses edges of precemented uppers onto insole and shapes shank section of shoes. Positions last between machine feed rollers that grip upper edges. Moves last along wiping bar that presses upper edges onto insole. May last entire upper. May remove temporary tacks, using *lasting tool*.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

690.685-362 SIDE LASTER, STAPLE (boot & shoe) alternate titles: side stapler; staple laster

Tends *lasting* machine that staples shank section (side) of shoe upper onto insoles and shapes it on shoe last. Places last on *pin jack* and pulls edge of upper over last, using *lasting tool*. Removes last, positions it under machine head, and starts machine that staples edges of upper to insole. May adjust cutterhead to regulate staple length, according to thickness of upper. May tend machine that tacks upper and be designated Side Laster, Tack (boot & shoe).
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

690.685-366 SIZING-MACHINE TENDER (clock & watch)

Tends machine that cuts grooves in edges of plastic watch crystals. Centers and clamps crystal in rotary holding device. Starts machine and moves cutter blade against rotating crystal to cut grooves in edge of crystal. Removes crystal from machine onto tray.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

690.685-370 SKI-TOP TRIMMER (plastic prod.)

Tends machine equipped with cutter attachment that trims plastic layer tops for use in ski manufacturing. Aligns top with guide and clamps top in holding device. Starts machine that trims tops to specified size and shape. Measures width of top for conformance to standards, using caliper.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

690.685-374 SKIVER (leather prod.)

Tends machine that bevels edges of leather parts of articles, such as belting, gloves, wallets, cigarette and key cases, and handbags to prepare parts for joining. Turns setscrews to adjust gauge, guide, feed roller, and blade, to regulate angle of bevel. Depresses pedal to start machine. Positions part on bed of machine against gauge and beneath guide. Guides part over feed roller that forces edge of material against blade to skive edge. Sharpens blade, using emery wheel. May pull leather strips across fixed cutting edge to reduce thickness and be designated Skiver, Hand (leather prod.).
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 4 DLU: 77

690.685-378 SKIVER, MACHINE (boot & shoe; rubber goods) alternate titles: beveler; edge skiver; scarfer; skiving-machine operator

Tends skiving machine that bevels edges of shoe parts to prevent ridges at stitched, cemented, or folded edges. Depresses pedal to start machine. Holds

and guides part against guide and between feed rollers that force edges of part against blade. Turns setscrews to adjust feed rollers, guides, and blade angle to specifications. Verifies width and thickness of beveled edges, using micrometer. May use pedal to regulate speed of rollers along curved, straight, or angled edges of part or to change incline of rollers and alter width and thickness of bevel. May tend machines that roughen edges prior to cementing or skive narrow parts, such as straps and backstraps. May be designated according to parts skived as Skiver, Counter (boot & shoe); Skiver, Tuck (boot & shoe). May be designated: Skiver, Box-Toe (boot & shoe); Skiver, Flare (boot & shoe); Skiver, Heel Tap (boot & shoe); Skiver, Sock Linings (boot & shoe); Skiver, Uppers Or Linings (boot & shoe); Skiver, Welt-End (boot & shoe). Important variables may be indicated by trade names of machines used.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 5 DLU: 77

690.685-382 SOLE LEVELER, MACHINE (boot & shoe) alternate titles: beater-out, leveling machine; inseam leveler; leveler; leveling-machine operator; outsole leveler; sole-leveling-machine operator

Tends machine that flattens, shapes, and smooths leather insoles and outsoles. Turns handle to adjust holding device to fit shoe. Positions shoe on *pin jack* and against holding device. Starts machine that forces shoe against presser roller and moves roller back and forth over sole to flatten ridges, bulges, and nicks caused by other operations. May move levers to control motion of roller.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

690.685-386 SPLITTING-MACHINE OPERATOR (rubber goods; rubber reclaim.) alternate titles: beadsaw operator; debeader; skiver; slitting-machine operator; trimming-machine operator; turner-splitter-machine operator

Tends machines that cut scrap tires or split rubber sheets for reclaiming rubber. Adjusts guides to accommodate tire size and cut to be made, and installs blades, using handtools. Lifts tire or sheet onto powered rollers by hand or with hoist. Starts rollers that force tire or sheet against blade or endless-belt-type saw to split tire or sheet into piles, shear tire into sections, sever bead from tire, trim rubber from carcass, or separate sponge rubber from carpeting. May be designated according to type of cutting performed as Carcass Trimmer (rubber reclaim.); Scrap-Tire Shearer (rubber reclaim.); Tire Debeader (rubber reclaim.).
GOE: 06.04.07 STRENGTH: H GED: R2 M1 L2 SVP: 2 DLU: 77

690.685-390 SPONGE BUFFER (plastic prod.)

Tends machine that buffs edges of household sponges to impart rounded finish. Depresses pedal to open device, inserts sponge between wheel teeth, and releases pedal to clamp sponge in wheels. Starts machine that revolves edge of sponge against buffing wheel to finish and round edges.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

690.685-394 SPORT-SHOE-SPIKE ASSEMBLER (boot & shoe)

Tends machine that attaches spikes to sport shoes, such as football or baseball shoes. Positions shoe on bed of drill press and lowers drill to ream holes in shoe sole. Inserts spike stem through outsole from inside of shoe and places washers on protruding stem. Positions shoe on bed of pneumatic ram and lowers ram that clamps and assembles spike to shoe. Repeats operations until specified number of spikes are attached to shoe sole.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 5 DLU: 77

690.685-398 STAMPING-MACHINE OPERATOR (boot & shoe) alternate titles: lining stamper; outside marker; upper stamper

Tends marking machine that stamps identifying symbols, such as case number, match number, and size on shoe parts. Turns selector knobs or places metal type on machine head to set specified type symbols. Positions parts on machine bed under head, following machine guide. Depresses pedal to lower heated inked head on shoe part and print symbols.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 4 DLU: 77

690.685-402 STRAP-CUTTING-MACHINE OPERATOR (rubber goods)

Tends machine that cuts uncured rubber or rubber-coated fabric strip into specified lengths, for use as leg straps on gaiters and hip boots. Selects cutoff wheel (having X-shaped cutting dies bolted in rim) for severing strap length. Bolts cutoff wheel to drive shaft, positions and bolts backing wheel against it, rim to rim, using wrenches. Mounts roll of strip in holder and threads end through guide and between wheels. Positions carton beneath wheels to catch cut straps. Starts machine, observes and counts mark on cutting wheel as it passes given mark on machine frame, to determine when required number of straps are cut. Arranges cut straps in books for use in assembling boots.
GOE: 06.04.07 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

690.685-406 STRING LASTER (boot & shoe) alternate titles: injection molder, outer sole

Tends battery of combination *lasting* and molding machines that mold rubber or plastic outsoles onto fabric, leather, or plastic uppers to make shoes. Positions upper over last with heel centered and even margin of upper around last sole, pulls string in hem tight around sole of last, and ties knot to keep it from slipping. Stretches and hooks upper over pins protruding from heel and instep of last, using claw-tipped end of *lasting tool*, to hold upper in place during molding. Pulls lever to turn last upper to face mold and raise shoe with newly molded sole for stripping. Places uncured rubber blank in mold, depresses pedal to lower last and close sides of mold, and sets automatic timing device for specified curing time. Strips molded shoe from last and examines sole for discoloration or softness indicative of overcuring or insufficient curing.
GOE: 06.04.09 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 77

690.685-410 TACK PULLER, MACHINE (boot & shoe) alternate titles: nail puller

Tends tack-pulling machine that removes temporary holding tacks from lasted shoes. Pushes lever to start machine. Holds and moves lasted shoe under revolving arm or machine jaws that pull tacks from last and insole or upper.
GOE: 06.04.05 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

690.685-414 TAPER, MACHINE (boot & shoe) alternate titles: staver; taper

Tends machine that applies adhesive tape to reinforce seams of upper shoe parts. Positions part on machine roller. Turns dial to regulate temperature of machine heating element that softens adhesive surface of tape. Depresses pedals that raise part, activate roller, and apply tape. Moves lever to cut adhered tape or uses scissors. Replaces tape roll on machine. May be designated according to part taped as Seam Taper, Machine (boot & shoe); Top Taper, Machine (boot & shoe).
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

690.685-418 TIP FINISHER (boot & shoe)

Tends multiarmed machine that bevels, burnishes, and perforates edge of toe tip to trim, finish, and decorate edge. Selects perforating punch according to work ticket and locks punch in perforating mechanism. Turns setscrew to adjust angle of beveling blade. Turns dial to regulate temperature of burnishing iron. Positions toe tip on end of rotating machine arm. Depresses pedal to rotate arm that moves tip past beveling blade, perforating mechanism, and automatic unloader. Reloads arms that have completed cycle.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

690.685-422 TIRE BUFFER (automotive ser.) alternate titles: buffer

Tends buffing machine that removes rubber from tire body to prepare tire for retreading. Positions tire on holder of machine. Places metal plate against tire and turns bolt to hold plate in place, using wrench. Inflates tire with air. Starts tire rotating and pushes lever that moves tire against abrasive wheel that cuts tread from tire. Turns dial to position buffing wheel against tire. Measures tire to determine size of retreading mold, using tapeline. May apply cement to tire to be retreaded, using brush. May inspect tire casings prior to buffing.
GOE: 05.12.15 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

690.685-426 TOE FORMER, STITCHDOWNS (boot & shoe) alternate titles: box-toe flanger, stitchdowns; toe laster, automatic

Tends toe-forming machine that draws leather upper over last to form toe of shoe. Places shoes on steaming rack to soften leather. Selects and clamps specified wiper plates in machine and adjusts plates and shoe holding device to fit size and style of shoe. Positions shoe in holding device. Depresses pedal to cause wiper plates to move forward against toe and slide downward, drawing upper over last to form toe. May insert steel toe cap between layers of leather in upper to form safety shoe box toe.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

690.685-430 TOE LASTER, AUTOMATIC (boot & shoe)

Tends *lasting* machine that presses toe section of upper edges onto insole and shapes toe section on last. Clamps specified wipers on machine head and adjusts wiper pressure. Positions toe of last on machine toe plate. Depresses pedal that causes wipers to press edges of upper onto insole for subsequent stitching. Nails anchor tacks in sides of shank and repeats wiper cycle to pull toe wire against toe and anchor it to tacks, to retain shape of toe section until stitched. May press precemented edges onto insole. May place upper in steamer to soften leather prior to lasting. May insert steel toe cap between leather layers to form safety shoe box toe.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

690.685-434 TRIMMER, MACHINE I (boot & shoe) alternate titles: shaver; trimmer

Tends machine that trims edges of shoe parts, such as heels, outsoles, or uppers to remove excess material. Turns knobs or setscrews to adjust guides and cutting blade as specified. Holds part against machine guide and presses it against cutter to be trimmed. May depress pedal that raises guide plate to move part into cutter. May be designated according to area or part of shoe trimmed as Heel-Seat Trimmer (boot & shoe); Heel Trimmer (boot & shoe) I; Top-Lift Trimmer (boot & shoe); Top Trimmer (boot & shoe) I. May be designated: Apron Trimmer (boot & shoe); Boot Trimmer (boot & shoe); Cut-Out Worker (boot & shoe); Rolled-Seat Trimmer (boot & shoe); Seat Trimmer (boot & shoe); Upper Trimmer (boot & shoe). Important variables may be indicated by trade names of machines used.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

690.685-438 TUBE MOLDER, FIBERGLASS (plastic prod.)

Tends machine that winds fabric and cellophane around mandrel to form fiberglass tubes used in manufacturing articles, such as fiberglass fishing rods or golf club shafts. Moistens edge of resin impregnated fabric with alcohol stick and places edge on steel mandrel. Smooths edge of fabric onto mandrel with hot iron. Rubs iron on sandpaper and silicon treated cloth to clean iron and prevent sticking. Positions mandrel and fabric on heated *rolling table*. Starts machine roller plate which presses and rolls fabric onto mandrel. Attaches cellophane strip diagonally to end of mandrel and hand rolls mandrel on table to

cover fabric, or clamps mandrel into machine, attaches cellophane, and starts machine to wrap cellophane around mandrel. Trims off excess cellophane, using scissors or knife. Wipes air bubbles and excess liquid from wrapped mandrel. Hangs mandrels on curing oven racks. Removes mandrel from cured tube. Places unwrapped end of mandrel through stop, clamps pulling device to end of mandrel and starts machine to pull mandrel out of cured tube. Cleans mandrels, using solvent, sandpaper, or wire brush. Coats mandrels with wax or other parting agents, using paint brush or dips mandrels in tanks. May straighten bent mandrels, using hammer or small press on level block. May be known according to task performed as Mandrel Cleaner (plastic prod.); Mandrel Puller (plastic prod.); Tacker (plastic prod.); Tube Roller (plastic prod.); Wrapper (plastic prod.).
GOE: 06.04.09 STRENGTH: M GED: R2 MI L2 SVP: 2 DLU: 77

690.685-442 TUBE SPLICER (rubber tire)
Tends machine that splices uncured rubber to form inner tubes for tire: Positions ends of tube in machine and starts machine that butt-splices tube. Lifts tube to hook and places cylinders under fold at each end to prevent creasing of rubber. May cut tube to specified length with hot knife prior to splicing. May punch hole at valve location and secure valve to tube with valve-press machine.
GOE: 06.04.07 STRENGTH: M GED: R2 MI L1 SVP: 3 DLU: 77

690.685-446 TUBER-MACHINE CUTTER (rubber goods; rubber tire)
Tends machines and auxiliary equipment that cut extruded rubber stock into specified lengths for items, such as tire treads, sidewalls, and other rubber goods: Turns crank and observes dial to adjust automatic cutter frame for specified cutting cycle or turns handwheel to adjust stock stop for specified lengths. Starts machine that cuts rubber as it passes on conveyor or positions stock against stop and pulls rotating blade across stock to cut and bevel ends. Observes passage of treads and sidewalls through automated auxiliary equipment that prints identification numbers on items, glues cushion strip to treads and sidewalls, and weighs items to detect variation from standards. Notifies TUBER-MACHINE OPERATOR (rubber goods; rubber tire) of machine malfunctions and processing defects. Fills reservoirs of printing, gluing, and marking machines. Changes numerals and brushes in printing and gluing machines, using handtools. May cut treads and sidewalls to specified lengths, using shears. May be designated according to product cut as Inner-Tube Cutter (rubber tire); Rubber-Flap Cutter (rubber goods; rubber tire).
GOE: 06.04.07 STRENGTH: L GED: R2 MI L2 SVP: 2 DLU: 77

690.685-450 V-BELT COVERER (rubber goods) alternate titles: flipping-machine operator
Tends machine that covers machine belts with rubberized fabric: Positions belt on pulleys of machine and raises pulleys to hold belt taut. Positions end of rubberized fabric on guide roll and starts machine that rotates belt and draws fabric through crimping device to cover belt. Cuts end of fabric after one revolution of belt. Presses fabric against belt with fingers and awl. Attaches identification band to each belt.
GOE: 06.04.05 STRENGTH: L GED: R2 MI L1 SVP: 2 DLU: 77

690.685-454 V-BELT FINISHER (rubber goods)
Tends machines that notch, measure, and brand identifying information on rubber V-belts: Positions belt onto expandable wheel of notching machine. Starts machine that notches inside surface to make belt flexible. Adjusts measuring machine weight tension according to belt-size chart, and positions belt on machine spindles. Pushes lever to rotate spindles that register belt length on gauge and stamp belt with identifying data. Inserts plate in branding machine. Feeds belts into machine to brand belts with identifying information. Ties belts in bundles and hangs bundles on rack. May be designated according to machine tended as Belt Brander (rubber goods); Belt Measurer (rubber goods); Belt Notcher (rubber goods).
GOE: 06.04.07 STRENGTH: L GED: R2 MI L1 SVP: 3 DLU: 77

690.685-458 V-BELT SKIVER (rubber goods)
Tends skiving machine that cuts and shapes edges of uncured rubber belts into V-shape: Turns belt inside out and fits belt over machine holding spindles. Turns screws to adjust angle of cutting knives and starts machine to rotate and skive belt. Weighs trim and adjusts knives to meet trim weight specifications. Removes belt from machine, turns belt right side out, and hangs on storage rack.
GOE: 06.04.07 STRENGTH: L GED: R2 MI L1 SVP: 3 DLU: 77

690.685-462 VULCANIZER (boot & shoe)
Tends machine that vulcanizes synthetic composition outsoles to leather or fabric uppers: Positions upper on heated metal last. Seats precut outsole in cavity of mold and pulls lever to invert last. Starts machine that lowers lasted upper into die cavity and vulcanizes outsole to upper.
GOE: 06.04.13 STRENGTH: L GED: R2 MI L1 SVP: 2 DLU: 77

690.685-466 VULCANIZING-PRESS OPERATOR (boot & shoe)
Tends machine that joins uppers of cloth sport shoes to rubber soles: Places cloth upper over form and rubber sole in electrically heated mold. Starts machine that unites sole and upper by heat and pressure. Reverses mechanism after specified period of time. Ties shoes together in pairs with shoelaces.
GOE: 06.04.07 STRENGTH: L GED: R2 MI L1 SVP: 3 DLU: 77

690.685-470 WELT BEATER (boot & shoe) alternate titles: platform beater; slasher; sole beater
Tends machine that shapes and flattens welt of lasted shoe prior to attachment of outsole: Positions shoe on anvil and depresses pedal to start machine. Guides welt under hammer that shapes and flattens it. Depresses second pedal to start slashing knife that scores toe portion of welt to permit smooth curving of welt at toe. May join shank to insole. May join outsole to shoe.
GOE: 06.04.05 STRENGTH: L GED: R2 MI L2 SVP: 3 DLU: 77

690.685-474 WELT BUTTER, MACHINE (boot & shoe) alternate titles: rand butter; rand-butting-machine operator
Tends machine that cuts welt strip at heel seat of lasted shoe and tacks welt ends to insole preparatory to bottoming operations. Turns wheel to adjust holding device to fit shoe. Positions shoe on movable *pin jack*. Pushes pin jack under machine head and depresses pedal to start machine that cuts welt strip and tacks welt ends. Fills machine receptacle with tacks. Sharpens cutting blades, using hone.
GOE: 06.04.05 STRENGTH: L GED: R2 MI L2 SVP: 2 DLU: 77

690.685-478 WELT CUTTER (boot & shoe) alternate titles: welt maker
Tends welt-cutting machine that cuts long narrow leather *blankers* into smaller sections for use as welts: Places ends of heavy paper strip in machine to cover leather strip when placed in cutting position. Positions end of leather strip under paper at point just before paper strip passes over knife, ensuring that edges of leather and paper are flush. Guides paper and leather by hand through cutting area to ensure straight line of feed.
GOE: 06.04.05 STRENGTH: L GED: R2 MI L2 SVP: 4 DLU: 77

690.685-482 WELT WHEELER (boot & shoe) alternate titles: stitch fudger; stitch wheeler
Tends machine that presses decorative indentations on welt to separate or simulate stitches: Positions shoe against guide on machine bed. Pulls lever to adjust blade for stitch length when separating stitches. Depresses pedal to raise bed, pressing welt against machine head. Holds welt under indenter blade to separate stitches or under heated corrugated wheel that forms simulated stitching. May be designated according to process as Stitch Separator (boot & shoe).
GOE: 06.04.05 STRENGTH: L GED: R2 MI L2 SVP: 2 DLU: 77

690.685-486 WIDTH STRIPPER (boot & shoe)
Tends machine that cuts series of *blankers* into strips used for shoe trimmings, such as bows and straps: Positions cutting disks and spacers (washers) on arbor and tightens setscrews. Inserts end of blocker series between machine guides and turns bolts to adjust guides to accommodate material. Depresses pedal that starts machine. Measures width of cut strips to verify conformity with specifications, using ruler. Trims imperfections from strips, using scissors. Bundles strips for shipment.
GOE: 06.04.05 STRENGTH: L GED: R2 MI L2 SVP: 3 DLU: 77

690.685-490 WIRE-WINDING-MACHINE TENDER (rubber goods) alternate titles: wire winder
Tends machine that winds wire around cured rubber hose for reinforcement. Positions spool of specified wire onto *letoff rack*, using hoist, and threads wire through machine. Adjusts machine for specified diameter of hose and pitch of wire spirals, using handtools. Pulls hose onto feed conveyor and positions hose in fixture of machine. Starts machine that winds wire onto hose. Verifies diameter and pitch of wire spirals with caliper and rule. Examines wire to ensure close fit around hose. Cuts wire and crimps ends, using handtools. Coils hose on skid or in packing box for removal to storage or shipping area. May attach coupling hardware to hose [HOSE-COUPLING JOINER (rubber goods)].
GOE: 06.04.09 STRENGTH: H GED: R2 MI L1 SVP: 2 DLU: 77

690.685-494 STITCHER, TAPE-CONTROLLED MACHINE (boot & shoe)
Tends battery of automatic stitching machines that stitch decorative designs on shoe parts, according to instructions encoded on tape cassettes: Receives bundles of shoe parts with tags that identify instruction cassette and style and color of thread to be used in stitching shoe parts. Places specified spools of thread on spindle of each machine, draws thread through machine guides and needles, and inserts prewound bobbin in shuttle. Positions shoe parts, such as upper or vamp, on holding device of machines, and depresses machine clamps to secure parts on device for stitching. Selects and inserts specified cassette in console of stitching machine, and presses buttons to activate machines that automatically stitch design according to encoded instructions on cassette. Removes shoe parts and examines design to verify conformance to specification.
GOE: 06.04.05 STRENGTH: L GED: R2 MI L1 SVP: 2 DLU: 86

690.685-498 PLASTIC ROLLER (plastic prod.)
Tends machine that winds drop cloths from precut lengths of plastic: Places end of plastic around takeup cylinder of machine, and overlaps plastic to secure plastic to cylinder. Depresses pedal to activate cylinder and wind plastic onto cylinder. Applies pressure by hand to edge of plastic to ensure evenness of plastic around cylinder. Stops machine, slips rolled plastic drop cloths off cylinder, and folds cloths for further processing. Pushes lever of counter to tally number of drop cloths folded.
GOE: 06.04.02 STRENGTH: L GED: R2 MI L1 SVP: 1 DLU: 86

690.685-502 ROLLER MAKER (rubber goods)
Tends machine that applies layers of vulcanized rubber onto metal rollers to fabricate or recondition rubber rollers used in industrial machines: Reviews work order to identify type of roller to be covered and type, color, and thickness of vulcanized rubber to be applied onto metal roller. Measures metal roller, using tape measure, to verify dimensions with work order. Transports and mounts roller between holding devices of roller building machine, by hand or

using overhead crane, working as team member. Carries, mounts, and loads roll of vulcanized rubber stock onto feed mechanism of machine. Depresses floor pedals to start feed mechanism and to start building machine that applies layers of vulcanized rubber around metal roller. Observes application of rubber around roller to detect air bubbles. Releases floor pedals to stop application of rubber, punctures air bubbles using knife, and applies pieces of rubber to airholes to seal holes. Measures thickness of rubber application, using calipers. Cuts rubber between roller and feed mechanism, using hot knife, and seals seam to roller, using stitching wheel. Trims rubber that laps over edges of roller, using knife.
GOE: 06.04.07 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 86

690.685-506 SAMPLE MAKER (boot & shoe)

Tends variety of machines that trim, shape, smooth, join, and finish shoe parts to fabricate footwear samples. Reads work order to determine type and style of shoe. Aligns precut components on bed of machine, positions components against machine guides, or feeds components between rollers. Flips switches, pushes buttons, depresses pedals, and moves levers to activate machines. Removes partially assembled component from machine and carries component to next machine in sequence of operation according to specifications. Changes and adjusts guides, cutting blades, buffing wheels, and heating irons, using handtools.
GOE: 06.04.05 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 86

690.685-510 TRADE MARKER (fabrication, nec)

Tends machine that drills hole and presses trademark into hole on stem of smoking pipes. Inserts and secures specified size drill in machine drill chuck, using chuck wrench. Places plastic tape of specified color in die press element of machine and adjusts die pressure, using wrench. Turns knobs to adjust operation speed of moving elements of machine. Presses button to start machine and depresses pedal to activate rotation of machine drum with clamps. Inserts pipe stems in clamps as clamps rotate by work station. Observes operation of machine that drills holes in stem and presses trademark into drilled hole to detect defects. Presses button and depresses pedal to stop machine when defects are noted. Turns handle to align drill and adjust pressure to correct defects.
GOE: 06.04.02 STRENGTH: M GED: R3 M1 L2 SVP: 3 DLU: 86

690.686-010 BEVELING-MACHINE OPERATOR (hat & cap) alternate titles: skiver-machine operator

Feeds sweatband leathers or cap-visor linings between power-driven roller and circular knife to bevel one edge. Starts machine, holds piece against guide, and pushes end between circular knife and roller.
GOE: 06.04.05 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

690.686-014 BIAS-MACHINE-OPERATOR HELPER (rubber tire)

Performs following duties in cutting rubberized fabric for tire ply (layer), bead wrapper, and chafer stock: Conveys fabric and liner rolls to machine area, using handtruck or forklift truck. Positions rolls in *let-off rack and windup racks*, using hoist. Threads fabric over guide rolls. Tags filled rolls according to type of stock. May lift cut plies from bias cutter arm to ply splice table. May splice plies by hand for BAND BUILDER (rubber tire).
GOE: 06.04.07 STRENGTH: H GED: R1 M1 L1 SVP: 2 DLU: 77

690.686-018 CEMENTER, MACHINE APPLICATOR (boot & shoe)

Applies cement onto separate shoe parts prior to joining, performing any of following operations: (1) Feeds parts between pressure and cementing rollers of machine and removes cemented parts. (2) Holds part against cement-covered roller or revolving brush that applies cement to part. (3) Feeds parts between rollers that move parts under spray nozzle. (4) Holds parts under machine applicator nozzle. May fill cement reservoir. May join parts together. May be designated according to parts coated as Binding Cementer, French Cord (boot & shoe); Bottom Cementer (boot & shoe) I; Cementer For Folding, Machine (boot & shoe); Channel Cementer, Insole, Machine (boot & shoe); Channel Cementer, Outsole, Machine (boot & shoe); Heel Cementer, Machine (boot & shoe). May be designated: Heel-Lining Paster (boot & shoe); Platform Cementer (boot & shoe); Potdevin Cementer, Machine (boot & shoe); Outsole Cementer, Machine (boot & shoe); Rand Cementer (boot & shoe); Tuck-And-Insole Cementer (boot & shoe); Upper-Lining Cementer (boot & shoe); Welt-Strip Cementer, Machine (boot & shoe).
GOE: 06.04.05 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

690.686-022 COATING-MACHINE FEEDER (leather prod.) alternate titles: cementer, machine; glue-machine feeder

Feeds leather or plastic into machine that coats material with waterproof paint or adhesive for use in lining or covering luggage or novelty cases. Covers one side of material with protective leather sheet and feeds material through machine rollers or revolving brush to coat exposed surface.
GOE: 06.04.16 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

690.686-026 CRIMPER (rubber goods) alternate titles: binder; hemmer; joiner; seamer

Feeds uncured rubber goods or garments, such as baby pants, through rollers or roller-cutter that crimp or fold over and press edges to reinforce article, or seal edges together and cut off excess material. May simultaneously feed binding tape between rollers that crimp tape to garment edges.
GOE: 06.04.07 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

690.686-030 CUTTING-MACHINE-TENDER HELPER (any industry)

Assists CUTTING-MACHINE TENDER (any industry) in cutting sheets of material, such as paper, pressboard, foil, cardboard, cork, or plastic. Positions and clamps material onto machine bed. Removes cut material from machine. Changes blades, using handtools. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 06.04.09 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

690.686-034 FOLDING-MACHINE OPERATOR (hat & cap) alternate titles: pugg maker; tube roller; turning-machine operator

Feeds machine that folds and presses pieces or strips of precut material, such as leather or fabric, to form hatbands or sweatbands. Feeds end of material under machine feed guide, into folding device, and between heated rollers to crease folded edges of material.
GOE: 06.04.05 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

690.686-038 INJECTION-MOLDING-MACHINE OFFBEARER (pen & pencil)

Removes barrels of fountain pens, ballpoint pens, and mechanical pencils from discharge outlet of injection-molding machine. Inspects barrel for defects. Places completed barrels in container. Opens gate of machine and removes runners from mold and dumps them into grinder.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

690.686-042 INJECTION-MOLDING-MACHINE OFFBEARER (musical inst.) alternate titles: gate tender

Removes musical instruments or parts, such as kazoos, fifes, and recorders, from discharge outlet of injection-molding machine. Inspects parts for defects and trims finger holes, using reaming drills.
GOE: 06.04.02 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

690.686-046 PLASTIC-DESIGN APPLIER (boot & shoe)

Feeds and off bears rotating machine (merry-go-round) that fuses plastic designs to shoe uppers. Aligns shoe part and design with guides in machine bed. Removes finished article from machine and stacks shoe uppers in bins.
GOE: 06.04.05 STRENGTH: S GED: R1 M1 L1 SVP: 1 DLU: 77

690.686-050 RUBBER-ROLLER GRINDER (pen & pencil)

Feeds automatic grinding machine that smooths surface of rubber rollers in stencil inking device. Positions rubber roller assembly of stencil inker in holding device of grinding machine and starts machine that automatically smooths surface of rubber rollers.
GOE: 06.04.07 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

690.686-054 SPLITTING-MACHINE FEEDER (leather mfg.) alternate titles: leather leveler

Feeds hides between rollers of machine that splits hides into layers. Positions hide on feed table and guides it between rollers which force edge of hide against moving knife. Stacks split hides. May cut such imperfections as blemishes or thin spots from hide, using knife. May soak hides in water to soften them preparatory to splitting.
GOE: 06.04.05 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

690.686-058 SWEATBAND FLANGER (hat & cap) alternate titles: flanging-machine operator

Feeds hat sweatbands into flanging machine that turns edge of sweatband to fit contour of hat body. Inserts sweatband between rollers and against guide on machine bed. Depresses pedal to start machine. Feeds part into rotating rollers and into slot of guide that turns bottom edge of sweatband. May be designated according to type of sweatband material flanged as Leather Flanger (hat & cap).
GOE: 06.04.05 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 78

690.686-062 SWEATBAND-CUTTING-MACHINE OPERATOR (hat & cap)

Feeds strips or scraps of leather between machine rollers and circular knife that automatically cuts strips to specified length for use as hat sweatbands. Turns handwheel to adjust cutting blade(s) or roller(s) according to sweatband size specified on work order. Flips switch to activate machine, positions leather against cutting blade(s) or roller(s), and pulls lever to secure leather in cutting position. Pulls lever or depresses pedal to activate machine, and observes cutting action of blade(s) to detect dull blade(s). Marks lot number on inside of sweatbands, using marking pencil or chalk. May attach adhesive size label to sweatbands. May inform supervisor of dull cutting blade(s), or replace dull blade(s), using screwdriver.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 78

690.686-066 TOGGLE-PRESS FOLDER-AND-FEEDER (boot & shoe)

Folds uncured, printed and powdered rubber sheeting longitudinally as sheeting is unreeled, and guides folded material beneath dies of toggle press that cut out uppers for gum shoes (rubbers).
GOE: 06.04.05 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

690.686-070 TUBER-MACHINE-OPERATOR HELPER (rubber goods; rubber tire)

Assists TUBER-MACHINE OPERATOR (rubber goods; rubber tire) in extruding rubber stock in specified form. Turns bolts to secure dies in machine, using wrenches. Feeds rubber stock into machine by hand or conveyor. May lift braided fabric hose onto turntable for feeding into machine that covers hose with rubber and be designated Covering-Machine-Operator Helper (rubber goods). Performs other duties as described under HELPER (any industry) Master Title.

GOE: 06.04.07 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

691 OCCUPATIONS IN FABRICATION OF INSULATED WIRE AND CABLE

This group includes occupations concerned with drawing wire and cable of nonferrous metal from wire bars, rods, or wire, and insulating it.

691.130-010 SUPERVISOR (nonfer. metal)

Supervises and coordinates activities of workers engaged in operations, such as braiding, stranding, and winding, to fabricate insulated wire and cable: Sets up machines for workers. Inspects and tests products for conformance to specifications, using inspection manuals, and testing equipment, such as ohmmeter, wheatstone bridge, and galvanometer. Trains new employees. May verify thickness of insulation, using micrometer, loupe, and graduated microscope. Performs duties as described under SUPERVISOR (any industry) Master Title. May be designated according to activity supervised as Inspection Supervisor (nonfer. metal); Plastic-Tubing-Insulation Supervisor (nonfer. metal).
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

691.130-014 SUPERVISOR, WIRE-ROPE FABRICATION (metal prod., nec)

Supervises and coordinates activities of workers engaged in spooling and stranding wire rope, and swaging fittings onto rope slings: Sets up spooling, stranding, closing, and swaging machines. Trains workers in operation of machines. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to activity of workers supervised as Closing Supervisor (metal prod., nec); Inspection Supervisor (metal prod., nec; nonfer. metal); Splicing Supervisor (metal prod., nec); Spooling Supervisor (metal prod., nec); Stranding Supervisor (metal prod., nec); Swaging-And-Plastic Supervisor (metal prod., nec).
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

691.367-010 INSPECTOR, WIRE (metal prod., nec; nonfer. metal) alternate titles: finished-wire inspector

Inspects and tests coated or uncoated wire for such properties as electrical resistance, hardness, size, cross sectional shape, and tensile strength, to verify their conformance to specifications. Reads written specifications, or receives oral instructions and determines work aids required and inspection procedures. Tests wire for electrical resistance, elongation, and tensile strength, by inserting wire in various testing devices and noting instrument readings. Measures wire for size, using micrometers and fixed gauges. Examines wire for defects, such as pits, scratches, and burnt surfaces. Records test results and informs supervisor when wire varies from specifications. May test wire for defective insulation and resistance to high temperature, using electrical testing equipment and electric heating furnaces. May be designated according to product inspected as Inspector, Wire Rope (metal prod., nec).
GOE: 06.03.01 STRENGTH: L GED: R3 M3 L3 SVP: 5 DLU: 77

691.382-010 EXTRUDING-MACHINE OPERATOR (nonfer. metal) alternate titles: tube-machine operator

Operates extrusion press to encase electric wire and cable in rubber or plastic sheath: Bolts specified dies, guides, and guide holders in extrusion head of press. Clamps roll of rubber strip on spindle of machine and threads strip into hopper-feeder, or fills hopper with plastic chips. Sets temperature control of press according to type of material to be extruded. Loads spool of wire on spindle and threads wire through machine and around takeup reel. Starts machine and adjusts controls to regulate speed of wire travel, pressure of hydraulic ram, and temperature of extrusion die to ensure sheath of uniform thickness. Guides rubber-covered wire through trough of powdered talc or soapstone as it emerges from press to prevent wire from sticking together when spooled. Clamps wire ends in electrodes of electric welder, turns on current, and holds brazing rod against heated wire tips to form continuous wire lengths. May feed wire through pot of molten metal to coat wire with tin prior to sheathing process. May operate machine equipped with wrapping device to wrap tape around wire prior to sheathing. May be designated according to machine operated as Continuous-Vulcanizing-Machine Operator (nonfer. metal); or according to material extruded as Plastic-Extruding-Machine Operator (nonfer. metal).
GOE: 06.02.09 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

691.382-014 LEAD-PRESS OPERATOR (nonfer. metal) alternate titles: extruding-press operator; press operator; braider; braider tender

Operates extrusion press to encase electric wire and cable in lead sheath: Bolts die in head of press, fills melting pot with lead, and mounts reel of cable on machine spindle. Threads cable through die and cooling chamber, fastens end to takeup reel, and starts machine. Adjusts controls to regulate speed of cable through machine, temperature and flow of metal, pressure of hydraulic ram, and pressure of water spray in cooling chamber to ensure uniform sheathing of lead on cable. Measures thickness and diameter of sheath with micrometers and calipers to verify conformity to size and surface specifications.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

691.387-010 INSPECTOR, INSULATION (nonfer. metal)

Inspects and tests insulated wire and cable for conformance to specifications, using testing instruments, inspection manuals, and blueprints: Measures diameter, wall thickness, concentricity of insulation, and thickness of wire or cable, using microscope, pin gauges, and micrometer. Attaches weights to cable to test adhesion of insulation to cable. Connects sample to electrical outlet and tests effectiveness of insulation under varying voltages, using such instruments as ohmmeter, wheatstone bridge, and galvanometer. Tests wearability of insulation, using twisting device. Tests breaking strength of wire and cable, using tensile testing machine. Examines and feels surface of braided metal shield surrounding insulation to detect imperfections, and cuts off or interlaces protruding metal strands of shield. Cuts insulation with knife and compares composition of insulation with specifications. Stamps mark of approval or rejection on cable tested.
GOE: 06.03.01 STRENGTH: L GED: R3 M3 L3 SVP: 5 DLU: 77

691.667-010 PNEUMATIC JACKETER (nonfer. metal)

Forces electric cable through rubber jacket (tubing) to insulate cable, using compressed air: Unrolls tubing from reel on truck. Ties leader (cord) to wooden plug of specified dimensions and inserts plug into one end of tubing. Clamps tubing onto compressed-air line and opens valve allowing air to force plug and leader through tubing. Fastens leader to cable end and clamps tubing onto compressed-air line. Scoops powdered talc into hopper connected to air line. Signals worker stationed at opposite end of tubing to pull cable. Turns valve, allowing air to expand tubing and force talc into tubing, as cable is pulled through tubing.
GOE: 06.04.34 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

691.682-010 ASBESTOS-WIRE FINISHER (nonfer. metal)

Sets up and operates machine to card asbestos fibers, wrap fibers around electric wire, and impregnate fibers with wax. Loads reels of wire onto machine spindle, threads wire between guides, through taping, carding, impregnating, and cooling units, and fastens wire to takeup reel. Places roll of tape on spindle and inserts end in taping device that folds tape around wire. Places *lap ll* of asbestos on carding device that shreds asbestos and cards fibers onto wire in continuous layer. Starts machine. Readjusts controls and replenishes supply of tape and asbestos to ensure uniform coverage of wire.
GOE: 06.02.09 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

691.682-014 BRAIDER OPERATOR (nonfer. metal)

Sets up and operates battery of automatic braiding machines that cover electric wire and cable with insulating material, such as cotton yarn, rubber tape, fiberglass, or fine steel, copper, and aluminum strands. Places bobbins of insulating material on machine spindles and threads strands through braiding head according to pattern draft which specifies lay and sequence of braiding. Locks spool of wire to be insulated in payoff spindle; threads wire through machine guides, footage counter, and braiding head; and turns setscrews to control tension of wire. Adjusts traverse attachment to ensure even winding of wire. Starts machine and winds braided wire around capstan and onto takeoff spool. Replaces empty bobbins and ties broken threads. May repair thread breaks, using brush and glue.
GOE: 06.02.09 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

691.682-018 INSULATING-MACHINE OPERATOR (nonfer. metal) alternate titles: coat-insulator operator; coat-operator, insulator; wire-taping-machine operator

Operates machine to wind insulating material, such as tape, yarn, and cloth around electric wire and cable. Loads reel of wire onto machine spindle and threads wire between metal and felt cleaning strips, through tank of liquid adhesive, and through taping mechanism. Fastens wire to takeup reel. Winds end of insulating material around wire and starts machine. Observes automatic wrapping of material around wire to detect broken or loose wrapping or uneven winding of wire on reel. Stops machine to repair breaks, adjust guides, and replenish supply of insulating material and liquid adhesive. Forms continuous wire by clamping ends of wire to be joined in electrodes of electric brazing torch, turning on current, and holding filler rod to heated wire ends. Measures wire with micrometer to determine that insulation meets specifications. Wraps paper around full wire reels, attaches identification tag, and lifts reel from machine. May operate machine, equipped with winding device, to wrap protective metal strip over insulation. May thread insulated wire through melted paraffin and polishing wipers to make insulation waterproof. May be designated according to insulating material applied as Paper-Wrapping-Machine Operator (nonfer. metal); Varnish-Cambric-Covering Machine Operator (nonfer. metal); or type of machine operated as Double-Lay-Winder-And-Paraffin-Unit Operator (nonfer. metal); Tandem-Taping-And-Paper-Wrapping-Machine Operator (nonfer. metal).
GOE: 06.02.09 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

691.685-010 ARMORING-MACHINE OPERATOR (nonfer. metal) alternate titles: armored-cable-machine operator; cable armorer; tape armorer

Tends battery of automatic winding machines that wind protective shield of yarn, wire or metal strip into flexible conduit or over insulated wire, such as submarine and underground cable: Starts winding machine and feeds insulated wire into machine and threads protective wire or strip through guides of automatic winding machine. Observes angle of spiral and adjusts guides, using wrench and screwdriver.
GOE: 06.04.09 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 77

691.685-014 LAGGING-MACHINE OPERATOR (nonfer. metal)

Tends machine that fastens wooden slats (lagging) to open reels of lead-covered cable: Fills hopper of machine with lagging and positions reels of steel band on spindles. Mounts cable reel on axle and starts machine that distributes lagging around edge of cable reel and binds lagging with steel banding.

GOE: 06.04.38 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

691.685-018 LEAD FORMER (elec. equip.) alternate titles: assembler flexible leads; former; lead assembler; lead bender

Tends variety of machines that form and assemble electrical wire leads, performing any combination of following tasks: Reads work order to determine information, such as type and sequence of assembly, and color-coded wire to use. Places coil in vise or clamping device of machine and depresses pedal or turns lever to close clamps which shape coil lead. Feeds wire into foot shear to cut wire leads to specified lengths. Scrapes ends of lead wires to remove insulation, using knife and scraper, or adjusts stop guides and feeds wire into pedal-operated wire stripping machine which strips insulation from wires. Dips stripped leads into tinning pot and inserts into wire brush machine to smooth surfaces. Strings specified number of plastic beads or slides cotton sleeving over end of wire to insulate field coil lead. Inserts end of lead wire into bullet press and depresses pedal to automatically position lugs on end of wire and to activate upper die which crimps lugs around end of lead. Wraps cut lengths of insulated wire together, using waxed cord to form cables. Positions lugs on wire leads by hand, prior to inserting assembly in press or crimping machine. May be designated according to task performed as Bead Stringer (elec. equip.); Lead Tinner (elec. equip.); Lugger (elec. equip.); Sleever (elec. equip.); Wire Cutter (elec. equip.); Wire Stripper (elec. equip.).
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 81

691.685-022 PAIRING-MACHINE OPERATOR (nonfer. metal)

Tends semiautomatic pairing machines that twist two or more wires together to form insulated telephone or electrical wire, following instructions on production tags: Attaches ends of two wires together; feeds paired wires through guides on bow, around capstan, over guide rollers; and attaches them to takeup reel. Sets counter and presses button to start takeup and pairing motors. Turns adjustment screws to maintain feed and rheostat to maintain running, stopping, and takeup tension. Stops machine to replace empty or filled reels and to check for and repair bare spots in insulation and breaks in wire. Tests paired wires for possible shorts.
GOE: 06.04.09 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

691.685-026 SPOOLING-MACHINE OPERATOR (metal prod., nec; nonfer. metal) alternate titles: bobbin winder

Tends machine that winds bare or insulated wire onto spools preparatory to shipment or further processing: Positions empty spool in machine. Threads wire from supply spool or coil through distributor (oscillating guide), *tension guides*, and secures end to empty spool or bobbin and starts machine. Observes machine which automatically winds wire and shuts off when specified amount of wire has been wound. Cuts wire after specified length has been wound, using wirecutters. May butt-weld ends of wire to form continuous strand. May locate and mark defective insulation during winding process, using spark tester. May wind insulation yarn [YARN WINDER (tex. prod., nec; textile)]. May be designated according to product wounnd as Cable Spooler (nonfer. metal).
GOE: 06.04.02 STRENGTH: H GED: R2 M1 L2 SVP: 3 DLU: 77

691.685-030 UTILITY WORKER, EXTRUSION (nonfer. metal)

Performs any combination of following tasks to insulate electric cable: Moves rubber strips from rubber mill to extruder machine, using handtruck. Feeds rubber strips into extruder machine that sheathes cable with rubber insulation. Winds adhesive tape around cable ends to waterproof cable during insulation. Guides sheathed cable onto takeoff reel as cable emerges from extruder. Clamps fittings onto cable ends and lowers reel into autoclave, using hoist. Connects air-pressure hoses and clamps autoclave cover in place. Turns valves to equalize autoclave pressure to prevent distortion of rubber sheath during curing period. Removes reel from autoclave onto payoff spindle of stripping machine. Adjusts slitting knife of stripping machine according to thickness of lead sheathed cable and threads cable beneath knife and spreader attachment. Feels stripped cable for lumps as cable emerges from stripping machine and removes lumps with sandpaper. Keeps log of cable stripped. May be known according to task performed as Reel Tender (nonfer. metal); Spooler And Coiler (nonfer. metal); Tuber Feeder (nonfer. metal).
GOE: 06.04.09 STRENGTH: H GED: R2 M2 L2 SVP: 3 DLU: 77

691.686-010 TWISTING-MACHINE OPERATOR (comm. equip.; elec. equip.)

Feeds two wires into machine that twists wires together to form telephone wire.
GOE: 06.04.09 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

691.687-010 PRODUCTION HELPER (nonfer. metal)

Performs any combination of following duties in fabricating and insulating electric wire and cable: Ties pull ropes, attached to cables emerging from extruding machines, onto takeoff reels, and coils cable around reels. Changes machine gears, using wrenches. Unclamps and hoists full reels from braiding, winding, and other fabricating machines, using power hoist. Rolls reels to other work areas or to storeroom. Moves wire, rubber, and other raw materials from storage to work area, using handtruck.
GOE: 06.04.40 STRENGTH: M GED: R1 M1 L1 SVP: 1 DLU: 77

692 OCCUPATIONS IN FABRICATION OF PRODUCTS FROM ASSORTED MATERIALS

This group includes occupations, not elsewhere classified, concerned with fabricating products that are composed of a combination of materials.

692.130-010 BRUSH-FABRICATION SUPERVISOR (fabrication, nec)

Supervises and coordinates activities of workers engaged in fabricating brushes: Schedules utilization of equipment, such as boring and filling, mixing, twisting, and stapling and filling machines to meet production schedule. Sets up boring and filling, stapling and filling, twisting, or other brush making machines to fabricate brushes, such as solid block and twisted-in-wire brushes. Trains workers in operation of machines and equipment. Requisitions and inspects materials. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 78

692.130-014 FINISHING SUPERVISOR (elec. equip.)

Supervises and coordinates activities of workers engaged in operations, such as assembling, cutting, planing, threading, or turning, to make anodes, electrodes, or other carbon products. Studies inspection reports or measures dimensions of finished product to verify conformance to specifications, using calipers, micrometers, or other measuring instruments. Analyzes deviations from specifications and prescribes data to correct machine setup, using knowledge of shop mathematics and machining operations. Inspects machinery to detect malfunction and directs repair or replacement of parts. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

692.130-018 SUPERVISOR I (button & notion)

Supervises and coordinates activities of workers engaged in fabricating slide fasteners (zippers) from wire or nylon filament and cloth tape. Examines workpieces for adherence to specifications and quality. Directs workers in machine setup or adjustment. Verifies dimensions of fasteners and parts, using precision instruments and following process sheets, job cards, and blueprints. Trains workers. Requisitions materials. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

692.130-022 SUPERVISOR VI (nonmet. min.)

Supervises and coordinates activities of workers engaged in fabricating packing for mechanical equipment, such as engines and compressors. Sets up and adjusts machines, such as shapers, winders, and braiders, using handtools. Trains workers in operation of machines and equipment. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to process supervised as Supervisor, Braiding (nonmet. min.); Supervisor, Finishing (nonmet. min.).
GOE: 06.01.01 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

692.130-026 SUPERVISOR, BROOMMAKING (fabrication, nec)

Supervises and coordinates activities of workers engaged in making brooms: Determines utilization of equipment, such as seeding, clipping, stapling, and winding machines, required to meet production schedules. Sets up and adjusts machines and equipment, using handtools. Trains workers in broom making operations. Requisitions materials and supplies. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

692.130-030 SUPERVISOR, PAINT ROLLER COVERS (fabrication, nec)

Supervises and coordinates activities of workers engaged in fabricating paint roller covers: Plans and coordinates utilization of equipment, such as beveling, cut-off, and spiral winding machines to meet production schedule. Sets up and adjusts machines. Trains workers in operation of machines and equipment. Performs duties as described under SUPERVISOK (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

692.130-034 SUPERVISOR, TOY PARTS FORMER (toy-sport equip.)

Supervises and coordinates activities of workers engaged in punching and pressing toy parts from metal, plastic, and cardboard material: Sets up and adjusts machines, using handtools. Trains workers in set up and operation of machines and equipment. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

692.130-038 SUPERVISOR, KEYMODULE ASSEMBLY (office machines)

Supervises and coordinates activities of workers engaged in assembling components to form modules used in keyboards of electronic computer equipment: Monitors production operations and inspects in-process and completed modules for conformity to specifications. Directs workers in machine setup, adjustment, or repair, using machine blueprints and diagrams and applying knowledge of machine functions. Confers with designated plant personnel to determine corrective action when quality or volume of production does not meet prescribed standard. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 86

692.130-042 SUPERVISOR, SHOP (fabrication, nec)

Supervises and coordinates activities of workers engaged in fabrication of metal paint trays and paint-roller cover frames, applying knowledge of product, machine functions, and properties of metal: Confers with plant personnel to determine customer orders, assign workers to duties, and to determine need for additional workers to meet production requirements. Maintains quantities of materials at each work station. Examines paint-roller cover frames or paint trays

to determine that frames and trays meet specifications. Assists workers in setting up machines, such as ram press, bending press, riveting, and punch press. Performs work activities of subordinate workers to overcome personnel shortages or to relieve workers. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R3 M3 L3 SVP: 5 DLU: 86

692.132-010 SUPERVISOR IV (nonmet. min.)
Supervises and coordinates activities of workers engaged in fabrication of abrasive products, such as wheels, belts, and rolls. Patrols work area to detect malfunctioning machines. Directs adjustment and repair of faulty machines and equipment. Trains workers. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

692.132-014 SUPERVISOR V (nonmet. min.)
Supervises and coordinates activities of workers engaged in cutting abrasive sticks and stones for honing machines. Trains workers to tend machines. Compares color code on abrasive bricks (blocks) and color code on blueprints to ensure conformity to specifications. Inspects cut abrasive sticks for surface defects and measures sticks, using micrometer. Requisitions production and maintenance supplies. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

692.132-018 SUPERVISOR, SKI PRODUCTION (toy-sport equip.)
Supervises and coordinates activities of workers engaged in fabricating skis. Trains workers in operation of machines and equipment. Requisitions supplies. Examines skis to verify conformance to standards. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to department or operation supervised as Supervisor, Core Shop (toy-sport equip.); Supervisor, Finishing (toy-sport equip.); Supervisor, Sanding (toy-sport equip.).
GOE: 06.02.09 STRENGTH: L GED: R3 M2 L3 SVP: 6 DLU: 77

692.137-010 SUPERVISOR, PAINTING DEPARTMENT (pen & pencil)
Supervises and coordinates activities of workers in paint department of wooden pencil factory. Orders paint for pencils from laboratory and verifies color of paint against standard color samples. Inspects pencils for evenness of applied coating and surface irregularities, such as nicks or scratches, to determine machine adjustment. Notifies SET-UP MECHANIC (pen & pencil) of needed adjustments on paint machines. Performs other duties as described under SUPERVISOR (any industry) Master Title. May set up and adjust paint machines.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

692.137-014 SUPERVISOR I (protective dev.)
Supervises and coordinates activities of workers engaged in fabricating and packaging disposable diapers. Reviews production schedule to determine diaper quantities and sizes to be fabricated during shift. Confers with shift supervisor of previous shift regarding condition of machines and production materials available. Completes requisition forms to request materials needed for diaper fabrication or packaging. Directs workers engaged in fabrication, packaging, and moving packaged diapers to shipping area. Assigns new workers to experienced workers for training. Maintains daily production sheets and quality control checklist of diaper defects for company records. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.04.01 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 86

692.260-010 MACHINE SETTER (nonmet. min.)
Sets up machines to fabricate abrasive products, such as wheels, belts and rolls. Changes and adjusts feed mechanisms, dies, and stop guides according to specifications, using handtools. Starts machine to obtain sample and measures product to verify machine setup, using templates and gauges. Examines product for surface defects and to determine causes. Notifies workers to stop operation of machines that malfunction.
GOE: 06.01.02 STRENGTH: L GED: R3 M3 L3 SVP: 6 DLU: 77

692.360-010 ASSEMBLY-MACHINE-SET-UP MECHANIC (elec. equip.)
Sets up and maintains in operating adjustment machines and equipment, such as capacitor-pack-winding machine, electrode cutter, spot welders, name-plate stamping machine, and induction heating unit. Receives instructions from supervisor regarding size, number, and type of capacitors to be produced. Arranges work benches and assembly lines to facilitate production. Inserts material into feed mechanism of machines and measures distance between points to set stops on machine, using rule. Secures dogs on dials of counting mechanism to indicate stops during winding operations. Installs machine cutting tools and welding electrodes. Adjusts setscrews to obtain tension on holding devices, using handtools. Makes trial run to ensure proper setting and informs operator regarding production requirements and machine operation. Inspects products to locate malfunctions in machine operation.
GOE: 06.01.02 STRENGTH: M GED: R3 M3 L3 SVP: 5 DLU: 77

692.360-014 BRUSH-MACHINE SETTER (fabrication, nec)
Sets up and adjusts machines used to cut materials and fabricate brushes. Changes and adjusts cutting blades, drills, feed mechanisms, and machine speeds according to specifications, using handtools. Verifies adjustments, using fixed gauges. Inspects machines for malfunction and replaces worn or broken parts, using handtools. Lubricates moving parts, using oilcan. May be designated according to machine maintained as Brush-Fabricating-Machine Setter (fabrication, nec); Brush-Trimming-Machine Setter (fabrication, nec).
GOE: 06.01.02 STRENGTH: M GED: R3 M2 L3 SVP: 5 DLU: 77

692.360-018 FIRESETTER (elec. equip.; electron. comp.; inst. & app.)
Sets up, adjusts, and maintains machines to make flares and stems, seal stems to bulbs, or seal exhaust tubing to bulbs in manufacture of electron tubes and light bulbs. Installs and adjusts specified types and sizes of machine parts, such as cutter, revolving heads, bulb loader, tubing loader, burners, and etching stamp, using handtools. Lights burners and adjusts gas, air, oxygen and hydrogen valves to attain specified cone, color, and density of flames. Starts machine and deposits bulbs, tubing, or other glass parts into hoppers that automatically feed parts into heads of rotating turret, or inserts bulbs and glass parts into sockets of conveyor or molds of rotating turret. Operates machine through trial run and adjusts machine to ensure accuracy of setup. Observes processing operations and inspects sample items for conformance to specifications. Readjusts valves and machine parts to achieve specified standard of product. Maintains machines and replaces faulty parts, using handtools. May operate machine to manufacture production parts.
GOE: 06.01.03 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 89

692.362-010 SET-UP MECHANIC, CROWN ASSEMBLY MACHINE (any industry)
Operates battery of machines that insert and glue cork, paper, plastic or aluminum foil in bottlecap shells. Installs punches and dies in crown assembly machines and adjusts stroke of punches that force lining material into caps. Turns adjustment screws to regulate feed mechanism, rate of glue flow, and heating flame. Starts machine and examines sample caps to verify conformance to specifications. Observes operation of machine to detect and diagnose cause of faulty operations. Disassembles machine and replaces broken or worn parts, using handtools. May repair machine conveyor belts [BELT REPAIRER (any industry)].
GOE: 06.02.20 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

692.380-010 SET-UP MECHANIC (pen & pencil)
Sets up and adjusts battery of machines that paint, stamp, tip, or trim wooden pencils. Installs and adjusts feed mechanisms, guide rollers, tracks, machine fittings and attachments, according to size and shape of pencils, using handtools and gauges. Adjusts controls, such as setscrews and cams to synchronize machine mechanisms. Regulates thermostatic controls on heated units of machines. Disassembles machines and replaces worn or defective parts, such as circular knives, grinding wheels, and rollers. Sharpens machine punches and blades, using files and powered emery wheel. Starts machines to test adjustments and examines pencils for defects, such as burns, splintered ends, and nicks to determine needed readjustments. Replaces or repairs defective machine belts. May be designated according to type of machine setup as Set-Up Mechanic, Coating Machines (pen & pencil); Set-Up Mechanic, Heading Machines (pen & pencil); Set-Up Mechanic, Stamping Machines (pen & pencil).
GOE: 06.01.02 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

692.380-014 SET-UP MECHANIC, AUTOMATIC LINE (pen & pencil)
Sets up and adjusts battery of automatic machines that groove, sand, insert lead in slats, glue, and press slats together to form wooden pencils.
GOE: 06.01.02 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

692.382-010 BALLPOINT-PEN-ASSEMBLY-MACHINE OPERATOR (pen & pencil)
Sets up and operates automatic machine to assemble ballpoint pens. Installs and adjusts feed mechanisms, guide rollers, tracks, fittings, attachments, type, and die according to size and shape of pens and identifying data to be stamped on barrels, using handtools. Loads machine hoppers with parts, such as barrels, ferrules (metal tips), eraser caps, nose cones, and ink cartridges. Fills machine reservoirs with glue and solvent. Mounts roll of printing foil on machine spindle, using wrench.
GOE: 06.02.20 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

692.382-014 PLATE STACKER, MACHINE (elec. equip.) alternate titles: plate grouper, machine
Sets up and operates machine to stack (interleaf) separators and positive and negative plates into groups to form storage battery elements. Loads positive and negative plates in magazines of machine. Positions separators in magazine with ribbed side toward positive plate to facilitate passage of sediment. Moves lever to set electric solenoid counter for number of plates specified for group. Turns screws to adjust opening in feeding mechanism (stripper gates), according to plate sizes, using handtools. Starts machine to stack specified number of plates and separators alternately to form group. Clears plate and separator jams and adjusts machine to correct malfunction, using handtools. Places groups on conveyor leading to burning stand. Removes oxide dust from machine, using vacuum cleaner.
GOE: 06.02.20 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

692.462-010 CALENDER-ROLL PRESS OPERATOR (machinery mfg.)
Operates hydraulic press to build calender rolls used to make paper and textile imprinting and embossing machinery. Fits flange over end of shaft. Hoists shaft into vertical position on hydraulic press, using crane. Places rings composed of paper, cotton, wool, and corn husks over shaft until shaft is full. Fits top flange onto shaft. Adjusts valves on hydraulic press, and starts pump to build up pressure. Monitors clock and gauges to ensure that pressure is main-

tained. Records weight of material put on shaft, measures length of material being compressed, computes density, and stops press when specified density is reached. Maintains pressure for prescribed time. Releases pressure and adds material to shaft as necessary.
GOE: 06.02.09 STRENGTH: M GED: R3 M3 L2 SVP: 4 DLU: 77

692.482-010 CARBON-AND-GRAPHITE-BRUSH-MACHINE OPERATOR (elec. equip.)

Sets up and operates automatic machines to grind, mill, and secure shunt leads to carbon and graphite brushes. Reviews work orders to determine size, type, and number of brushes to be produced. Installs grinding wheels, cutting blades, and tamping tools on machine shafts and turns setscrews to adjust cutting and grinding mechanisms and width guides according to specifications, using handtools. Observes panelboard to detect and remove jammed brushes. Verifies dimensions of brushes, using micrometer, calipers, and ruler. May be designated according to machine operated as Concaving-Machine Operator (elec. equip.); Heading-Machine Operator (elec. equip.); Tamping-Machine Operator (elec. equip.).
GOE: 06.02.09 STRENGTH: M GED: R3 M3 L3 SVP: 4 DLU: 87

692.485-010 STRINGER-MACHINE TENDER (protective dev.)

Tends machine that winds copper wire around plastic cores to produce intrauterine birth control devices. Positions core in winding machine. Starts machine that winds wire around core to fabricate IUD of specified size. Removes IUD from machine and laces thin wire on bottom to facilitate removal by physician. Verifies size of IUD, using preset plug gauge and calipers. Verifies wire tension, using tensiometer, and turns nuts or setscrews to adjust tension. Removes empty spools of copper wire from machine and threads new spools on machine.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

692.662-010 DYNAMITE-PACKING-MACHINE OPERATOR (chemical)

Sets up and operates machine to pack dynamite into paper cartridge shells to form sticks. Installs and adjusts tamping sticks and nipple plates in packing machine according to diameter and length of cartridges to be packed, using nonsparking handtools. Starts machine, directs DYNAMITE-PACKING-MACHINE FEEDER (chemical) to fill powder hopper with dynamite, and fills shuttle board (cartridge forming block) with paper cartridge shells. Secures shuttle board in filling position on machine, and scoops dynamite from hopper into box above tamping sticks. Lifts shuttle board of filled cartridges from machine and tends crimping press to finish ends, or passes filled cartridges to DYNAMITE-CARTRIDGE CRIMPER (chemical).
GOE: 06.02.09 STRENGTH: M GED: R3 M2 L3 SVP: 5 DLU: 77

692.662-014 GELATIN-DYNAMITE-PACKING OPERATOR (chemical)

Operates stuffing machine to fill paper dynamite cartridges with gelatin-type dynamite. Installs and adjusts extruding auger and nozzle according to diameter and length of cartridges to be packed. Starts machine and holds end of cartridge to nozzle until filled. Taps bottom of cartridge on bench to settle top level of dynamite, and stands it in frame to be crimped.
GOE: 06.02.09 STRENGTH: M GED: R3 M2 L3 SVP: 5 DLU: 77

692.662-018 WAFER-MACHINE OPERATOR (elec. equip.)

Operates machines to fabricate wafer-type (flat) dry cells. Loads feeding mechanism with materials, such as plastic film, paper, zinc and carbon plates, and silver wax. Starts machine and equipment that cuts piece of plastic film for base of cell, positions and presses zinc plate on plastic film, cuts and places paper cover on zinc plate, drops core (black mix) on plastic film, positions carbon plate on core, deposits sealing compound on carbon plate, covers plate with plastic film, tamps and seals cell and trims edges, and applies silver wax to negative and positive ends. Observes finished cells conveyed past mirror to detect defects. Adjusts machine and equipment for size changes or to correct malfunctions, such as faulty tinning, sealing, and trimming, using handtools. Directs workers extruding black mix cores and feeding cores to machine.
GOE: 06.02.09 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

692.662-022 WIRE-WRAPPING-MACHINE OPERATOR (office machines)

Operates automatic wire-wrapping machine to wire panel and plugboard type subassemblies in manufacture of machines, such as computers and punched-card office machines: Reads work orders, wiring diagrams, and blueprints to determine wiring specifications, number of units to be wired, and specified paper tape or punched card deck to use for machine control. Positions specified *paper tape* on spindles or places punched card deck in feed hopper. Mounts unwired panel or plugboard in holding fixture and positions fixture in machine, using wrenches and clamps. Pushes buttons and switches to operate wire-wrapping machine that automatically routes, cuts, and wraps ends of wires around terminal posts to install wiring. Monitors indicator lights, spools of wire, and machine operation to detect machine malfunctions. Notifies supervisor of malfunctions or need for change in machine setup.
GOE: 06.02.09 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 77

692.665-010 BRAIDING-MACHINE TENDER (rubber goods)

Tends battery of machines that braid and cement fabric cord or wire around rubber hose for reinforcement. Threads machine with specified spools of cord, rubber insulation, or wire stock. Notifies BRAIDER SETTER (rubber goods) when change in pitch gear is required. Pulls hose from reel and threads it into braiding machine. Adjusts controls to maintain uniform tension on cord or wire stock. Starts flow of rubber cement into machine and starts machine. Observes operation for defects, such as broken cords and loose braiding. Ties broken cords. Places braided hose on stock rack or coils it in box. May rewind partial spools of cord to make full spool, using electric windup spindle. May tend machine that knits yarn onto rubber hose and be designated Knitting-Machine Tender (rubber goods). May tend one or more looms that weave yarn and wire jacket around hose and be designated Loom Operator (rubber goods).
GOE: 06.04.09 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

692.665-014 PUNCH-PRESS OPERATOR (fabrication, nec)

Tends press that automatically punches out blocks of floor tile from sheets of vinyl and asphalt or asbestos material. Starts machine and observes sheet for uniformity of color pattern. Pushes button to release punching ram, allowing defective sections of sheet to pass through and onto scrap conveyor. Feels material to determine its flexibility as it enters machine and notifies CALENDER OPERATOR (fabrication, nec) to adjust temperature of rolls. Stops machine when jams occur and removes damaged floor tile to clear punch press.
GOE: 06.04.09 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 77

692.665-018 DRY-CELL-ASSEMBLY-MACHINE TENDER (elec. equip.)

Tends variety of machines that automatically assemble dry-cell components. Dumps parts and materials, such as top assemblies and electrolyte gel, into hoppers of assembly machines. Places cans (containers) that hold critical parts during assembly operations onto conveyor. Starts machines and conveyor system. Observes operation and movement of units at various stages of assembly to ensure units are assembled according to specifications. Adjusts machines as necessary to correct malfunctions when jam-ups occur. Inspects finished cells to detect defects and missing parts.
GOE: 06.04.20 STRENGTH: H GED: R3 M2 L3 SVP: 4 DLU: 86

692.682-010 ANKLE-PATCH MOLDER (boot & shoe)

Operates electrically heated machine to mold plastic trademark ankle patch onto quarters for sneakers. Pours liquid plastic into feeder tank. Lifts plate cover, equipped with two die openings for simultaneous molding of right and left quarters. Slides dies into holders, tightens screws and replaces plate, using wrench. Starts machine and presses button to blow air through sprue holes in dies to clear openings. Brushes silicone on dies to prevent sticking. Positions right and left quarters over die openings on plate with edges against guide pins. Presses buttons to lower rams onto quarters, inject plastic to fill dies, and mold patches. Examines molded pieces for defects, such as insufficient plastic, lack of adhesion to cloth, discoloration, or unclear imprint, and rejects defective pieces. Cleans adhering plastic from die grooves and sprue holes, using metal pick. Adjusts rheostat to vary heat setting, according to size of die and to correct defects.
GOE: 06.02.02 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 77

692.682-014 BEAD-FORMING-MACHINE OPERATOR (rubber tire)

Sets up and operates machine to coat strands of steel wire with rubber to form beads for use in making pneumatic tires. Installs bead-forming wheel, dies, and baffles, and turns setscrews to adjust guides, spring tension, bead cutter arm, and bead forming wheel cycle according to specifications, using wrenches and screwdriver. Threads specified number of wires from spools through tuber die for rubber coating and into machine for forming into bead layers. Starts machine to feed wire through die and onto forming wheel. Cuts wire to remove bead layer from forming wheel when cycle is complete. Tapes cut end to hold bead together for wrapping or places bead in wrapping machine.
GOE: 06.02.09 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

692.682-018 BORING-AND-FILLING-MACHINE OPERATOR (fabrication, nec)

Sets up and operates boring-and-filling machine to fabricate brushes. Installs specified ratchet wheel, cams, stapling head, and drill in machine, using handtools. Mounts roll of wire on spindle and threads wire through stapling mechanism. Fills magazine with material, such as horsehair, nylon, wire, plastic filaments, or vegetable fibers, according to type of brush being made. Positions and clamps wooden or composition brush base in jig under drill, and clamps predrilled base in jig under filling-and-stapling device. Starts machine which simultaneously drills holes in blank base, and inserts and staples brush material in holes of drilled base. Places finished brush on storage rack. May be designated according to type of brush filled as Hair-Brush-Boring-And-Filling-Machine Operator (fabrication, nec); Tooth-Brush-Boring-And-Filling-Machine Operator (fabrication, nec); Wire-Brush-Boring-And-Filling-Machine Operator (fabrication, nec).
GOE: 06.02.09 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

692.682-022 BROOM STITCHER (fabrication, nec)

Operates machine to stitch twine through broom fibers to strengthen and shape body of broom. Inserts and tightens jaws in vise that holds broom for stitching. Attaches ratchet and turns lever to set number, rows, and length of stitches. Inserts and clamps brush end of broom in vise. Cuts specified length of twine for each course, using knife. Wraps twine around broom and pulls one end between fibers, using hook, and threads other end through needle. Pushes vise into stitcher and starts machine to stitch fibers. May buckle leather strap around broom to hold it during stitching.
GOE: 06.02.09 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

692.682-026 CANDLE-EXTRUSION-MACHINE OPERATOR (fabrication, nec)

Sets up and operates machine to extrude sheets of candle wax or candles. Reviews instructions to determine type product to be produced. Installs speci-

fied die plates in machine, using handtools. Threads wick material through machine guides. Turns valve and dials to transfer wax to machine and to regulate speed, pressure, and temperature of machine. Starts machine that feeds wax and wick through dies to produce candles of specified dimensions or forces wax through dies to produce sheet of candle wax. Adjusts pressure controls to obtain specified dimensions.
GOE: 06.02.18 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 77

692.682-030 COREMAKING-MACHINE OPERATOR (elec. equip.)
Operates machine to mold core and insert carbon rod in core to form cathode of dry cell batteries: Installs extruder bushings and mold on machine, using handtools. Places carbon rods in trough of feeding mechanism. Fills machine hopper with paste (black mix), using shovel. Starts machine that rams paste into mold, drives bar into paste to form hole for carbon rod, inserts rod in paste, tamps paste to compress paste around rod, and ejects finished core onto conveyor belt. Inspects core for defects and off-centered rods. Adjusts rod-centering device and force of impact and length of stroke of ram, using handtools.
GOE: 06.02.20 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

692.682-034 ELECTRODE TURNER-AND-FINISHER (elec. equip.)
Sets up and operates machines to perform machining operation, such as boring, threading, and turning on carbon electrodes according to production specifications: Installs specified drilling and threading tools in holders, using handtools. Lifts and centers electrode in chuck of machine, using hoist. Starts machine that automatically drills and threads electrode ends. Positions workpiece in turning lathe. Starts machine, and sets feed and travel controls to machine electrode to specified diameter and surface finish. Verifies conformance of machined workpiece to specifications, using calipers.
GOE: 06.02.09 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

692.682-038 FILLING-AND-STAPLING-MACHINE OPERATOR (fabrication, nec)
Operates machine to insert and staple brush-filling material into prebored holes of brush head: Places spool of wire on machine spindle and threads wire into staple machine. Lays material in feeder box. Turns manual-control wheel to test feeding and staple-forming operation. Twists key to clamp brush head in holding block. Turns handwheel and screw adjustment to adjust tilt and height of machine table and positions brush head under filling spout. Depresses pedal to start machine and moves brush head under filling spout to ensure that brush-filling material is inserted and stapled in brush head holes. Readjusts table to accommodate varying angles of holes in brush head.
GOE: 06.02.09 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

692.682-042 GAUGE OPERATOR (fabrication, nec)
Operates machine to cut floor covering sheets into tile: Installs specified cutting die, and adjusts feed stroke, air pressure, and suction pick-up on machine, using handtools. Starts machine and feeds floor covering sheets into machine. Removes tiles from machine and transfers tiles to stock area, using handtruck.
GOE: 06.02.09 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

692.682-046 PAINT-ROLLER-COVER-MACHINE SETTER (fabrication, nec)
Sets up and operates variety of machines used to fabricate paint roller covers: Changes and adjusts jigs and fixtures, cutters, and chucks on machines, such as sewing, cutting, and reversing machines, using handtools. Fills machine reservoirs with glue and adjusts mechanisms that control flow of glue into machines. Inspects machines to detect malfunctions and adjusts machines. Replaces worn or damaged parts, using handtools.
GOE: 06.02.20 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

692.682-050 POWER-DRIVEN-BRUSH MAKER (fabrication, nec)
Sets up and operates filling machine which inserts and fastens brush wire in metal hub to fabricate power-driven circular wire brushes: Inserts specified metal hub in machine holding fixture and tightens bolts using hand wrench. Selects coil of brush wire according to chart, mounts it on feeding reel, and threads end through machine feed rollers. Turns screws to adjust stroke of feeding arms that feed specified amounts of brush wire into machine cutting blade which cuts wire to length. Fills magazine feed with tying wires of specified length. Starts machine which inserts brush wire into hub and ties into place with wire. Notifies supervisor of machine malfunction.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

692.682-054 STACKING-MACHINE OPERATOR I (any industry) alternate titles: lamination stacker, machine; plate stacker, machine
Operates machine to stack plates or sheets of material, such as metal or plastic, to assemble laminated products, such as rotor cores and storage battery elements or to form bundles for shipment: Places specified material into one or more feed magazines or holding devices. Moves lever to set automatic feed for number of items specified for stack. Turns screws to adjust opening in feed mechanism to size of item, using measuring instruments or built-in scale and handtools. Starts machine that automatically measures or counts and stacks specified number of pieces in desired arrangement. Clears jams and adjusts machine to correct malfunction, using handtools. Removes finished stack from machine and places stack into basket or into magazine of machine performing subsequent operation. May insert spacers between bundles to form continuous stack.
GOE: 06.02.20 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 77

692.682-058 STRAPPING-MACHINE OPERATOR (wood, container) alternate titles: box strapper; strapper
Operates machine to wind reinforcing metal or plastic bands around ends of boxes or cartons: Places spool of strapping on machine and threads end of strap through jaws of clamp. Adjusts jaws to attain specified tension on strap. Tightens clamp down on box or carton placed in it. Nails end of strap to box. Starts machine that automatically winds strap around box or carton. Nails strap to box, and cuts strap with snips. Releases pressure of clamp on box or carton and removes it from machine.
GOE: 06.04.38 STRENGTH: H GED: R3 M1 L2 SVP: 4 DLU: 77

692.682-062 STRING-WINDING-MACHINE OPERATOR (musical inst.)
Operates lathe-type winding machine to wind wire or other materials over core of wire, nylon, or gut to make musical instrument strings: Places looped end of core over one end of machine and attaches core to other end of machine. Places spool of winding wire or nylon on spool holder and threads end through loop on core. Starts machine and guides covering material along rotating core. Stops machine and cuts covering material with shears or wirecutter. Clips one end of core with wirecutter and removes it from machine. May wind more than one strand of wire or nylon over core. May wind colored silk or rayon on string ends for trim, identification, or protection. May specialize in winding bass strings and be designated Bass-String Winder (musical inst.).
GOE: 06.02.09 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

692.682-066 SWEEPER-BRUSH MAKER, MACHINE (fabrication, nec) alternate titles: broom-machine operator
Operates machine to bind fibers on cylindrical core to form brushes used on street sweeping machines: Mounts brush core in machine, turns crank to wind specified amount of cable on holding spool, and staples end of cable to core, using hammer. Sets spool brake to maintain tension between spool and core, using wrench. Aligns carriage wheel guide in spiral groove of core and adjusts material guides and conveyor to feed material onto core according to size of brush, using wrenches. Spreads precut fibers on conveyor. Starts machine that winds cable to bind fibers onto revolving core. Staples or bolts cable to core at completion of winding process. Repairs sweeper brush cores, using handtools.
GOE: 06.02.09 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 77

692.682-070 TWISTING-MACHINE OPERATOR (fabrication, nec)
Sets up and operates twisting machine to twist wire around brush filling-material to make brushes: Fastens specified chuck in machine to accommodate diameter of wire. Turns screws to set stops on machine bed at specified distance from chuck to stop twisting action when wire is twisted to required length, using handtools and rule. Selects specified size of precut looped wire and places on machine bed with looped end over machine hitching post. Inserts straight ends of wire into machine chuck and tightens with hand wrench. Weighs out specified amount of horsehair, nylon, vegetable fibers or other brush material on scale. Distributes material evenly in brush area between ends of wire. Moves lever to start machine that twists wire around brush material. Stacks finished brush in storage bin.
GOE: 06.02.20 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

692.685-010 ABRASIVE-BAND WINDER (nonmet. min.)
Tends electrically powered or hand-cranked band-winding machine that joins and shapes precut backing strip with abrasive-coated strip by spirally winding strips on mandrel to produce grinding and polishing tubes or cones: Applies adhesive to backing strip by handbrush or by automatic applicator attached to winding machine. Clips ends of backing strip and abrasive strip to mandrel. Depresses foot switch or turns handcrank to revolve mandrel. Guides strips by hand and depresses pressure roller pedal to feed strips on mandrel. Unclips and slides completed roll from mandrel and places roll in container.
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

692.685-014 ADHESIVE-BANDAGE-MACHINE OPERATOR (protective dev.)
Tends machine that automatically makes adhesive bandages from cloth and plastic material: Positions specified rolls of materials on machine spindles and locks them in place with plates and setscrews to prevent unrolling. Threads materials through rollers in prescribed sequence. Starts machine that cuts materials to required length, affixes gauze to cloth or plastic tape, fastens crinoline strips to ends, seals completed bandage in paper wrapper, and deposits it on conveyor belt or in bin for subsequent packing. Observes machine during operations to detect jamming, twisted materials, or malfunctions and makes minor adjustments to correct faults.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

692.685-018 AIR-HOLE DRILLER (fabrication, nec)
Tends machine that drills airhole in shank of smoking pipe to connect shank hole to bowl chamber: Clamps smoking pipe bowl in jaws of holding device and starts machine. Pulls handle of drill that automatically releases drilling tool into center of shank to bore hole through shank into base of bowl chamber. Removes bowl from clamp after drilling tool automatically stops and holds shank against sanding wheel to face shank for stem fitting.
GOE: 06.04.03 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

692.685-022 BEAD PREPARER (rubber goods)
Tends machine that wraps and cements rubberized fabric tape on bead wire used to reinforce airplane deicers: Loads specified reels of bead wire and rub-

berized fabric tape on *letoff racks*, and threads wire and tape through machine. Adjusts feed rollers and tension wheels according to specifications, using handtools. Pours rubber cement and powdered soapstone in dispensers and starts machine. Examines and feels bead wire for loose wrap. Cuts bead wire when windup reel is filled, using pliers.
GOE: 06.04.07 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

692.685-026 BRASSIERE-SLIDE-MAKING-MACHINE TENDER, AUTOMATIC (garment)
Tends automatic machine that loops tape through buckles and cuts and fuses tape ends together to fabricate brassiere slides: Fills machine hoppers with plastic buckles. Mounts rolls of tape on brackets and threads machine. Starts machine and observes operation for malfunctions. Reports malfunctions to supervisory personnel. Removes slides from machine following fabrication.
GOE: 06.04.05 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

692.685-030 BROOM BUNDLER (fabrication, nec)
Tends machine that binds bundles of brooms for shipment. Stacks specified number of brooms under ram of binding machine. Depresses pedal that lowers ram to compact broom heads and insert twine through heads. Removes brooms from machine and ties twine around heads and handles to form bundle.
GOE: 06.04.38 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 77

692.685-034 BUCKLE-FRAME SHAPER (button & notion) alternate titles: chop-and-frame operator
Tends automatic machine that cuts and shapes wire or fabric-covered wire to form bars, prongs, and buckle frames: Adjusts forming head according to product specified, using handtools. Positions reel of wire on machine spindle and draws end of wire through guides to forming head. Inserts wire against stop and depresses treadle switch to start machine. Observes automatic feeding of wire into machine or holds switch down with foot and advances wire against stop as specified item is cut, formed, and ejected. May pull levers of hand-bending machine to shape sample items.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

692.685-038 CANDLE MOLDER, MACHINE (fabrication, nec)
Tends cast-molding machine that forms candles: Fills machine with liquid wax and turns valve to force steam into jackets to heat molds. Turns valve to transfer wax to molds. Scrapes *flash* from molds, using knife, and depresses pedal to eject candles into trays. Cuts candlewick ends to specified length, using knife. May move lever to force needles, threaded with wicks, through candles or to insert pins into candles, leaving hole for later insertion of wick. May imbed decorative bases in butt ends of candles during cooling. May insert wax cores in molds for application of final wax coating.
GOE: 06.04.19 STRENGTH: M GED: R2 M1 L2 SVP: 4 DLU: 77

692.685-042 CAPPING-MACHINE OPERATOR (elec. equip.) alternate titles: washer-and-capper-machine operator
Tends machine that inserts and tamps washers and affixes cover to dry-cell containers (cans). Inserts washers and dumps caps into feeding mechanisms. Starts machine and observes mirror to inspect units passing on conveyor to ensure washers are at prescribed depth. Inspects capped cells for defects and off-center carbon rods. Adjusts machine for changes in size of cans or to correct malfunction, using handtools. May tend machine equipped with device that cuts (punches) paper washers from tape, inserts washer, and affixes cap to can.
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

692.685-046 CELL TUBER, MACHINE (elec. equip.)
Tends machines that wrap dry cells in plasticized material and insert and seal cells in paper tubes or metal sleeves, using any of following methods: (1) Installs roll of plastic film in wrapping machine equipped with sealing unit. Threads plastic film through feeding device to wrapping mechanism. Starts machine and feeds cells to machine. (2) Tends tubing machine, fed by turntables, that inserts metal bottom and dry cell into paper tube and crimps tube over bottom. (3) Tends sleeving machine, fed by turntable, that inserts tubed cell in metal sleeve and positions and crimps metal cap on sleeve. Inspects units for faulty crimping or sealing. Observes machine for malfunctions and makes adjustments, such as retiming machine, using handtools. May be designated according to machine tended as Sleeve-Machine Tender (elec. equip.); Tubing-Machine Tender (elec. equip.); Wrapping-Machine Tender (elec. equip.).
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

692.685-050 CEMENTER, MACHINE (boot & shoe)
Tends machines that apply margin of rubber or latex cement to rubberized fabric parts used in assembling rubber footwear: Starts machine, picks up uncemented part from hook, *board*, tray, frame, or stack and applies cement, using any of following methods: (1) Draws edge of workpiece between preset revolving rollers, exercising care to obtain even coating and prevent part from being misshapen. (2) Depresses pedal to bring rollers together on material passing between rollers. (3) Holds top of *skirtlike upper* along bottom edge between rollers to apply margin of cement all around for subsequent bonding to shoe bottom. Turns setscrews to adjust distances between pickup, wiper, and applicator rollers and blades to regulate amount of cement deposited. Places processed parts on conveyor belt or in hooks, frames, or stacks. May stack one part in another before cementing [FITTER, PLACER (rubber goods) 753.687-022].
GOE: 06.04.05 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

692.685-054 COATING-MACHINE OPERATOR (pen & pencil) alternate titles: painting-machine operator
Tends machines that apply lacquer, paint, or stain to pencils: Pours coating fluid into reservoir of machine. Places pencils on feed conveyor or in hopper of machine. Starts machine that presses pencils through openings in sides of reservoir to coat them with fluid. Places coated pencils on conveyor that carries them through heated drying unit and drops them into container. Removes coated pencils from container and examines them for evenness of coating. May tend pair of machines that apply successive coats of paint or lacquer to pencils.
GOE: 06.04.21 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 77

692.685-058 CORE SHAPER (toy-sport equip.)
Tends machine that shapes sides or cambers (arches) of wooden or foam core blanks or plastic base strips used in ski manufacturing: Installs specified cutter heads, templates, and guides according to work order, using handtools. Starts machine that shapes core blanks or plastic base strips, following template contours. May be designated according to operation performed as Core Shaper, Sides (toy-sport equip.); Core Shaper, Top (toy-sport equip.).
GOE: 06.04.09 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 77

692.685-062 CROWN-ASSEMBLY-MACHINE OPERATOR (any industry) alternate titles: cap-lining-machine operator; inserting-press operator; lining-machine tender; spot-machine operator
Tends machine that inserts and glues cork, paper, plastic, or aluminum foil in bottlecap shells: Pours glue into pot. Turns valves to adjust gas flame for heating glue and to regulate flow of glue into machine. Mounts roll of lining material on machine spindle and starts machine. Observes discs and shells flowing from hopper into machine and pries jammed discs or shells loose, using poker. Examines glued shells on conveyor and rejects bent shells and officers or chipped discs. Pries glued disc from sample shell, using pick, observes quantity and texture of glue on sample, and adjusts valves to maintain specified temperature and rate of flow of glue.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

692.685-066 DEICER-ELEMENT WINDER, MACHINE (rubber goods)
Tends machine that winds wire onto drum to form electric heating elements for airplane deicers: Aligns and tapes precut sheet of fabric on drum of machine. Determines location of element parts on fabric and length of element wires, using template. Tapes braided wire connections and solders strips to fabric in specified locations. Brushes rubber cement on fabric, and threads wire into machine. Turns dials to adjust machine that crimps and spaces element wires during winding, and starts machine. Cuts element wires to specified length and tapes ends of wires to fabric. Verifies length and spacing of element wires with rule. Counts number of wires specified for sections of element, and pulls off excess wires. Solders parts, such as *bus bars* and braided connections to element wires, using soldering iron. Cuts fabric, containing formed element, from drum of machine, using scissors, and lays element on stockrack.
GOE: 06.04.20 STRENGTH: L GED: R2 M2 L2 SVP: 4 DLU: 77

692.685-070 DESIGN INSERTER (plastic prod.)
Tends equipment that inlays glass, metal, and plastic figures into pocket knives, money clips, key cases, gearshift balls, and other products: Places product in gas furnace to soften it. Removes product from furnace, using tongs. Places article on machine and depresses pedal to lower ram that indents surface of article. Inserts figure into surface indentation of article by hand or by machine. May tend machine that stamps design on face of article. May be designated according to kind of substance inlaid as INLAYER, SILVER (plastic prod.).
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

692.685-074 DIELECTRIC-PRESS OPERATOR (auto. mfg.)
Tends dielectric press that bonds together and embosses materials, such as vinyl and fiber panels used for decorating motor vehicle interiors: Places layers of fiber panel, packing, and vinyl in tray on table of press. Pushes tray under ram of press. Pushes button to lower ram and start dielectric action that bonds vinyl and fiber panels. Pulls tray from press at end of cycle, and removes assembled panel. May tend machine that automatically feeds tray to and from press bed.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 90

692.685-078 DYNAMITE-CARTRIDGE CRIMPER (chemical)
Tends crimping presses that crimp and finish ends of filled dynamite cartridges: Installs specified crimping dies and adjusts table as directed, according to diameter and length of cartridges being crimped. Places single cartridges or shuttle (forming block) of cartridges on table under dies, starts machine, and depresses pedal to crimp cartridges. Stacks finished cartridges in case-house buggy (cart).
GOE: 06.02.04 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

692.685-082 FILM SPOOLER (photo. appar.)
Tends automatic machine that winds, cuts and prints lines on unexposed film, loads film into cartridges, and seals and packages cartridges for shipment. Loads automatic units with film, labels, backing paper, and cartridges. Observes operations for jams and malfunctions. Adjusts mechanisms, using handtools.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

692.685-086 FOILING-MACHINE OPERATOR (ordnance)
Tends automatic machine that punches out disks of waterproof paper and presses them over open end of loaded primer cups to seal out moisture: Positions specially holed plate containing loaded primer cups in holding fixture of feed table and starts machine. Removes plate when machine automatically stops. May examine sealed primer cups and remove defective ones from plate.

using fingers, metal pick, or wax-tipped stick. May load machine with rolls of paper tape.
GOE: 06.04.09 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

692.685-090 GARLAND-MACHINE OPERATOR (fabrication, nec)
Tends machine that binds evergreen and conifer twigs with wire to make garlands and wreath stock. Places spool of wire on machine feed spindle and threads wire between crimping gears and through guides to wrapping chamber. Adjusts meter of measuring device that rings bell as specified lengths of garland are formed. Starts machine, inserts ends of twigs into wrapping chamber, and depresses pedal to actuate mechanism that binds twigs into continuous strand of garland. Cuts garland to specified length with wire cutters and places them on table or conveyor. May bend lengths of garland into circle, twist wire ends together, and tie ribbon bow over wire joint to form wreaths. When concerned only with making wreaths, is designated Wreath-Machine Operator (fabrication, nec).
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

692.685-094 GLUE-MACHINE OPERATOR (pen & pencil) alternate titles: lead-laying-and-gluing-machine operator
Tends machine that places pencil leads in grooves of wooden slats and cements slats together to form pencil blanks: Places pencil leads and wooden slats in feed hoppers of machine. Fills reservoirs of machine with cement. Starts machine that automatically applies cement to grooved surface of slats, places lead in grooves and joins cemented slats to form blank. Stops machine and removes jammed slats or leads.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

692.685-098 GLUING-MACHINE OPERATOR (rubber goods)
Tends machine that spreads adhesive onto foam rubber pillow sections: Presses section against revolving disk that applies cement to section. Places coated sections on conveyor passing beneath drying lamps for joining together by other workers. Fills adhesive reservoir as necessary.
GOE: 06.04.21 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

692.685-102 KICK-PRESS OPERATOR (protective dev.)
Tends kick press that joins snap fasteners to fabric for use in manufacture of gas mask carriers: Inserts upper half of fastener in plunger of machine and positions lower half on anvil. Places reinforcement patch and fabric over lower half of fastener, guided by pinhole in fabric. Depresses pedal to lower plunger and join fastener parts to fabric.
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

692.685-106 LAMINATING-MACHINE OPERATOR (furniture)
Tends machine that cements precut plastic covering material to plywood panels to form furniture parts, such as tops for cabinets and tables: Inserts plywood panel between rollers of cement-spreading machine to coat both sides of panel with cement. Positions plastic covering material on sides of panel and places covered panel on bed of press. Starts machine that presses covered panel with heated ram for prescribed time to seal plastic covering material onto plywood panel. May tend automatic machine that presses veneer to panels and trims excess edges.
GOE: 06.04.09 STRENGTH: M GED: R3 M1 L2 SVP: 3 DLU: 77

692.685-110 LAMP-SHADE JOINER (fabrication, nec) alternate titles: paster
Tends machine that bonds edges of precut parchment together to form lampshades. Depresses pedal to raise top presser bar of machine and positions edge of parchment on lower presser bar. Brushes cement on edge of parchment. Bends parchment in circle and positions opposite edge of parchment on top of cemented edge. Releases pedal to lower and lock top presser bar onto parchment to bond edges.
GOE: 06.04.04 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

692.685-114 LEVEL-GLASS-VIAL FILLER (cutlery-hrdwr.)
Tends equipment that fills glass vials with alcohol or ether solution and leaves air bubble to form vials used in tools and instruments to determine levelness: Fills rack with vial-filled cups and lowers rack into tank of solution. Lowers weighted glass cover and moves lever to turn on air pressure. Sets timer for designated time cycle. Shuts off air and raises cover when bell rings. Compares bubbles in random sampling of filled vials with master vial for conformance to size. Refills vials or lets vials stand to evaporate excess fluid to regulate size of bubble. Pours solution from jug into tank to replace used fluid.
GOE: 06.04.36 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

692.685-118 LIGHT-BULB ASSEMBLER (light. fix.)
Tends variety of machines that assemble electric light bulbs, performing any combination of following tasks: Feeds parts and materials, such as lead and fuse wires, glass tubing, flares, and getter fluid, into machine that automatically shapes and combines them to make mounts (units which furnish light when electricity flows through them). Observes completed mounts for faulty combination of parts and assists mechanic in locating defect in machine. Records number of damaged mounts. Examines machine conveyors for jammed or defective parts when signal indicates stoppage. Removes jammed or defective parts, using tweezers. Feeds glass bulbs and mounts into machine that inserts and seals mount in bulb. Inserts and arranges wire protruding through neck of bulb in cement-filled base as bulb passes on conveyor to basing machine. Observes basing operation as machine carries bulb through series of burners which bake cement, past knives which cut off excess wires, and soldering irons which solder contact points at bottom and side of base. Inspects completed lamp for identification markings, freedom from dirt and cracks, and to determine condition of filament, using tinted glass. Removes excess solder from base of lamp, using knife. Places defective lamps in salvage bin. Puts lamp in corrugated paper case and packs lamp in carton. Inserts slip identifying contents in carton and places carton on conveyor. Feeds completed stem into annealer to remove glass strains resulting from stem making. Manually places bulb over mount prior to sealing. Removes air impurities from bulb. Secures bases to bulbs in oven where cement is automatically applied and dried. Secures bases to ends of fluorescent light tubes. May be designated according to operation performed as Baser (light. fix.); Sealer (light. fix.). May tend machine that cuts off part of light bulb necks and be designated Neck Cutter (light. fix.).
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

692.685-122 MAT-MAKING MACHINE TENDER (furniture)
Tends machine that automatically weaves wire and cord or burlap to provide firmness between padding and coil springs of mattresses and upholstered furniture: Mounts roll of burlap on machine rack and threads end between machine rollers. Places cone of wire and spools of twisted paper cord on reels, and inserts wire and cord ends into machine. Starts machine that automatically makes mats. Spreads emerging fabric over table and cuts fabric into mats of specified length, using cutting pliers.
GOE: 06.04.09 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 77

692.685-126 MOUNTER II (light. fix.)
Tends machines that mount glass beads on lead wires, wind filament coils and clamp coils to lead wires of bead mounts used in incandescent lamps: Fills machine hoppers with glass beads and observes machines for malfunctioning. Inserts completed bead mounts in glass bulbs. Notifies maintenance crew of machine malfunctioning and to replace exhausted wire reels.
GOE: 06.04.09 STRENGTH: L GED: R1 M1 L1 SVP: 3 DLU: 77

692.685-130 PINKING-MACHINE OPERATOR (button & notion)
Tends automatic machine that cuts continuous chain of slide fasteners (zippers) into individual units of preset length with serrated tape ends: Threads end of chain from supply carton through guides and feeding mechanism to cutting die. Starts machine and picks cut piece from discharge rail. Examines zippers for ragged pinking, short or long tape ends, stops, malformed filament, and sewing defects. Stacks pieces in machine tray and verifies length against previously cut piece. Pulls chain from carton by hand to prevent jamming of machine.
GOE: 06.04.09 STRENGTH: S GED: R2 M1 L2 SVP: 2 DLU: 77

692.685-134 POULTICE-MACHINE OPERATOR (pharmaceut.)
Tends machine that automatically inserts chemical granules between two continuous layers of cloth and cuts and sews edges to make poultices: Places spools of thread and rolls of cloth on spindle of machine. Threads needles using pliers. Inserts end of cloth into conveyor guide. Dumps or scoops granules into machine hopper and starts machine. Examines poultices for uniformity of stitching, and feels them for specified thickness and firmness and even distribution of granules. Adjusts stroke in insertion rod to correct irregularities in filling to prevent excessive looseness or tautness of product.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L2 SVP: 4 DLU: 77

692.685-138 PROTECTOR-PLATE ATTACHER (cutlery-hrdwr.) alternate titles: strike-plate attacher
Tends machine that attaches protective metal strike-plates to wooden segments of assembled folding rule: Mounts reels of metal strip on machine spindles and threads strip ends through feed mechanism. Holds unfolded rule against guides and starts machine that cuts off, forms, and fastens pronged protector-plate to each segment of rule. Removes spilled and jammed plates from mechanisms, using screwdriver.
GOE: 06.04.09 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

692.685-142 RIBBON INKER (pen & pencil) alternate titles: inking-machine tender
Tends machine that impregnates ribbons with ink to make ribbons for machines, such as typewriters, adding and addressograph machines, and cash registers: Fills ink pan of machine and loads machine roll or spool of silk, cotton, or nylon ribbon. Starts machine to rotate rollers that dip into ink pan and press ink on ribbon. Adjusts speed of machine and amount of ink to be pressed on ribbon according to type of ribbon to be made. Inspects inked ribbons for imperfections. May shape inner curve of divider that separates inks of bicolored ribbons, using file and emery cloth, until curve matches that of inking rollers. May adjust machine guides according to width of ribbon to be inked.
GOE: 06.04.16 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

692.685-146 SADDLE-AND-SIDE WIRE STITCHER (print. & pub.) alternate titles: stitcher operator
Tends wire-stitching machine equipped with adjustable table that fastens together pages of pamphlets or magazines: Loads machine with spool of wire and threads wire through machine. Sets table flat for side stitching or tent-shaped for saddle (back) stitching. Positions materials under head of machine and starts machine. Adjusts machine table to accommodate size of materials being stitched.
GOE: 06.04.04 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

692.685-150 SANITARY-NAPKIN-MACHINE TENDER (protective dev.)
Tends automatic machine that forms sanitary napkins: Threads nonwoven fabric, plastic inserts, paper, and cotton filling through feed rollers of machine

in prescribed sequence. Fills glue reservoirs. Loads hot-melt pellets in heater unit and sets temperature and flow controls to melt pellets and saturate napkin to impart body to napkin. Starts machine. Examines napkins for defects and segregates damaged items for disposal. Packs finished pads into cartons and places them on conveyor for sealing.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

692.685-154 SEAL-EXTRUSION OPERATOR (elec. equip.)
Tends extrusion press that fills grooves of storage battery covers with sealing compound: Attaches cylinder of sealing compound to press or fills drum of press with compound, using bucket. Depresses pedal to extrude sealing compound. Holds and moves inverted cover under vent of press to fill grooves to specified level. Places filled covers on truck. Turns valve to circulate cleaning solution through machine or cleans press, using brush and water.
GOE: 06.04.36 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

692.685-158 SEALER, DRY CELL (elec. equip.) alternate titles: sealer operator
Tends preheater, seal dispenser (sealer), and flamer that seals dry cells: Installs sprocket of prescribed size according to diameter of cell. Turns setscrews to adjust sealer and flamer according to height of cells, using handtools.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

692.685-162 SEALING-MACHINE OPERATOR (light. fix.)
Tends automatic machine that seals assembly of filament and glass supports (mount) into glass bulb: Fits mount into glass bulb and places assembly in holding sockets of circular disk mounted on vertical shaft. Starts machine that brings assembly past gas flames to weld mount to bulb and cut off excess glass from stem.
GOE: 06.04.19 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

692.685-166 SEPARATOR OPERATOR (button & notion)
Tends battery of machines that separate polished buttons from polishing media and sort buttons according to size: Unloads buttons from polishing barrel into container and transports container to separating machine, using handtruck or dolly. Positions container above machine, using electric hoist, and pulls lever to tilt container and dump contents into machine hopper. Moves switches to start machine that removes polishing media and moves buttons through series of screening cylinders that sort buttons according to size.
GOE: 06.04.09 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

692.685-170 SKI TOPPER (toy-sport equip.)
Tends machine that bonds plastic strips to tops of skis: Positions ski covered with precut strips on bed of machine. Presses lever or pedal to lower press or activate pressure rollers that bond plastic to ski tops. Examines skis for defects and removes blemishes, using abrasives, blade, and solvent.
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

692.685-174 SLICING-MACHINE OPERATOR (button & notion)
Tends machine equipped with circular saws that slices pearl button blanks into two or more thinner blanks: Starts machine and positions blanks by hand in jaws of automatic clamps on turret feed mechanism. Observes feeding of blanks toward saw blades and stops machine if blanks appear to require realignment in holders. Removes containers of sliced blanks and places containers on bench or handtruck. May position single blank in holding clamp of manually controlled slicing machine and pull on leverage bar to feed blank into rotating saw blades.
GOE: 06.04.08 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

692.685-178 SLINGER, SEQUINS (plastic prod.)
Tends machine that automatically interlaces thread around strings of sequins in such manner as to separate, space, and hold fast sequins. Places spools of thread and string of sequins in machine and inserts ends in feeding mechanism. Observes operation to determine that threads are aligned and have desired tension and that threads and sequins are of same color.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

692.685-182 SORTER, MACHINE (button & notion) alternate titles: classifying-machine operator
Tends battery of automatic machines that sort button blanks according to thickness: Loads blanks into machine hopper, using hand scoop. Starts machine that sorts blanks and drops them into separate containers beneath machine. Removes filled containers and carries them to inspection department or storage.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

692.685-186 SPIRAL-MACHINE OPERATOR (paper goods)
Tends machine that automatically wraps paper cord or cellophane tape around wire or cord to be used as handles for shopping bags, beverage stirring sticks, and other purposes.
GOE: 06.04.09 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

692.685-190 SPUN-PASTE-MACHINE OPERATOR (elec. equip.)
Tends machine and injection equipment that line dry-cell battery cans with liquid paste that serves as separator between anode (can) and cathode (core) and as reservoir for portion of electrolyte: Turns valve to open paste line and admit paste to reservoir of injection device. Starts machine and feeds unlined cans into openings in dial-type holder that positions cans to receive injection of measured amount of paste and spins cans to distribute paste evenly. Pushes unlined cans into opening to eject lined cans, dropping them onto conveyor belt leading to dryer. Removes excess paste from face of dial, using hand scraper.
GOE: 06.04.21 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

692.685-194 STAMPING-MACHINE OPERATOR (pen & pencil)
Tends machine that imprints identifying data, such as trademark and type of lead on pencils: Places pencils in machine hopper, and starts machine to lower die-head and stamp data on pencil. Ties pencils into bundles. May install type or dies in machine head and replace colored foil roll in machine.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

692.685-198 STAPLER, MACHINE (furniture) alternate titles: wire-stitcher, machine
Tends stapling machine that staples padding to innerspring mattress assemblies: Loads spool of wire into machine. Places spring assembly on table, spreads precut padding on top of spring and positions them under head of machine. Starts machine and holds padding on spring as machine moves around table. May staple padding to spring assembly, using stationary stapling machine or hand stapler.
GOE: 06.04.20 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

692.685-202 STAPLING-MACHINE OPERATOR (any industry) alternate titles: wire-stitcher operator
Tends machine that staples together parts of products made from materials, such as plastic, paper, leather, felt, and canvas: Loads machine with wire staples or spool of wire, and positions material under head of machine. Steps on pedal to lower ram that cuts off wire staple and forces it through material to clinch it together. May adjust machine table to accommodate different sizes of materials being stapled.
GOE: 06.04.20 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 77

692.685-206 STOP ATTACHER (button & notion)
Tends semiautomatic press that attaches metal stops to slide fastener stringers: Fills machine hopper with stops. Inserts stringer between press jaws and depresses pedal to drive prongs of stop through tape. Pulls chain through dies to machine stop to position stringer for next stroke. Picks jammed or defective stops from feeder tube, or hopper, using metal pick or tweezers. May tend machine that automatically punches, forms, and attaches stop to stringer. May hold zipper on anvil of *power press* by hand and depress pedal to attach stops to individual zipper. May be designated according to location of stop as Bottom-Stop Attacher (button & notion); Top-Stop Attacher (button & notion). May attach hardware to zipper and be designated according to type of hardware attached as Box Attacher (button & notion); Bridge Attacher (button & notion); Pin Attacher (button & notion).
GOE: 06.04.20 STRENGTH: S GED: R2 M1 L2 SVP: 2 DLU: 77

692.685-210 TAPE COATER (nonmet. min.)
Tends machine that coats cloth tape with abrasive compound for use in polishing roller bearings: Mounts reel of tape of specified size onto machine spindle, and adjusts feed guide to accommodate tape. Fills machine cylinder with abrasive compound, and threads tape through cylinder and onto winding spindle. Scrapes excess compound from coated tape.
GOE: 06.04.21 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

692.685-214 TAPER, MACHINE (fabrication, nec)
Tends machine that tapes edges of precut material, such as parchment or fabric, on wire frame to form lampshades: Inserts spool of binding tape on machine spindle and draws tape through machine guides and folding attachment. Depresses pedal to raise holding device and positions edge of material and wire frame in groove of machine bed under pressing head. Releases pedal to lower and lock holding device. Starts machine that presses tape over edges of material and wire frame. Removes lampshade from machine and trims excess tape from shade, using scissors.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

692.685-218 THERMOSTAT-ASSEMBLY-MACHINE-TENDER, AUTOMATIC (inst. & app.)
Tends machine that automatically assembles, calibrates, and tests thermostat units: Turns setscrews to regulate speed of machine hoppers. Fills hoppers with workpieces and screws. Adjusts control device that positions workpiece under screw mechanism and sets depth of automatic screwdriver, using handtools. Starts machine that automatically assembles, calibrates, and tests thermostats. Examines thermostat units for defects. May turn dial indicator to set temperature of thermostat. May tend in-line or rotary, self-indexing, multiple-station-and-purpose automatic assembly machine.
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 89

692.685-222 TILE-POWER-SHEAR OPERATOR (fabrication, nec)
Operates power shear to cut sheets of floor coverings into tile of specified size: Adjusts stop gauges according to predetermined size. Feeds material under blade and against stop. Depresses pedal that lowers shear and cuts material into tile.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

692.685-226 TINSEL-MACHINE OPERATOR (fabrication, nec)
Tends twisting machine that forms tinsel strands: Places spools of tinsel, cotton, and wire on spindles or bobbins and threads material on machine. Starts machine that automatically weaves them into single strand of tinsel. Winds completed strands on cards by hand.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

692.685-230 TRIM ATTACHER (cutlery-hrdwr.)
Tends machine that applies metal binding to protect and decorate edges of wooden level bodies: Inserts strips of metal trim in vertical slots of machine.

Stands level body on end under loaded slots and closes gate to lock level in place. Starts ram that forces metal corner strips into grooves in wooden body of level. Examines trimmed levels to detect split or splintered wood, or scratches and dents in metal binding. May install metal end plates on level bodies, using drill press and power screwdriver.
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

692.685-234 TUBE WINDER, HAND (nonmet. min.) alternate titles: tube maker; winder operator

Tends machine that winds material, such as asbestos or felt paper around mandrel to form insulated pipe-covering. Places mandrel of designated size in winding jig and attaches end of sheet to mandrel. Turns mandrel wheel specified number of times to wind layers of liner, filler, and outer materials, such as adhesive coated asbestos, tar, corrugated and wool felt papers around mandrel. Cuts material from roll sheet, using knife. Lifts and turns mandrel to vertical position. Grasps and shakes tube to drop mandrel from center of tube. Stacks tubes on handtrucks and replaces mandrel in jig. May manually paste and wrap completed tube in canvas outer jacket. May tend machine that winds specified pattern of fiberglass filament around mandrel to produce tubular pipe.
GOE: 06.04.09 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 77

692.685-238 VACUUM-APPLICATOR OPERATOR (fabrication, nec)

Tends machine that applies adhesive luminous coating to aluminum plates for use as signs. Places plate on bed of machine. Positions precut adhesive material on plate, adhesive side down. Positions vacuum head over plate and turns steam valve or starts heat lamps to press and bake plate for specified time. Raises vacuum head and removes plate for further processing. May cut adhesive material from roll, using shears.
GOE: 06.04.21 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

692.685-242 WICKER, MOLDED CANDLES (fabrication, nec) alternate titles: wick tender

Tends machine that inserts wicks in openings of molded candles. Threads wick from spool through inserting sleeve and turns hand screws to adjust wick cutter and control motion of ram that compresses wick at bottom of candle. Places candles in holders on turntable and starts machine. Examines finished candles for surface defects and loose wicks and packs them in cartons. May cut and insert wicks by hand.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

692.685-246 WINDER (toy-sport equip.) alternate titles: solid center winder; winder, gammeter

Tends machine or series of machines that wind thread, yarn, or rubber strands around spherical molded cores to produce items, such as golf balls, baseballs, and softballs. Positions core in winding machine. Starts machine that winds core to specified size. Removes wound ball, breaks winding material, and ties loose end. Verifies size of ball with preset gauge or tape measure. Weighs baseballs and softballs on scale or verifies compression of golf balls on testing machine to ascertain that winding material in machine is adjusted to specified tension. Turns nut or setscrews of tension springs to adjust tension. Removes empty spools and rethreads machine. May be designated according to article wound as Baseball Winder (toy-sport equip.); Golf-Ball Winder (toy-sport equip.); Softball Winder (toy-sport equip.).
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

692.685-250 WINDOW-SHADE CUTTER AND MOUNTER (furniture)

Tends machines that cut window shade fabric and rollers to specified size, and install roller end caps and hanging pins, and staple fabric to roller. Installs roll of shade cloth on spindles of window-shade cutter machine. Threads end of cloth through retaining and feed rollers of machine. Turns handle to feed specified amount of cloth into machine. Depresses treadle to cut cloth and fold bottom hem. Clamps shade roller against stop on saw carriage, starts machine, and pushes carriage against saw blade to cut roller to specified length. Removes roller and slips cap over each end. Clamps roller in pin-driving machine, inserts pin in driver, and depresses lever to drive pin through cap into end of roller. Fastens top end of cloth to roller, using hand stapler.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

692.685-254 WINDOW-SHADE-RING SEWER (furniture) alternate titles: window-shade-ring coverer

Tends crocheting machine that covers metal rings used as window-shade pulls. Fills magazine with metal rings. Oils machine and threads crocheting needle. Starts machine with hand clutch and observes operation to detect malfunctions. Clips thread and ties ends as rings are covered.
GOE: 06.04.09 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

692.685-258 WIRE-TURNING-MACHINE OPERATOR (wood, container) alternate titles: looper

Tends machine that cuts binding wires between successive wirebound *box blanks*, forms loops in wire ends, and drives wire tips into wood. Starts machine and observes boxes to detect uncut wire. Removes boxes from machine.
GOE: 06.04.09 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

692.685-262 WOOD-WEB-WEAVING-MACHINE OPERATOR (furniture) alternate titles: loom operator; weaver

Tends wood-web weaving machine that binds together wood slats to form indoor or porch shades. Spreads bundle of wood slats on machine bed. Starts machine and feeds slats into machine jaw which grips and pulls slats over and under warp threads. Stops machine to tie broken warp ends. Positions shade on stapling machine carriage and depresses pedal to staple molding and splints on top and bottom of shade. May tend machine that binds together plastic slats with decorative yarn to form window blinds and be designated Woven-Blind Loom Tender (furniture).
GOE: 06.04.09 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

692.685-266 ZIPPER TRIMMER, MACHINE (button & notion)

Tends power press that cuts excess scoops (links) from slide fastener chains to shorten them to specified length. Measures chain against machine-mounted ruler to determine number of scoops to remove. Positions stringer under die of press and presses pedal to operate cutter. Rubs cut scoops against edge of press to remove them from tape. Examines zippers for broken or missing scoops and discards defective zippers.
GOE: 06.04.34 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

692.685-270 ZIPPER-MACHINE OPERATOR (button & notion) alternate titles: chain-machine operator; scoop-machine operator

Tends battery of automatic machines that cut and form metal slide fastener scoops (links) from wire and crimp them onto beaded edge of tape to form side of zipper (stringer). Positions box of beaded tape behind each machine and mounts coil of wire on roller. Threads tape and wire through guides and automatic feeder mechanism and into forming dies. Starts machines, and observes operation to detect malfunctioning, such as jamming. Measures scoops to verify specified dimensions, such as width, spacing, and height of lug, using micrometer. Turns setscrews to adjust die jaws for height of lug and depth of cup on scoops, using wrenches. May examine finished product for imperfections, such as malformed or rough-cut scoops, using eye loupe. May tend automatic machine that attaches preformed scoops to tape.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

692.685-274 KEYMODULE-ASSEMBLY-MACHINE TENDER (office machines)

Tends machine that automatically assembles components to form modules used in keyboards of electronic computer equipment. Observes machine operations to detect defective parts and to ensure continuous movement of parts, subassemblies, and final assemblies along feed tracks. Removes defective parts from feed tracks and repositions disoriented parts, using pick. Pries jammed parts from track, using pick, or replenishes supply of parts in feeder bowl to remedy machine stoppage. Packs completed assemblies into containers. Notifies mechanic when machine malfunctions repeatedly occur. Periodically cleans feed tracks, machine surface, and work area, using handbrush, broom, airhose, or vacuum cleaner.
GOE: 06.04.09 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 86

692.685-278 DIAPER MACHINE TENDER (protective dev.)

Tends automatic machine that forms disposable diapers. Threads rolls of woodpulp, plastic backing, and nonwoven fabric facing in specified sequence through guides of machine. Fills glue reservoir and fragrance receptacle, and loads diaper tape tabs into dispensing bins. Flips switch to start machine that automatically crushes woodpulp into fiber; sprays fiber to impart fragrance; applies glue to join layers of diapers into continuous strip; affixes tape tabs to strip at designated intervals; applies glue to shape form-fit diapers; cuts strip into individual diapers; and folds diapers in half for packing. Observes operation of machine and examines diapers to detect machine malfunctions. Turns knobs or screws to make minor adjustments to sections of machine, such as rollers, cutting blades, and folding device, using handtools. Notifies maintenance personnel when welding or parts replacement is required.
GOE: 06.04.09 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 86

692.685-282 LAMINATOR, PRINTED CIRCUIT BOARDS (electron. comp.)

Tends laminating machine that automatically bonds assembled layers of laminating materials and printed circuit board (PCB) panels to form multilayer PCB panels. Reads instruction sheet to determine specified materials and laminating procedures. Assembles inner and outer layers of PCB panels and laminating materials over guide pins of holding fixture. Places assembled boards on bay (shelf) of machine. Turns controls to set time, pressure, and temperature of laminating machine according to specifications. Starts laminating machine that applies pressure and heat to bond materials and form multilayer PCB panels. Monitors machine operation and adjusts machine controls to maintain specified temperature and pressure. May compute pressure level for laminating machine. May heat materials in oven to remove moisture or condition materials prior to laminating process.
GOE: 06.04.09 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 86

692.685-286 MOLDER, AUTOMOBILE CARPETS (tex. prod., nec) alternate titles: molder; molder-trimmer

Tends machines that mold nonwoven carpet used in automobiles. Places carpet blank (precut section of nonwoven carpet) into oven that heats carpet to prepare carpet for molding. Sprays insides of stationary mold with silicone fluid, using pump sprayer, to prevent sticking. Places jute backing over steel pins in stationary mold. Removes heated carpet from oven, smooths carpet over mold, and secures carpet over jute on stationary mold. Observes carpet to detect defects, such as wrinkling and drawn edges, that indicate overheating of carpet. Turns dial on oven to adjust heating cycle. Presses button to lower upper mold onto stationary mold to press, cool, shape, and bond carpet and jute backing to fit sections of automobile. Removes carpet from mold and places carpet on trim buck. Presses button to lower holding device that secures carpet in position

for trimming. Trims carpet along trim line, using utility knife. Hammers carpet, using mallet, to remove knockout sections on trim back. Sprays adhesive onto bottom of exposed carpet to reattach loose jute, using spray can.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 86

692.685-290 TRACK LAMINATING MACHINE TENDER (inst. & app.)
Tends machine that laminates and trims vinyl from aluminum track used in drafting machines: Loads spool of vinyl onto laminating machine wheel, starts machine, and feeds track into machine that automatically laminates vinyl onto track and trims vinyl. Monitors track conveyance and visually examines track to detect lamination and trimming flaws, such as excess vinyl, air bubbles, and oil or adhesive accumulation on edge of track. Smooths air bubbles from lamination and trims excess vinyl, using handtools. Cleans excess oil and adhesive from edge of track, using rag and brush. Rejects defective track. May cut vinyl at joint to separate track sections, using knife or saw.
GOE: 06.04.09 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 90

692.686-010 ASSEMBLY-MACHINE OPERATOR (pen & pencil)
Feeds components, such as barrels, caps, cartridges, and nibs into and removes assembled pens and pencils from automatic assembly machine. Places components in predetermined sequence on revolving spindles or dumps components into hoppers. Lifts assembled pens or pencils from machine spindles and inspects for loose components. Places inspected units on conveyor. May be designated according to component or station as Assembly-Machine Feeder (pen & pencil); Assembly-Machine Offbearer (pen & pencil); Cartridge Feeder (pen & pencil).
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

692.686-014 BASE REMOVER (light. fix.)
Feeds incandescent lamp bulbs into holders of rotating wheel of machine that carries lamp through series of gas torches to melt cement adhering to base of lamp preparatory to removal of defective bases. Removes lamp from holder as device rotates back to starting position and pulls base and glass bulb apart. Wipes excess cement from bulb and places in rack.
GOE: 06.04.09 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

692.686-018 BROOMCORN SEEDER (fabrication, nec) alternate titles: broomcorn scraper
Feeds broomcorn into machine that removes seed or chaff and straightens fibers. Holds stalk and brush end of fibers against teeth of rotating cylinder to remove seed and chaff. May cut stems to size [CUTTER (fabrication, nec) II].
GOE: 06.04.09 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

692.686-022 BULB FILLER (light. fix.)
Places bulb in guide of machine that automatically cuts and blows magnesium wire into alloy photoflash bulb to provide material for flashing. Holds open neck of each bulb over air jet to blow loose end of wire into top of bulb. Places bulbs on conveyor leading to sealing machine.
GOE: 06.04.09 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

692.686-026 CARBON ROD INSERTER (elec. equip.)
Feeds machines that insert carbon rods, cap, seal, tube, and otherwise assemble dry cells: Removes cells or components from conveyors, containers, or cartons and places them on ramp, conveyor, dial, turntable, or into mechanism that feeds them to core tamping, capping, sealing, tubing, sleeve, or wafer machines. Removes units from discharge conveyor of machine and places them on other conveyor or in trays or boxes. May dump components into hopper of machine.
GOE: 06.04.20 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

692.686-030 CUTTER II (fabrication, nec)
Feeds broomcorn stems into lever-type cutter that cuts them for use in making brooms: Shakes stems against table to align ends. Positions stems on table against gauge and depresses pedal or manually lowers blade to cut stems to specified length. May remove seed and straighten fibers. [BROOMCORN SEEDER (fabrication, nec)].
GOE: 06.04.09 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

692.686-034 DESIGN ASSEMBLER (fabrication, nec)
Positions stacks of floor covering pieces on bed of machine that transfers layer of pieces onto conveyor and fills spaces between pieces with floor covering material to form inlaid floor covering, following pattern guides on machine bed.
GOE: 06.04.19 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

692.686-038 DYNAMITE-PACKING-MACHINE FEEDER (chemical) alternate titles: powder shoveler
Feeds dynamite cartridge filling machine with granular or gelatin dynamite. Pushes buggy containing dynamite to packing machine and fills hopper, using wooden shovel. Sweeps spilled dynamite and broken shells from floor and shovels sweepings into boxes. Scrubs empty buggy with sodium carbonate solution, using brush, to neutralize remaining nitroglycerin. May scrub packinghouse floor with sodium carbonate solution.
GOE: 06.04.09 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

692.686-042 GROOVER (any industry)
Feeds material, such as plastic or wood, to rotating cutters of grooving machine, or places material in machine hopper, that cuts grooves in material used to make products, such as lead pencils, picture frames, and boxes.
GOE: 06.04.09 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

692.686-046 LAMINATED-PLASTIC-TABLETOP-MOLDING WRAPPER (furniture)
Feeds machine that wraps metal molding around edge of laminated plastic tabletops: Clamps tabletop plastic side up in machine bed while coworker guides molding between edge of tabletop and pressure roller that shapes molding and presses lip into groove along tabletop edge. Transfers wrapped top, automatically released from machine, to conveyor and clamps another top in machine bed.
GOE: 06.04.20 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

692.686-050 MOUNTER I (light. fix.) alternate titles: stem-mounting-machine operator
Feeds tungsten filament wire coils into machine that mounts them to stems in electric light bulbs: Inserts coils, using tweezers, into slotted plate of spider mounting machine which automatically drops them into position on lead wires attached to stem and loops these wires over coils to hold them securely. Examines finished mounts emerging from machine for imperfections.
GOE: 06.04.20 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

692.686-054 NAIL-POLISH-BRUSH-MACHINE FEEDER, AUTOMATIC (fabrication, nec)
Feeds brush bases into machine that automatically fills and staples bristles to fabricate nail and mascara brushes. Fills machine hoppers with bases or inserts base in jig of machine table. Observes machine operation for malfunctions and examines finished brushes for defects. May pack brushes for shipment.
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

692.686-058 NECKER (jewelry-silver.)
Feeds rolls of cardboard and fabric into machine that automatically wraps materials around each other to form cardboard necks (filler between case and lining of jewelry box). Sets controls to cut strips to prescribed length. Observes machine to detect malfunction. Dumps strips into basket for further processing.
GOE: 06.04.09 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

692.686-062 STEM SIZER (fabrication, nec) alternate titles: hurl shaker
Feeds machine that separates broomcorn stems according to thickness: Places stems in screen-bottomed vibrating hopper that separates thin stems. Removes stems from and beneath hopper and stacks stems in storage bins.
GOE: 06.04.09 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

692.686-066 THIRD DRY-CELL-ASSEMBLING MACHINE TENDER (elec. equip.)
Removes dry cells from trough of dry-cell-assembling machine and places cells right side up in wooden trays, preparatory to sealing with wax.
GOE: 06.04.20 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

692.686-070 PASTER, HAT LINING (hat & cap)
Feeds satin and cardboard squares into gluing machine to assemble hat linings: Presses switch to start gluing machine. Inserts satin and cardboard squares in corresponding feed slot of gluing machine that glues items together. Pours glue into glue trough of machine to maintain required level. Empties hat linings from machine hopper, stacks linings, and places linings in storage for further processing.
GOE: 06.02.27 STRENGTH: L GED: R1 M1 L1 SVP: 3 DLU: 86

692.687-010 SPLICER (fabrication, nec) alternate titles: drs-felt splicer
Splices rolls of felt paper to provide continuous sheets for use in production of hard-surface floor covering, working as member of team. Positions roll of felt paper on stand, using power hoist. Cuts ends of material with hooked knife and attaches ends to another roll, using glue or tape. Aligns seam under heated machine iron and lowers iron to seal seam. Examines material for kinks and tears.
GOE: 06.04.34 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

693 MODELMAKERS, PATTERNMAKERS, AND RELATED OCCUPATIONS

This group includes occupations concerned with making models or patterns of any combination of metal, clay, plastics, and similar materials. Wood patternmakers are included in Group 661.

693.130-010 SUPERVISOR, MODEL MAKING (clock & watch)
Supervises and coordinates activities of workers engaged in making models, such as mechanical and electric clocks, timers, and controls. Sets up and operates lathe, milling machine, shaper, grinder, and related machines and equipment [MODEL MAKER (clock & watch)]. Trains new workers. Inspects models or fabricated parts for conformance to specifications, using gauges, micrometers, and other precision instruments. Assembles and tests models to verify performance standards. Requisitions materials and parts. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.07 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

693.131-010 PATTERN-SHOP SUPERVISOR (foundry)
Supervises and coordinates activities of workers engaged in making models, foundry patterns, and prototypes from wood, plastic, plaster, or metal, for use in manufacture of dies, castings, and such products as machinery parts and automobile body parts. Trains workers. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.07 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

693.132-010 PATTERN-GRADER SUPERVISOR (wood prod., nec)
Supervises and coordinates activities of workers engaged in cutting out patterns for shoe lasts. Reads and interprets work orders and lasts specifications.

Trains new workers. Inspects patterns to ensure conformance to specifications [LAST-PATTERN GRADER (wood prod., nec)]. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.04 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

693.260-018 ENGINEERING MODEL MAKER (inst. & app.; office machines)

Sets up and operates variety of machines to fabricate tooling, patterns, parts, and models for electronic, mechanical or electromechanical instruments, devices, or equipment, such as electromedical and computer equipment, measuring, indicating, and controlling instruments, and surgical and navigational instruments, according to engineering blueprints and specifications. Studies drawings and sketches of proposed product and confers with engineering personnel to plan design details and model operation. Determines machines, tooling, and sequence of operation necessary to produce model parts, tooling, dies, or patterns, utilizing knowledge of machining and fabricating techniques. Lays out reference points and dimensions on assorted materials, such as metals, plastic, and synthetic resins, using measuring instruments and work aids [LAY-OUT WORKER (any industry) I 809.281-010]. Sets up and operates machines, such as milling machines, lathes, grinders, drill press, punch press, and brake, to produce or modify model parts [MACHINIST (machine shop) 600.280-022]. Fits and assembles parts, using handtools or power tools. Wires and solders electrical and electronic connections and components. Inspects and tests model or other product to verify conformance to specifications, using precision measuring instruments, such as calipers, gauges, and micrometers, and test equipment, such as multimeter and oscilloscope. Suggests structural or operational modifications or reworks component parts as required to ensure performance of equipment or parts meets standards. May consult with engineering personnel to evaluate design and performance factors. May specialize in fabricating, testing, and adjusting prototype models of electromedical equipment and be designated Medical-Apparatus Model Maker (inst. & app.).
GOE: 05.05.07 STRENGTH: M GED: R4 M4 L4 SVP: 8 DLU: 90

693.261-010 DEVELOPER PROVER, INTERIOR ASSEMBLIES (aircraft mfg.) alternate titles: developer prover, upholstering; trimmer

Plans, lays out, fabricates, and assembles aircraft upholstery, interior trim, soundproofing, insulating, and related items, to develop prototype parts to verify or modify engineering designs, using precision instruments, handtools, power tools, and shop equipment: Reads and interprets blueprints, sketches, and engineering information to determine design specifications. Plans location and arrangement of parts and assemblies, considering space requirements in aircraft. Lays out dimensions of parts on assorted materials, such as plastic, wood, or cardboard, to develop template for fabricating parts, using measuring and marking instruments. Cuts template to size, using saw, shears, or power cutters. Fabricates and assembles sample parts from assorted fabrics, plastics, and other trim materials, utilizing upholstery craft skills, using templates, handtools, and shop equipment, such as sewing machines, snap fasteners, and power cutters [UPHOLSTERER (aircraft mfg.) 780.384-014]. Installs completed parts and assemblies in aircraft mockup to verify accuracy of fit, using handtools and power tools. Modifies templates as required prior to releasing pattern to production. Collaborates with engineering, tooling, production, and other personnel to resolve developmental, assembly, and installation problems.
GOE: 05.05.15 STRENGTH: M GED: R4 M4 L4 SVP: 6 DLU: 87

693.261-014 DEVELOPMENT MECHANIC (aircraft mfg.) alternate titles: experimental mechanic

Lays out, fabricates, and assembles developmental or experimental structural and mechanical parts and assemblies, and installs parts and assemblies in prototype aircraft or spacecraft, following engineering information, using precision instruments, handtools, power tools, and shop equipment: Reads and interprets blueprints, sketches, loft information, and related engineering data to plan sequence of operations and methods for fabricating, assembling, and installing parts and assemblies. Lays out radii, angle, and dimensions of parts on assorted materials, using precision measuring and marking instruments, such as gauges, calipers, scale, and scriber, applying trigonometric calculations to solve layout problems. Sets up and operates shop equipment, such as bandsaw, lathe, table saw, drill press, shear, and brake, to shape and form parts. Verifies dimensions of parts, using precision measuring instruments. Drills, countersinks, and reams holes in parts and assemblies for bolts, rivets, and other fasteners, using power tools. Aligns and joins structural assemblies, using transit, sight level, handtools, power tools, clamps, and fasteners. Installs experimental parts and assemblies in prototype structure to verify accuracy of layout and assembly. Tests functional performance of installed parts. Confers with engineers to resolve fabrication and installation problems. May fabricate or modify tooling, such as jigs, fixtures, templates, and form blocks. May fabricate and assemble reduced-scale mockups of parts and assemblies. May be designated by type of part or assembly developed as Controls Development Mechanic (aircraft mfg.); Developer-Prover, Mechanical (aircraft mfg.); Fabrication And Structures Development Mechanic (aircraft mfg.); Hydraulic And Plumbing Development Mechanic (aircraft mfg.); Mechanic, Experimental Structural Assembly (aircraft mfg.).
GOE: 06.01.04 STRENGTH: M GED: R4 M4 L4 SVP: 7 DLU: 88

693.261-018 MODEL MAKER (aircraft mfg.)

Lays out, fabricates, and assembles scale models of aeronautical and aerospace products, such as aircraft and missiles, utilizing knowledge of model building, lofting principles, and machining, using precision instruments, tools, machines, and equipment. Reviews engineering information and model design to determine methods and sequence of operations to build model. Lays out design to determine lines and contours for model, according to blueprints, rough sketches, or verbal instructions, using trigonometric calculations and principles of model designing for establishing station lines and index points. Marks radius, contour, angle, and dimensions on materials, such as wood, metal, and plastic, using measuring instruments, crayon, scriber, or other method. Sets up and operates shop equipment, such as saws, planer, jointer, drill press, wood lathe, shear, and brake, to fabricate parts, such as nacelles, wings, and control surfaces. Shapes and hand finishes model to required contours and tolerances, using tools and work aids, such as knives, chisel, file, and sandpaper. Drills, countersinks, and reams holes in parts and assemblies for fasteners, such as bolts, screws, and dowel pins, using power tools. Fits, aligns, and joins model parts, assemblies, and working mechanisms into complete structure, using jigs, fasteners, glue, solder, or other method. Sprays or brushes protective, finish, or decorative coatings, such as enamel, paint, or lacquer, on model surfaces. Develops and constructs holding fixtures, jigs, special tools, fittings, templates, patterns, and molds used to construct models. May construct, operate, and maintain associated test equipment. May install model in wind tunnel and modify model during tests as directed by engineering personnel and be designated Model Builder, Wind Tunnel (aircraft mfg.). May construct models for display, advertising, or sales purposes and be designated Model Builder, Display (aircraft mfg.).
GOE: 06.01.04 STRENGTH: M GED: R4 M4 L4 SVP: 7 DLU: 88

693.261-022 ROCKET-MOTOR MECHANIC (aircraft mfg.)

Fabricates, assembles, and tests experimental solid fuel rocket motor parts and assemblies according to specifications, using handtools, precision instruments, machines, and test equipment. Reads and interprets blueprints, drawings, and engineering information to determine methods and sequence of operations to fabricate experimental units. Sets up and operates machines, such as milling machines, lathes, drill presses, and power saws, to machine parts. Measures parts for conformance to specifications, using calipers and micrometers. Assembles parts into completed units, such as valves and pressure vessels, using handtools. Operates vacuum pressure testing equipment to test assembled units for air leaks. Confers with engineering, supervisory, and manufacturing personnel to exchange technical information. May mix chemicals used in fabrication of composite materials. May operate winding machine to fabricate composite parts for solid fuel rocket motor. May specialize in fabricating, assembling, and testing experimental liquid fuel rocket engines and be designated Rocket-Engine Mechanic, Liquid (aircraft mfg.).
GOE: 05.05.07 STRENGTH: M GED: R4 M4 L4 SVP: 7 DLU: 89

693.280-014 PATTERNMAKER, ALL-AROUND (foundry; plastic prod.)

Fabricates foundry patterns from various materials, such as wood, metal, and plastic, for use in forming molds for castings, according to blueprint specifications and using various machine tools, power tools, and handtools. Studies blueprint of part to be cast, computes dimensions, and plans sequence of operations depending upon material specified for pattern. Measures, marks, and scribes layout on metal casting or woodstock. Sets up and operates various wood and metal machine tools and other power tools to machine, cut, and shape stock or casting to specifications. Pours or spreads materials into mold or over model of pattern or builds laminations of fiberglass cloth and plastic resin to fabricate patterns from assorted materials, such as plastic, plaster, or clay. Assembles pattern sections, using fasteners, such as nails, screws, bolts, glue, or glass cloth and resin. Shapes workpiece to specified finish, using handtools and power tools, such as scrapers, files, sanders, grinders, rasps, and planer. Verifies conformance of finished pattern to blueprint specifications, using templates and measuring instruments, such as scales, calipers, micrometer, and protractor. Applies protective finish or paints pattern sections to indicate method of assembly. Repairs broken or damaged patterns and corrects patterns to compensate for defects in castings. Constructs templates for layout and inspection.
GOE: 05.05.07 STRENGTH: M GED: R4 M4 L3 SVP: 8 DLU: 86

693.281-014 PATTERNMAKER (metal prod., nec)

Constructs prototype springs for use in motor vehicles and lays out and forms spring leaves for use as templates in forming production springs. May construct metal platforms, using handtools and bench tools, and weld pattern on each platform to make lower dies of spring-forming machine.
GOE: 05.05.06 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

693.281-018 PATTERNMAKER, METAL, BENCH (foundry) alternate titles: filer, metal patterns; patternmaker, bench; patternmaker, hand; scratcher, metal patterns

Fits, assembles, and hand finishes castings and parts in making of metal foundry patterns, using handtools and analyzing specifications according to knowledge of pattern-making methods. Studies blueprint of part to be cast, computes dimensions, and plans sequence of operations. Dresses casting down to specified dimensions, using files, scrapers, powered hand grinders, and drill press. Assembles pattern, using handtools and bolts, screws, and other fasteners. Verifies conformance of pattern dimensions to specifications, using templates and measuring instruments, such as scale, calipers, and micrometer. May make templates for own use in inspecting finished surfaces [TEMPLATE MAKER (any industry)]. May operate welding equipment in assembling pattern [WELDER, COMBINATION (welding)].

GOE: 05.05.06 STRENGTH: M GED: R4 M3 L4 SVP: 8 DLU: 77

693.281-022 PATTERNMAKER, SAMPLE (cutlery-hrdwr.)

Fabricates luggage hardware according to blueprint specifications for use as patterns in quantity production. Lays out design on metal, following specifications, and cuts, forms, and assembles finished parts, using hand and machine metalworking tools. Verifies dimensions of assembled parts against specifications, using calipers and other precision measuring instruments. Fastens assembled hardware to sample luggage, adjusting parts to ensure function of hinges, locks, and closures. Alters hardware according to changes in specifications. May submit finished luggage sample to customer for approval. May design hardware.

GOE: 05.05.06 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 77

693.281-030 TOOL BUILDER (aircraft mfg.)

Lays out, fabricates, assembles, and repairs jigs, fixtures, forms, templates, and related tooling used in manufacturing aircraft parts and assemblies, following blueprints, sketches, and specifications, using handtools, power tools, machines, and equipment. Reviews engineering information, tool design drawings, and other specifications to determine methods and sequence of operations to fabricate tools. Examines blueprint of part for which template, jig, fixture, or other tooling is to be built. Calculates unspecified dimensions, and lays out design on assorted materials to establish and coordinate reference points and tooling holes, using measuring instruments, such as dividers and straightedges. Sets up and operates variety of machines and shop equipment to cut, shape, and finish materials to specified dimensions. Fits, aligns, and assembles tooling components, and measures tooling assembly for conformance to specifications, using precision measuring and checking instruments. Joins assembly components, using bolts, pins, clamps, screws, rivets, or other method. Repairs or reworks tools. May draw sketches and prepare detailed instructions for fabricating or machining to be performed by other workers. May specialize in building specific type tool and be designated Form Block Maker (aircraft mfg.); Jig And Fixture Builder (aircraft mfg.); Machine Tool Fixture Builder (aircraft mfg.); Wood-Tool Maker (aircraft mfg.).

GOE: 06.01.04 STRENGTH: M GED: R4 M4 L4 SVP: 7 DLU: 87

693.361-014 MOCK-UP BUILDER (aircraft mfg.)

Lays out, fabricates, and assembles full-scale master mock-ups and prototypes of experimental and production aircraft and spacecraft structures and components, according to specifications, using machines, handtools, and power tools. Lays out lines and contours of structures and components on metallic and nonmetallic materials, utilizing knowledge of trigonometry to determine radius angles and dimensions, according to engineering drawings, sketches, loft data, or verbal instructions. Sets up and operates shop equipment, such as bandsaw, lathe, planer, and drill press, to fabricate parts, such as ribs, empennage, wings, and landing gear. Drills, countersinks, and reams holes in parts and assemblies for bolts, screws, and other fasteners, using power tools. Forms frames and bases from plaster, using cutting, shaping, and finishing tools. Grinds, files, and sands parts to finished dimensions. Aligns and fits parts and assemblies, using fixtures and precision measuring instruments. Joins parts, using fasteners, such as bolts, screws, and clamps, or glue. Confers with liaison personnel to discuss development problems or to recommend modifications if mock-up cannot be fabricated or assembled as designed.

GOE: 05.05.07 STRENGTH: M GED: R4 M4 L4 SVP: 7 DLU: 88

693.380-010 MODEL MAKER (clock & watch)

Sets up and operates machines, such as modelmaker's lathe, milling and engraving machines, and jig borer to make working models of watch parts and complete watches. Makes bridges, plates, and wheels, cutting teeth on wheels and pinions, and working from blueprints to extremely close tolerances. Makes and threads screws. Assembles complete watches. May design and fabricate own tools.

GOE: 05.05.07 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

693.380-014 MODEL MAKER (auto. mfg.) alternate titles: miniature-model maker

Sets up and operates variety of woodworking, metalworking, and plastic-working machines to fabricate component parts, and assembles parts to form miniature models of motor vehicle bodies and accessories, using handtools. Constructs parts, following blueprints, computer generated designs, photographs, and other specifications, using bench lathes, milling machine, drill press, planer, baking oven, grinder, files, chisels, and measuring instruments. Assembles completed parts to form desired unit, using handtools and abrasives. May paint and upholster completed bodies.

GOE: 05.05.07 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 90

693.381-018 MOCK-UP BUILDER (vehicles, nec) alternate titles: mock-up assembler

Constructs full-scale experimental and production trailer mockups according to specifications, using woodworking and metalworking machines and handtools. Lays out lines and contours of trailer structures and components on metal, wood, and plastic materials with crayon and scriber, according to engineering drawings, sketches, lofting data, or verbal instructions, using calipers, scales, gauges, and trigonometry to define radius angles and dimensions. Sets up and operates shop equipment, such as bandsaw, lathe, planer, jointer, and drill press, to shape parts, according to blueprints. Drills, countersinks, and reams holes in parts and assemblies for bolts and screws, using portable power tools. Aligns and fits parts and assemblies, using transit and sight level. Joins parts together, using bolts, screws, clamps, or glue. Lays out, fits, drills, screws, bolts, and rivets together metal sheeting, upright frames, bottom and top bars, and angle clips, using pneumatic handtools and templates. Marks and cuts openings in sheeting, installs support framing around openings, and installs doors, hinges and catches. Fits, drills, bolts, and rivets metal frame gots, headers, and buck plates to make body section, verifying tolerances with tri-square and rule. Installs insulating material and electrical wiring. Connects water supply and installs fixtures and appliances. Completes model by installing molding, hardware, and accessories.

GOE: 05.05.07 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

693.381-022 MOLDER, PATTERN (foundry)

Casts patterns in nonferrous metals for use in high production duplicate castings, applying knowledge of metal characteristics, molding sand, contours of patterns, and pouring procedures. Makes one or more sand molds, using wood pattern to form mold impression of metal pattern to be cast [MOLDER (foundry)]. Pours molten aluminum, bronze, or other nonferrous metal into molds with hand ladle. Machines metal patterns to exact dimensions [PATTERNMAKER, METAL (foundry)]. May make wood patterns used to form sand molds in which metal patterns are cast [PATTERNMAKER, WOOD (foundry)].

GOE: 06.02.24 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

693.381-026 ELECTRICAL AND RADIO MOCK-UP MECHANIC (aircraft mfg.)

Lays out, fabricates, and assembles jig boards, wiring templates, and master panels used as production patterns for manufacturing control panels and wiring assemblies for aircraft and space vehicles, using handtools, power tools, precision measuring instruments, and shop equipment. Reads blueprints, assembly drawings, and schematics to determine arrangement and relationship of parts and equipment, reference and location points, dimensional specifications, and circuitry routings. Measures and marks location in mockup for installation of control panels, wiring, junction boxes, switches, and related items. Plans, routes, attaches, and ties wires between designated locations in mockup to form prototype wire harness. Transfers pattern of prototype harness to blank jig board and attaches terminal pins, guide pins, clamps, and holding devices to jig board, using handtools and power tools. Assembles sample wire harness, using jig board, and tests continuity of circuits, using voltmeter, ammeter, and other test equipment. Lays out and fabricates prototype panel boards, using precision measuring instruments, such as square, straightedge, scale, protractor, and scriber, and shop equipment, such as saw and drill press. Fits wire harness assembly and panel board in mockup to verify accuracy of layout and modifies layouts as required. Fabricates wiring template used to locate wire harnesses, terminal connections, and related parts and equipment on control panel assembly, using shop equipment. Installs instruments, terminal outlets, switches, junction boxes, and wire harnesses on sample control panel. Tests continuity and functional performance of control panel assembly, using test equipment, to verify conformance of jig board, master panel, and wiring template layouts to specifications.

GOE: 06.01.04 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 88

693.382-010 LAST-PATTERN GRADER (wood prod., nec)

Operates pattern grading (sizing) machine to cut out paper last patterns for shoe sizes of specified style and cuts out steel patterns for use in manufacturing shoe lasts. Positions customer's last pattern on steel sheet, scribes line around pattern, and cuts along line with metal snips to form steel cutting pattern. Secures pattern on table of grading machine. Adjusts reduction scale of machine to cut specified size paper patterns. Inserts cutting tool and stylus into ends of pantograph arm of machine. Starts machine, turns gear to advance uncut pattern paper from roll into position under cutting tool and lowers stylus to starting point on steel pattern. Guides stylus around pattern, observing action of cutting tool to correct cutting irregularities. Measures paper pattern cut by machine against original pattern to verify reproduction of size and shape. Repeats machine operations to cut out specified number of patterns of given size. Readjusts reduction scale and repeats cutting operation to produce all pattern sizes specified for prescribed shoe style. Staples, tapes, or glues specified sized heel patterns to last patterns when making patterns for LAST-MODEL MAKER (wood prod., nec). May cut insole patterns to customer specifications for use in shoe factories.

GOE: 06.02.04 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

694 OCCUPATIONS IN FABRICATION OF ORDNANCE, AMMUNITION, AND RELATED PRODUCTS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with fabricating naval, aircraft, antiaircraft, tank, coast, and field artillery having a bore of over 30mm; specialized components for tanks; ammunition; and related products.

694.131-010 TRACER-BULLET-SECTION SUPERVISOR (ordnance)

Supervises and coordinates activities of workers engaged in charging tracer bullets with powder and shaping them to finished dimensions. Interviews new workers and assigns them to work commensurate with their qualifications. Assigns more experienced workers to train new workers. Makes recommendations for promotion or dismissal of workers. Directs workers engaged in repair of machines and other equipment. Coordinates work of department with that of

related departments. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

694.132-010 EXPLOSIVE-OPERATOR SUPERVISOR (ordnance)

Supervises and coordinates activities of workers engaged in fabrication, assembly, and loading of ammunition and ammunition components. Interprets and enforces safety regulations. Devises mechanical methods for production processes. Trains workers in operation of machines and equipment. Directs inspection and gauging of processed or stored materials. May supervise ammunition reclamation and reloading activities and be designated Renovation-Plant Supervisor (ordnance). Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L4 SVP: 8 DLU: 77

694.260-010 LOADING-MACHINE TOOL-SETTER (ordnance)

Sets up battery of automatic machines to assemble primed shell bodies, powder, wads, and shot into complete shotgun shells. Replaces worn or broken machine parts, such as bushings, punches, crimpers, powder and shot chargers, hoppers, springs, and belts, using handtools. Examines samples of assembled shells for defects, such as incomplete crimping, tipped top wads, or blurred printing (identifying data), and verifies shell length and diameter, using fixed gauges. Cuts open sample shells with knife to determine that components are assembled as specified. Diagnoses cause of defect and replaces worn parts or adjusts setscrews, stop nuts, knurled bolts, and wingnuts by trial and error until machine produces acceptable work. Dismantles machine to gain access to defective parts and to clear jams not removable by operator. Submits samples of first-run shells assembled after adjustment or changeover to ballistics for approval before releasing machine to operator. Takes charges of powder and shot from loading mechanisms and weighs them on grain scale to verify accuracy of charges. Turns knob to regulate charge to meet specifications.
GOE: 06.01.02 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

694.360-010 PRIMER-CHARGING TOOL SETTER (ordnance)

Sets up charging, varnishing, foiling (tamping), and shaker machines, and assembly presses, used in charging and assembling primers for small arms ammunition: Removes, replaces, and adjusts such tools as punches, punch blocks, pins, dies, and die blocks, using handtools. Peens die mouths in foiling die block and reams die hole with hand reamer to sharpen edges, operates *bench grinder* to grind punches and dies for fitting into blocks, hammers charging and shaker plates on straightening plate to straighten them, and rotates bent punch in drill press to determine high spot and taps with metal block to straighten punch. Examines trays of primers for scratches, dents, and lack of anvil or foiling paper. Measures depth of priming mixture, tamping, and anvil in primer, or primer seating in battery cup, using fixed gauges. Turns setscrews to adjust punch or pin block height. May be limited to primer assembly presses only.
GOE: 06.01.02 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

694.362-010 CLIP-LOADING-MACHINE ADJUSTER (ordnance)

Sets up and operates machine to position cartridges into clips preparatory to use in small arms weapons: Adjusts or replaces feeding and clipping units to maintain synchronized operation, using handtools and gauges. Lubricates moving parts of machine. Pushes buttons to start machine and stops it when jams occur. Examines workpieces removed from jams to determine location of malfunctioning unit. Notifies MAINTENANCE MACHINIST (machine shop) for repairs. May give instructions to new machine operators.
GOE: 06.02.20 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 77

694.382-010 SALVAGE-MACHINE OPERATOR (ordnance)

Sets up and operates machines to disassemble rejected cartridges for salvaging metal parts: Replaces punches, fingers, dies, feed plate, and shell holders, using handtools, and turns setscrews and stop nuts to adjust ratchets, springs, gates, and pulldown mechanism to accommodate caliber cartridge being processed. Starts machine and feeds cartridges into slots in dial feed plate by hand. Shakes empty cases in hand tumbler to remove powder. Weighs and records scrap and components. May insert cartridges in jaws of bench device and pull lever to extract bullet.
GOE: 06.02.20 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

694.382-014 TRACER-BULLET-CHARGING-MACHINE OPERATOR (ordnance)

Operates multiple-station machine to automatically charge and tamp subigniter, igniter, and tracer powder in bullet jackets to form tracer bullets for military rifle ammunition: Starts machine and watches tracks and stations for malfunctioning and jams. Clears jammed dies, funnels, and bullets, using fingers or wire hook. Observes dies at assembly station and inserts jackets by hand in dies missed at hopper tube, seating them with hammer. Turns setscrews and stopnuts, using handtools, to adjust width of track rails, height of scraper regulating amount of powder scooped, stroke of tamping punch, and timing of die-turning fingers. Replaces worn and damaged punches, dies, knock-out pins, and fingers. Weighs powder samples from each charging station on grain scale and adjusts height of scraper or changes size of scoop to regulate load. Measures depth of charge in bullet with dial indicator for firmness of pack. Empties cartier pouches of powder into reservoir bags at charging stations to replenish supply. Cleans machine, using airhose and steam wand, and washes powder dust from floor with water hose.
GOE: 06.02.09 STRENGTH: H GED: R3 M2 L3 SVP: 4 DLU: 77

694.385-010 SHOTGUN-SHELL-ASSEMBLY-MACHINE OPERATOR (ordnance)

Tends battery of automatic machines that perform any combination of following operations to assemble shotgun shells preparatory to loading with powder and shot: Starts machine that coils paper strip into wad and presses wad into shell body; presses molded base wad into shell body; presses metal head onto body and crimps head to form extractor flange; or presses loaded primer into head. Observes machines for jams in hoppers and feed mechanisms and removes jammed components. Examines assembled shells for defects, such as open seams, wad bulges, damaged mouths, and malformed or tarnished heads. Measures head thickness and diameter, shell length, and primer depth, using fixed gauges and dial micrometer. Weighs coiled paper base wads on grain scale to verify conformance to specifications. May fill hoppers with components and remove filled containers of assembled shells and rejects.
GOE: 06.04.20 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

694.585-010 SHELL-SIEVE OPERATOR (ordnance) alternate titles: chip separator

Tends rotary and shaker screens that tumble primed rim-fire cartridge cases to shake out loose particles of priming mixture, sawdust, dirt, and chips and to screen out oversize and malformed cases. Records volume of production.
GOE: 06.04.09 STRENGTH: H GED: R1 M1 L1 SVP: 2 DLU: 77

694.665-010 SHOTGUN-SHELL-LOADING-MACHINE OPERATOR (ordnance) alternate titles: loading-machine operator

Tends battery of automatic machines that assemble shotgun shells and print load information on shell body. Starts machine and observes operation for jams in hoppers, feed tubes and channels, rotary feed plates, and loading and crimping mechanisms. Removes jammed shell components, using fingers or wire hook. Examines samples of completed shells at specified intervals to detect incomplete crimping, bulging wads, and blurred printing. Measures length, head thickness, and diameter, using fixed gauges. Cuts open shell with knife and weighs powder and shot charge on grain scale to ensure charges are within specified limits and wads are correctly placed within shells. Periodically obstructs flow of powder and wads to ensure that automatic warning devices are functioning. Communicates with HOPPER FEEDER (ordnance) and packing workers regarding operational difficulties, quality, quantity, and changeover of shells that corrective action may be taken, using intercom system. Cleans machines of powder, shot, and scrap, using brush and vacuum cleaner. Notifies LOADING-MACHINE TOOL SETTER (ordnance) of machine malfunctioning.
GOE: 06.04.09 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

694.682-010 BULLET-ASSEMBLY-PRESS SETTER-OPERATOR (ordnance)

Sets up and operates automatic machine to cut and size lead wire into bullet cores, fit cores into steel jackets, and shape nose and base of bullets according to specifications. Installs and aligns dies and cutting tools and adjusts pressure and depth of stroke of cutting mechanism according to specifications, using handtools and gauges. [STRAIGHT-LINE-PRESS SETTER (ordnance); SWAGING-MACHINE ADJUSTER (ordnance)]. Threads lead wire through machine guides and pulleys. [CUT-OFF-MACHINE OPERATOR (ordnance); SWAGING-MACHINE OPERATOR (ordnance)]. Starts machine to obtain sample bullet and to verify machine setup. Examines bullets for defects and conformance to specifications, using gauges.
GOE: 06.02.02 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 77

694.682-014 HYDRAULIC-PRESSURE-AUTO-FRETTAGE-MACHINE OPERATOR (ordnance) alternate titles: cold-work operator

Operates hydraulic-pressure-auto-frettage machine to improve physical characteristics and to detect physical weakness of machined artillery barrels, following specifications: Plugs muzzle end of barrel, sets barrel in vertical container of frettage machine, and tightens clamps to lock barrel in place. Connects water pressure pipes to machine, starts water pumps, and moves controls to apply hydraulic pressure to barrel bore to expand bore to specified diameter. Observes pressure indicators and records pressure and time at specified intervals. Fastens cables around barrel and signals OVERHEAD CRANE OPERATOR (any industry) 921.663-010 to remove barrel from machine.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

694.685-010 ANVIL-SEATING-PRESS OPERATOR (ordnance) alternate titles: primer assembler; primer-press operator

Tends *power press* that forces primer anvils into loaded primer cups to form complete primers for small arms cartridges: Aligns specially holed plate containing anvils over matching plate of loaded primer cups. Positions assembled plates in holding fixture, pulls lever to lock plates in place on feed table, and starts machine. Examines assembly for malformations, discolorations, and other defects. May seat anvils, using hand-operated toggle press. May tend shaker machine that fills plates with primer components [SHAKER-PLATE OPERATOR (ordnance)].
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

694.685-014 BULLET-ASSEMBLY-PRESS OPERATOR (ordnance)

Tends machine that shapes (points) front end of steel-jacketed bullets, inserts and seats lead slugs, shapes (bases) rear of bullets, and sizes external diameter, preparatory to insertion in brass cases to form completed cartridges: Places bullet jackets, containing loose slugs, point downward in *dial* feed stations, or observes operation of automatic machine, clearing clogged feed lines, filling dial feed stations, and pressing jackets firmly into holes.

GOE: 06.04.02 STRENGTH: H GED: R2 M1 L2 SVP: 3 DLU: 77

694.685-018 BULLET-LUBRICATING-MACHINE OPERATOR (ordnance) alternate titles: machine pack-shaker lubricator

Tends shaker machine that inserts small arms cartridges into specially holed plates. Positions filled plates on conveyor that immerses cartridge noses in lubricant to coat bullets, preventing lead deposits within weapon bore when fired.
GOE: 06.04.21 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

694.685-022 FUSE-CUP EXPANDER (ordnance)

Tends machine that expands fuse cups into adapters of fragmentation bombs to ensure tightness of fit. Wipes cup threads with cloth and screws cup into bomb cavity, using wrench. Guides bomb from conveyor into machine jig. Pushes lever to force tapered mandrel into fuse cup and expand cup into adapter wall.
GOE: 06.04.02 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

694.685-026 LOADING-MACHINE OPERATOR (ordnance) alternate titles: cartridge-loading operator

Tends machine that loads small arms cartridges with powder and inserts bullets. Inserts bullets in holes of dial feed plate and observes cartridge case feed lines for tipped and inverted cases. Notifies LOADING-UNIT TOOL-SETTER (ordnance) of machine malfunction. Measures samples of loaded cartridges for conformance to specifications, using go-not-go gauges. May replenish powder supply.
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

694.685-030 LOADING-UNIT OPERATOR (ordnance)

Tends machines that load small arms cartridge cases with powder and bullets and crimps cases, working as member of team. Places powder dispensing plate in machine fixture and pushes lever that moves plate under machine hopper to fill holes in plate with powder and return it automatically. Clamps plate of cartridge cases over powder plate and turns over assembly to dump powder into cases. Taps dispensing plate with mallet to dislodge powder residue and removes plate. Measures powder-filled cases, using special gauge, to verify cases are filled. Positions plate of bullets over plate of cartridge cases and pulls bottom slide in bullet plate to drop bullets into cases. Positions cartridge plate on press and pushes lever to lower punches that seat bullets to specified depth in cartridge cases. Places plate of cartridges on press bed and pushes lever to lower crimping block that crimps cartridge cases around bullets. Removes plate from press and examines cartridges for defects, such as dented points, scratches, and loose bullets. Measures samples with fixed gauges to verify conformance to specifications. May be designated according to machine unit tended as Loading-Unit Operator, Crimping (ordnance); Loading-Unit Operator, Powder Charging (ordnance); Loading-Unit Operator, Seating (ordnance).
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

694.685-034 PELLET-PRESS OPERATOR (ordnance)

Tends press that forms pellets of explosives from mixed powder for use in charging or producing detonators for grenades, bombs, shells, and other ammunition. Rubs graphite on table plate and bottom of feed chute of machine. Aligns dies and punches of machine, and adjusts cogwheels to which punches are attached to regulate punches to produce size pellets specified. Fills machine hopper with powder and moves flywheel to make sample pellet. Weighs pellet on balance scale and determines its size with micrometers. Makes necessary adjustments to machine to produce pellets according to specifications. Operates press by remote control due to fire and explosion hazards.
GOE: 06.04.09 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

694.685-038 PRESS TENDER, PYROTECHNICS (chemical) alternate titles: explosives operator

Tends hydraulic press that compresses powder in cardboard cases for use as pyrotechnic (firework) flares and signals. Places cases in mold of press and locks mold. Weighs and pours specified amounts of powder into cases. Pulls lever or pushes button to raise press bed and force ram into mold to compress powder in case. Releases pressure and removes mold. Breaks open molds with mallet and removes containers. May add specified quantities of explosive powder to form igniting charge. May be designated according to type of pyrotechnic loaded as Press Tender, Incendiary Grenade (chemical); Press Tender, Smoke Signal (chemical); Press Tender, Star Signal (chemical).
GOE: 06.04.09 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 77

694.685-042 PRIMER-INSERTING-MACHINE OPERATOR (ordnance) alternate titles: heading-and-priming operator; priming-machine operator

Tends machine that inserts and seats primers in center fire cartridge cases and shotgun shells. Starts machine and feeds cases onto pins of rotating dial plate or fills hopper. Observes flow of primers and cases through feed tracks to detect malfunction or jamming of inserting and seating punches and ejection mechanism. Stops machine to remove jammed primers or cases, using fingers, and notifies PRIMER-INSERTING-MACHINE ADJUSTER (ordnance) of malfunction. Examines primed cases at ejection chute for defects, such as dents or scratches, and measures them for conformance to specifications, using fixed gauges. May tend machine that waterproofs cases [PRIMER-WATERPROOFING-MACHINE OPERATOR (ordnance)].
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

694.685-046 PRIMER-WATERPROOFING-MACHINE OPERATOR (ordnance) alternate titles: lacquer-machine feeder

Tends semiautomatic machine that daubs and sprays lacquer to base and mouth of cartridge cases to form waterproof seals around primer and bullet. Pulls lever to start machine and inserts cartridge cases into recesses in *dial* feedplate. Observes mechanisms that *index*, apply and remove excess lacquer, and eject cases. Notifies PRIMER-WATERPROOFING-MACHINE ADJUSTER (ordnance) of machine malfunction. Examines cases to ensure complete coverage of lacquered areas. May tend machine that inserts primer in case [PRIMER-INSERTING-MACHINE OPERATOR (ordnance)].
GOE: 06.04.21 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

694.685-050 RIM-FIRE-PRIMING OPERATOR (ordnance) alternate titles: rim-fire charger operator

Tends battery of automatic machines that fill head cavity of rim-fire cartridge cases with priming mixture. Rubs moist priming mixture into holes in charger plate, using rubber handhood. Positions plate in holding fixture of priming machine. Starts machine that punches pellets of priming powder into cases and spins mixture into head cavity. Removes jammed cases from feed channels, using airhose or wire pick. Removes empty charger plate when machine stops.
GOE: 06.04.09 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

694.686-010 CLIP-LOADING-MACHINE FEEDER (ordnance)

Feeds clips or loaded cartridges into conveyor slots of feed channels of machine that automatically forces clip over cartridge bases to fasten together specified number of cartridges for use in small arms magazines, working as member of team.
GOE: 06.04.20 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

699 MISCELLANEOUS MACHINE TRADES OCCUPATIONS, N.E.C.

This group includes miscellaneous occupations, not elsewhere classified, concerned with feeding, tending, operating, controlling, and setting up machines to work various materials and products.

699.130-010 PRODUCTION SUPERVISOR (any industry)

Supervises and coordinates activities of workers engaged in two or more metal manufacturing processes, such as machining, metal forming, assembling, and welding, applying knowledge of processes involved, production methods, and products. Trains employees in work methods and procedure. Inspects products to verify conformance to specifications and directs setup and adjustments of machines. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

699.131-010 SUPERVISOR, LUBRICATION (any industry)

Supervises and coordinates activities of workers engaged in lubricating industrial equipment and machinery. Trains workers in lubrication methods, operation of lubrication equipment, and in use of various types and grades of oils and greases. Records lubrication activities to verify equipment is serviced as scheduled. Orders installation of grease cup and other fittings to reduce machine wear. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.04.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

699.137-010 SUPERVISOR, CLEANING (beverage; can. & preserv.; dairy products; food prep., nec)

Supervises and coordinates activities of workers engaged in cleaning machines, equipment, and work areas in beverage or food industries. Fills container with specified amount of cleaning agent, such as liquid or powdered soap and caustic soda. Directs workers in cleaning machines, such as separators, pasteurizers, evaporators, driers, cookers, fillers, and washers, conveyor lines, and working areas. Starts machines and reports machine, gauge, and other control instrument malfunctions to maintenance department. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.04.01 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 77

699.362-010 AUTOMATED CUTTING MACHINE OPERATOR (aircraft mfg.)

Sets up and operates automated cutting machine to cut assorted materials, such as graphite, bleeder and breather cloth, and fiberglass, used in manufacturing composite (fiber reinforced plastic) aircraft parts and assemblies. Reads cutting requests to determine job specifications, such as part identification number, type and quantity of material required, and cutting instructions. Mounts material onto machine fixture or dispensing device, manually or using overhead crane and handtools. Pulls specified length of material over machine cutting table and cuts material, using knife. Positions material on machine cutting table, following blueprints, sketches, and other specifications, using measuring instruments. Pulls and positions additional plies of material onto cutting table. Positions cutter above material plies in specified location. Loads machine control media or enters commands in computer control console to retrieve preprogrammed cutting instructions. Enters commands to activate vacuum that secures materials to table, identify cutter location coordinates, and start machine. Monitors operation of cutting machine to detect malfunctions and informs supervisor or programmer of problem. Removes cut plies from table, marks part identification on plies, and bags and labels cut material for subsequent production use. Sets up and operates machine to cut test pattern from sample material, and obtains approval of test pattern by quality control, programming, or other authorized personnel prior to cutting production materials. Removes and replaces broken or worn blades, using handtools.

GOE: 06.02.09 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 88

699.380-010 DIE SET-UP OPERATOR, PRINTED CIRCUIT BOARDS (electron. comp.)

Sets up and adjusts punching dies in blanking and piercing machines used to fabricate printed circuit boards (PCB's): Reads job order to determine specified dies to be installed. Removes face block from shaft assembly and installs dies according to specifications, using handtools. Replaces face block and aligns shaft assembly with die. Tightens bolts to secure die base and to prevent movement during machine operation. Turns flywheel by hand to ensure complete compression and expansion cycles. Adjusts shaft height as required and locks shaft assembly in vertical position, using handtools. Starts and stops machine and observes operation to detect machine malfunctions.
GOE: 06.01.02 STRENGTH: H GED: R3 M2 L2 SVP: 3 DLU: 86

699.382-010 FLUID JET CUTTER OPERATOR (aircraft mfg.)

Sets up and operates high-speed water jet cutter to cut and trim parts and materials from assorted materials according to specifications: Reads work order, blueprints, and specifications to determine machine setup, type of material or part, quantity, and finish dimensions. Measures and marks cutting and trimming lines on material or part, using measuring instruments, scriber, or marking pen, or mounts material or part in cutting or trimming fixture. Installs and aligns machine accessories, such as cutting tips, work positioner, plates, fixtures, and shields, using handtools and measuring instruments, or enters coordinate information into computer control panel, using *teach pendant*. Manipulates machine controls, such as buttons, switches, dials, levers, and pedals, to regulate and adjust cutting speed and flow of fluid. Cuts and trims parts by manually moving part or material under stream of fluid along cutting lines, controlling movement of part secured in fixture or on work positioner, or entering commands to retrieve and start preprogrammed cutting or trimming instructions to cut materials mounted on machine bed. Observes displays, cutting or trimming process, and listens to sound of machines to detect malfunctions. Replaces worn or damaged machine parts, such as nozzles, tips, and washers. Measures dimensions of finished part, using measuring instruments, such as micrometers, calipers, and dial indicators, or check fixture. Cleans machines and work area. May scoop or pour abrasive particles into hopper of machine. May trim, sand, and drill parts, using shop equipment. May operate automated cutter and be designated Abrasive Water Jet Cutter Operator (aircraft mfg.); or operate manual cutter and be designated Water Router Operator (aircraft mfg.).
GOE: 06.02.09 STRENGTH: M GED: R3 M2 L3 SVP: 5 DLU: 87

699.384-010 COMPARATOR OPERATOR (any industry) alternate titles: shadowgraph operator

Inspects parts for defects in finish and dimensions, using machine that projects magnified shadows of parts on screen: Reads specifications of part to ascertain form and degree to be magnified. Draws enlarged outline of part to scale on chart (celluloid disk), using scribers, dividers, and straightedge. Places chart over translucent glass disk of comparator (shadowgraph) machine. Inserts specified lens into machine and adjusts mirrors to magnify parts. Positions and secures parts on machine table. Turns light on and moves levers of machine to bring shadows of parts into focus with chart outline. Inspects shadows for imperfections of finish and incorrect dimensions. Prepares reports of findings. May rotate part in holding fixture to examine surfaces and to verify concentricity of parts.
GOE: 06.03.01 STRENGTH: L GED: R3 M3 L3 SVP: 4 DLU: 77

699.482-010 RIVETING-MACHINE OPERATOR I (any industry)

Sets up and operates riveting machine to rivet together parts fabricated from materials, such as sheet metal and plastic, according to work orders and specifications: Positions, aligns, and bolts specified dies over anvil and ram of machine and positions fixtures in machine bed, using micrometer, rule, gauge, shims, and wrenches. Installs cam and spring in anvil to synchronize action or clinching post of lower die with action of ram and with rivet feed agitator or lever when setting up semiautomatic machines which position rivets over anvil. Turns knobs and sets screws to adjust depth and pressure limit of ram stroke. Aligns holes of workpieces and inserts shanks of rivets into holes or onto anvil of machine. Positions rivets or holes in workpieces over anvil or against fixtures. Depresses pedal to lower ram that spreads rivet shank to clinch workpieces. Fills hopper with rivets when operating semiautomatic machines. May set up machines equipped with several rams, or with turret to punch and dimple rivet holes and to reposition workpiece after each operation.
GOE: 06.02.02 STRENGTH: M GED: R3 M2 L3 SVP: 5 DLU: 77

699.587-010 SLITTING-MACHINE-OPERATOR HELPER I (any industry) alternate titles: drum operator; machine-operator helper; rewinder; rewinder-operator helper; slitter-and-rewinder; slitter helper

Assists SLITTING-MACHINE OPERATOR (any industry) I performing any combination of following tasks: Positions roll of material, such as cardboard, felt, metallic foil, paper, plastic, rubberized sheeting, or textile fabrics, at rear of machine, using handtruck or cart. Assembles cores, collars, and shafts on roll and positions roll in machine brackets, using hoist. Places takeup tubes I of specified widths on rewind shaft. Threads material over tension bar, between feed rollers, and under rotary blades and laps end of material around takeup tube. Pushes finished roll to bench and removes shaft. Separates pads (slit sections of roll) by chopping at score-marks and prying pad from roll, using dividing iron. Stacks and weighs pads and records weight and color of load. Moves load to next process station or to storage, using handtruck. May space cutting blades on machine shaft, according to width specified for strips, and turn setscrew to secure blades in position, using allen wrench. May pack rewound rolls. May move mill rolls from stock to machine, using handtruck or cart. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 06.04.09 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

699.682-010 BINDING CUTTER, SYNTHETIC CLOTH (tex. prod., nec)

Operates machine, equipped with electrically heated knives, to cut synthetic cloth into binding strips and fuses edges to prevent raveling by melting cloth fibers: Spaces knives on machine shaft, according to specified strip width, and turns setscrews to secure knives in position, using wrench. Mounts cloth roll on machine supports and threads cloth through machine units. Laps end of material around takeup tubes I. Turns dial to regulate temperature of knives and starts machine. Observes operation to detect faulty cutting and winding. Removes narrow rolls of material following process. Replaces defective knives, using handtools and spacing gauges.
GOE: 06.02.05 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

699.682-014 CUTTER (glove & mit.; tex. prod., nec)

Operates machine to cut parts for articles, such as gloves or fabric buffing wheels, from multiple layers of material: Presses pedal to activate conveyor on which layers of material have been spread, guides material into position on bed (cutting block) of machine, and releases pedal when specified length of material is under ram. Straightens edges of material layers to prevent partial cuts. Lifts gang die onto rack under ram of machine, using chain hoist, or positions single die on material. Presses pedal or lever to lower ram that forces die through material.
GOE: 06.02.05 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

699.682-018 CUTTER OPERATOR (any industry) alternate titles: sheeter operator; slitter sheeter operator

Sets up and operates cutting machine equipped with rotary or reciprocating blades to cut rolls of material, such as cloth, paper, paperboard, cellophane, or plastic into sheets, according to specifications: Reads work order to determine dimensions of sheets to be cut. Inserts shaft into core of one or more rolls and raises and positions roll or rolls on cutter rack, using hoist. Threads ends of material through feed rollers, under or across cutting blades, and aligns material against machine guides. Turns rheostat or handwheel to adjust tension of material and to synchronize timing of cutting blades with rate of material feed to regulate length and width of cut. Starts machine and verifies size of cut material, using rule, or notes accuracy of knife cut on spots of premarked paper. Readjusts machine to ensure specified dimensions of sheet. Starts counting device, conveyor belt, or automatic take off table, or raises platform (bearing pallet) on machines equipped with these devices. Observes operation of machine to detect malfunctions, such as jamming, wrinkling, or tearing of material. Stops machine to make required adjustments. Replaces worn cutting blades, using handtools. May oversee duties of assistant operator. May operate machine equipped with electronic eye to control timing of cutting blades and be designated Spot Cutter (any industry). May be designated according to material cut as Cellophane Sheeter (any industry); Foil Cutter (electron. comp.); Paperboard Sheeter (paper products); Paper Sheeter (any industry); or according to purpose for which material is cut as Envelope Cutter (paper products); Liner Sheeter (any industry); Tag-And-Label Cutter (print. & pub.); Wrapper Sheeter (any industry).
GOE: 06.02.09 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 79

699.682-022 DIE CUTTER (any industry) alternate titles: beam-machine operator; clicker; clicker operator; clicking-machine operator; die-press operator; dinking-machine operator; power-press operator

Operates machine to cut out parts of specified size and shape from materials, such as cardboard, cloth, leather, mica, paper, plastic, or rubber: Places single or multiple layers of material on bed of machine. Turns handwheel to raise or lower head of machine (ram) according to thickness of material or depth of die. Positions one or more cutting dies on material or clamps dies to head of machine and positions material under dies to ensure maximum utilization of material. Depresses pedal or moves lever to activate ram that forces die through material. Removes cut parts from die or bed of machine. Measures parts with rule or compares parts with standard to verify conformance to specifications. Stacks parts in storage area according to size and shape. May sharpen cutting edges of dies, using file or hone. When operating machine to trim hat brims, is designated Rounding-Machine Operator (hat & cap). May be designated according to type of die used as Adjustable-Die Cutter (paper goods); Solid-Die Cutter (paper goods); or according to part cut as Sole-Leather-Cutting-Machine Operator (boot & shoe); Toppiece Cutter (boot & shoe); Trimming Cutter (garment). May be designated: Beam-Press Operator (rubber goods); Box-Toe Cutter (boot & shoe); Brim Cutter (hat & cap); Buckram Cutter (boot & shoe; hat & cap; feather prod.); Cap-Parts Cutter (hat & cap); Double Cutter (boot & shoe); Glove-Parts Cutter (glove & mit.); Handbag-Parts Cutter (leather prod.); Hat-Parts Cutter (leather prod.); Heel-Lift-Beam Cutter (boot & shoe); Helmet-Hat-Brim Cutter (hat & cap); Insole Cutter, Machine (boot & shoe); Label Cutter (garment); Leather-Novelty-Parts Cutter (leather prod.); Lining Cutter, Machine (boot & shoe); Outsole Cutter, Machine (boot & shoe); Shoe-Parts Cutter (boot & shoe); Silk-Lining Cutter, Machine (boot & shoe; hat & cap; leather prod.); Single-Beam Clicker (boot & shoe; hat & cap; leather prod.); Sole-Cutting-Machine Operator (boot & shoe); Top-Lift Cutter (boot & shoe); Trimming Cutter,

Machine (boot & shoe); Twin-Beam Clicker (boot & shoe, hat & cap, leather prod.); Upper Cutter, Machine (boot & shoe).
GOE: 06.02.09 STRENGTH: M GED: R3 M2 L3 SVP: 4 DLU: 77

699.682-026 ROLL-SHEETING CUTTER (tex. prod., nec) alternate titles: trim operator

Operates machine to trim edges and slits rolls of coated fabric or plastic sheeting to specified widths for use as wall and shelf covering. Adjusts knives to cut through pattern (design) on material at exact points so patterns will match in register when butted together. Observes operation to correct deviation of cut from point. May be designated according to material cut as Coated Fabric Cutter (tex. prod., nec); Plastic-Sheeting Cutter (plastic prod.).
GOE: 06.02.09 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

699.682-030 SLITTING-MACHINE OPERATOR I (any industry) alternate titles: rip-machine operator; roll-cutting operator; slitter-and-rewinder-machine operator; splitter operator

Operates machine to slit continuous lengths of material, such as cardboard, felt, metallic foil, paper, plastic, rubberized sheeting, or textile fabrics, into strips of specified width. Spaces rotary blades on machine shaft, according to width specified for strips, and turns setscrew to secure blades in position, using allen wrench. Mounts roll or bolt of material on machine supports and threads material over tension bar, between feed rollers, and under rotary blades. Laps ends of slit material around takeup tubes. Starts machine and observes flow of material through machine to detect irregular cutting and winding. Moves levers to stop, start, and regulate speed of machine and to align material with rotary blades. Disengages winding shaft and removes narrow rolls of material. Stacks material on shelves according to width of material. When slitting aluminum foil into widths, is designated Aluminum-Foil-Spooling-Machine Operator (nonfer. metal). When slitting embroidered cloth into strips for use as decorative trimming, is designated Straight Cutter, Machine (tex. prod., nec). May be designated according to material or product cut as Binding Cutter (hat & cap); Cuff Slitter (glove & mit.); Electric-Tape Slitter (rubber goods); Facing Slitter (garment, knitting); Paper Slitter (elec. equip., paper & pulp, paper goods); Tape Cutter (garment, knitting).
GOE: 06.02.09 STRENGTH: M GED: R3 M2 L3 SVP: 4 DLU: 77

699.682-034 BEVELER, PRINTED CIRCUIT BOARDS (electron. comp.) alternate titles: finisher

Operates machine to bevel printed circuit board (PCB) connectors. Reads work order to determine specified angle and depth of bevel. Turns knobs to adjust machine cutting tool. Slides PCB along guide over cutting tool to bevel PCB connector. Views beveled edge of sample board connector through magnifying scope to verify angle and depth of cut meet company specifications. Operates machine to bevel all connector edges. Inspects PCB's to detect rough edges, dirty surfaces, and closed holes. Smooths rough edges, using hand file. Cleans dust and deposits from PCB, using airhose, toothbrush, or rag. Scrapes excess plating from holes, using utility knife.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 86

699.685-010 BUTTON-ATTACHING-MACHINE OPERATOR (garment; hat & cap) alternate titles: button bradder; button clamper; button riveter; button tacker; patent-button machine operator, automatic; top-bottom-attaching-machine operator

Tends machine that attaches buttons to articles of apparel, such as work clothing and caps. Places tack in holder on machine bed. Positions premarked article over tack on bed and positions button on garment over tack and under machine ram. Depresses pedal that lowers ram, joining button to article.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

699.685-014 CUTTER, MACHINE II (any industry) alternate titles: shearer; straight cutter

Tends machine that cuts materials, such as braid, cardboard, cloth, felt, leather, ribbon, roofing paper, strands of wire, or tape to specified dimensions, by any of following methods: (1) Spaces guide or stop gauge along calibrated scale of cutting table according to length of cut specified and tightens setscrew to secure guide or gauge in position. Stacks single or multiple layers of material on cutting table with edges against stop gauge or pulls material across cutting table to guide. Lowers lever-type blade by hand to cut material. (2) Spaces stop gauge along calibrated scale, according to length of cut specified, and tightens setscrew to secure gauge in position. Places single or multiple layers of material on bed of machine with edges against stop gauge or moves lever to advance material in bed of machine against stop gauge. Depresses pedal to activate lever-type-blade that lowers and cuts material. May tend machine that trims excess material or irregular edges from variety of materials or garment and shoe parts. (3) Mounts roll of material on shaft or positions container of flat folded material at feed end of machine. Threads end of material through guides and automatic feeding device. Turns setscrew to regulate feeding device according to length of cut specified. Starts machine that automatically feeds material under lever-type blade and cuts material into lengths. Stacks lengths of material on table or in handtruck. May change blade, using handtools. When cutting materials for use in making rubber stamp pads, is designated Guillotine Operator (pen & pencil). When trimming feathers for use in making shuttlecocks, is designated Shuttlecock-Feather Trimmer (toy-sport equip.). May be designated according to material or article cut or trimmed as Belt-Loop Cutter (garment); Collar Trimmer (garment); Sample Cutter (garment, textile). May be designated: Band Cutter (garment); Belt Cutter (garment); Braid Cutter (rubber goods); Elastic Cutter (garment); Foil Cutter (any industry); Hose-Suspender Cutter (garment); Label Cutter (garment, knitting); Piping Blocker (boot & shoe); Ribbon Cutter (garment, Sheet Cutter (tex. prod., nec); Strap Cutter (garment); Tape Cutter (garment); Toppiece Chopper (boot & shoe).
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

699.685-018 EYELET-MACHINE OPERATOR (any industry) alternate titles: button bradder; button clamper; button riveter; eyelet maker; eyelet riveter; eyeletter; grommet-machine operator; grommet maker

Tends machine that crimps eyelets, grommets, snaps, buttons, or similar fasteners to material, such as cloth, canvas, paper, plastic, leather, or rubber to reinforce holes, attach fasteners, or to attach parts, by any of following methods: (1) Pours metal fasteners into hopper of machine. Positions material under machine head according to marking on machine bed or material. Depresses pedal to start machine that feeds fastener from fastener holder, lowers ram to force fastener through material and to crimp fastener edges into material, and material into position for succeeding fasteners. (2) Lays fastener in holder of machine. Positions material over fastener according to marks on material or prepunched holes in material. Depresses pedal to lower machine ram which forces edges of fastener into material. (3) Inserts bottom section of two piece fastener in slot in bed of machine and top section into hole in material. Depresses pedal to lower ram and rivet both sections together. May locate and mark positions of fastener on material. May tend machine that also punches holes for fasteners. May be designated according to type of fastener used as Blind Eyeletter (boot & shoe); Blind Hooker (boot & shoe); according to part attached as Buckle-Attaching-Machine Operator (hat & cap); Hook-and-Eye Attacher, Machine (garment); or according to part made as Chin-Strap Maker (hat & cap); Sweatband Maker (hat & cap). May be designated: Button-Attaching-Machine Operator (any industry); Cap-And-Stud-Machine Operator (rubber goods); Fastener Attacher (any industry); Gripper Attacher (any industry); Snap Attacher (any industry); Snap-Fastener-Machine Operator (any industry).
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

699.685-022 EYELET-PUNCH OPERATOR (furniture)

Tends machines that automatically fasten fabric, padding, and scrim with eyelets to form felted border panels for mattresses. Loads material on machine reels, inserts ends between rollers, and drops metal eyelets into feed slots of machine. Starts machine and cuts, folds, and bundles boxing as it emerges.
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

699.685-026 POWER-SCREWDRIVER OPERATOR (any industry) alternate titles: power-nut-runner operator

Tends power screwdriver that tightens bolts, nuts, or drives screws to assemble products fabricated from materials, such as wood, metal, plastic, or other materials. Threads or clamps specified torque chuck onto machine spindle. Inserts shank of specified wrench or screwdriver bit into chuck and tightens it, using chuck wrench. Inserts screw or bolt through holes of workpieces or nut onto stud, and turns screw or bolt to catch thread. Positions bolt or nut under bit, and depresses lever to lower spindle and grip head of screw or nut. Pushes pedal to activate spindle that turns and tightens nut, bolt, or screw to torque limit of chuck. May tend machine that positions screw or bolt into workpiece. May tend machine that is activated by pressing workpiece against chuck. May fill hoppers with screws and tend machine that automatically feeds screw between aligned holes of workpiece.
GOE: 06.04.20 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

699.685-030 RIVETING-MACHINE OPERATOR II (any industry)

Tends riveting machine that rivets together parts fabricated from materials, such as plastic, cloth, or leather. Aligns holes of workpieces. Inserts rivet shank through holes or onto anvil of machine. Positions rivet or holes of workpieces over anvil or against fixtures. Presses pedal to lower ram that expands rivet shank and clinches workpieces together. Fills hopper with rivets when tending automatic machine that positions rivets over anvil. May tend machine equipped with rotating die and be designated Rivet Spinner (any industry).
GOE: 06.04.20 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

699.685-038 FILLING-MACHINE OPERATOR (nonfer. metal)

Tends machine that fills cavities of aluminum extrusions with cement to form thermal-conduction barriers for use in manufacturing windows and doors. Moves machine controls to regulate extrusion feed rate and speed of cement flow. Adjusts drive wheels, pressure rollers, and cement needle according to extrusion size and cavity to be filled, using wrenches. Starts machine that conveys extrusion on rollers through machine for filling operation. Observes operation to ensure cavity filling meets company standards. Readjusts settings when cavity filling falls below specifications. Stacks filled extrusions discharged from machine into cart with assistance from coworker. Places separator blocks and sticks between extrusion layers to prevent sticking and facilitate cement drying.
GOE: 06.04.36 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 86

699.685-046 PINNER, PRINTED CIRCUIT BOARDS (electron. comp.)

Tends machine that drills pinning holes and inserts metal pins into sets of copper laminated fiberglass boards and backing material preparatory to fabrication of printed circuit boards (PCB's). Fills pinning machine hopper with metal pins. Reads work orders to determine specified PCB's. Positions PCB's on bed of machine. Turns machine levers and handwheels to adjust, align, and hold PCB's for drilling and pinning. Activates machine that drills pinning holes and inserts pins into PCB's to stabilize PCB's during numerical-controlled drill-

ing of component mounting holes. Stacks pinned PCB's for transfer to next work station. May assemble sets of fiberglass PCB's and backing material prior to pinning operation.
GOE: 06.04.09 STRENGTH: M GED: R2 M2 L1 SVP: 2 DLU: 86

699.685-050 PRODUCTION-MACHINE TENDER (auto. mfg.)
Tends automatic production machines and equipment that machine, stamp, weld, form, move, or apply adhesives to automotive parts, according to specifications and machine operating instructions: Pushes buttons on control panel to start and activate automatic cycles of production machines and equipment. Observes machine operations, material supplies, and position of workpieces to detect malfunctions, needed supplies, or misaligned parts. Adjusts alignment of parts on transfer devices and fixtures, using wrench, screwdriver, or control panel. Pushes buttons and presses keys on *teach pendant* to adjust programmed positions of robots' end-of-arm tools or to reset programs that control robot movements. Inspects welds of arc welding robots and adjusts weld position, amount of electrode wire in weld, or heat setting, using teach pendant. Replenishes workpieces for spot welding robots, adhesive supply for adhesive applying robots, and welding wire for arc welding robots. Lubricates machine parts, using grease gun and oilcan. Removes weld slag from fixtures, using chisel, hammer, or file. Notifies supervisor of machine malfunction or defective auto parts. May be assigned to one type of machine, such as material handling, spot welding, or arc welding robots; automatic spot welder; or punch or drill press. May work as part of team.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 90

699.685-054 TRIMMER, PRINTED CIRCUIT BOARD PANELS (electron. comp.)
Tends machines that trim and bevel edges of copper laminated fiberglass panels used in fabrication of printed circuit boards (PCB's): Flips switches to activate machines. Positions panel over pegs on bed of trimming (shearing) machine. Presses buttons to lower cutting blade that trims excess edges from fiberglass panel. Removes panel from bed of trimming machine and positions edge of panel against guide on bed of beveling machine. Moves panel along guide and under rotating cutting blade that bevels edges of panel. May clean machines, using airhose, to remove shavings. May count and record number of panels completed.
GOE: 06.04.09 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 86

699.686-010 MACHINE FEEDER (any industry)
Feeds or removes metal, plastic, or other stock and material from automatic fabricating machines: Places stock into hoppers, onto conveyors of self-centering machine bed, or lifts coils of sheet metal or wire onto feedrack. Removes stock from conveyor and piles it into boxes, truck, or on feed conveyor for next operation. May push dual control buttons to activate machine. May work in pairs to feed or remove pieces from machine. May thread sheet metal or wire through machine. May be designated by machine fed as Shear Operator, Automatic (any industry) II; or by task performed as Punch-Press Feeder (any industry); Punch-Press Offbearer (any industry); Straightening-Machine Feeder (any industry).
GOE: 06.04.09 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

699.687-010 HARNESS CLEANER (textile) alternate titles: harness brusher; reed cleaner
Cleans lint, dust, gum, and size from harness assemblies and loom reeds, using brush or airhose. Scrubs harness assemblies in cleaning solution and hangs them in drying cabinet. May clean and replace worn or damaged *drop wires*.
GOE: 06.04.39 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

699.687-014 MACHINE CLEANER (any industry) alternate titles: machine brusher; machine rubber; wiper
Cleans dust, dirt, grease, and lint from machines and auxiliary equipment, such as tanks and pipelines, in industrial plant or aboard ship, using cleaning solutions, waste, rags, waterhose, pumps, lint vacuum system, airhose, brushes, and scraping tools: Cleans screen on lint vacuum system and replaces worn screen. May clean plant sewage treatment system and water supply wells. May remove machine guards and accessories, using handtools. May paint exposed surfaces of machines to prevent rust. May oil moving parts or wearing surfaces. May clean floors around machine, using broom or vacuum cleaner. May be designated according to machine or part of machine cleaned as Bottle-Packing-Machine Cleaner (any industry); Creel Cleaner (textile); Opening-Machine Cleaner (textile); Pin Cleaner (textile); Rack Cleaner (textile); Shafting Cleaner (any industry). May be designated: Card Cleaner (textile); Guide-Rail Cleaner (textile); Loom Blower (textile).
GOE: 06.04.39 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 86

699.687-018 OILER (any industry) alternate titles: boiler-room helper; greaser and oiler; greaser; hostler; lubricator; machine hostler; oiler and greaser
Oils and greases moving parts of friction surfaces of mechanical equipment, such as shaft and motor bearings, sprockets, drive chains, gears, and pulleys, according to specified procedures and oral instructions: Fills container, such as oilcan, grease gun, or tank of lubrication truck with specified lubricant. Squirts or pours oil on moving parts and friction surfaces, or into holes, oil cups, or reservoirs. Turns oil cup valves to regulate flow of oil to moving parts. Forces grease into bearings with grease-gun, smears grease on friction surfaces, or packs grease cups by hand. Fills wells and sumps of lubricating systems with oil. Reports machinery defects or malfunctions to supervisor. May clean machines, sweep floors, and transport stock. May be specified according to type of machine or equipment lubricated. May tend machine that automatically oils parts.
GOE: 05.12.08 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

699.687-022 ROPE CLEANER (textile)
Rubs powdered mica onto tension rope of warp beam to prevent rope from slipping and to maintain even tension on warp.
GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

7 BENCHWORK OCCUPATIONS

This category includes occupations concerned with the use of body members, handtools, and bench machines to fit, grind, carve, mold, paint, sew, assemble, inspect, repair, and similarly work relatively small objects and materials, such as jewelry, phonographs, light bulbs, musical instruments, tires, footwear, pottery, and garments. The work is usually performed at a set position in a mill, plant, or shop, at a bench, worktable, or conveyor. At the more complex levels, workers frequently read blueprints, follow patterns, use a variety of handtools, and assume responsibility for meeting standards. Workers at the less complex levels are required to follow standardized procedures.

70 OCCUPATIONS IN FABRICATION, ASSEMBLY, AND REPAIR OF METAL PRODUCTS, N.E.C.

This division includes occupations, not elsewhere classified, concerned with fabricating, assembling, and repairing or reconditioning products primarily made of metal, but may include parts of plastic or other materials. Also includes products usually made of metal, such as certain tools, but sometimes made of a substitute metallic-type material, the fabrication of which involves use of tooling and techniques similar to metalworking.

700 OCCUPATIONS IN FABRICATION, ASSEMBLY, AND REPAIR OF JEWELRY, SILVERWARE, AND RELATED PRODUCTS

This group includes occupations concerned with fabricating and repairing solid and plated jewelry, tableware, dresser sets, ornamental articles, trophies, medals, rosaries and ecclesiastical ware, jewelers' findings, and related items made of precious and semiprecious metals, and such alloys as pewter and stainless steel. Includes mounting stones in settings. Lapidary work is included in Group 770, and metal engraving is included in Group 704.

700.130-010 SUPERVISOR (jewelry-silver.)

Supervises and coordinates activities of workers engaged in production of sterling silver or silver-plated hollowware, such as serving pieces, flatware, ecclesiastical items, or trophies. Analyzes characteristics, such as luster, malleability, and attractiveness of workpiece in process to determine whether to stop or continue production of workpiece. Trains new workers. Inspects finished work to ensure adherence to specifications, using micrometer, calipers, height-gauge, and rulers. May operate equipment, such as buffing machine, press, and drophammer to correct defects in product. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

700.131-010 SUPERVISOR (jewelry-silver.; plastic prod.)

Supervises and coordinates activities of workers engaged in production of jewelry cases. Trains new employees in all phases of operations. Performs duties as described under SUPERVISOR (any industry) Master Title. May be designated according to workers supervised as Supervisor, Hand Workers (jewelry-silver.; plastic prod.); Supervisor, Machine Workers (jewelry-silver.; plastic prod.).
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

700.131-014 SUPERVISOR (metal prod., nec)

Supervises and coordinates activities of workers engaged in beating gold strips into leaves of specified dimensions, performing duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

700.131-018 SUPERVISOR, JEWELRY DEPARTMENT (jewelry-silver.)

Supervises and coordinates activities of workers engaged in more than one phase of manufacturing jewelry, such as rings, pins, charms, and medals. Assigns workers to stamping, soldering, enameling, or engraving department. Trains workers in methods of jewelry manufacture, such as model making, casting, polishing and stone cutting. Inspects finished work to ensure adherence to specification, using sight magnifier, micrometer, and loupe. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M4 L3 SVP: 7 DLU: 77

700.261-010 PEWTERER (jewelry-silver.)

Designs and fabricates pewter products, applying knowledge of metallurgy, mold-making, and pewter casting and finishing. Researches reference materials and consults with interested parties to develop ideas for new products. Designs, drafts, and fabricates models of new casting molds, using drafting tools, lathe, and handtools. Fabricates lathe accessories and modifies handtools to facilitate turning and finishing of cast pieces. Mixes and heats alloy and fills casting molds [PEWTER CASTER (jewelry-silver.) 502.384-010]. Joins cast parts to form product, using solder and blowtorch, and shapes, engraves, and polishes product, using lathe and cutting and polishing tools [PEWTER FINISHER (jewelry-silver.) 700.281-026]. Analyzes production data to determine deviations from standards necessitating replacement of molds or modification of equipment.
GOE: 01.06.02 STRENGTH: M GED: R3 M3 L3 SVP: 8 DLU: 86

700.281-010 JEWELER (jewelry-silver.) alternate titles: bench worker; jewelry jobber; jewelry repairer

Fabricates and repairs jewelry articles, such as rings, brooches, pendants, bracelets, and lockets. Forms model of article from wax or metal, using carving tools. Places wax model in casting ring, and pours plaster into ring to form mold. Inserts plaster mold in furnace to melt wax. Casts metal model from plaster mold. Forms mold of sand or rubber from metal model for casting jewelry. Pours molten metal into mold, or operates centrifugal casting machine to cast article [CENTRIFUGAL-CASTING-MACHINE OPERATOR (jewelry-silver.)]. Cuts, saws, files, and polishes article, using handtools and polishing wheel. Solders pieces of jewelry together, using soldering torch or iron. Enlarges or reduces size of rings by sawing through band, adding or removing metal, and soldering ends together. Repairs broken clasps, pins, rings, and other jewelry by soldering or replacing broken parts. Reshapes and restyles old jewelry, following designs or instructions, using handtools and machines, such as jeweler's lathe and drill. Smooths soldered joints and rough spots, using hand file and emery paper. May be designated according to metals fashioned as Goldsmith (jewelry-silver.); Platinumsmith (jewelry-silver.); Silversmith (jewelry-silver.) I.
GOE: 01.06.02 STRENGTH: S GED: R4 M3 L3 SVP: 7 DLU: 77

700.281-014 JEWELER APPRENTICE (jewelry-silver.) alternate titles: bench-worker apprentice; jewelry-repairer apprentice; craft worker

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 01.06.02 STRENGTH: S GED: R4 M3 L3 SVP: 7 DLU: 77

700.281-018 MODEL MAKER I (jewelry-silver.)

Makes models by hand from materials, such as plastic, plaster, wax, and metals, according to prepared design for use as molds in casting silverware articles, using sculpturing, carving, and engraving tools. Cuts, carves, chisels, scrapes, and files plaster, wax, or other plastic materials to make model of article in conformity with design. Makes mold of clay or plaster and casts metal sample of model [MOLD MAKER (jewelry-silver.) I]. Grinds, sharpens, and makes own handtools, such as scrapers, cutters, gougers, and shapers. May chase decorative designs on silver blanks to be used as models from which steel-production dies are made [CHASER (jewelry-silver.)]. May make own jigs and fixtures.
GOE: 01.06.02 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

700.281-022 SILVERSMITH II (jewelry-silver.)

Assembles and repairs silverware, such as coffee pots, tea sets, and trays. Anneals workpiece in gas oven for prescribed time to soften metal for reworking. Wires parts, such as legs, spouts, and handles, to body to prepare unit for soldering. Solders parts together and fills in holes and cracks with silver solder, using gas torch. Hammers out deformations and levels and sets bottoms, using dollies, hammers, and tracing punches. Shapes and straightens damaged legs, lids, and spouts with pliers. Restores dented embossing on articles, using hammers and punches. Pierces and cuts open design in ornamentation, using hand drill and scroll saw. Glues plastic separators to handles of coffee and teapots. May operate lathe to form articles of silverware out of silver or plated sheet, according to sketches. May hammer metal into shape and solder seams to make handles and spouts. May work with metals other than silver, such as pewter, brass, chromium, and nickel.
GOE: 01.06.02 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 77

700.281-026 PEWTER FINISHER (jewelry-silver.)

Shapes, joins, engraves, and polishes pewter items following casting, using machine and handtools and applying knowledge of finishing processes. Secures cast pewter item onto chuck of lathe, depresses button to activate lathe, and pares inner and outer surfaces of items to remove rough edges and excess material, to shape piece to style specifications, and to impart luster to finish, depending on processing stage, using variety of chipping and cutting tools. Engraves decorative lines on item, using engraving tool. Polishes finished surfaces, using abrasive pad. Determines placement on item of auxiliary parts, such as spouts and handles, using paper facsimile, and marks solder path on item, using grease pencil. Routs out solder path, following marked lines and using routing machine. Places part on jig to stabilize part, aligns auxiliary part with part of jig, and joins parts, using solder and blowtorch. Weighs completed pieces to determine deviation from target weight, and records weight and proc-

essing time required on production records. Carries pieces to next work station. Occasionally fabricates chipping and turning tools, using machine and handtools.
GOE: 01.06.02 STRENGTH: M GED: R3 M2 L2 SVP: 7 DLU: 86

700.381-010 CHAIN MAKER, HAND (jewelry-silver.)
Forms chains of various shapes and designs from gold wire to make jewelry articles according to specifications: Winds wire into coils, using coiling device. Saws coils through one side to form separate links, using handsaw. Assembles links in specified manner to form rope chain or fancy links, using pointed pliers. Solders links to form chain, using gold solder and gas torch. Immerses chain in chemical baths to clean gold. Polishes chain, using jeweler's rouge and felt polishing wheel.
GOE: 06.01.04 STRENGTH: L GED: R4 M2 L3 SVP: 6 DLU: 77

700.381-014 FANCY-WIRE DRAWER (jewelry-silver.)
Draws, shapes, and engraves or embosses precious or base metal wire for use in fabricating precious or costume jewelry, such as chains, box links, and bracelets: Inserts tapered end of metal wire, such as gold, platinum, and silver, through die hole, pulling wire through dies of wire-drawing machine manually to form round, half-round, square, or rectangular jewelry wire. Engraves ornamental designs on surface of wire, using triangular and square-pointed tools, such as gravers and carvers, or embosses wire with decorative patterns, using wire-drawing machine equipped with embossing rollers. Draws, shapes, and embosses ribbon-wire, using rolling mill. Examines dimensions of rolled or drawn wire, using micrometers.
GOE: 01.06.01 STRENGTH: S GED: R4 M3 L3 SVP: 7 DLU: 77

700.381-018 GOLDBEATER (metal prod., nec)
Beats gold strips into gold leaf, using hammers, for use in decorating products, such as books, furniture, and signs: Cuts gold strip into one inch squares and interlaminates squares with leaves of cutch (packet of vellum sheets). Hammers cutch to reduce thickness and expand area of squares to form gold sheets of specified dimensions. Cuts sheets into quarters and interlaminates quartered sheets with leaves of shoder (packet of skins). Hammers shoder to form gold leaf of specified dimensions.
GOE: 06.01.04 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

700.381-022 HAMMERSMITH (jewelry-silver.) alternate titles: flat hammerer
Repairs defects in silver hollowware, such as trays, creamers, teapots, and bowls, using hammers, dollies, and tracing punches: Examines article to determine nature of defect, such as dents, uneven bottom, scratches, or holes. Places article on anvil or dolly and pounds out dents or bulges, selecting hammer with head corresponding in curvature with surface of article. Straightens twisted articles by hand. Forms concavity in bottom of article to improve its stability, using tracing punches and hammer. Verifies levelness of bottom edges of article, using straightedge, or by rocking article back and forth on flat surface. Peens edges of scratches or holes to repair defect, using peening hammer.
GOE: 06.01.04 STRENGTH: L GED: R3 M1 L2 SVP: 6 DLU: 77

700.381-026 LAY-OUT WORKER (jewelry-silver.)
Lays out settings and mounts stones in jewelry mounting, following specifications: Compares mounting with design to determine position of settings. Marks and drills holes in mountings to center stones according to design specifications. Decorates raised portions of metal, using engravers' tools. Positions mountings in sandblasting machine to clean and sharpen design preparatory to further processing. May modify existing mountings to reposition jewels [STONE SETTER (jewelry-silver.; optical goods)].
GOE: 01.06.02 STRENGTH: S GED: R4 M2 L3 SVP: 7 DLU: 77

700.381-030 LOCKET MAKER (jewelry-silver.)
Shapes, finishes, and assembles metal parts to fabricate lockets: Stamps design in metal frame with drop press. Cuts edges with chisel or reamer to flatten sides. Solders in lining and places field piece between outer and inner frame to hold picture. Removes rough spots with file and emery paper, and polishes with buffing wire and wire brush. Dips lockets in cleaning solution to remove stains and in solution of gold or other metal to color lockets.
GOE: 06.01.04 STRENGTH: L GED: R3 M2 L2 SVP: 7 DLU: 77

700.381-034 MOLD MAKER I (jewelry-silver.) alternate titles: chaser
Finishes, alters, and repairs metal molds used to cast jewelry articles and trophy figurines, using hand carving and engraving tools: Cuts design in mold and files, grinds, and shapes points, surfaces, and contours. Fits halves of molds together to determine if they close tightly. Drills holes in mold to allow gases to escape during casting. Reshapes pouring funnels of molds to facilitate flow of molten metal. Drills holes in mold and attaches handles, using drill press and screwdriver. Forms sample castings in mold and measures casting to verify dimensions. May grind, sharpen, and make tools.
GOE: 01.06.02 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

700.381-038 MOLD-MAKER APPRENTICE (jewelry-silver.) alternate titles: chaser apprentice
Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 01.06.02 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

700.381-042 RING MAKER (jewelry-silver.)
Fabricates rings by any of following methods: (1) Casts rings, using molds of rubber, plaster, wax, sand, and metal. (2) Cuts out ring blanks from flat metal and shapes blanks into ring bands. (3) Ties or twists gold or silver wires together and bends to form rings. Removes gates, solders ends, and files rings to remove excess metal. Cleans and polishes rings by immersing them in metal cleaning or acid solution. May set stones in rings.
GOE: 06.01.04 STRENGTH: L GED: R3 M2 L2 SVP: 7 DLU: 77

700.381-046 SAMPLE MAKER I (jewelry-silver.) alternate titles: crafter
Fabricates sample jewelry articles, according to drawings or instructions: Cuts and shapes metal into findings, using metal cutting and carving tools. Arranges metal findings into specified design, softens findings by heating with gas torch, and shapes findings, using hammer and die. Solders pieces together, and smooths rough surfaces, using wooden mallet, files, or polishing wheel. Attaches decorative trimmings, such as wax flowers, enamel motifs, and stones.
GOE: 01.06.02 STRENGTH: L GED: R3 M2 L2 SVP: 7 DLU: 77

700.381-050 SOLDERER (jewelry-silver.)
Solders together parts of new or broken jewelry, using gas torch and solder: Selects type of solder to be used and lays parts on asbestos board. Lights torch and applies solder and flux to article as needed. Immerses article in water to cool.
GOE: 06.01.04 STRENGTH: S GED: R3 M2 L3 SVP: 5 DLU: 77

700.381-054 STONE SETTER (jewelry-silver.; optical goods) alternate titles: jewelry setter
Sets precious, semiprecious, or ornamental stones in rings, earrings, bracelets, brooches, metal optical frames, and other jeweled items, using handtools: Places item in vise. Cuts and files setting to accommodate stones, using files, chisels, and hand or electric drills. Positions stone in setting and fixes in place by pressing prongs around stone, by raising retaining metal ridge around stone, or by tapping edges of setting with setting tool and hammer, forcing metal against stone. Smooths edges, using emery file and pointed steel tool. Examines union of stone and setting, using magnifying glass. May drill holes in settings preparatory to setting stones in piece. May replace stones in rings. May be designated according to stone set as Diamond Setter (jewelry-silver.) or according to item worked on as Stone Setter, Metal Optical Frames (optical goods).
GOE: 05.05.14 STRENGTH: L GED: R3 M2 L2 SVP: 7 DLU: 77

700.381-058 STONE-SETTER APPRENTICE (jewelry-silver.; optical goods)
Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.14 STRENGTH: L GED: R3 M2 L2 SVP: 7 DLU: 77

700.682-010 FLATWARE MAKER (jewelry-silver.)
Operates power press and other machines to stamp out spoons and forks from sterling silver blanks: Positions and secures specified cutting dies in holders of power press, using wrench. Starts press, positions blank, and depresses pedal to cut blank to size. Places cut blank in die holder of drop press. Pulls strap to drop ram onto blank to form bowl or fork end of flatware, regulating force of ram by height from which ram is released. Anneals flatware between initial and final stampings, using torch to heat metal to prescribed temperature. Immerses annealed flatware in specified solution to cool and clean metal. Positions formed fork blanks in holders of tining press and activates cutters that form tines. Shapes handle, bowl, or tines of spoons and forks, using copper model as standard, grinding wheel, emery-belt, wooden mallet, forming blocks, and hand files.
GOE: 06.02.02 STRENGTH: L GED: R3 M2 L2 SVP: 7 DLU: 77

700.682-014 LATHE HAND (jewelry-silver.) alternate titles: sawyer
Operates bench lathe to saw, mill, burr, or bevel metal stock or parts used to make jewelry findings: Secures stock in guide or jig, starts lathe, and moves stock against cutting tool. May manipulate stock against cutting tool without use of guide or jig.
GOE: 06.02.02 STRENGTH: L GED: R3 M1 L2 SVP: 6 DLU: 77

700.682-018 PROFILE-SAW OPERATOR (jewelry-silver.)
Trims excess metal from edges of hollowware, such as trays, platters, bowls, and vegetable dishes after forming on forming press, using circular saw: Selects saw blade according to metal composition of workpiece and mounts it on driving spindle, using wrench. Measures distance from bottom of workpiece to ridge or scallop on contour and adjusts height of saw blade, using dividers, scale, adjustable square and wrenches. Starts machine and positions hollow side of workpiece over saw blade with top flat against backboard. Guides workpiece against saw following designated ridge or scallop to cut excess metal at same height around edge of workpiece.
GOE: 06.02.02 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

700.684-010 ARBORER (jewelry-silver.) alternate titles: bender; ring maker; sizer
Forms ring blank into circular shape, using ring mandrel and rawhide mallet: Files ends of ring blank smooth and square and places blank in ring bending device. Pulls lever to bend blank into semicircle. Places blank on mandrel and hammers blank into circular shape, using rawhide mallet. Slides ring over sizing (measuring) mandrel to verify conformity to specifications.
GOE: 06.04.24 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

700.684-014 ASSEMBLER (jewelry-silver.)
Assembles jewelry, such as rings, lockets, bracelets, brooches, and watchcases, using pliers, screwdriver, and jeweler's hammer. May use foot

press. May be designated according to type of product assembled as Bracelet Maker, Novelty (jewelry-silver.); Brooch Maker, Novelty (jewelry-silver.).
GOE: 06.04.23 STRENGTH: S GED: R2 M1 L1 SVP: 3 DLU: 77

700.684-018 BRIGHT CUTTER (jewelry-silver.)
Cuts layer of metal from walls of settings and other surfaces of jewelry articles to reveal bright inner metals: Clamps article in chuck preparatory to cutting. Lubricates cutting tool and pushes tool over surface to remove specified layer of metal.
GOE: 06.02.24 STRENGTH: S GED: R3 M2 L2 SVP: 3 DLU: 77

700.684-022 CHAIN MAKER, MACHINE (jewelry-silver.)
Forms chains for watches and other jewelry articles: Feeds wire into machine. Hooks together ends of chain formed by machine, using pliers, and solders on trimming. May be designated according to type of chain as Novelty-Chain Maker (jewelry-silver.).
GOE: 06.02.23 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

700.684-026 DRILLER (jewelry-silver.) alternate titles: drill-press operator
Drills holes and sockets for stones or hinges in pieces of jewelry, such as brooches, rings, and bracelets: Inserts drill bit of specified size in chuck of press and starts drill. Holds piece of jewelry against drill, pressing it until holes or sockets are formed. May use hand drill.
GOE: 06.04.24 STRENGTH: S GED: R2 M1 L2 SVP: 3 DLU: 77

700.684-030 EARRING MAKER (jewelry-silver.)
Assembles pearl earrings according to designs or instructions: Winds wire-threaded pearls, by hand, around metal-looped earring blanks. Cuts end of wire thread with cutter. Fastens pearls on loops by twisting wire with pliers. May paste loops of pearls and single pearls to facing of other loop blank.
GOE: 06.04.23 STRENGTH: S GED: R3 M2 L2 SVP: 3 DLU: 77

700.684-034 FILER (jewelry-silver.) alternate titles: fitter; shaper
Trims and smooths edges, surfaces, and impressed or raised designs of jewelry articles and jewelry findings, using files, chisels, and saws: Places article in holding device or against bench pin. Files or cuts excess metal from surfaces and ornamentations, such as filigree or relief designs. Miters joints and ends of formed ring blanks, using file. May smooth and polish edges and soldered areas of jewelry, using abrasive wheel. May operate motor-driven filing machine.
GOE: 06.04.24 STRENGTH: L GED: R3 M1 L2 SVP: 3 DLU: 77

700.684-038 GOLD CUTTER (metal prod., nec)
Cuts goldleaf sheets to specified sizes and fills interleaved books with cut sheets, using handtools: Removes sheet of goldleaf from mold, using wood pinchers. Places sheets on worktable and smooths sheets preparatory to cutting. Cuts sheets to specified size, using cutting device. Places goldleaf in interleaved book, using wood pinchers. May operate electric cutting machine to cut goldleaf.
GOE: 06.02.24 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

700.684-042 HOLLOW-HANDLE-KNIFE ASSEMBLER (jewelry-silver.)
Cements knife blades into hollow handles by performing any combination of following tasks: Weighs, measures, and mixes specified amounts of powder and water together in automatic beater for specified time. Pours cement into drum of centrifugal loading machine, inserts knife handles in perimeter of drum and activates machine to fill handles. Places filled handle in tray. Inserts tang of blade into cement-filled handle and twists blade to align blade with handle. Places assembled knife between spring-loaded holders on vertical endless chain conveyor leading to drying oven or water-curing machine. Removes finished pieces from conveyor and examines them for alignment and excess cement. Twists blade to realign it with handle, and places rejects in tray. Places accepted knives in rack for air drying. Cleans cement from knife, using brush and metal pick. May pour cement into pneumatic cylinder, connect compressed air-hose, place knife handle under cylinder spout, and fill handle by depressing pedal to release cement from cylinder.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

700.684-046 JIGSAWYER (jewelry-silver.) alternate titles: jigsaw operator
Cuts out metal jewelry findings according to pattern, using jigsaw: Receives metal sheets with patterns cemented to tops, or prints patterns on printing press and cements onto metal sheets. Assembles several sheets into laminated block with oiled paper between layers to produce multiple findings in one cutting operation. Drills holes for saw blade, using drill press. Mounts blade on jigsaw, starts saw, and guides metal sheet against blade to cut along lines of pattern.
GOE: 06.04.24 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

700.684-050 MESH CUTTER (jewelry-silver.)
Cuts metal mesh to specified dimensions to make jewelry articles, such as women's handbags, belts, and watchbands: Detaches small metal squares from mesh by cutting corner rings until desired size and shape of mesh is attained. May complete shaping of mesh with scissors.
GOE: 06.02.24 STRENGTH: S GED: R3 M1 L2 SVP: 3 DLU: 77

700.684-054 OXIDIZER (jewelry-silver.)
Brushes oxide solution on ornamentation (patterned surfaces) of silverware and silver-plated ware to darken crevasses to make design stand out after buffing: Brushes oxide on ornamentation of hollowware, such as bowls, trays, and coffee pots. Dips ornamented end of knives, forks, and spoons in solution, and wipes excess solution from silverware with cloth to prevent discoloration. Places silverware in mesh basket and immerses it in water to neutralize oxidation. May tend conveyorized machine that automatically oxidizes stainless steel flatware items.
GOE: 06.04.24 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

700.684-058 PREPARER, MAKING DEPARTMENT (jewelry-silver.)
Operates equipment and uses handtools to prepare metal jewelry findings for further processing, using handtools and machine tools: Shapes, cuts, and assembles findings, using pliers, shears, arbors, mallets, files, or foot press. Drills holes in findings, using small drill. Cuts off excess metal or makes slots in findings, using bench lathe. Polishes findings on powered abrasive disk or emery wheel. Softens findings by heating them in furnace to prepare them for soft soldering or shaping.
GOE: 06.02.24 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

700.684-062 PREPARER, SAMPLES AND REPAIRS (jewelry-silver.)
Duplicates sample jewelry articles by shaping, assembling, and cutting findings for soldering and other operations, using original sample as guide. Repairs jewelry damaged during processing by replacing or reshaping defective parts, using handtools and machine tools.
GOE: 06.02.24 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

700.684-066 RING STAMPER (jewelry-silver.) alternate titles: ring striker
Stamps out, shapes, and trims ring and findings blanks for jewelry, such as bracelets, pins, and earrings, performing any of following tasks: Stamps, cuts ring and finding blanks from metal strips, using kick-press or power press. Forms contoured ring body from blank metal, using drop-press. Trims excess metal from edges of contoured ring body. Heats and softens metal blank, preparatory to stamping and shaping operations, using annealing furnace or gas torch. May operate rolling mill to decrease thickness of metal ingots.
GOE: 06.02.24 STRENGTH: L GED: R2 M1 L1 SVP: 5 DLU: 77

700.684-070 SILVERWARE ASSEMBLER (jewelry-silver.)
Assembles silver hollowware, such as lazy susans, teapots, creamers, and chafing dishes: Drills holes in parts, using bench drill. Screws, bolts, or pins base, legs, and lid to body of hollowware, using handtools. Adjusts length of legs, or flattens base with mallet so article stands firm and level. Mixes, tests ingredients, following formula, to form adhesive compound, and glues handle to hollowware. May ream and tap holes, using bench drill and tap. May fastens parts together by swedging. May buff and polish articles after assembly to remove finger marks.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

700.684-074 SPINNER (jewelry-silver.)
Stretches and shapes metal into symmetrical forms, using handtools and bench lathe, for use in making jewelry. Mounts work on the chuck. Starts lathe and forces handtools against metal to bend and stretch it as specified.
GOE: 06.02.24 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

700.684-078 STRETCHER (jewelry-silver.)
Stretches rings to specified size and shape, using stretching device: Slides ring onto hollow arbor (female) having slits running down its length that permit it to contract or expand. Turns wheel to force tapered male arbor into hollow arbor to expand and stretch ring. Repeats operation until ring is stretched and formed as specified.
GOE: 06.04.24 STRENGTH: S GED: R2 M1 L2 SVP: 3 DLU: 77

700.684-082 WATCH-BAND ASSEMBLER (jewelry-silver.)
Assembles ribs of skeleton for expansion metal watch band, using handtools: Inserts coil spring in center eyelet of watch-band rib with pencil-shaped jigger. Turns under projecting ends of spring to fasten rib to skeleton.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

700.687-010 BENCH WORKER, HOLLOW HANDLE (jewelry-silver.)
Performs any combination of following tasks involved in assembling knife handles and handles for hollowware, such as creamers and sugar bowls: Holds halves of handles against electrodes on spot-welding machine to tack-weld them together. Places handles on rack hooks and dips them in tank of flux. Places knife handle halves in assembly press to fit halves together onto metal holding frame preparatory to soldering. Inserts premeasured amount of solder in hollow handle. Loads handles on screen conveyor that carries them through furnace. Positions soldered handles in fixture of milling machine or belt grinder to face mouth of handles. Positions handle in fixture and depresses pedal that submerges handles into water tank and forces compressed air into fixture. Observes handles to detect air bubbles indicating faulty soldering. Brushes flux on inside of handles and sprinkles them with powdered solder, using reed scoop.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

700.687-014 BOILER-OUT (jewelry-silver.)
Coats rings and jewelry fittings with acid solution or wax to protect metal from oxidation during soldering process: Drops fittings into boiling acid solution for specified time, or applies wax to fittings, using brush. Removes acid-coated fittings and heats them in oven to harden coating. Dips soldered articles in chemical solutions and water to remove coating.
GOE: 06.04.33 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

700.687-018 BRIMER (metal prod., nec)
Applies special powder to both sides of plastic mold sheets to prevent gelatin strips from sticking to sheet, using powder and plush stick.

GOE: 06.04.33 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

700.687-022 CASTER HELPER (jewelry-silver.)
Prepares investment molds for use in casting gold rings: Mixes plaster of paris and water in specified proportion and pours around wax model. Places casting in oven for baking. Cleans finished casting by dipping it in acid and water solution.
GOE: 05.12.10 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

700.687-026 CHARGER II (jewelry-silver.) alternate titles: bench hand; set-up and charger
Prepares jewelry findings for subsequent soldering operations: Positions jewelry article on nonflammable work surface, such as asbestos board or pan of crushed emery stone. Selects findings and positions them on jewelry article, using tweezers. Places particle of solder (charge) at junction of jewelry article and finding, using brush or pick.
GOE: 06.04.23 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

700.687-030 CUTCH CLEANER (metal prod., nec)
Cleans, dries, and presses cutch sheets (skins) to recondition sheets for reuse, using airhose and hydraulic press: Receives wet sheets that have been washed to remove gold particles, and holds sheets under compressed airhose to remove excess moisture. Places sheets in fanned-out pattern in heated hydraulic press to press and complete drying of sheets. Stacks reconditioned sheets on worktable for reuse.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

700.687-034 INSPECTOR (jewelry-silver.)
Examines findings and finished pieces of jewelry for specified size and shape and for defects in enameling, painting, plating, and polishing. Straightens parts or inserts links, using pointed pliers. May measure and weigh completed articles of sterling silver or pieces of jewelry, using balance scale, micrometer, calipers, rulers, and height gauge. May inspect filled books of gold leaf or rolls of metal foil for defects, such as dimensional accuracy, holes or torn corners.
GOE: 06.03.02 STRENGTH: S GED: R3 M2 L2 SVP: 4 DLU: 77

700.687-038 LABORER, GOLD LEAF (metal prod., nec)
Places gold strips between sheets of plastic or skin to form packets (stacks) for beating by GOLDBEATER (metal prod., nec). May be designated Shoder Filler (metal prod., nec) when forming packet for second beating, or Mold Filler (metal prod., nec) when forming packet for third beating.
GOE: 06.04.24 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

700.687-042 MELTER (jewelry-silver.)
Melts gold, or gold and silver alloys, using furnace, electric heating unit, or torch, and pours molten metal into ingot molds to prepare metal for use in making jewelry: Places metal in clay crucible. Places crucible in preheated oven or heats crucible with torch to melt metal. Observes color changes in metals to ensure that specified temperature is attained. Pours molten metal into ingot mold. Opens mold, lifts out ingot with tongs, and quenches ingot in water. May operate roller machine to roll ingots into metal strips for use in stamping out jewelry blanks [ROLLER (jewelry-silver.)].
GOE: 06.04.24 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 77

700.687-046 MOLD SHEET CLEANER (metal prod., nec)
Removes gold dust and chips that adhere to plastic sheets, during hammering process: Inserts plastic sheets in opening of glass enclosure and under compressed airhose that blows gold dust and chips from sheets. Stacks cleaned sheets on worktable for reuse.
GOE: 06.04.39 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

700.687-050 MOLD-MAKER HELPER (jewelry-silver.) alternate titles: chaser helper
Assists MOLD MAKER (jewelry-silver.) I in making metal molds used to cast jewelry articles: Scrapes, files, and sandpapers surfaces of metal molds so they will close smoothly. Performs duties as described under HELPER (any industry) Master Title.
GOE: 06.04.24 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

700.687-054 PLANISHER (jewelry-silver.)
Flattens previously initialed heads of signet rings to remove dents, using press. Positions plunger and arbor holder in press. Slips ring on arbor and inserts arbor in arbor holder. Pushes lever that forces plunger down on head of ring to flatten it and remove dents. Releases lever and removes ring from press.
GOE: 06.04.24 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

700.687-058 POLISHER (jewelry-silver.) alternate titles: rubber-off
Smooths and polishes jewelry, such as charms, earrings, pins, rings, and bracelets, using polishing wheel: Selects polishing wheel and dressing compound according to type of metal to be polished and type of finish desired. Applies dressing compound or rouge to rotating wheel and moves article against wheel to remove surface blemishes and produce luster. May apply dressing compound and rub articles with cloth to remove discoloration and produce luster. May immerse jewelry in plating solution for specified time to coat jewelry with gold, silver, or other material. May polish areas of rings that are inaccessible to polishing wheel, using strip of abrasive polishing fabric. May buff jewelry findings with abrasive to produce grain effect (dull, granulated surface) and be designated Grainer (jewelry-silver.). When holding jewelry against lapping disk to smooth soldered joints, rough edges, and file marks, may be designated Lapper (jewelry-silver.). When holding jewelry against wire-brush wheel to remove stains, oxide coatings, solder flux, and to produce satin-finished surfaces, may be designated Scratch Brusher (jewelry-silver.).
GOE: 06.04.24 STRENGTH: S GED: R2 M1 L2 SVP: 3 DLU: 77

700.687-062 PREPARER (jewelry-silver.) alternate titles: bench hand
Performs any combination of following tasks in preparing cast jewelry findings for further processing: Cuts, saws, or breaks off gates from jewelry castings, using shears, jeweler's saw, pliers, or foot press equipped with cutting tool. Removes burrs and smooths rough edges of casting, using file or grinding wheel. Straightens distorted castings, using foot press equipped with shaping dies. May remove plaster from castings by dipping castings in water and acid solution. May count and separate jewelry casting into containers, according to type, and marks containers with identifying information. May specialize in breaking off gates from jewelry castings and be designated Breaker-Off (jewelry-silver.).
GOE: 06.04.24 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

700.687-066 SCRAPER (jewelry-silver.) alternate titles: cutter and edge trimmer
Saws and grinds gates and flash from castings of novelty jewelry and trophy figurines: Starts bandsaw and positions casting against revolving blade to cut off gate. Scrapes off flash and smooths rough surfaces, using belt-sanding machine, rotary file, and hand knife.
GOE: 06.04.24 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

701 OCCUPATIONS IN FABRICATION, ASSEMBLY, AND REPAIR OF TOOLS, AND RELATED PRODUCTS

This group includes occupations concerned with hand forging, straightening, tempering, sharpening, assembling, repairing, and reconditioning handtools used in woodworking, metalworking, ceramics, construction, mechanics, agriculture, masonry, sheet metal, jewelry, and watchmaking; setting, filing, welding, or otherwise reconditioning circular or bandsaw blades; and grinding or otherwise reconditioning twist drills, reamers, lathe bits, and other cutting tools used in power and machine tools.

701.137-010 SUPERVISOR, ASSEMBLY-AND-PACKING (cutlery-hrdwr.)
Supervises and coordinates activities of workers engaged in painting and assembling can opener parts, packing completed can opener parts, and packing completed can openers. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.04.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

701.261-010 QUALITY-CONTROL INSPECTOR (cutlery-hrdwr.)
Inspects completed handtools and parts in process, using statistical sampling techniques and following printed procedures, to evaluate quality of products: Selects, according to sampling tables, percentage of production lot of tools, such as planes, bit braces, levels, garden shears, tape, and folding rules. Examines tool or part to judge quality of finish and to detect visible flaws, such as cracks in castings. Measures dimensions and angles for conformance with blueprint or tabular specifications, using measuring instruments. Tests hardness of metal components [HARDNESS INSPECTOR (heat treating)]. Moves working parts of tool by hand to judge smoothness of action. Function tests mitre boxes and saws by making trial cuts to verify accuracy of mitre gauge and absence of saw run-out. Secures drill bit or counter bore in powered chuck and bores holes in wood to evaluate cutting action. Records findings on chart. Rejects or accepts entire production lot according to quality of sample inspected. Notifies supervisor when sampling indicates progressive deterioration in product quality, in order that corrections can be made in machine setup or operating procedure to forestall production of unacceptable work. Verifies accuracy of production gauges against master gauges. Computes percentages, ratios, and proportions of product-quality deviations in order to prepare engineering reports and analyses.
GOE: 06.01.05 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

701.381-010 REPAIRER, HANDTOOLS (cutlery-hrdwr.)
Repairs handtools, such as planes, vises, bit braces, levels, tape rules and mitre boxes: Examines defective tools to determine from experience, nature of defect or cause of malfunction, and possibility of repair. Disassembles tool, using screwdrivers, hammers, chisels, punches, and files. Operates power tools, such as drill press, power press, and handmilling machine, to remove screws, pins, rivets, bushings, collars, and jackets. Replaces defective part or repairs part, using files, reaming tools, and vise. Verifies dimensions, straightness, and concentricity of parts, using gauges. Reassembles tool, using hand and power equipment [ASSEMBLER (cutlery-hrdwr.)]. Records nature and extent of repairs performed. Maintains stock of parts.
GOE: 05.10.02 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

701.381-014 SAW FILER (any industry) alternate titles: filer
Repairs bandsaw, handsaw, and circular saw blades according to customer's or manufacturer's specifications, using handtools, machine tools, and welding equipment: Examines saw for defects. Cuts broken teeth from saw, using power shear [SHEAR OPERATOR (any industry) I]. Forms teeth on saw blade by beveling joints on grinder and welding or brazing them together. Brazes or welds cracks in saw blades. Straightens twists and kinks in blades, using

straightening press, and hammers out dents in blade on metal table. Adjusts cutting width of teeth, using swage or special pliers. Computes number and angle of teeth to produce specified cut. Clamps blade in saw-filing machine and turns handwheel to adjust distance between teeth, angle of bevel, and depth of cut of file or abrasive wheel. Starts machine that automatically grinds and files saw teeth. May be designated according to type of saw sharpened as Band-Saw Filer (any industry); Circular-Saw Filer (any industry).
GOE: 05.05.07 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 77

701.381-018 TOOL GRINDER I (any industry) alternate titles: cutlery grinder; tool sharpener

Sharpens shears, scissors, hair clippers, surgical instruments, cleavers, and other fine-edged cutting tools, using whetstone and grinding and polishing wheels: Holds cutting edge of tool against rotating wheel or clamps tool in holder or carriage to steady it during sharpening process. Sharpens surgical instruments and razors, using fine-grained grinding wheels, and hones them on whetstone. May sharpen handsaws. May brush heated mixture of glue and grit onto worn grinding wheels to rebuild them. May specialize in sharpening barbers' tools and be designated Barber-Tos. Sharpener (any industry). May specialize in sharpening shears and scissors and be designated Scissors Grinder (any industry). May specialize in sharpening tools and implements in homes and business establishments and be designated Grinder (any industry) III.
GOE: 05.05.07 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

701.384-010 TOOL-MAINTENANCE WORKER (office machines)

Repairs and adjusts handtools and power tools used in assembling, adjusting, and aligning typewriters: Examines tools for wear and tear. Tests operation of pneumatic tool, such as power socket wrench and power screwdriver, by driving home nuts and screws and by verifying tightness, using handtools, torque wrench, or torque screwdriver. Sharpens and squares ends of screwdrivers, using bench grinder. Brazes or solders loose handles to tools, using gas torch. Repairs or replaces defective jaws of special pliers and wooden tool handles, using mallet and vise. Straightens bent tool shanks in vise or by tapping tool shanks with hammer. Dismantles, cleans, and oils motors for power tools. Discards irreparable tools and requisitions and distributes replacements. May repair worn or defective tool parts, using bench lathes, cut-off machine, drill press, and machinists' tools.
GOE: 06.02.24 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

701.684-010 CALIBRATOR (cutlery-hrdwr.)

Calibrates and repairs torque and other wrenches, using test scale and handtools: Sets wrench indicator on end of wrench handle to maximum setting and inserts head of wrench into socket on test scale. Twists wrench until wrench mechanism releases and notes corresponding indication on scale. Adjusts wrench mechanism so that indications on scale coincide with releases of torque wrench, using allen wrench. Disassembles defective wrenches, examines parts, and replaces or repairs parts, using handtools.
GOE: 06.04.24 STRENGTH: L GED: R2 M1 L2 SVP: 4 DLU: 77

701.684-014 INSPECTOR, OPEN DIE (cutlery-hrdwr.)

Inspects cutting dies for conformance with specifications: Examines dies for defects, such as uneven or distorted cutting edge, and for correct identification number. Verifies dimensions of die face, using template. Tags defective dies and routes them to repair shop.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

701.684-018 LEVEL-VIAL SETTER (cutlery-hrdwr.) alternate titles: glass setter

Mounts glass vials in level bodies (frames) or vial cases: Inserts vial in body or case, and holds vial in position, using specially designed holder, wood wedges, or paper. Mixes plaster with liquids to desired consistency. Levels frame or case on bench plate, or clamps it in fixture and applies plaster around enclosed vial, using handtools. Adjusts vial to center bubble and smooths plaster, using trowel. Removes excess plaster, using handtools and compressed air-hose.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

701.684-022 SAW SETTER (stonework) alternate titles: saw maker

Maintains stonecutting saws in operating condition: Removes broken and bent saw blades from gangsaws. Cuts new blades and cuts holes in ends of blades for mounting in saw frame, using cutting torch. Straightens bent blades, using hammer. Spaces, tightens, and levels blades to set up gangsaws so that stone will be cut, according to specifications. May direct workers engaged in setting blocks of stone on cars to see that they are properly squared and leveled for cutting on gangsaws.
GOE: 05.10.01 STRENGTH: M GED: R3 M1 L2 SVP: 5 DLU: 77

701.684-026 SAW-EDGE FUSER, CIRCULAR (cutlery-hrdwr.)

Fuses diamond and carbon edges to circular steel saw blades, using oven: Weighs carbide, nickel, iron, and diamond ingredients in specified percentages on jeweler's scale. Pours compound in form clamped to saw-blank edges, and places saw blank in oven at preset temperature and under specified atmospheric conditions to fuse compound to saw edge. May operate metalworking tools, such as grinder, lathe, and drill press, to finish edge of saw. May measure edge of saw with micrometer and pressure gauges.
GOE: 06.04.32 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 77

701.684-030 TOOL FILER (pottery & porc.)

Repairs iron and steel tools used by POTTER (pottery & porc.) to form pottery and porcelain ware: Clamps tool to template in vise. Selects files for particular metal, and files edge of tools to correct contour, following template outline. Inspects reworked tools for adherence to specifications, using templates and angle gauges. May fabricate master tools and templates from rough drawings.
GOE: 05.12.13 STRENGTH: L GED: R3 M1 L2 SVP: 5 DLU: 77

701.687-010 ASSEMBLER (cutlery-hrdwr.) alternate titles: pinner

Joins parts, such as handles, blades, gears, or springs to assemble articles, such as pliers, knives, razors, shears, knife sharpeners, can openers, and ice crushers: Positions parts together, following guides such as holes, edges, and prongs. Rivets, bolts, or screws parts together, using hammer, riveting machine, wrench, or pneumatic screwdriver. May drill, ream, or tap holes in parts of pliers, using drill press. May use clamps, pneumatic or screw presses, and other work aids to hold parts during assembly. May be designated according to article assembled as Assembler, Knife (cutlery-hrdwr.); Electric-Razor Assembler (cutlery-hrdwr.); Shear Assembler (cutlery-hrdwr.).
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

701.687-014 BLADE BALANCER (agric. equip.)

Weighs lawnmower cutting blades and sorts them into stacks according to weight to ensure that blades of approximately equal weight will be mounted on each mower.
GOE: 06.03.02 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

701.687-018 COLD-PRESS LOADER (cutlery-hrdwr.) alternate titles: laborer, cutting tool

Places steel saw blade cores, mixed or segmented diamond materials, and silver solder into molds preparatory to firing core in furnace: Inserts precut silver solder wire into groove in top graphite mold. Places steel blade core in bottom graphite mold. Positions segmented diamonds onto core edge according to size of core, or pours diamond mixture into notches on saw blade edge. Places top mold over bottom mold and lays it on firing platform. May requisition, weigh, and blend diamonds and metal powder alloys. May stamp serial number on saw blade. May be designated according to form of saw blade edge as Notched-Blade Loader (cutlery-hrdwr.).
GOE: 06.04.32 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

701.687-022 LEVEL-VIAL CURVATURE GAUGER (cutlery-hrdwr.) alternate titles: glass curvature gauger

Gauges length and degree of curvature of level glasses (vials), using gauge indicator, and sorts or rejects them according to differences in values: Positions vial against indicator button in fixture of machine. Observes point of maximum curve of vial on gauge indicator and rejects vials that do not fall within specified degrees.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

701.687-026 LEVEL-VIAL INSPECTOR-AND-TESTER (cutlery-hrdwr.) alternate titles: inspector

Examines and gauges level vials for conformance to specifications and tests for leakage: Loads boxes of sealed vials into evaporating oven, and examines heated vials to detect fluid-loss due to leakage. Gauges length of vials, using go-not-go gauge, and examines vials for clarity of guidelines. Sorts completed vials according to position of bubble in relation to guidelines, to match vials in levels containing more than one vial. May be known according to specific task assigned as Final Inspector (cutlery-hrdwr.); Tester (cutlery-hrdwr.); Vial Gauger (cutlery-hrdwr.).
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

701.687-030 POWER-CHISEL OPERATOR (cutlery-hrdwr.) alternate titles: featherer

Trims wooden handles of hammers, axes, and hatchets, using portable power chisel, to remove curled shavings (feathers) raised on handle by steel edges of eye when tool head is driven onto handle.
GOE: 06.04.25 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

701.687-034 WEDGER, MACHINE (cutlery-hrdwr.)

Mounts steel axe and hatchet heads on wooden handles, using power hammer: Starts slotted end of handle into eye of tool, using hand hammer. Places assembled workpiece headup under power hammer, and moves controls to lower hammer that drives tool head onto handle. Inserts wooden wedge in handle slot, and moves controls to hammer wedge into slot. May operate table saw to trim excess wood from tool eye. May trim end of handle, using abrasive wheel. May mount steel hammer heads on wooden handles manually, using chisel and hammer.
GOE: 06.04.23 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

703 OCCUPATIONS IN ASSEMBLY AND REPAIR OF SHEETMETAL PRODUCTS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with laying out, cutting, shaping, and fitting ferrous or nonferrous sheet metal to assemble or repair sheet metal parts and items. Structural sheet metal occupations are included in Division 80.

703.132-010 SUPERVISOR, METAL CANS (tinware)

Supervises and coordinates activities of workers engaged in fabricating tin cans, pails, and other tinware from cut, pressed, or shaped tinplate. Trains new workers. Confers with workers' representatives to resolve grievances. Performs duties as described under SUPERVISOR (any industry) Master Title.

GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

703.381-010 PATTERNMAKER (stonework)

Lays out and cuts sheet metal patterns used to cut stones for building and monuments, working according to blueprints: Calculates dimensions of pattern from blueprints or scale drawings. Lays out and draws pattern on sheet of metal, using square, rule, compass, scribe, and marking pencil. Cuts pattern from sheet, using hand shears. Measures and compares pattern with specification, using rule and caliper. Marks identification figures on pattern and files it in rack according to markings. May draw scale drawings of stone blocks from rough or detailed sketches.
GOE: 05.05.06 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

703.684-010 BENCH-SHEAR OPERATOR (furniture)

Cuts sheet metal furniture parts to shape with hand-operated bench shears: Scribes cutting lines on one sheet or receives sample sheet marked by another worker. Places sheet in shears with one line of cut on edge of lower knife. Pulls lever to cut sheet along line. Advances sheet into shears as separate cuts are made on scribed lines until shape is completely cut. Marks other sheets as desired, using first sheet as pattern, and cuts parts from sheets.
GOE: 06.02.25 STRENGTH: M GED: R3 M1 L2 SVP: 5 DLU: 77

703.684-014 CUPBOARD BUILDER (furniture) alternate titles: cabinet finisher

Assembles metal cabinets: Inserts pins in hinges to attach doors to cabinet. Attaches stationary knobs in place with screws. Fits, assembles, and attaches locks to doors. Measures and drills support holes in shelves and shelf brackets and screws shelves in place. Adjusts doors, knobs, and shelves to fit by bending, filing, or hammering them, using handtools.
GOE: 06.02.22 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

703.684-018 TEMPLATE CUTTER (cutlery-hrdwr.)

Cuts out metal templates for cutting dies following master pattern, using shears and files: Staples pattern onto sheet metal to form outline for cutting operation, using stapling machine. Cuts template along pattern edge, using shears and file. Removes pattern from template, using hammers and punch. Marks identifying information, such as type, number, and size onto template, using pen or pencil.
GOE: 06.04.24 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 77

703.685-010 PAIL BAILER (tinware) alternate titles: bail attacher; kinker; snapper-on

Tends machine that automatically attaches bails (handles) to pails: Feeds coil of wire into machine, and places plastic handles that are attached automatically to bail by machine into hopper. Turns knobs to time movement of pails on conveyor for attachment of bails. Observes operation of machine to detect jams and malfunctions. Inserts bails in pails missed by machine, using handtool. Inspects bails for quality and reports irregularities to supervisor. May tend machine that fabricates bails for use on metal containers, or welds handles to can covers.
GOE: 06.04.02 STRENGTH: L GED: R3 M1 L2 SVP: 3 DLU: 77

703.685-014 TESTING-MACHINE OPERATOR (tinware) alternate titles: can tester; pail tester

Tends can testing machine that automatically tests cans for leaks: Starts machine and observes operation of machine and conveyor on which cans are carried through machine. Notifies supervisor of defective operation of machine or conveyor. Verifies accuracy of test machine, using standard test can. Places rejected cans on water tester and pulls lever to inject water into cans to indicate leaks. Marks location of leaks for can repairer, using crayon. May apply flux to inside of ear clincher or side seams of can, using flux applicator and reheat soldered seams under gas flame to seal leaks. May reshape bent or dented cans on metal form with mallet. May reheat soldered seams under gas flame to seal leaks. Retests repaired cans. May record number of cans rejected and repaired.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

703.687-010 ASSORTER (steel & rel.)

Inspects tinplate for defects and for conformance to specified weight, size, and gauge, and classifies material according to quality: Examines sheets for defects, such as insufficient coating, holes, dirt, bows, or twists. Wipes grease from sheets with cloth and straightens bent corners with handtool. Measures gauge of sheets, using micrometers, and compares measurements with customer specifications. Weighs sheets on scale. Sorts sheets according to defects found and places sheets in piles. Marks identifying information on piles with eraser.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

703.687-014 METAL-FINISH INSPECTOR (any industry)

Inspects surfaces of sheet metal articles, such as refrigerator and freezer cabinets, or automobile bodies for burrs, dings, scratches, laminated metal, or other surface defects prior to painting or porcelainizing: Rubs gloved hand over surfaces and examines workpiece. Marks defects for repair, using knowledge of acceptable metal finish standards and specifications. Records recurring defects on inspection report and submits report to quality control department for action. Records and submits daily inspection report.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

703.687-018 METAL-FINISH INSPECTOR (furniture)

Examines interior and exterior of assembled lacquered, enameled, or varnished pieces of metal furniture for defects in finish or construction. Rejects faulty pieces and returns pieces to proper departments for correction. Applies manufacturer's label to accepted pieces.
GOE: 06.03.02 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

703.687-022 STEEL-BARREL REAMER (wood. container)

Enlarges and shapes rivet hole in side of steel barrel, using hand reamer.
GOE: 06.04.24 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

704 ENGRAVERS, ETCHERS, AND RELATED OCCUPATIONS

This group includes occupations concerned with engraving or etching designs or lettering into surface of flat or curved metal objects, using engravers' handtools and machines or etching acids and inks. Photoengravers and printing plate, die, and roller engravers are included in Division 97.

704.131-010 ENGRAVING SUPERVISOR (engraving)

Supervises and coordinates activities of workers engaged in hand and machine engraving of dies, jewelry, notarial seals, and silverware: Trains new workers. Examines engraved items for conformity to specifications, using mandrel, caliper, and ruler. May lay out patterns for workers [PATTERNMAKER (engraving)]. May be designated according to specification as Die-Engraving Supervisor (engraving); Jewelry-Engraving Supervisor (engraving; jewelry-silver.). Performs other tasks as described under SUPERVISOR (any industry) Master Title.
GOE: 01.06.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

704.131-014 SUPERVISOR, ENGRAVING (pen & pencil)

Supervises and coordinates activities of workers engaged in fabrication of marking devices, badges, and memorial plates: Interprets customers' orders and assigns and directs workers engaged in selecting size and style of characters used, typesetting master pattern and setup of pantograph for reproduction of pattern, and layout and hand engraving or fabrication of seals, memorial plates, badges, metal tags, and stencils. Inspects in-process and finished work for compliance with customers' orders and quality standards. May operate presses and pantograph, or assist in setting them up. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 01.06.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

704.381-010 CHASER (jewelry-silver.)

Reproduces decorative designs on items made of silver, gold, platinum, and other metals, from photographs or drawings: Outlines design on surface of article, using handtools. Positions hollowware over snarling tool (forming head) and raises design area, using foot-powered hammer. Strikes small tools with hammer to indent design area. Pours molten pitch into article to serve as foundation. Melts pitch with blowtorch to remove pitch from completed article. Cuts designs in castings of lamp bases and ornamental statuary.
GOE: 01.06.02 STRENGTH: L GED: R4 M2 L3 SVP: 6 DLU: 77

704.381-014 CHEMICAL-ETCHING PROCESSOR (aircraft mfg.) alternate titles: chemical-milling processor; etcher, aircraft

Etches specified portions of metal parts and materials used in manufacturing aircraft, using immersion equipment, templates, handtools, and precision measuring instruments: Reads work order, blueprints, and process specifications to determine location of etch, finished dimensions, and method and sequence of operations. Cleans surface of parts and materials to ensure uniform adhesion of maskant. Applies maskant to surfaces to be etched, scribes etch lines, using template, and removes maskant from etch areas. Immerses parts and materials in etching solution for specified time, manually or using hoist. Removes objects from etch solution, rinses objects with water, and removes remaining maskant. Measures etched parts and materials for conformance to specifications, using micrometers, scales, and other precision measuring instruments. May immerse parts and materials in successive baths and rinses to perform surface processing in addition to etching, such as pickling, chromodizing, passivating, degreasing, and stripping, and be designated Process Equipment Operator (aircraft mfg.).
GOE: 06.01.04 STRENGTH: M GED: R3 M2 L3 SVP: 6 DLU: 88

704.381-018 ENGINE TURNER (jewelry-silver.)

Cuts designs or lines in jewelry by machine: Marks design or line on jewelry, using ruler and scriber, following sample, sketch, photograph, or standard pattern. Clamps article of jewelry in holding device of machine and cuts design by moving cutting tool along guidelines. Observes progress of work through magnifying glass attached to cutting tool. Sharpens cutting tool.
GOE: 01.06.01 STRENGTH: S GED: R3 M2 L2 SVP: 6 DLU: 77

704.381-022 ENGRAVER APPRENTICE, DECORATIVE (engraving)

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 01.06.01 STRENGTH: S GED: R3 M2 L2 SVP: 7 DLU: 77

704.381-026 ENGRAVER, HAND, HARD METALS (engraving)

Lays out and cuts lettering and designs on surfaces of hard metal for hobs, dies, and molds or plates used to imprint designs on paper, metal, plastic, or porcelain products, following sketches and blueprints, and using engraving tools: Computes dimensions of lettering and design, and marks or scribes layout lines on workpiece, using drawing tools, such as straightedge, compass, and scriber. Positions workpiece in vise and cuts designs in surface of workpiece or trims precut designs, using gravers, punches, files, hammer, and shaped

chisels. Sharpens and forms cutting edge of gravers on cutter grinder [TOOL-GRINDER OPERATOR (machine shop)]. May sketch original design for customer. May enlarge or reduce reproduction of pattern according to size of article to be made. May brush surface of metal with acidproof paint to prevent corrosion. May be designated according to type of imprinting device engraved as Stencil Maker (engraving).
GOE: 01.06.01 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

704.381-030 ENGRAVER, HAND, SOFT METALS (engraving) alternate titles: carver; decorator

Engraves lettering and ornamental designs on soft metal articles, such as silverware, trophies, aluminum or plastic eyeglass frames, and jewelry articles, according to sketches, diagrams, photographs, or sample workpieces, using engraver's handtools: Lays out design or lettering to be engraved on object by brushing chalklike powder or solution on item and sketching design in powder, locating reference points, and marking outline of design on item, using scribers or gravers, or by imprinting design on surface of item, using inked rubber stamp, and marking outline, using scribers. Mounts piece in chuck and affixes chuck in jeweler's ball (rotating vise) or mounts piece directly in jeweler's ball. Cuts design in workpiece, using chisel-like engraving tools. May sketch original designs. May be designated according to kind of product engraved as Engraver, Flatware (engraving); Engraver, Jewelry (engraving); Engraver, Optical Frames (engraving); or according to specialty as Engraver, Lettering (engraving); Engraver, Ornamental Design (engraving).
GOE: 01.06.01 STRENGTH: S GED: R3 M2 L2 SVP: 7 DLU: 77

704.381-034 ENGRAVER, SEALS (pen & pencil)

Engraves characters and designs in surface of die according to customers' copy or specification, and casts corresponding male die for use in seals, such as corporate or notary seals: Marks vertical centerline on blank or prestamped dies, using compass. Selects style and size of characters and visually spaces characters from centerline to obtain symmetry. Engraves characters in surface of die, using hand stamps and mallet, and restamps closed or distorted characters. Cleans die, using wire brush. Installs finished female die in device (splash) used to impress die in molten seal metal (lead alloy) to form male die (counter). Melts metal in gas-fired crucible and ladles metal onto aluminum foil sheet placed on base of splash. Drops die into metal and allows it to cool. Removes dies from splash, files notch in both to ensure alignment in seal press, and trims excess metal from counter, using knife. Oils faces of dies to prevent sticking. Applies adhesive fabric (sticky-back) to base and ram of press and aligns and mounts dies. Imprints seal on purchase order to verify copy.
GOE: 01.06.01 STRENGTH: S GED: R4 M2 L3 SVP: 6 DLU: 77

704.382-010 ENGRAVER, PANTOGRAPH I (engraving) alternate titles: prototype-machine operator

Sets up and operates pantograph engraving machine to engrave designs or lettering on engraving dies, nameplates, stamps or seals, following two or three-dimensional pattern or blueprint: Positions and secures pattern to workpiece on cutting table, using rule, square, calipers, and fixtures. Sets reduction scale and controls of pantograph to attain specified size of reproduction on workpiece and height, depth, and width of cut. Sharpens cutting tools on cutter grinder [TOOL-GRINDER OPERATOR (machine shop)]. Inserts cutting tool into spindle of machine and secures it with wrench. Starts machine and lowers stylus to beginning point on pattern. Guides stylus over pattern. Observes action of cutting tool and adjusts movement of stylus to ensure accurate reproduction and verifies conformance to specifications, using micrometers and calipers. May observe action of cutting tool through microscope.
GOE: 05.10.05 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

704.582-010 ENGRAVER, MACHINE II (engraving)

Operates engraving machine to inscribe letters on flat metal surfaces: Slides master lettering plates onto fixture according to sequence specified on work order. Adjusts gauge on arms of machine according to size of letters. Centers and clamps blank plate on machine. Moves lever that lowers diamond cutting point onto plate. Guides dummy point, that controls cut, over lettering on master plate to inscribe letters on metal.
GOE: 05.10.05 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

704.682-010 ENGRAVER, MACHINE I (engraving)

Operates pantograph engraving machine to engrave letters and figures on products, such as badges, fraternal emblems, pendants, and thermometers: Inserts specified letters and figures into pattern frame. Positions and secures workpiece in machine holding fixture and sets stylus at beginning of pattern. Depresses pedal to lower cutting tool onto workpiece. Engraves designs on workpiece by moving stylus around pattern, causing cutting tool to duplicate motion on workpiece. Removes workpiece and places in tray.
GOE: 05.10.05 STRENGTH: S GED: R3 M2 L2 SVP: 3 DLU: 77

704.682-014 ENGRAVER, PANTOGRAPH II (engraving)

Engraves specified characters on metal blanks of articles, such as trophies, trays, badges, and plaques, according to work order. Positions and locks blank metal plate in holding fixture beneath rotary cutting tool. Selects specified lettering template and places template beneath stylus attached to machine cutting tool. Turns knob on machine to set reduction scale to obtain required reproduction ratio on metal plate. Starts machine and guides stylus over template, causing cutting tool to simultaneously duplicate characters on metal plate. Cleans chips from metal plate, using airhose. Examines engraving for quality of cut, burrs, and rough spots. May increase or decrease depth of cut by adjusting height of worktable. May wipe acid over engraving to darken or highlight inscription. May assemble trophies, using wood base, bolts, and wrench.
GOE: 05.10.05 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

704.684-010 ETCHER (engraving)

Etches designs, lettering, and figures on processed plates of brass, steel, copper, zinc, magnesium, or plastic: Mixes acid solution according to formula, and pours mixture into etching tank. Places plate on rack in etching tank, sets tank timing controls, and starts machine that sprays plate with corrosive solution. Removes plate periodically, and measures depth to which metal has been etched, using gauge. Inspects plate to ensure that design is not undercut. Washes plate to remove etching powder and protective ink. May brush etching powder on surface of plate to prevent undercutting of reproduction.
GOE: 01.06.01 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

704.684-014 SILK-SCREEN ETCHER (engraving) alternate titles: etcher, hand

Etches lettering, trademarks, or designs through silk screen onto metal objects, such as plates, jewelry, trophies, cutlery, and tools: Positions object to be etched on setup board. Places silk screen of specified design or lettering over object. Brushes specified acid solution through silk screen to etch design on object. Rinses workpiece in neutralizing solution after specified time to remove acid, or places it on conveyor which carries workpiece into bath. May brush acid resistant solution through screen and place workpiece into acid bath to etch pattern on unprotected surface.
GOE: 06.04.24 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

704.687-010 CLEANER (engraving) alternate titles: white-work cleaner

Removes excess paint from metal stampings to bring out etched or embossed pattern or lettering, by rubbing surface of pattern with cloth and solvent. Separates stampings that are scratched or marred, or that have been imperfectly finished. May apply paint to unpainted areas of stampings overlooked during painting process, using brush. May remove masking compound from specified areas of metal parts to be chemically etched, using template outline and knife.
GOE: 06.04.39 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

704.687-014 ETCHER, HAND (cutlery-hdwr.)

Etches trademarks on stainless steel knives and forks, using rubber stamp and acid solution: Ties cloth around glass block and pours acid on cloth to form stamp pad. Places cutlery in lime bath. Removes cutlery from bath, presses rubber stamp on acid pad, and stamps cutlery.
GOE: 06.04.24 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

705 FILING, GRINDING, BUFFING, CLEANING, AND POLISHING OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with filing, grinding, buffing, cleaning, and polishing metal, plastic, or rubber parts or objects other than by use of production machines. Tool sharpening occupations are included in Group 701.

705.381-010 DIE BARBER (machine shop)

Rough-finishes stamping-die-member surfaces, using abrasives and abrading handtools: Lifts and positions die member on bench manually or with hoist. Brushes blue pigment on ridges and grooves left by milling operation. Grinds ridges down until only traces of pigment are visible at bottom of grooves. Uses variety of files, stones, and abrasive cloths and papers to shape and smooth die member. May repair punch and die sets, using bench lathe, portable grinder, and polisher, and abrasive handtools.
GOE: 05.05.06 STRENGTH: M GED: R3 M1 L2 SVP: 7 DLU: 77

705.381-014 EXTRUSION-DIE REPAIRER (nonfer. metal)

Repairs aluminum extrusion dies, according to specifications, using powered handtools: Examines exterior of dies for defects, such as cracks or excessive wear, and observes exterior surface of extrusion samples to determine whether inside of dies need resurfacing or polishing. Secures dies in vise, and determines amount of metal to remove from die opening to restore die to specifications, using diagram and gauges. Selects abrasive bit and secures it in electric tool, and moves tool over die opening surface to remove, polish, or angle surface to specifications, utilizing experience and knowledge of dies. Heats dies with stress cracks in oven to soften metal and taps sides of dies to close cracks, using hammer and bit. Removes rough spots from exterior of repaired dies, using electric deburring tool. Verifies openings of new dies, using calipers and gauges, and monitors sample extrusions to determine whether press dies need repair.
GOE: 05.05.06 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 86

705.384-010 SCRAPER, HAND (machine shop) alternate titles: hand scraper; scraper

Scrapes metal workpieces with handtools to smooth machine ways, surface plates, and bearing surfaces to ensure free action of parts: Positions workpiece on worktable, in vise, or in fixture, and secures it with clamps and wrenches. Files and grinds burrs from workpiece. Applies pigment to surface plate with brush, cloth, or sponge. Positions workpiece and surface plate against each other, rubs one surface against other to determine high spots. Selects hand scraper and scrapes workpiece surface to remove high spots indicated by pigment pattern. Repeats operation until pigment pattern is even over work surface. May inspect workpiece for conformity to specifications, using such instruments

as dial indicator, height gauge, master, surface plate, and gauge blocks. May use powered hand scraper. May polish and buff steel articles, using portable polisher or buffing brush [POLISHER AND BUFFER (any industry) II].
GOE: 06.02.24 STRENGTH: M GED: R3 M1 L2 SVP: 6 DLU: 77

705.481-010 FILER, FINISH (ordnance)

Finishes and fits together metal small arms parts preparatory to assembly, using handtools and machine tools. Removes burrs and rounds sharp edges, using hammer, chisel, files, and scrapers. Sets up and operates drill press and speed lathe [ENGINE LATHE SET-UP OPERATOR, TOOL (machine shop)], equipped with rotary file or abrasive wheel to remove burrs, smooth interior surfaces of reamed and tapped holes, and to spot face. Polishes movable parts to ensure smoothness of action, using bench polishing jack. Calculates amount of metal to be removed from parts, using micrometer, scales, and gauges, and files excess metal from parts. Trial fits parts to ensure accurate fit. May imprint serial numbers on parts, using hammer and punch dies. May repair and refinish damaged parts returned by customer and be designated Filer Repairer (ordnance).
GOE: 06.01.04 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

705.481-014 LAPPER, HAND, TOOL (machine shop) alternate titles: lap hand, tool; precision lap hand

Laps metal objects, such as gauges and machine parts, to specifications within tolerances as fine as 0.00001 inch, applying knowledge of abrasives and *lapping* procedures: Measures workpiece with instrument, such as optical comparator, compares workpiece dimensions with specifications to ascertain amount of stock to be removed, and estimates number of lapping strokes required. Mounts workpiece in fixture, or in power-driven mechanism, using wrenches and keys, and positions work aids, such as parallel bars and rods to guide motion of *lap I* or workpiece. Files grooves in surface of lap to hold *lapping compound*. Applies compound to workpiece and rubs lap across workpiece with rotary or reciprocating motion, feeling friction and applying required pressure based on previous experience, to attain specified tolerance. Measures workpiece to verify conformance to specifications, using special gauges. Straightens or polishes rods by inserting and pressing them between two rollers with lapping compound.
GOE: 05.05.07 STRENGTH: L GED: R3 M3 L2 SVP: 5 DLU: 77

705.484-010 FILER, HAND, TOOL (machine shop) alternate titles: precision filer, hand; tool filer, hand

Files grooved, contoured, and irregular surfaces of metal objects, such as metalworking dies and machine parts, to conform to templates, other parts, layout, or blueprint specifications. Studies blueprint or layout on workpiece, and selects files according to material, size and shape of work, and amount of stock to be removed, applying knowledge of filing procedures. Files workpiece surface to layout lines, and inspects with magnifying glass. Verifies conformity of finished workpiece by positioning workpiece against template or other part, or by measuring dimensions, using instruments, such as vernier calipers, micrometers, and surface gauges. Smooths and polishes workpiece with emery cloth or power buffer, and feels surface with fingers for smoothness. May lay out workpiece [LAY-OUT WORKER (machine shop)] or saw out template or layout [CONTOUR-BAND-SAW OPERATOR, VERTICAL (machine shop)]. May functionally test workpiece by mounting workpiece in press or with other parts and operating press or machine. May specialize according to product as Die Filer (machine tools).
GOE: 05.05.07 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

705.484-014 FINAL FINISHER, FORGING DIES (machine shop) alternate titles: die-finisher, forging; forging-die finisher

Grinds and sands contoured metal surfaces to finish forging dies, using handtools. Selects abrasive tools according to operation and dimensions specified. Manipulates powered hand grinder to remove bead, grind curved surfaces to specified radii, remove machining marks, and smooth die surfaces. Sands surfaces of cavity and gutters to facilitate flow of metal during forging. Manipulates handtools, such as files, stones, and emery cloth, to smooth surfaces. Visually and tactually inspects surfaces for flaws and smoothness.
GOE: 05.05.07 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

705.582-010 BLADE GROOVER (cutlery-hrdwr.)

Operates machine to grind decorative grooves in steel knife blades. Marks groove length of blade according to bench marks, using chalk. Places tip of blade under rotating abrasive wheel and presses blade against wheel to grind groove in blade. Examines groove in blade for conformance to specified depth and width and dresses abrasive wheel, using handstone. Turns stop nuts to adjust roll and guide according to width of blade and replaces worn abrasive wheel, using wrenches.
GOE: 06.04.24 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

705.682-010 GOLD-NIB GRINDER (pen & pencil)

Operates machine to grind pen points to specified size and shape: Inserts pen point blanks into slots on machine holder and clamps blanks into holder. Starts machine that rotates grinding wheel (copper lathe) and advances pen point blanks against wheel to grind fine, medium, or broad points on blanks. Examines ground points for conformance with specifications. Notifies machine repairer of grinding defects. May observe grinding process through magnifying glass.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

705.682-014 TRIMMER (jewelry-silver.) alternate titles: facer; straight edger; tipper

Operates bench grinding machine: Holds stainless steel, silver, and silver-plated flatware against emery coated belt or wheel, shaped to match contour of workpiece, which removes burrs, flash, or pressmarks and rounds edges. May remove burrs, using hand file. May change abrasive belts, using handtools.
GOE: 06.02.02 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

705.684-010 BENCH GRINDER (any industry)

Moves metal objects, such as castings, billets, machine parts, sheet metal subassemblies, or arrowheads, against abrasive wheel of bench grinder to grind, smooth, or rough-finish objects to specifications: Clamps workpiece in workholder or jig, or holds it in hands, and feeds it against rotating grinding wheel to remove excess metal, scratches, or burs. Examines or measures workpiece for conformance to standards. Guides dressing tool across wheel to true surface. Replaces worn wheels, using wrench. May position workpiece in automatic feed mechanism. May select and mount abrasive wheels of different grit size to grinder to obtain specified finish on workpiece. May start pump and direct coolant flow against wheel.
GOE: 06.04.24 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

705.684-014 BUFFER I (any industry) alternate titles: color buffer

Buffs items, such as automobile trim or accessories, hardware, or fabricated plastic parts with cloth buffing wheel: Holds and moves parts against wheel to smooth surfaces, produce specified finish, or cut down plating defects, such as burns or salt deposits, using knowledge of metals and buffing operations. Coats buffing wheel by holding buffing compound stick against revolving wheel. Pushes and manipulates workpiece against buffing wheel to remove scratches and defects and produce specified finish, using knowledge of buffing operations and finishes. Replaces worn buffs, using wrench. Uses care not to cut through plate when buffing plated surfaces. May be designated according to type of material buffed as Buffer, Chrome (any industry); Buffer, Copper (any industry); Buffer, Nickel (any industry). May polish articles [POLISHER (any industry)] and buff articles and be designated Polisher And Buffer (any industry) I. May polish brass eye castings used in fitting wooden shuttles and clean castings in series of chemical solutions and be designated Strapper And Buffer (woodworking).
GOE: 06.04.24 STRENGTH: M GED: R2 M1 L2 SVP: 4 DLU: 77

705.684-018 FILER AND SANDER (woodworking) alternate titles: sander and filer

Shapes metal eye castings to fit in wooden shuttles: Files and sands eye castings to specified shape and smoothness, using vise, hand files, and emery cloth. Removes completed castings from vise and places castings in containers. Cleans brass particles from files by drawing file card (block of wood with even rows of metal pins attached) through file grooves.
GOE: 06.04.24 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

705.684-022 GREASE BUFFER (jewelry-silver.)

Holds and turns silverware, such as bowls, tea sets, trays, or flatware, against grease-coated cloth wheel or leather belt to impart specified finish. May remove scratches, spots, or blemishes with pumice stone. May bolt layers of precut cloth onto spindle and form into buff of desired shape by holding rakelike handtool against rotating cloth. May buff silverware to specified final finish, using soft cloth buffing wheel and fine grained rouge or buffing compound and be designated Finisher (jewelry-silver.).
GOE: 06.02.24 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

705.684-026 GRINDER I (any industry)

Grinds and smooths surfaces of items, such as automobile or appliance components, prior to finishing operations, using powered portable wheel, disk, or belt grinder: Examines and feels surface of workpiece for defects. Selects grade of abrasive belt, wheel, or disk according to specifications, knowledge of abrasives, and condition of metal, and attaches to grinder. Starts grinder and moves it over surface of workpiece to remove scratches, laminated metal, excess weld material, and burs. Polishes ground areas with finer abrasive to produce smooth, unmarred surface. Replaces worn abrasive disks, wheels, and belts, using wrench. May be designated according to type of grinder operated as Grinder, Belt (any industry); Grinder, Wheel Or Disk (any industry). May grind leaded-in portions of automobile bodies and be designated Grinder, Lead (auto. mfg.).
GOE: 06.04.24 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

705.684-030 GRINDER-CHIPPER I (any industry) alternate titles: grinder-dresser; portable grinder operator

Grinds and chips workpiece to groove, bevel, round, or straighten edges or remove excess stock from metal as specified by drawings, job orders, or guidelines or to remove defects, such as shrink cracks and holes, using portable grinders, chipping hammers, pedestal grinders, and hand files: Positions workpiece manually or by using jib of crane. Inserts selected grinding wheel or cutting chisel into portable grinder or power hammer. Positions and manually guides tool along specified guidelines on edge or surface of workpiece. Inspects work, using rule, straightedge, or template. Grinds portable parts on pedestal grinder. Removes sharp edges or burrs, using hand file. Grinds, chips, or brushes off excess weld, splatter, and rust to improve appearance of workpiece. Sharpens chisels and dresses grinding wheels, using grinder and wheel dresser. May cut excess metal from workpiece, using acetylene torch. May climb large assemblies to remove metal from improperly fabricated parts at direction of FITTER (any industry) I or WELDER-FITTER (welding). May be designated according to tool used as Chipper (any industry) I; Grinder (any industry) II.

GOE: 06.02.24 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 77

705.684-034 METAL FINISHER (any industry)

Grinds, files, or sands surfaces of metal items, such as automobile bodies and household appliances, using handtools, power tools, and knowledge of metal finishing techniques: Examines and feels surface of metal to detect defects, such as dents, scratches, or breaks in metal. Removes dents, using hammer and dolly block, and fills uneven surface with molten solder. Smooths surface of item to specified finish, using handtools and powered tools. May polish metal surface, using powered polishing wheel or belt [POLISHER (any industry)].
GOE: 06.04.24 STRENGTH: L GED: R2 M1 L2 SVP: 4 DLU: 77

705.684-038 MOLD FINISHER (machine shop)

Shapes and smooths metal surfaces to finish molds, using handtools: Lifts partially completed mold half with hoist, and positions and secures in holding fixture. Removes burrs and smooths contoured surfaces with powered hand grinder. Positions and hammers specified handtool against mold surface to make sharper impression. Verifies contour of impression with templates. Applies blue pigment to mold surfaces, and presses mold halves together manually to locate high spots. Fits and installs nameplate in mold, using handtools. Inserts preformed metal tabs into slots in mold; verifies height of each insert with preset dial indicator, and hammers mold metal around inserts with pneumatic hammer to secure them. Performs other hand scraping, sanding, and brushing tasks, using handtools, to shape and smooth mold. May make own handtools.
GOE: 06.02.24 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

705.684-042 MOTHER REPAIRER (recording)

Repairs metal phonograph record *mother* (matrix): Examines matrix to locate inspection markings that indicate defects, using microscope or magnifying glass. Removes defects, such as bubbles, dirt, and particles of nickel in sound track grooves, using needles and cloths moistened with solvents. Wipes surface of matrix with cleaning solvent to remove inspection markings.
GOE: 06.02.24 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

705.684-046 NEEDLE POLISHER (button & notion)

Polishes industrial sewing and knitting needles, using buffing wheels: Picks up rack of needles, using tongs and holds needles against buffing wheels to polish needles to specification. Examines needles by feel and using eye loupe to determine if polished surface meets specifications. Conditions surface of buffing wheels, balances wheels, and aligns tongs to maintain polishing equipment, using handtools. Records quantity of needles polished, date polished, and initials work ticket.
GOE: 06.04.24 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

705.684-050 NIB FINISHER (pen & pencil)

Smooths and polishes tips of fountain pen nibs, following specifications and using polishing compounds and abrasive cloths and papers: Applies polishing compound, such as rouge, emery, garnet, or other abrasive cloths or paper. Presses and rotates nib on abrasive cloth or paper to polish it to specified smoothness. Wipes polished nib with cloth and inspects surface for smoothness with magnifying glass and by feeling with fingertips.
GOE: 06.04.24 STRENGTH: L GED: R2 M1 L2 SVP: 4 DLU: 77

705.684-054 PIPE BUFFER (construction)

Cleans and polishes end of pipe, prior to welding in pipeline construction, using portable buffing machine. May operate portable gasoline motor generator to provide electric power for buffer.
GOE: 05.12.18 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

705.684-058 POLISHER (any industry)

Removes excess metal and surface defects from such items as hardware, small arms barrels, automobile trim, or accessory parts prior to buffing, bluing, or plating, using revolving abrasive wheel or belt: Selects abrasive belt or wheel according to grain size, type of finish specified, product being polished, or amount of metal to be removed, using knowledge of polishing operations and abrasives. Attaches wheel or belt to drive mechanism. Starts polisher and manipulates workpiece against abrasive wheel or portable wheel against workpiece to remove metal and surface defects. Examines part for acceptability of finish. May be designated according to type of material polished as Polisher, Aluminum (any industry); Polisher, Brass (any industry); Polisher, Bronze (any industry); Polisher, Zinc (any industry).
GOE: 06.04.24 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

705.684-062 POLISHER AND BUFFER II (any industry)

Polishes and buffs steel and stainless steel articles, such as ice cream freezer lids, soda fountain dispensers, storage tanks, and display cases, using portable polisher, buffing brush, and emery cloth: Secures workpiece to bench or table and guides abrasive polishing wheel over workpiece to remove scratches and other defects from metal surface. Dips buffing brush into abrasive cake and lubricant. Moves buffing brush over surfaces of workpiece to remove fine scratches and to achieve specified finish. Polishes recessed areas with fine grade emery cloth.
GOE: 06.04.24 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 77

705.684-066 POLISHER APPRENTICE (any industry) alternate titles: metal-polisher-and-buffer apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 06.04.24 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

705.684-070 POLISHER, SAND (jewelry-silver.)

Polishes sterling or silver-plated hollowware, such as bowls, dishes, and trays, and flatware, by applying compound of powdered pumice and oil to workpiece while turning it against felt, leather, or brush polishing wheel. Mixes pumice and oil according to established proportions for type of workpiece being polished. Holds workpiece against revolving brush to remove excess solder from joints, using care not to cut through soldered joint.
GOE: 06.02.24 STRENGTH: L GED: R3 M1 L2 SVP: 6 DLU: 77

705.684-074 SNAG GRINDER (foundry) alternate titles: casting finisher; cast-shell grinder; snagger; swing-frame-grinder operator; swing grinder

Cleans and rough finishes surfaces of casting, using powered grinding wheel mounted on counterbalanced frame. Positions casting under grinding wheel manually or using crane or hoist. Grabs grinder handles and pulls wheel down against casting to remove projections, such as gates, fins, and parting lines, from surface. Repositions casting to grind other areas. May change position of belts on motor and pulleys to increase revolutions per minute when grinding wheel wears down. May remove cracks in surfaces of ingots, billets, and forgings, using grinder. May grind castings, using stationary grinder and be designated Stand Grinder (foundry).
GOE: 06.04.24 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

705.687-010 JIGGER (jewelry-silver.)

Places pieces of jewelry articles on pins of specially designed jigs to facilitate polishing operations.
GOE: 06.04.34 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

705.687-014 LABORER, GRINDING AND POLISHING (any industry) alternate titles: finisher

Cleans, deburrs, polishes, or grinds items of metal, plastic, or rubber, using handtools or powered equipment, performing any combination of following tasks: Scrapes or rubs parts with file, wire brush, or buffing cloth. Holds part against buffing or grinding wheel. Deburrs or polishes parts, using portable grinder, chipping hammer, buffer, deburring tool, or hand pick. Mounts part on revolving spindle or chuck and holds or moves tools, such as file, abrasive stone, or cloth against workpiece to file, grind, polish, or buff surface. Cleans interior surfaces of holes, using reamer. Changes tools on powered equipment. Applies abrasive compound, wax, or other dressing to facilitate cleaning or polishing operation. May be known according to process performed as Buffer (any industry) II; Burrer (machine shop); Burrer-Marker, Axle (machine shop); Top-Edge Beveler (any industry); Wire Brusher (any industry).
GOE: 06.04.34 STRENGTH: M GED: R2 M2 L2 SVP: 2 DLU: 77

705.687-018 METAL SANDER AND FINISHER (furniture)

Removes surface defects, such as burrs and pits, from metal furniture parts and polishes surface: Positions parts in holding device and removes surface defects with hand sanding machine, sandpaper, or file. Polishes surface to smooth finish, using such materials as cleaning powder, pumice, or steel wool. Wipes surface clean with cloth and stacks finished parts.
GOE: 06.04.24 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

706 METAL UNIT ASSEMBLERS AND ADJUSTERS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with assembling and adjusting metal units or components, including mechanical assembling or adjusting not requiring overall mechanical knowledge. Occupations concerned with electrical assembling and adjusting are included in Division 72.

706.130-010 SUPERVISOR, COIN-MACHINE (svc. ind. mach.)

Supervises and coordinates activities of workers engaged in production of coin-vending machines: Selects dies or cutting tools, according to design of metal or plastic part to be formed. Sets up automatic equipment, such as forming press, punch press, and power shear. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

706.131-010 LABORATORY SUPERVISOR (machine shop)

Supervises and coordinates activities of workers engaged in assembling, final testing, and inspection of miniature ball bearings: Inspects and tests sample bearings on variety of special devices to determine whether bearings conform to specifications. Examines rejected bearings to ascertain whether components are salvageable. Recommends research to update inspection and testing techniques, instrumentation, and correlation of inspection and testing results with manufacturing methods and processes. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

706.131-014 SUPERVISOR (office machines)

Supervises and coordinates activities of workers engaged in fabrication of standard and electric typewriters: Examines defective parts to determine whether to stop or continue assembly process, using job knowledge of acceptable quality and manufacturing standards, such as process sheets, blueprints, and sketches. May verify dimensions of parts, using precision measuring instruments. Performs tasks as described under SUPERVISOR (any industry) Master Title. May be designated according to activities of workers supervised as Supervisor, Assembly (office machines) II; Supervisor, Fabrication (office machines);

Supervisor, Inspection (office machines); Supervisor, Soldering (office machines); Supervisor, Type-Bar-And-Segment (office machines).
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

706.131-018 CHIEF INSPECTOR (office machines)

Supervises and coordinates activities of workers engaged in inspecting office machine parts and assembled mechanical and electromechanical tape-moistening machines, and inspects materials and purchased machine parts, using precision measuring devices. Confers with assembly supervisors to determine staff assignments at assembly inspection stations and to discuss ongoing inspection results. Alerts supervisors when reports indicate major or consistent assembly discrepancies, and meets with punch press supervisor to discuss rejection findings on parts production. Examines raw materials for smoothness and to detect surface defects, such as nicks, burrs, pits, and scratches, following blueprints, sketches, and order specifications. Tests materials for hardness, using hardness tester. Measures materials, using precision measuring instruments such as calipers, micrometers, gauges, and dial indicators. Prepares rejection slips indicating reasons materials or parts failed inspection. Trains new staff and monitors progress. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.03.02 STRENGTH: M GED: R3 M3 L3 SVP: 7 DLU: 86

706.361-010 ASSEMBLER (machinery mfg.)

Assembles machinery, such as crushers and vibrators, according to blueprints and shop orders, for processing materials, such as coal, clay, chemicals, and rock. Positions parts in frame of machine, using hoist, and bolts stationary parts in place, using impact wrench and handtools. Removes burrs and rough spots from parts with hand file and portable pneumatic grinder. Aligns bearings with shafts in machine. Inserts shims and turns setscrews to set clearance between parts, and verifies clearance, using scale and fixed gauges. Fastens lift chain around machine and directs OVERHEAD CRANE OPERATOR (any industry) 921.663-010 in moving machine to storage area. May be designated according to type of machine assembled as Crusher Assembler (machinery mfg.); Vibrator Assembler (machinery mfg.).
GOE: 06.02.22 STRENGTH: M GED: R3 M2 L3 SVP: 5 DLU: 77

706.361-014 ASSEMBLY INSPECTOR (agric. equip.)

Inspects lawn and garden equipment, such as garden tractors, snow blowers, and power lawnmowers for assembly defects, and repairs defects, using handtools. Examines equipment for surface defects, such as paint streaks and scratches and improper decal application. Touches up paint defects, using brush or spray can. Pushes and pulls knobs and levers to test operation of controls, such as engine throttle and clutch lever. Adjusts controls, using pliers, screwdrivers, and wrenches. Observes and listens to equipment during test run to detect defects, such as leaks, malfunctioning controls, and other defects indicated by unusual noises. Examines identification plates and shipping tags to ensure matching of serial numbers.
GOE: 06.01.05 STRENGTH: L GED: R3 M2 L1 SVP: 5 DLU: 77

706.381-010 ALIGNER, TYPEWRITER (office machines)

Adjusts type and type bar of assembled typewriters to obtain even spacing, equalized impression, and alignment of characters, following manual, and using special-purpose handtools. Inserts paper in machine and types row of alternate upper and lower case characters of each key. Examines imprints for defects, such as close spacing and misaligned or unbalanced impressions. Bends or straightens type or type bar to rectify defective impressions, using special-purpose handtools. Turns regulator or impression screw to adjust length of type-bar stroke and to regulate depth of impression, using screwdriver. Spaces and aligns each upper and lower case character, using first aligned key character as guide.
GOE: 06.02.24 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

706.381-014 BENCH HAND (furniture)

Cuts and forms metal furniture parts according to blueprints, using handtools and power tools. Lays out furniture parts on metals, using punches, scribers, and templates. Cuts and forms metal parts, using handtools and machines, such as tin snips, drill press, and power hacksaw. Assembles parts to ensure closeness of fit, using handtools, such as screwdriver, wrench, and hammer. Disassembles furniture prior to painting.
GOE: 06.02.24 STRENGTH: M GED: R3 M2 L3 SVP: 6 DLU: 77

706.381-018 FINAL ASSEMBLER (office machines)

Assembles, installs, and adjusts variety of electromechanical units, such as feed drives, control key assemblies, and printing units, on new and rebuilt punched card office machines according to blueprints and written specifications, using handtools, assembly fixtures, and test devices. Reads blueprints to determine position of unit and component parts. Positions components in assembly fixture. Assembles unit and mounts it on office machine frame, using screwdrivers and wrenches. Starts machine and adjusts unit for specified clearances and time cycles, using fixed gauges, test lights, and handtools. Inspects machine to verify that optional equipment changes have been made according to customer order. May operate electric hoist to position unit on office machine frame.
GOE: 06.01.04 STRENGTH: M GED: R3 M2 L3 SVP: 6 DLU: 77

706.381-022 INSPECTOR, TYPEWRITER ASSEMBLY AND PARTS (office machines) alternate titles: inspector, manufactured parts; inspector, mechanical

Inspects typewriters, subassemblies, and parts for conformance with specifications, using handtools and measuring instruments. Moves parts to determine binding, looseness, or misalignment. Tests tightness of screws and nuts, using screwdrivers and wrenches. Measures dimensions of parts, distance between them, and shapes of angles and curves to verify conformance to specifications, using comparator, micrometer, dial indicators, and fixed and adjustable gauges. Refers to blueprints and charts for tolerances. Examines parts for surface defects, such as rust, dullness, discoloration, and chipped and scratched finish. Stops production when rejects exceed specified limits. Compiles information to indicate number of, and reasons for, rejects. May train other workers performing inspections. May be designated according to type of assembly monitored as Inspector, Conveyor Line (office machines); Inspector, Final Assembly-Conveyor Line (office machines); Inspector, Floor Sub-Assembly (office machines); Inspector, Station Assembly-Conveyor Line (office machines); or type of parts inspected as Inspector, Purchased Parts (office machines).
GOE: 06.01.05 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 77

706.381-026 OPERATING-TABLE ASSEMBLER (furniture)

Operates metalworking machines to shape prefabricated metal parts and assembles parts to make surgical tables. Mills parts and assembles base of table. Constructs hydraulic-lifting and table-revolving mechanisms, using drilling, reaming, and tapping machines, and installs them in base. Mounts table frame with its various moving or collapsible sections on base, and attaches table plates to frame. Inspects completed table for compliance with specifications. May assemble examining chairs and be designated Examining-Chair Assembler (furniture).
GOE: 06.01.04 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

706.381-030 REPAIRER, TYPEWRITER (office machines)

Repairs and adjusts defective typewriters removed from production line, using handtools, power tools, and gauges. Operates typewriter to test functioning of parts and mechanisms to determine repairs required. Disassembles machines to repair or replace defective components, using handtools and holding devices. Bends, taps, turns parts, such as screws, nuts, and type bar, to eliminate binding, looseness, and misalignment, using special handtools. Verifies specified clearance between parts, using spacebars, tension scales, dial indicators, and feeler gauges. Measures rotation of motor drive-wheel to determine speed of wheel, using tachometer. May adjust interrelated typewriter parts to synchronize machine operation and be designated Adjuster (office machines).
GOE: 06.02.24 STRENGTH: M GED: R3 M2 L3 SVP: 6 DLU: 77

706.381-034 SEWING-MACHINE ASSEMBLER (machinery mfg.)

Mounts previously assembled units of power sewing machines onto frames of machines, and fastens units, such as crankshafts, needle arms, and feed rockers to machines, using drill press, handtools, and gauges.
GOE: 06.02.23 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

706.381-038 SUBASSEMBLER (machinery mfg.)

Assembles machinery components, such as operating cylinders, electric control cases, transmissions, clutches, and special tools, according to specifications. Transports specified parts from storage to work area manually or by using overhead crane. Removes burrs and rough surfaces from metal parts with hand file or portable pneumatic grinder. Brushes lubricant on moving parts and fits parts together on bench, following blueprints. Inserts shims between parts to realign or level parts and verifies alignment and clearance of parts, using micrometers, scale, and gauges. Bolts, screws, and rivets parts together, using handtools. May operate hydraulic press to force bearings into sleeves and flatten rivets. May set up and operate drill press, bench lathe, and speed lathe. May connect electric wires to terminals of subassembly, using screwdriver. May move subassembly to storage area, using overhead crane.
GOE: 06.02.24 STRENGTH: M GED: R3 M3 L2 SVP: 6 DLU: 77

706.381-042 TURBINE SUBASSEMBLER (engine-turbine)

Assembles steam and gas turbine subassemblies according to drawings, using measuring instruments, handtools, and power tools. Chips, grinds, and files welds and patches on castings and relief areas on cylinder joints to obtain specified clearances or smooth finish, using pneumatic chipping hammer and pedestal grinder. Drills and taps holes in castings to seat nipples and valves, using single-spindle drill press. Fills castings, high pressure cylinders, turbine exhaust ends, gland casings, relay cylinders, compressor cylinders, and compressor heads with water, using high pressure pump to simulate steam pressure in turbine. Measures expansion of unit, using micrometer-scaled rod. Inspects weldments, baffles, valves, valve seats, and piping for leaks. Inserts heating element of electric heater into hollow studs and heats studs to facilitate tightening with wrenches. Bolts or dowels fitted parts together, using wrenches and pneumatic hammer. Measures clearances and spacing, using feeler gauges, calipers, and micrometers. May cut expansion reliefs in cylinders and exhaust end joints, using portable power hacksaw.
GOE: 06.02.22 STRENGTH: M GED: R3 M2 L3 SVP: 6 DLU: 77

706.381-046 WHEELWRIGHT (automotive ser.)

Repairs and aligns defective wheels of automotive vehicles, such as automobiles, buses, and trucks. Examines wheel rims, drums, discs, and wire spokes for damage. Hammers out warps in wheel rim, or places wheel rim in hydraulic press and forces rim into shape with pry bar or hydraulic jacks. Repairs damaged wire spokes, using straightening press, and replaces broken or missing spokes. Examines alignment of wheels on test stand equipped with dial indicator gauge for measuring radial and lateral tolerance. Corrects alignment of wheels, using handtools.
GOE: 05.10.01 STRENGTH: H GED: R3 M1 L2 SVP: 5 DLU: 77

706.381-050 PRECISION ASSEMBLER, BENCH (aircraft mfg.) alternate titles: detail bench assembler

Assembles machined parts into precision aircraft and missile assemblies, such as landing gear struts, brakes, fueling equipment, control linkages, actuators, and gearbox mechanisms, according to specifications, using handtools, power tools, and measuring instruments. Measures parts to determine specified tolerance, using measuring instruments, such as micrometers, calipers, and verniers. Files and buffs parts to fit, using handtools and power tools. Drills, taps, reams, countersinks, and spotfaces bolt holes in parts, using drill press or portable power drill. Positions and aligns parts, using jigs, fixtures, and templates. Bolts, screws, and rivets parts together, using handtools and power tools. Disassembles and replaces parts as required. May lap and hone internal cylindrical surfaces. May test functional performance of assembly. May clean and lubricate parts and assemblies. May mark identifying information on parts.
GOE: 06.02.23 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 87

706.382-010 FUNCTIONAL TESTER, TYPEWRITERS (office machines)

Operates assembled typewriters to test their performances. Types characters in prescribed sequence on sample sheet to evaluate functioning of parts, such as shift, ribbon feed, key levers, tabulator, carriage, and spacebar. Indicates on prepared form condition of machine, such as excessively noisy, binding parts, misaligned type, and jammed backspace. Sends report and defective machines to ALIGNER, TYPEWRITER (office machines) for repair or adjustment. Repeats tests on adjusted or repaired machines to verify corrections.
GOE: 06.03.01 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

706.382-014 TESTER, SOUND (machinery mfg.) alternate titles: bearing inspector

Operates sound-testing equipment to detect defects in machinery ball bearing assemblies and diagnoses causes of defects. Turns dials on equipment to specified setting. Slides bearing on adapter arm and starts machine to rotate inner ring of bearing. Listens through headphones to detect sounds that indicate mechanical defect in bearing and to determine probable cause of defect. Separates defective bearings and sorts bearings for scrap or salvage.
GOE: 06.03.01 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

706.384-010 INSPECTOR-ADJUSTER, OFFICE-MACHINE COMPONENTS (office machines)

Inspects and adjusts components and subassemblies of high-speed printers used in electronic data systems for conformance with specifications, using testing equipment and handtools. Examines components and subassemblies for defects and faulty workmanship, using schematic drawings and work process specifications. Measures and checks clearances, tensions, alignments, and electric circuitry, using gauges, ohmmeter, and aligning fixtures. Turns adjusting screw to increase or decrease tension and clearance of parts not conforming to specifications. Examines printout of printed characters to determine if height, width, and spacing meet specifications, using plastic template, and adjusts rollers to correct defects, using handtools. Connects frequency meter lead to circuit board of printer and reads meter dial to verify that frequency readings are within prescribed limits. Measures printer motor speed, using motor-speed tester, and routes defective motors to repair shop.
GOE: 06.01.05 STRENGTH: L GED: R3 M2 L3 SVP: 3 DLU: 86

706.387-010 INSPECTOR, AUTOMATIC TYPEWRITER (office machines)

Inspects automatic electric typewriter, used as part of data processing unit, for conformance to specifications. Plugs machine connections into electrical outlets. Tests performance of typewriter by pressing keys, listening for noise variations, and noting malfunction of mechanisms, such as trip margin stop, backspacer, carriage, and shift. Examines typed copy to determine skipping and misalignment of characters. Marks sample sheet with designated symbols to indicate defects. Routes machine, sample sheet, and work ticket to readjusting or repairing departments. May test performance of typewriter, using automatic programmed simulator.
GOE: 06.03.01 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

706.387-014 MACHINE TESTER (office machines)

Tests machines, such as calculating or adding machines, manually or automatically to detect malfunctions, using handtools, alignment gauge, and tester. Sets machine on ball swivel mount to facilitate turning in all directions when examining parts. Plugs cord of machine into electrical outlet. Presses keys on keyboard and moves levers in prescribed sequence to test alignment of printing, repeat latch, ribbon and paper feed, correction release, noise, and clearance of type bars, according to checklist. Test-runs battery of machines through fixed computation cycle automatically, using auto typist or tester. Reads arithmetic results recorded on paper tapes of machines and compares them with test chart to verify accuracy. Indicates defects on inspection worksheet and gives worksheet and machine to repairer. May disassemble machine to determine cause of defect. May be designated according to type of inspection done as Clearing Inspector (office machines); Final Inspector (office machines); Sampling Inspector (office machines); Utility Inspector (office machines).
GOE: 06.03.01 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

706.481-010 INTERNAL-COMBUSTION-ENGINE SUBASSEMBLER (engine-turbine) alternate titles: bench assembler; group assembler

Fits together mechanical parts at workbench or assembly floor to make subassemblies for internal combustion engines according to drawings or routing sheets, using handtools and power tools. Places basic part of assembly, such as carburetor, water pump, fuel pump, oil pump, governor, cam housing, gearcase, exhaust housing, remote control, pistons and connecting rods into holding fixture. Bolts, screws, or pins mechanical and electrical parts together, such as push rods, valves, rocker arms, and magnetos, using power wrenches, torque wrench, stud drivers, and hammer. Operates hand or power arbor press to press bushings and seals into housings or onto shafts. Reams tubular worm gear cage to form smooth surface for assembled worm gear, using hand reamer. Tests sealed units, such as relief valves, fittings, and cylinders under air or water pressure (HYDRO-PNEUMATIC TESTER (any industry)). Applies decals to engine to indicate operating procedure. May be designated according to part assembled as Carburetor Assembler (engine-turbine); Cylinder-Head Assembler (engine-turbine); Gearcase Assembler (engine-turbine); Governor Assembler (engine-turbine); Remote-Control Assembler (engine-turbine); Water-Pump Assembler (engine-turbine).
GOE: 06.02.22 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

706.484-010 DRAPERY-ROD ASSEMBLER (retail trade)

Assembles drapery rods to customer's order in retail establishment. Bends rod to customer's specifications to ensure proper fit in window boxes and offsets. Installs drapery pull cords, drapery carriers, master carriers, and end pulleys on drapery rod.
GOE: 05.12.15 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

706.587-010 CLEANER-TOUCH-UP WORKER (office machines) alternate titles: touch-up worker

Wipes grease and fingermarks from typewriter parts, such as covers, platen, and keyboard, using cloth and solvent and touches up scratches and nicks in enamel finish, using paint and brush. Notifies supervisor if shade of touchup paint and cover color do not match. Rejects machines with covers too badly marred to touch up. Records serial numbers of machines cleaned. May insert wire to secure typewriter carriage in place for shipping. May attach identifying tags and warranty to typewriter.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

706.587-014 SORTER (office machines)

Disassembles and sorts defective typewriter parts and subassemblies into lots to reclaim serviceable parts, using handtools. Lifts containers of rejected mixed parts from assembly lines onto handtruck and transports them to work area. Dismantles subassemblies, using pliers, wrenches, and screwdrivers. Sorts parts into lots for reuse, repair, or salvage according to disposition information on tags and instructions from supervisor. Assigns part number from stock catalog to reusable, repairable, or salvaged parts. Prepares route slips to indicate, according to instructions from supervisor, departments to which parts are to be sent. May bend, straighten, grind, ream or tap defective typewriter parts to remove defects, using handtools and power tools. May extract metal parts from floor sweepings to reclaim salvageable parts, using hand magnet.
GOE: 06.03.02 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

706.684-010 AIR-CONDITIONING-COIL ASSEMBLER (svc. ind. mach.) alternate titles: coil fin assembler; plate fin assembler

Assembles prepunched aluminum fin plates and copper tubing to form cooling coils for air-conditioning units, using handtools and other equipment. Places fin plates on worktable and clamps into position. Inserts copper tubing through holes in fin plates. Depresses switch to activate hydraulic rams, forcing them through tubes, to expand tubes and lock fins in position. Joins completed assemblies, using end plates and pneumatic hammer to expand ends of tubes. Heats tube ends and seals joints, using solder. May operate press machine to punch fins and tubes required to fabricate air-conditioning coils.
GOE: 06.02.23 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 77

706.684-014 ASSEMBLER I (office machines) alternate titles: assembler-adjuster

Assembles and adjusts typewriters and office machine assemblies and subassemblies, using blueprints, gauges, handtools, and holding devices. Screws and bolts parts together, using screwdrivers, wrenches, and other handtools. Tests operation of machines and typewriters to detect loose and binding parts and to determine synchronization of related parts. Bends and taps parts into alignment, using pliers and mallets. Turns compensating screws to set parts at specified tensions and clearances. Verifies tensions and clearances of parts, using tension scales and space and feeler gauges. May ream and tap holes and file and fit carriages and covers of equipment, using hand reamer, tap, and file.
GOE: 06.02.23 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 81

706.684-018 ASSEMBLER, PRODUCT (machine shop) alternate titles: assembler; erector

Assembles metal products, such as vacuum cleaners, valves, or hydraulic cylinders, partially or completely, working at bench or on shop floor. Positions parts according to knowledge of unit being assembled or following blueprints. Fastens parts together with bolts, screws, speed clips, rivets, or other fasteners, using handtools and portable powered tools. May remove small quantities of metal with hand files and scrapers to produce close fit between parts. May operate drill presses, punch presses, or riveting machines to assist in assembly operation. May disassemble power brake boosters, air-brake compressors, and valves for salvage of parts and be designated Disassembler, Product (machine shop). May assemble and test patient lifting devices and be designated Assembler, Patient Lifting Device (protective dev.). Usually specializes in assembly of one type of product.

GOE: 06.02.23 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 77

706.684-022 ASSEMBLER, SMALL PRODUCTS I (any industry) alternate titles: bench assembler

Performs any combination of following repetitive tasks on assembly line to mass produce small products, such as ball bearings, automobile door locking units, speedometers, condensers, distributors, ignition coils, drafting table subassemblies, or carburetors: Positions parts in specified relationship to each other, using hands, tweezers, or tongs. Bolts, screws, clips, cements, or otherwise fastens parts together by hand or using handtools or portable powered tools. Frequently works at bench as member of assembly group assembling one or two specific parts and passing unit to another worker. Loads and unloads previously setup machines, such as arbor presses, drill presses, taps, spot-welding machines, riveting machines, milling machines, or broaches, to perform fastening, force fitting, or light metal-cutting operation on assembly line. May be assigned to different work stations as production needs require or shift from one station to another to reduce fatigue factor. May be known according to product assembled.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 79

706.684-026 ASSEMBLER, TYPE-BAR-AND-SEGMENT (office machines)

Assembles typewriter type-bar-and-segment units and bends ends of type bars to specified angles and clearances preparatory to type soldering, using handtools and hand-powered brake: Clamps segment to holding device and inserts type bars into segment slots. Pushes curved wire (fulcrum) through channel in segment and through holes in type bars to hold them in place. Moves bars to determine snugness of fit. Bends type-bars to fit precisely into segment slots, using special pliers. Grinds defective bars to fit, using emery wheel. Positions type-bar-and-segment assembly to holding plate on braking device. Moves levers to adjust quadrant (scale in degrees) to degree desired, to bend ends of type bars to specified angles and clearances, and to release bent type bars from holding and bending jaws. Removes formed type-bar-and-segment unit from braking device. Positions type-bar-and-segment assembly in guide-installation fixture and installs type guide, using special alignment tools and power screwdriver. Checks outside bars for guide clearance after removal from fixture, using gauge. May be designated according to work performed as Fitter, Type-Bar-And-Segment (office machines); Former, Type-Bar-And-Segment (office machines); Guide-Installer, Type-Bar-And-Segment (office machines); Spacer, Type-Bar-And-Segment (office machines).
GOE: 06.02.23 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

706.684-030 ATOMIZER ASSEMBLER (fabrication, nec)

Assembles component parts of perfume atomizers, such as stems, washers, springs, and plungers, using handtools. Screws completed atomizers onto empty glass containers and places them in boxes.
GOE: 06.04.23 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

706.684-034 BAR AND FILLER ASSEMBLER (furniture)

Fits upright filler tubes into crossbars to form sections of metal bed ends. Sets crossbar in place in assembling frame. Sets filler tubes vertically in each hole in bar and presses tubes into bar with lever. Removes section from frame.
GOE: 06.04.22 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

706.684-038 BEARING-RING ASSEMBLER (machinery mfg.) alternate titles: unit assembler

Assembles outer rings, inner rings, bearings, and retainer guards to form ball bearing assembly unit used in manufacture of gyros and other commercial equipment. Selects inner ring and places it on pedestal jig. Selects outer ring and places it on pedestal jig. Picks up ball bearings of specified size and number, using magnetic and nonmagnetic needles. Inserts bearings between outer and inner rings, spacing them with nonmagnetic needle. Selects and inserts retaining guard into ball bearing unit assembly. Tests finished assemblies with gauge to determine accurate radial play. May secure ball bearings in position, using rivets and riveting press. May disassemble finished ball bearings rejected, during final inspection.
GOE: 06.04.23 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

706.684-042 BENCH ASSEMBLER (agric. equip.) alternate titles: subassembler

Assembles parts to form yard and garden care equipment components, such as reels, steering handles, and gear boxes, following specifications and using handtools and power tools. Fits parts of components together and fastens them with bolts and cotter pins, using handtools and pneumatic impact wrench. Seats inserts, such as bearings and grease seals in hubs and sleeves, using power press. Rivets reel blades to hubs on reel shaf., using pneumatic clinching gun, and sets rivets, using rivet press [RIVETING-MACHINE OPERATOR (any industry) II]. May be designated according to part assembled as Reel Fabricator (agric. equip.).
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

706.684-046 BENCH HAND (motor-bicycles)

Assembles motorcycle and bicycle subassemblies, using arbor press, drill press, grinder, riveter, or other power bench machines: Positions and clamps metal parts in bed of machines. Starts machines to burr, grind, drill, or polish brake drum, clutch hub, shifter cam, or other subassembly parts, following standard procedures. Removes part from machine and compares part with pattern. Bends tubular sections to specified shape, using handtools. Fits and rivets or spot welds parts together.

GOE: 06.04.22 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 77

706.684-050 DRAWER UPFITTER (furniture) alternate titles: drawer, hardware worker; file-drawer finisher

Assembles drawers for use in metal file cabinets: Inserts slide rod, block, and spring in file drawers to hold file guides. Rivets label holders to drawer fronts. Screws handles to drawers.
GOE: 06.04.23 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

706.684-054 FITTER II (any industry)

Fits together components of fabricated metal products, such as boxes, shells, and frames, for window sashes, doors, bicycles, and tubular furniture to prepare them for welding, brazing, or assembly: Positions parts into fixture or frame, examines alignment visually, or verifies alignment, using square, rule, and template. Files and grinds to remove burrs or alter shape. Straightens part by hammering or using straightening press. Secures part to fixture or fastens parts together, using clamps.
GOE: 06.02.22 STRENGTH: H GED: R2 M1 L2 SVP: 5 DLU: 77

706.684-058 HYDRAULIC-CHAIR ASSEMBLER (furniture)

Assembles hydraulic chairs, such as professional, laboratory, and hospital chairs, from prefabricated and finished parts: Assembles hydraulic-lifting and chair-revolving mechanisms and mounts them on base. Assembles chair frame to base and attaches seat, arm, and headrests. Inspects and adjusts completed unit. Rethreads screws, retaps holes, and removes excess paint while assembling, to facilitate work. May be designated according to type of chairs assembled as Dental-Chair Assembler (furniture).
GOE: 06.02.22 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

706.684-062 INJECTOR ASSEMBLER (engine-turbine)

Smooths, drills, and tests parts for diesel engine fuel injectors according to specifications, using lapping machine, microscope drill, and testing equipment: Mounts injector check valves on spindle heads. Smooths flat and curved surfaces of valves on rotating disk or semisphenically-shaped pan containing *lapping compound* for specified time. Examines samples of lapped valves under binocular microscope for nicks and grooves. Clamps injector spray tip in fixture under microscope drill and moves lever to drill holes into tip. Stamps identifying numbers on injector parts, using roll type metal stamper. Clamps body of injector into holding fixture and inserts tip assembly including check valve, barrel and plunger, stem, spring, and retaining nut. Screws injector into testing machine and moves lever to test operation of plunger, spring, and spray tip outlets.
GOE: 06.02.23 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

706.684-070 LOCK ASSEMBLER (furniture)

Assembles bases, columns, housings, springs, valves, and tubing to form completed supports for hydraulic chairs, such as dental or barber chairs. May operate any of various metalworking machines to machine rough or inaccurately shaped parts to size.
GOE: 06.02.22 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

706.684-074 LOCK ASSEMBLER (cutlery-hrdwr.)

Fastens together parts of locks with screws, bolts, and rivets, using handtools and power tools: Files and fits parts to obtain smooth functioning of lock. Assembles inside lock parts in lock case and rivets side plate in place, using rivet tool. May pack locks in cartons and mark cartons to identify contents.
GOE: 06.04.23 STRENGTH: S GED: R2 M1 L2 SVP: 3 DLU: 77

706.684-078 LOCK INSTALLER (furniture)

Installs slide locks in drawers of metal office furniture, using power drill to cut holes and handtools to screw parts in place.
GOE: 06.04.24 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

706.684-082 METAL-BED ASSEMBLER (furniture) alternate titles: panel assembler

Assembles head and foot sections of metal bedstead: Inserts upright fillers in holes in bedpost and in holes in cross filler. Springs legs of frame apart and inserts ends of cross filler into holes in legs. Fits molding to bedpost and drives it into grooves in bedpost with mallet. Forces ends of panel into molding, bottom of panel into cross molding, and ends of cross molding into bedpost, using mallet. May cut panel from stock, using power shear. May bend molding to shape by use of power press. May assemble safety rails and attach motors, pulleys, and cables to bed frame to assemble electric hospital beds. May be designated according to section of bed assembled as Foot-Piece Assembler (furniture); Head-Piece Assembler (furniture).
GOE: 06.02.22 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

706.684-086 PLUMBING-HARDWARE ASSEMBLER (plumbing-heat.) alternate titles: assembler; fittings tightener

Assembles plumbing fixtures, such as faucets, stoppers, and shower heads, using handtools and power tools: Screws pipe fittings into grease traps, check valves, and other plumbing fixtures, using pipe wrench or power wrench. Drills holes in fixtures for bolt attachments, using power drill. Fits parts together and secures parts with screws, bolts, or solder, using handtools and flame solderer. May adjust valves and other linkage to ensure free action of moving parts.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

706.684-090 SPRING ASSEMBLER (metal prod., nec)

Assembles leaf-type springs, performing any combination of following tasks: Picks up specified spring leaves from conveyor and inserts metal rod through center holes of leaves to align leaves lengthwise and form springs. Removes

rod and attaches leaves together with nut and bolt, using pneumatic wrench. Attaches pads and clips to leaf spring to maintain spring alignment. Places ends of spring under bushing machine and activates machine to insert rubber bushings. May spread grease over surface of spring leaves before assembly, using greasing apparatus or brush. May compress leaves prior to attaching center bolt, using press. May be designated according to specific task performed as Bolt-Up Worker (metal prod., nec); Bushing-And-Broach Operator (metal prod., nec); Catcher (metal prod., nec); Clip Riveter (metal prod., nec); Greaser (metal prod., nec); Pinner (metal prod., nec).
GOE: 06.04.22 STRENGTH: H GED: R2 M1 L1 SVP: 4 DLU: 77

706.684-094 SUBASSEMBLER (office machines)

Fastens together and adjusts variety of subassemblies, such as circuit breakers, brush slides, control panels, and other office machine subassemblies, using assembly fixtures and handtools. Reads blueprints or written instructions to determine position of subassembly components, such as cams, shafts, frames, keys, and brushes. Positions components in assembly fixtures. Fastens subassembly together with bolts, screws, and collars, using wrenches and screwdrivers. May solder parts of subassembly together. Adjusts linkage and clearance of assembled components to specifications, using fixed gauges and handtools. May disassemble and inspect subassemblies of rebuilt machines for conformance to engineering change orders.
GOE: 06.02.23 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 86

706.684-098 VALVE GRINDER (machine shop) alternate titles: valve lapper

Laps valves against valve seats to produce gastight fit, using powered tools. Applies lapping compound to bearing surfaces of valve and seat. Inserts valve stem into valve guide and positions valve against seat. Engages holes or slot in top of valve with projections in powered rotary tool (valve grinder). Presses and rotates valve against seat, using powered tool. May test valve by connecting chamber to hydraulic or pneumatic pressure and observing leaks. May rotate valve against seat, using handtool.
GOE: 06.02.24 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

706.684-102 VENDING-MACHINE ASSEMBLER (svc. ind. mach.)

Fastens together components of vending or slot machines and assembles machine, using handtools and power tools, performing any combination of following tasks: Positions, aligns, and fastens specified parts to form subassemblies of coin machines, such as selector button control panels, coin changer chassis, coin chutes, and refrigeration units, using hand press, jigs, and pneumatic screwdriver. Attaches inside components of machine, such as selection drums, evaporator units, ice makers, cup droppers, and motors as machines pass along conveyor line. Positions and attaches door panels, latch assemblies, and instruction panels, using pneumatic screwdriver.
GOE: 06.02.23 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

706.684-106 WHEEL LACER AND TRUER (motor-bicycles) alternate titles: wheel assembler; wheel truer

Laces and trues-up (aligns) motorcycle and bicycle wheels according to specifications, using gauges and handtools or power tools: Hooks wire spokes onto perforated hubs and screws nipples of spokes onto rim to lace (assemble) wheel, using special hand wrench. Measures diameter of wheel, using fixed gauge. Grinds protruding end of spokes from inside surface of rim, using portable hand grinder. Mounts tires on wheels. [TIRE MOUNTER (fabrication, nec)] and clamps wheel in fixture. Positions dial indicator against tire and rim, turns wheel, and notes points at which wheel needs alignment as indicated by needle deflection on indicator. Turns spoke nipples with wrench to adjust tension of spokes at indicated points to align wheel.
GOE: 06.02.23 STRENGTH: M GED: R2 M1 L2 SVP: 4 DLU: 77

706.684-110 WRAPPER OPERATOR (metal prod., nec)

Wraps extended spring leaf ends around main leaf, using hand-operated wrapping device: Selects and sets eye pin (eye holder) into base of wrapping device. Positions cold main-leaf eye over pin to hold main leaf in place during wrapping. Heats end of second leaf for specified time in furnace and positions leaf behind main-leaf eye, using clamp tongs. Inserts centering pin through center hole in each leaf to align leaves and clamps leaves together with tongs. Pulls lever to move pressure plate against heated end of second leaf forcing it around main-leaf eye.
GOE: 06.04.22 STRENGTH: M GED: R2 M2 L2 SVP: 2 DLU: 77

706.685-010 TYPE-SOLDERING-MACHINE TENDER (office machines)

Tends machine equipped with multiple stations that solders typewriter type to type bars: Clamps type bar and segment assembly to holding plate of machine. Selects type in designated sequence and positions type between guides, or in matrix plate on machine table. Pulls down first type bar with fingers and seats end of bar in back slot of type. Pushes table or depresses treadle that moves assembly to next station where flux, solder, and coolant air are automatically applied. May apply flux to back slot, using tweezers. May adjust guides for different styles of type, using size blocks and turning setscrews. May remove excess solder to prevent type from binding in type guide, using pencil-flame gas torch and brush or file.
GOE: 06.04.20 STRENGTH: S GED: R2 M1 L2 SVP: 3 DLU: 77

706.685-014 WHEEL-TRUING MACHINE TENDER (motor-bicycles)

Tends truing machine which aligns spoke-wheels: Places loosely laced (spoked) wheel onto rotating bed of machine. Presses buttons to lower ram which clamps wheel into position. Turns knob which rotates turntable to align spoke nipple screws on wheel with advanceable power screwdrivers. Presses button to bring screwdrivers into contact with screw and tighten them. Pushes lever to progressively rotate worktable to align screws with screwdrivers. Removes wheel from machine and mounts on mandrel, places point of dial indicator against rim. Spins wheel and reads dial to ascertain points of diameter and circumference imbalance. Turns spoke nipples with wrench where required to true-up wheel.
GOE: 06.04.24 STRENGTH: M GED: R2 M2 L2 SVP: 2 DLU: 77

706.687-010 ASSEMBLER, PRODUCTION (any industry)

Performs repetitive bench or line assembly operations to mass-produce products, such as automobile or tractor radiators, blower wheels, refrigerators, or gas stoves. Places parts in specified relationship to each other. Bolts, clips, screws, cements, or otherwise fastens parts together by hand, or using handtools or portable power tools. May tend machines, such as arbor presses or riveting machine, to perform force fitting or fastening operations on assembly line. May be assigned to different work stations as production needs require. May work on line where tasks vary as different model of same article moves along line. May be designated according to part or product produced.
GOE: 06.04.22 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 80

706.687-018 FAN-BLADE ALIGNER (elec. equip.) alternate titles: blade aligner; fan-blade truer; line-up-machine operator

Bends metal fan blades by hand to adjust pitch (angle) of blade, and to align blades for vibrationless tracking. Places blade assembly on spindle of gauging fixture, and manually rotates blades between set of pin gauges. Sights across blade surface and tips of gaugepins, and bends and twists blade into contact with pin ends. May use wrench or bending tool to adjust heavy-duty blades and blade carriers. May align and adjust pitch of oil-retaining ring at hub of commercial or industrial fan.
GOE: 06.04.24 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

706.687-022 INSPECTOR, ALIGNING (office machines) alternate titles: alining checker

Examines typed characters and exterior features of typewriter, such as serial number and carriage model, for conformance to specifications. Verifies serial number, model carriage, front panel, and type style against specifications. Measures width of type guide, using go-not-go gauge. Compares arrangement of key tops with diagram stuck to verify positions of characters. Types line-of-write on sample sheet and examines typing for defects, such as characters above or below line-of-write, heavy or light impressions, cutting into or embossing paper, and uneven spacing or tilted characters. Marks sample sheet with prescribed symbols to indicate defects. Places sheet, ticket, and machine on conveyor for realigning or stamps inspection number on tickets and papers of approved machine and posts serial number to production report. Determines alignment and looseness of specified parts, using screwdriver.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

706.687-026 INSPECTOR, TYPE (office machines)

Examines typewriter type under mounted magnifying glass for defects, such as burrs, incomplete or off-center characters, or malformed back blades. Discards defective type. May push type along knifelike blade for ease in examining.
GOE: 06.03.02 STRENGTH: S GED: R2 M1 L2 SVP: 3 DLU: 77

706.687-030 PUSH-CONNECTOR ASSEMBLER (house. appl.) alternate titles: assembler, latches and springs

Installs catches in vacuum cleaner hose couplings, using fingers and metal pry. Positions spring-steel ring in holding groove on inside wall of coupling. Pries ring away from coupling wall, using handtool, and slips latch bar between ring and wall. Positions latch bar so that push button attached to bar protrudes through opening in coupling wall. Inserts second latch bar at opposite point on coupling.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

706.687-034 ROLLER-BEARING INSPECTOR (machinery mfg.; motor-bicycles) alternate titles: roller-bearing assembler

Sorts rollers for roller bearings into groups according to diameter or length: Sets gauge slots of machine that automatically ejects off-size rollers, using micrometers and gauges. Feeds rollers into machine hopper. Examines rollers for defects, such as marks, scratches, or other blemishes. Measures bearing retainer for conformance to specification, using height gauge. Fits bearings into retainer rings and packs roller bearings in boxes for shipment. May sort inner and outer rings of ball bearing, according to size, using gauges.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

709 MISCELLANEOUS OCCUPATIONS IN FABRICATION, ASSEMBLY, AND REPAIR OF METAL PRODUCTS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with fabricating, assembling, and repairing metal products.

709.134-010 SUPERVISOR, METAL FURNITURE ASSEMBLY (furniture)

Supervises and coordinates activities of workers engaged in assembling and packing metal furniture: Assigns tasks to workers based on workflow. Monitors

work in progress to ensure conformance to set standards and work order specifications. Assists workers in performance of duties to solve work problems or reassigns workers to maintain production at specified levels. Trains new workers. Inspects assembled pieces for conformity to production standards. Reroutes defective furniture for reworking. Enforces worker adherence to safety standards. Examines packaging for furniture to ensure compliance with company standards. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

709.137-010 INSPECTION SUPERVISOR (chemical; nonfer. metal)
Supervises and coordinates activities of workers engaged in inspecting materials received, production of uranium fuel elements, and storage of fuel elements in nuclear fuel plant. Assigns workers to inspection stations according to priorities and workers' knowledge of nuclear fuel element processing procedures and techniques. Examines materials and products rejected by subordinates to verify defects and to determine whether defects are within allowable engineering standards. Submits samples of hardware and materials received to quality control personnel to obtain verification of manufacturers' certifications and authorizations to release items for production usage. Compiles and submits reports to quality control engineer. Trains new workers. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

709.281-010 LOCKSMITH (any industry) alternate titles: lock expert
Installs, repairs, rebuilds, and services mechanical or electrical locking devices, using handtools and special equipment. Disassembles locks, such as padlocks, safe locks, and door locks, and repairs or replaces worn tumblers, springs, and other parts. Inserts new or repaired tumblers into lock to change combination. Cuts new or duplicate keys, using keycutting machine. Moves lockpick in cylinder to open door locks without keys. Opens safe locks by drilling. May keep records of company locks and keys.
GOE: 05.05.09 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 88

709.281-014 LOCKSMITH APPRENTICE (any industry)
Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.09 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

709.364-010 INSPECTOR, MAGNETIC PARTICLE AND PENETRANT (any industry)
Inspects chemically treated metallic and nonmetallic parts and assemblies under fluorescent or black lighting for defects, such as fissures, weld breaks, or fractures, using magnetic particle or fluid penetrant inspection processes and equipment, using either of following methods: (1) Immerses or sprays ferrous magnetic metal parts with iron oxide solution. Positions parts between electrodes of magnetic testing equipment and activates switch to induce magnetic field that attracts and accumulates iron oxide particles at defective points. (2) Immerses or sprays nonmagnetic metal or nonmetallic parts with fluid penetrant solution. Rinses excess solution from parts, and dries parts in oven. Examines parts under fluorescent or black lighting to detect defects at or near part surfaces indicated by thick deposits of iron oxide particles or reflection of penetrant solutions. Removes surface defects, using handtools, power tools, or abrasive solutions, or marks part defects for repair or discard depending on nature and extent of defects. Notifies supervisor of defective processing of parts or materials. May be designated by inspection process involved as Inspector, Magnetic Particle (any industry); Inspector, Penetrant (any industry).
GOE: 06.03.01 STRENGTH: M GED: R3 M3 L3 SVP: 5 DLU: 87

709.364-014 TOWEL-CABINET REPAIRER (business ser.)
Services continuous-roll towel cabinets in rest rooms of industrial and commercial establishments. Disassembles cabinet, using handtools, to determine cause of failure reported by towel-service company customer. Repairs or replaces components, such as springs and release mechanism, at scene or returns cabinet to repair shop for more extensive overhaul. May repair or replace related items, such as hot-air hand driers, toilet tissue dispensers, and soap dispensers. May deliver laundered towels to customers on route, according to prescribed schedule.
GOE: 05.10.01 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

709.367-010 INSPECTOR, METAL CAN (tinware) alternate titles: can-line examiner; can technician
Inspects and tests metal cans for imperfections, using scaler and measuring devices: Pulls samples of tinplate or aluminum sheeting can bodies and ends from production lines, and inspects them for surface flaws in metal, defective seams, and machining defects, such as scratches, burrs, and dents. Measures sample, using micrometer or gauges, to verify dimensions. Records results of inspection in log for each machine. Stops production line when inspection reveals need for corrective maintenance. Tests cans for bursting strength, using hot oil-pressure tank. Feeds defective test cans through testing machines to verify efficiency of rejection mechanisms. Disassembles and flattens cans or lids, using handpress and cutters. Measures flanges, hooks, seams, curls, countersinks, beads, and inside and outside dimensions of cans, using dial gauges. Immerses coated cans and lids in chemical solutions for specified time to test resistance of coating. Weighs coated and uncoated can samples, and records and compares difference in weight with standard conversion charts to determine amount of coating deposited. Verifies temperature of drying ovens and solder baths to ensure uniformity of heating and melting processes.
GOE: 06.03.01 STRENGTH: L GED: R4 M3 L3 SVP: 5 DLU: 77

709.381-010 ATOMIC-FUEL ASSEMBLER (chemical) alternate titles: fuel assembler; process operator, atomic energy
Prepares fuel elements for use in nuclear reactors or radiographic measuring and detecting devices, performing any combination of following tasks: Strings fuel cells on wire or rod, using tweezers, safety gloves, and radiation shield or box. Enlarges hole in cell as necessary for precise fit, using reamers, files, scrapers, and emery cloth. Inspects completed assembly for flaws, such as burrs or faulty assembly. Stacks prescribed number of assemblies in jig and slips ring or cap over end to form single fuel unit. Cleans inside of metallic tubes, using ultrasonic wand, preparatory to filling with liquid fuel solution. Mixes radioactive solution according to specifications and pours into tube, using remote-controlled slave manipulators. Seals ends of tube by crimping cap or by spot welding cap to tube. Inspects tubes for leakage, using mass spectrometer or disintegration counter. Cleans exterior of tubes, using acetone and cloth or brush. Packs tubes in cartons or lead containers for shipment. Weighs completed assemblies or radioactive materials, using gram scale. Keeps records of materials used, shipping data, and number of units assembled.
GOE: 06.01.04 STRENGTH: L GED: R4 M2 L2 SVP: 4 DLU: 77

709.381-014 MODEL BUILDER (furniture)
Makes parts for and assembles prototypes of metal furniture according to specifications to test practicality of new designs: Lays out and marks parts, following blueprints, sketches, and verbal instructions, using calipers and scribers. Cuts and forms parts from metal, such as steel and aluminum, using lathe, power saw, snips, and handtools. Joins parts, using screwdriver, wrench, and welding torch. May alter design of finished model according to revised specifications.
GOE: 05.05.06 STRENGTH: M GED: R3 M2 L3 SVP: 7 DLU: 77

709.381-018 MODEL MAKER II (jewelry-silver.) alternate titles: jewelry-casting-model maker
Constructs metal models of jewelry articles for use in making molds for casting jewelry parts: Lays out design on metal stock, using gravers. Cuts metal along markings and smooths edges, using handsaw and file. Examines and measures metal parts for conformance to design specifications on scale drawing. Hammers, carves, and scrapes rough model to produce specified relief design, using handtools. Drills holes in model, using drill press. Assembles and solders parts together [SOLDERER (jewelry-silver.) 700.381-050]. Polishes metal surfaces, using abrasive wheel. May make and sharpen tools. May modify design specifications to conform to production requirements. May construct preliminary model of wax or wire.
GOE: 01.06.02 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

709.381-022 MODEL-MAKER APPRENTICE (jewelry-silver.) alternate titles: jewelry-casting-model-maker apprentice
Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 01.06.02 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

709.381-026 MOLD STAMPER AND REPAIRER (rubber tire) alternate titles: mold dresser
Repairs and refinishes tire molds and changes lettering plates and bead rings: Repairs nicks, dents, and holes in molds, using ball peen hammer, hand drill, chisels, metal plugs, and acetylene torch. Refinishes repaired area or complete mold with hand-buffing machine and steel wool. Changes bead rings and nameplates showing size and ply to correspond with tires scheduled to be cured, using wrenches. Cleans and maintains inventory of plates, bead rings, and molds. Positions molds in area, using hoist. May add metal to, or remove metal from, plates, rings, and molds, using welding equipment and files. May fill in mold lettering with liquid metal or plugs, buff to smooth finish, and restamp [MOLD STAMPER (machine shop)].
GOE: 05.10.01 STRENGTH: H GED: R3 M2 L2 SVP: 6 DLU: 77

709.381-030 ORGAN-PIPE MAKER, METAL (musical inst.)
Casts metal into sheets and forms metal pipes for pipe organs, using handtools and knowledge of metal properties and pipe making: Melts mixture of lead and tin in melting pot. Pours molten metal onto flat table to form sheets. Brushes sizing onto sheets and cuts sheets, using hook knife and power shears. Hand-rolls sheets into tubes on mandrel, using handtools. Scrapes edges, using handtool to obtain required angle for soldering and solders seam. Places pipe on mandrel and hammers pipe, using mallet to form and finish mouth. Hand-rolls annealed sheet zinc in similar manner to form larger pipes.
GOE: 05.05.06 STRENGTH: M GED: R3 M2 L2 SVP: 7 DLU: 77

709.381-034 PATTERNMAKER (furniture)
Sketches and constructs patterns from blueprints for use in manufacture of metal furniture parts: Draws outline of part on paper or traces it from blueprint. Transfers outline onto pattern materials, such as metal, plastic, or rubber by tracing over lines. Cuts out pattern with lathe or handtools and power tools, such as tin snips and power hacksaw. Assembles pattern sections, using handtools, such as hammer and screwdriver. Marks identifying number or symbol on pattern.
GOE: 05.05.07 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

709.381-038 REED MAKER (machinery mfg.)
Fabricates reed assemblies for textile looms, using machines, handtools, and gauges: Inserts spool of wire in machine that cuts wire into dents (specified

lengths) and consecutively fastens ends of dents to opposing coils of two parallel forming springs. Positions additional forming springs across rows of dents to reinforce assembly and ensure specified spacing of dents. Compresses springs in screw press and wires frame (steel band) around dents to form reed assembly of specified width. Packs lime preparation between dents and dips assembly into solder trough to solder dent ends to frame. Removes lime preparation, wires, and springs, using handtools. Inspects spacing of dents, using micrometer and feeler gauge. Corrects spacing, using straightening tool. Cleans and polishes reed assembly, using portable buffing wheel.
GOE: 06.01.04 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

709.381-042 SPRING FORMER, HAND (metal prod., nec) alternate titles: fitter, hand

Shapes semielliptical spring leaves, using hand-forming jack. Reads specifications to determine arch required to shape leaf and computes additional arch required to compensate for unsetting of leaves in subsequent operations. Positions forming die (flexible pattern) over center pin of jack. Bends pattern and secures it to jack with holding pin. Positions center hole of hot leaf over center pin and bends leaf, using clamp tongs. Clamps ends of each leaf to pattern and sprinkles water over leaf to set arch and prevent warping. Immerses leaves in oil and places them in tempering oven [TEMPERER (heat treating)]. Shapes cold leaves on fitting block with sledgehammer.
GOE: 06.02.24 STRENGTH: M GED: R3 M2 L2 SVP: 7 DLU: 77

709.381-046 WIRE-MESH-FILTER FABRICATOR (metal prod., nec)

Fabricates and installs wire-mesh screening in housings of filters used for swimming pools and in motors of jet aircraft, motor boats, and automobiles, following blueprints or sketches, using handtools, power tools, and metalworking tools: Cuts copper or stainless steel wire-mesh screening sections according to dimensional specifications, using hand shears, scissors, or power shears. Joins sections of screening, using spot welding or riveting machines. Solders seams of screen with soldering iron or silver solder and acetylene torch. Applies silver solder and flux to screening crosspieces, and places screening in gas-fired furnace to melt solder, using tongs. Fits screening into housing of filter and solders screening in place. May fabricate and install wire-mesh screening in housing of experimental model filters and be designated Experimental Fabricator-And-Installer (metal prod., nec).
GOE: 06.02.24 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

709.382-010 SEWING-MACHINE TESTER (machinery mfg.)

Sets up and operates nc... sewing machines to test machine and attachments preparatory to shipment: Feeds piece of cloth into machine to test feeding action. Threads machine and makes prescribed tension adjustments preparatory to test sewing. Starts machine and sews sample piece of cloth, varying stitching pattern and type of stitch to evaluate machine operation. Installs machine attachments, such as hemming, buttonholing, and shirring devices to evaluate operation of attachments. Rejects defective machines and attachments. May verify effectiveness of machine attachments, using detachable gauge. May specialize in attachment testing and be designated Sewing-Machine Attachment Tester (machinery mfg.).
GOE: 06.03.01 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

709.384-010 FIRE-EXTINGUISHER REPAIRER (any industry)

Repairs and tests fire extinguishers in repair shops and in establishments, such as factories, homes, garages, and office buildings, using handtools and hydrostatic test equipment: Dismantles extinguisher and examines tubings, horns, head gaskets, cutter discs, and other parts for defects. Replaces worn or damaged parts, using handtools. Cleans extinguishers and recharges them with materials, such as soda water and sulfuric acid, carbon tetrachloride, nitrogen, or patented solutions. Tests extinguishers for conformity with legal specifications, using hydrostatic test equipment. May install cabinets and brackets to hold extinguishers. May sell fire extinguishers.
GOE: 05.10.04 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 77

709.484-010 SILK-SCREEN-FRAME ASSEMBLER (any industry) alternate titles: frame builder, silk-screen; setter-up, silk-screen frame

Builds frames for silk or metal screens used to stencil identifying or operational data on parts or products following blueprints: Bends bar stock to specified shape and dimensions to form frame, using vise and handtools. Solders joints, using soldering iron. Measures and marks location of holes on frame, using rule. Drills and threads holes, using drill press and handtap. Screws guides and stops in holes for use in positioning part in frame.
GOE: 06.04.23 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

709.484-014 STRAIGHTENER, HAND (any industry)

Straightens metal workpieces to blueprint specifications, using handtools and knowledge of metal properties: Rolls workpiece on flat surface or mounts and rotates it between centers to ascertain irregularities visually or with dial indicator. Positions workpiece on surface plate or anvil and hammers workpiece at points of irregularity to straighten it. Hammers mandrel through cylindrical objects, such as pipes or tubing to remove dents or kinks. Measures straightened workpiece for conformance with specifications, using straightedge, micrometers, and calipers. May straighten workpiece in straightening press. May heat workpiece in furnace or with heating torch to straighten it. May be designated according to parts straightened as Tool Straightener (any industry); Straightener, Gun Parts (ordnance).
GOE: 06.02.24 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

709.587-010 INSPECTOR (cutlery-hrdwr.)

Inspects and examines articles, such as can openers, hacksaw blades, steel rules, and kitchen cutlery for manufacturing defects. Examines parts for defects, such as nicks, defective plating, and incorrect marking. Verifies dimensions of parts, using fixed gauges. Turns handle of can opener to verify meshing of gears. Attaches tag, noting defects, to article and returns it to repair department. May be designated according to article inspected as Hacksaw Inspector (cutlery-hrdwr.); Steel-Rule Inspector (cutlery-hrdwr.).
GOE: 06.03.02 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

709.587-014 SPOILAGE WORKER (tinware) alternate titles: can-repairer

Inspects and repairs rejected tin cans and tin-can parts: Inspects parts for defects, such as scratches, dents, nicks, and punctures, and sorts parts according to type of defect. Places can parts over die of straightening fixture and depresses pedal that forces curving plate against die to remove dents or places can body over form and reshapes flanges and side walls, using rubber hammer. Tests cans for leaks, using pressure tester [TESTING-MACHINE OPERATOR (tinware)]. Solders holes in seams, using gas flame and hand-soldering iron. Cleans can parts with damp cloth, water, or solvent. Records source, type, and disposition of reprocessed cans and places cans and can parts in carton. Weighs scrap and routes scrap to salvage department. May observe decorated cans emerging from oven and remove cans with defects, such as faulty printing, malformed seams, or foreign materials.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 4 DLU: 77

709.667-010 FABRIC STRETCHER (furniture) alternate titles: bunk assembler; cot assembler; fabric assembler; flat-spring assembler

Clinches wire mesh fabric to metal frames to assemble springs for cots, folding beds, and other furniture: Clamps frame in jig and hooks helical springs to frame bars. Spreads fabric and stretches springs, using hooked handtool, and links spring hooks to loops of fabric. Attaches hooks to secure fabric to frame, using pliers and hammer.
GOE: 06.04.22 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

709.682-010 AUTOCLAVE OPERATOR II (chemical)

Operates series of high pressure autoclaves to test fabricated uranium fuel elements for leakage and ruptures in zirconium cladding and weld: Loads fuel elements in metal baskets and places baskets into tank of autoclave, using crane. Closes tank lid, using torque wrench. Turns valve to admit specified amount of water into tank, and closes exhaust outlet of tank. Activates electric heating element, adjust control knobs, and observes gauges to obtain specified temperature and pressure. Monitors guages to prevent rise in temperature and listens for alarm signal that indicates leak or rupture of one or more fuel elements. Presses button to cut off heat elements, opens exhaust water valve to dump hot water, and opens valve to admit cold water to cool elements. Opens autoclave, removes basket, and replaces tested elements. Records serial number of ruptured elements. Periodically tests quality of deionized water in autoclave, using special equipment.
GOE: 06.03.01 STRENGTH: L GED: R3 M2 L3 SVP: 6 DLU: 77

709.684-010 ADJUSTER (furniture)

Bends or shapes doors and drawers so that they fit snugly and work smoothly in assembled metal furniture without binding, using handtools.
GOE: 05.10.01 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 77

709.684-014 ASSEMBLER, METAL FURNITURE (furniture) alternate titles: metal-furniture assembler

Performs any combination of following tasks to assemble metal furniture: Drills holes in parts, such as backrests, covers, and seats, using power drill and template. Fits parts together and fastens them temporarily with clamps and presses. Bolts, staples, or screws parts together, using handtools, such as pliers, wrenches, pneumatic screwdrivers, and staplers. Rivets parts together, using hand or pneumatic hammer. Inserts such parts as casters and scuff plates into holes or slots. Bends fastening devices and fits interlocking parts together with hammer or rubber mallet or by striking parts against floor or workbench. Applies cement to cushions and covers with brush or spray gun, and joins parts by hand. Pulls and fastens drawstrings, wires, or springs to join precut upholstery covers to armrests, seats, and other parts, using handtools. Inserts drawers into slides and adjusts slides to fit drawer surfaces. Packs furniture for shipment. May bend metal parts, using bending machine. May be designated according to parts assembled as Backrest Assembler (furniture); Seat Assembler furniture); or according to type of metal furniture assembled as Art Metal-Chair Assembler (furniture); Office-Chair Assembler (furniture); Table Assembler, Metal (furniture).
GOE: 06.04.22 STRENGTH: M GED: R2 M2 L2 SVP: 2 DLU: 80

709.684-018 ASSEMBLY-LINE INSPECTOR (furniture)

Inspects unfinished metal articles of furniture for defects in metal or poor work: Marks rejected piece with chalk or crayon and returns it to proper department for repairs. Observes and feels welds and bent corners for burrs. Removes burrs, using file or emery paper. May inspect assembled electric hospital beds to certify conformity to production standards.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

709.684-022 BABBITTER (machine shop)

Lines bearing surfaces of metal workpieces with babbit (tin alloy) to reduce friction and wear: Melts metal in pot or ladle. Positions workpiece in fixture,

and heats with torch. Places molten metal from ladle or pot into fixture. Smooths and shapes bearing surfaces to match contours, using hand scraper. May apply acid to workpiece and dip it in molten tin to coat surface preparatory to babbitting.
GOE: 06.02.24 STRENGTH: M GED: R3 M2 L1 SVP: 6 DLU: 77

709.684-026 BIRD-CAGE ASSEMBLER (metal prod., nec)
Fabricates wire birdcages, using hand tools and drill press. Cuts wire to specified length, using wirecutter. Positions metal plate in jig, and drills holes around circumference of plate, using drill press. Fits ends of wires into holes in plate, and fastens upper ends of wire together to form cage.
GOE: 06.04.21 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

709.684-030 CAGE MAKER (concr. prod.)
Cuts, forms, and welds wire mesh and reinforcing steel to fabricate cages used in reinforcing concrete pipe and other concrete forms, according to blueprint or work order specifications. Unrolls roll of wire mesh of specified gauge, and unrolls and stretches out mesh for cutting. Measures mesh with steel rule and cuts strands, using hand or pneumatic cutter. Feeds wire mesh into rollers of bending machine and turns adjusting wheel to shape frame or cage sections. Places formed rods or mesh on floor or in special forming stand preparatory to welding. Tack-welds sections together, using arc-welding equipment. Cuts reinforcing steel, using cutting torch.
GOE: 06.02.24 STRENGTH: M GED: L3 M1 L2 SVP: 5 DLU: 77

709.684-034 CIGARETTE-LIGHTER REPAIRER (any industry)
Repairs and cleans cigarette lighters, using handtools. Disassembles lighter and adjusts or replaces parts, such as spark wheels, injector valves, and clutch gears, using handtools. Removes carbon and defective wick from lighter, inserts new wick, and repacks cotton, using tweezers and picks. Immerses lighters in solution to clean them. Applies polish to lighters and refinishes surfaces, using hand polisher. Inserts flint and fills lighter with fluid or gas. May immerse butane lighters in specified solution to detect leaks. May sell lighters to customers. May compute charges for repairs.
GOE: 05.12.15 STRENGTH: L GED: L2 M1 L2 SVP: 3 DLU: 77

709.684-038 CLIP-BOLTER AND WRAPPER (metal prod., nec) alternate titles: clip wrapper
Clips assembled leaf springs together by any of following methods: (1) Inserts bolt through end holes in U-shaped clip and tightens nut, using impact wrench. (2) Inserts bolt through hole in end of spring and positions spring and clip in holding device. Hammers clip around spring to align hole in clip over bolt. Tightens nut on bolt, using impact wrench. (3) Installs holding die and aligns spring and over clip. Starts press that automatically wraps clip around spring. Reams rough ends from rivet eyes, using drill press.
GOE: 06.04.22 STRENGTH: M GED: R2 M2 L1 SVP: 3 DLU: 77

709.684-042 HAND STAMPER (any industry)
Stamps designs or lettering on metal workpieces, using hand stamps (punches) and hammer. Orients specified stamp from rack and holds and hammers it to imprint workpiece. May use stand or fixture to position stamp or workpiece.
GOE: 06.04.24 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

709.684-046 HOT-TOP LINER (steel & rel.)
Lines ingot mold covers (hot-tops) with firebrick and refractory mortar, using handtools. Examines cover to determine necessary repairs. Pries or chips defective lining from inside of cover, using crowbar, hammer, or pneumatic chisel. Cleans covers, using wire brush. Scores specified amount of refractory mortar powder with water and spreads mixture on inside of cover, using trowel. Positions firebrick and refractory ring in mortar, using trowel, tamping bar, and wire clamps. Mixes specified amounts of molasses and graphite to form base for premixed facing solution and applies base and facing solution to cover, using brush.
GOE: 05.12.09 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

709.684-050 KEY CUTTER (any industry) alternate titles: key maker; keysmith; key worker
Cuts notches in key blanks to duplicate notches of original key, using key-duplicating machine: Selects key blank according to size, shape, or code number of original key. Positions original key and blank in vises on carriage of machine and against guides. Turns thumbscrews to secure key and blank in vises. Starts cutting disk of machine. Pushes and pulls horizontally moving carriage of machine to slide notched edge of original key against stationary guide on machine and to move key blank against cutting disk, duplicating notches of original key in key blank. Turns thumbscrews and removes keys from vises. Presses and holds duplicated key against revolving wire wheel to remove burrs from key. Positions one key atop other to compare notches of keys. May collect payment from customer and make change. May sell key holders or related novelty items.
GOE: 05.12.13 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 77

709.684-054 MOLD STAMPER (machine shop)
Lays out and stamps lettering and designs manually on tire molds, following blueprints. Positions and clamps mold on worktable manually or using hoist. Reads blueprint to obtain information, such as location and spacing of single letters, words, and designs. Applies blue pigment to mold and measures and marks reference lines with protractor, rulers, and scribers to indicate location of specified stampings. Positions stamps according to layout lines and hammers stamps to imprint letters and designs in mold in reverse order. Inspects impressions with template to verify uniform depth. May compute spacing of letters. May set up and operate pantograph machine to engrave letters and designs in molds.
GOE: 06.02.31 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 77

709.684-058 REAMER, HAND (machine shop)
Reams drilled holes in metal workpieces, using handtools. Inserts reamer (straight-fluted rotary cutting tool) into hole and twists and pushes it to enlarge, smooth, or improve roundness of hole. Verifies hole specifications, using plug gauge. May place workpieces in vise when reaming out hole.
GOE: 06.02.24 STRENGTH: M GED: R3 M1 L2 SVP: 5 DLU: 77

709.684-062 REPAIRER (furniture) alternate titles: salvage worker
Repairs or replaces damaged metal furniture parts, using handtools and power tools: Welds cracks, using acetylene torch. Files, scrapes, or sands parts to remove dirt, paint, or rust. Melts solder into holes and cracks. Grinds solder until smooth and flush with surrounding metal, using portable grinder. Bends or hammers dented or twisted parts to original shape. Replaces inoperative furniture parts. May reassemble metal furniture.
GOE: 05.10.01 STRENGTH: L GED: R3 M1 L2 SVP: 5 DLU: 77

709.684-066 RIVETER, HAND (any industry)
Rivets together light-gauge metal parts to assemble articles, such as kitchenware, household appliances, and metal furniture, using portable riveting gun or rivet set and hammer: Aligns parts and inserts rivets in rivet holes. Positions parts with rivet head against anvil or die. Places die of rivet gun or rivet set over end of rivet shank. Presses trigger of gun or strikes end of rivet set with hammer to spread rivet over rivet hole. May drill or ream rivet holes, using portable drill. May remove defective rivets, using hand punch.
GOE: 06.04.22 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

709.684-070 SALVAGER (petrol. refin.) alternate titles: salvage repairer; valve repairer, reclamation
Repairs defective valves and pipefittings removed from refinery pipelines, following specifications and using handtools and power tools: Clamps valve gauge in vise. Grinds surfaces of valve gauge to specified finish, using portable grinder. Cleans valve parts, using electric buffer and solvents. Verifies dimensions of valve parts, using calipers. Sends parts that require machining to machine shop. Orders new parts by catalog number, size, and type. Assembles and repacks valves, using handtools. Screws valve on testing device and moves handle of hydraulic pump to test valve at specified pressures. Tightens bolts to stop leaks, using wrench. Removes flanges and pipefittings from pipe, using wrenches and acetylene cutting torch. Cleans flanges and fittings, using sandblasting equipment [SANDBLASTER (any industry)]. Paints valves and fittings, using spray gun. Keeps inventory record of valves, flanges, and pipefittings by size and type. May recondition other refinery equipment, such as steam traps, water glasses, tubing, and condenser sections.
GOE: 05.10.02 STRENGTH: H GED: R3 M2 L2 SVP: 5 DLU: 77

709.684-074 SHEARER AND TRIMMER, WIRE SCREEN AND FABRIC (metal prod., nec) alternate titles: screen cutter and trimmer; shearer, screen measurer and trimmer
Cuts and trims edges of wire screening or fabric to specified dimensions, using hand shears and hone: Measures material to locate specified point of cut, using rule, scale, or pattern. Cuts material following line between parallel wires of weave or along edge of pattern. Inspects and hones cut edges to remove burrs and even tips of wires, using magnifying glass and hand hone. May hold workpieces in position for brazing. May clean or polish finished workpiece to remove tarnish, using specified cleaning solution or polishing wheel. May cut and trim wire screening, using scissors, power shears, power slitting machine, and grinding machine. May solder edges of screen of wire cloth to form seam and be designated Seamer (metal prod., nec).
GOE: 06.04.24 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

709.684-078 SPRING FITTER (metal prod., nec)
Measures, reshapes, and assembles spring leaves to form set of matched springs: Measures leaves, using ruler and straightedge, and sorts them according to size and shape. Reshapes warped leaves to specifications, using sledgehammer or shaping press. Selects and positions matched leaves in vise on worktable and presses pedal to compress leaves. Inserts bolts through leaf holes and tightens nut, using wrench. Verifies length and alignment of spring, using straightedge and ruler. May route spring leaves through assembly process after repairing leaves.
GOE: 06.02.24 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

709.684-082 STAB SETTER AND DRILLER (cutlery-hrdwr.) alternate titles: blank driller
Fabricates dies used to mark sewing reference points on materials: Positions metal blank on bed of drill press. Aligns drill template over plate. Starts machine and drills holes into blank. Inserts stabs (pointed metal dowels) into holes. Places stab setter (handpunch) over stab and hammers stab into hole.
GOE: 06.02.02 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

709.684-086 TORCH-STRAIGHTENER-AND HEATER (any industry) alternate titles: straightener, torch
Straightens metal plates, weldments, and structural shapes or preheats them preparatory to welding or bending, using torch: Selects torch tip from data charts according to thickness, area, and temperature of metal to heat. Screws

up on torch and connects hoses from torch to tanks of oxygen and fuel gas, such as acetylene. Turns levers to activate flow of gas, lights flame, and adjusts mixture to obtain desired size and color of flame. Holds or guides flame along surface of workpiece to heat and expand metal to achieve specified straightness, or until color indicates sufficient heating for welding or machine straightening or bending. Measures workpiece with straightedge or template to ensure conformance with specifications. May hammer out bulges and bends. May place workpiece into heating furnace for specified period of time, using jib of crane.
GOE: 05.10.01 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 77

709.684-090 TUBE BENDER, HAND I (any industry) alternate titles: bender, hand

Bends metal and plastic tubing, according to specifications, for use in hydraulic, fuel, and electrical installations: Draws outline of tubing on cardboard or cuts wood forming blocks with band scroll saw, following templates. Screws blocks to forming board, as specified. Bends tubing by hand to conform to outline on cardboard or hammers tubing around forming blocks, using mallet. May heat plastic tubing in hot oil or water to facilitate bending. May operate circular power hacksaw to cut tubing. May bead, burr, and flare tubing. May assemble and test preformed metal tubing for use in hydraulic, fuel, and water systems of aircraft and spacecraft.
GOE: 06.02.24 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

709.684-094 UTILITY OPERATOR II (chemical)

Assembles *monotubes*, unloads and stores nuclear reactor fuel elements, and decontaminates work area: Places fuel elements and spacers on rack of monotube loading machine in sequential order. Activates machine that automatically pushes fuel elements and spacers into monotubes. Moves filled monotubes to storage, using recharge machine. Removes tube caps from reactor wall openings and attaches connector to loaded monotube and adapter to reactor tube preparatory to charging-discharging operation, using handtools. Decontaminates work area, using brush, soap, and water. Places radiation exposed safety clothing in laundry bags for cleaning and stacks cleaned clothing on shelves.
GOE: 05.12.12 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 77

709.684-098 WIRE-FRAME-LAMP-SHADE MAKER (fabrication, nec)

Constructs wire lampshade frames, working from blueprints, sketches, and models, using handtools and wireworking machines: Builds jig of heavy gauge wire to fix position of framing members and hold them in position during production assembly and welding operations, using handtools. Inserts forming blocks and wire stops into machines and adjusts stops and rollers, using handtools. Loads automatic wire-cutting machine and feeds lengths of wire cut to size into wire-forming roller and bending machines. Positions top and bottom frame rings over jig and spot welds framing membersto rings.
GOE: 06.02.24 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

709.684-102 WIRE-ROPE-SLING MAKER (metal prod., nec)

Fabricates wire rope slings from cut lengths of wire rope: Cuts wire rope to specified length, using hand shears or abrasive cutting wheel. Marks rope at specified points, using chalk, and seizes at marks to facilitate forming sling. Forms loop and makes splice, using either of following methods: (1) on mechanical splice, splits rope by separating three adjacent strands to seizing, leaving other three strands and core intact. Bends sets of strands into desired size loop crossing over with one set. Lays strand sections alternately back into rope grooves until sections are laid into throat. Cuts out core and attaches metal sleeve to base of loop. Presses sleeve onto rope, using mechanical or hydraulic press: (2) on hand splice, forms loop at end of rope to seizing. Places loop in splicing vise or places thimble in loop, when required. Interweaves or tucks loose end of strands into body strands, using marlinespike. Cuts protruding ends and hammers down splice, using block of wood and mallet. Wraps wire over splice, when required. Attaches fittings, such as hooks, shackles, turnbuckles, and sockets, to slings according to customer's order. May apply some fittings by swaging or filling with molten zinc.
GOE: 06.02.24 STRENGTH: M GED: R3 M1 L2 SVP: 5 DLU: 77

709.685-010 GOLD RECLAIMER (metal prod., nec)

Tends equipment that crushes, filters, and separates embedded gold particles from materials, such as broken or scrapped clay, melted crucible, and waste water to reclaim gold for reuse: Fills bin of crusher with material to be processed, using shovel, and starts crusher to grind material into fine powder. Separates gold particles from powder, using special reciprocating table, agitation tank, thickener, and set of troughs. Turns valves and knobs and adds specified amounts of ingredients to waste water in tank. Moves switch to start precipitation process.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

709.685-014 HOT BOX OPERATOR (metal prod., nec)

Tends machine that removes wrinkles from rolls of metal foil: Places roll of foil on machine feed roller. Threads foil through tension rollers and heated tunnel, and attaches end of foil to rewind roller. Turns valves and knobs to set required tension of rollers and specified heat of tunnel. Starts and observes operation of machine to detect malfunction. Makes required adjustment or notifies supervisor. Removes wrinkle-free roll of foil from machine for further processing.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

709.685-018 ROLLER, GOLD LEAF (metal prod., nec)

Tends machine that forms rolls of gold leaf: Places roll of paper on arbor of machine and feeds paper around tension and rewind rollers. Positions coil of wax on machine roller and book of gold leaf on machine table. Starts machine and removes gold leaf from book, using pinchers. Places gold leaf on paper passing into machine, and pulls lever to apply wax coating to paper to prevent sticking of gold leaf on rotating roll which is cut to specified length by machine.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

709.686-010 LABORER, TIN CAN (tinware)

Performs any combination of following tasks involved in manufacture of tin cans: Opens bales of tinplate, using cutters. Removes rust spots, oil stains, or other surface accumulations, from sheets of tinplate, using steel wool, scouring powder, or cloths soaked in alcohol. Straightens bent or dented tinplate with mallet. Places cans and lids on paint racks, prior to painting process and removes painted items from racks for shipping. Supplies packing-line workers with packing materials. Places units, such as handles and cleats on flux pads and positions nozzles and solder strips on cans on conveyors that pass into ovens used to join items to cans. Packs cans or lids in cardboard containers by hand or using packing machine, or bulk-packs cans in railroad cars or transport trucks with handtools. Lines railroad cars or trucks with paper and installs bulkheads for bulk loading. Sorts cans according to size and type. Feeds flattened can bodies through reforming machine to straighten them. Seals containers with tape, staples, and bands or feeds filled containers through glue machine. Repairs, relabels, and collapses used cartons for subsequent use. Wraps pallet loads of cans with cardboard and paper. Stacks, moves, or loads cans, containers, materials, and supplies around areas of plant by hand, truck, or cart. May inspect units for obvious defects and discard defective items. May be designated according to work assigned as Bag Sealer (tinware); Can-Reforming Machine Operator (tinware); Can Stacker (tinware); Cleaner (tinware).
GOE: 06.04.24 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

709.687-010 CLEANER AND POLISHER (any industry)

Cleans and polishes chromium or nickel plated articles with cloth and liquid cleanser. May remove paint or other foreign matter adhering to surface of article with solvent, knife, or steel wool. May be designated according to type of metal cleaned as Chrome Cleaner (any industry); Nickel Cleaner (any industry).
GOE: 06.04.39 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

709.687-014 CLEANER, FURNITURE (furniture) alternate titles: bed washer; furniture cleaner; metal cleaner

Removes dirt, grease, rust, nicks, and scratches from surfaces of metal furniture or parts, using any of following methods: (1) Immerses furniture or parts into series of chemical and water baths, using hoist. (2) Rubs and wipes metal surfaces with cleaning fluid and dry cloth. (3) Rubs surfaces with emery cloth or sandpaper to remove rust and scratches. (4) Moves steam iron covered with damp cloth across laminated tabletops and wipes moisture from cleaned tabletops with cloth. May be designated by type of metal furniture cleaned as Table-And-Desk Finisher (furniture).
GOE: 06.04.39 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

709.687-018 HOT-TOP-LINER HELPER (steel & rel.)

Assists HOT-TOP LINER (steel & rel.) in lining covers (hot-tops) for ingot molds: Pries and chips firebrick, mortar, and clay from inside of cover, using tools, such as crowbar or chipping hammer. Attaches crane hooks to lugs of cover. Cleans mold with oxygen lance. Mixes mortar and carries firebrick to repair platform. May signal crane operator to lift and position covers. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.09 STRENGTH: H GED: R1 M1 L1 SVP: 3 DLU: 77

709.687-022 INSPECTOR (chemical)

Inspects nuclear reactor fuel elements and components for conformance to quality and dimensional specifications: Removes fuel elements and components from conveyors or crates, and inspects them for surface defects, such as pits, cracks, corrosion, and weld beads, using magnifying glass. Examines exposed radiographic films of fuel elements to detect presence of minute voids in elements. Compares defects with standards charts to determine acceptability of each element. Measures interior and exterior dimensions of elements, using ring and plug gauges. Rolls each element through warp gauge to ensure lengthwise alignment. Records number of defective elements and places elements in designated crate.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

709.687-026 INSPECTOR, WIRE PRODUCTS (metal prod., nec)

Inspects wire products, such as brassiere frames, oven or refrigerator racks, and wire cloth for conformance with specifications: Places product in fixture, or measures dimensions, using ruler to verify specified size and shape. Examines product for defects, such as broken welds, chipped or unpainted surfaces, holes, or uneven weave. Twists and bends product into alignment, using hands or pliers. Cuts defective sections from wire cloth, using scissors. Staples ends of wire cloth together, using stapling gun. Routes defective products to repair shop.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

709.687-030 PROOF-COIN COLLECTOR (government ser.)

Inspects proof (struck from new dies) coins produced by U.S. Mint for imperfections, such as burrs, scratches, and flattened edges. Packs satisfactory units for mailing to coin collectors in specially designed protective envelopes. May inspect medals, lapel buttons, ribbons, and similar items attached to coins for decorative or display purposes.

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GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

709.687-034 SALVAGER HELPER (petrol. refin.)
Assists SALVAGER (petrol. refin.) in repairing defective valves and pipefittings removed from refinery pipelines: Dismantles valves, using wrenches. Rethreads pipefittings, using pipe threader. Sorts fittings according to type and size and places them in bins. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.15 STRENGTH: H GED: R2 M1 L1 SVP: 4 DLU: 77

709.687-038 SPRING INSPECTOR II (metal prod., nec) alternate titles: inspector-and-unloader
Removes springs from conveyor belt and inspects them for defects, such as missing or bent leaves, clips, and bushings, and excessive spacing between leaves: Measures spring dimensions to verify specifications, using rule and micrometer. Marks spring to indicate defects, using crayon. Notifies supervisor when springs indicate specified types and quantity of defects that require rework. Separates and stacks defective and acceptable springs. Straightens defective springs, using hammer.
GOE: 06.03.02 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 77

709.687-042 SPRING TESTER II (metal prod., nec)
Tests resiliency of springs, such as those used in screen doors, using testing device: Attaches weights to spring and notes deflection and recovery of spring. Discards defective springs.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

709.687-046 TIN-CONTAINER STRIAGHTENER (tobacco)
Places tobacco tin over form and beats with hammer or mallet, or uses straightening device to remove minor dents from tins.
GOE: 06.04.24 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

709.687-050 TUBE BENDER, HAND II (any industry)
Bends metal tubing around forming blocks, or between rollers of bending device to produce components for such products as refrigeration systems or electrical heating units: Marks tubing at point of bend or places end of tubing against stop of bending device. Bends tubing to specified shape around rollers or forming blocks. May slip fittings on tube. May flare tube by forcing end against rotating cone. May be designated according to material formed as Wire Bender, Hand (any industry).
GOE: 06.04.24 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

709.687-054 ULTRASONIC TESTER (chemical)
Tests fabricated uranium fuel elements for bonding and element container for thickness in atomic fuel plant, using ultrasonic testing equipment: Pushes buttons and turns dials to activate test equipment. Places fuel element used as standard in test equipment tank, and calibrates ultrasonic sensor chart indicator, comparing chart from test run to standard chart pattern previously obtained. Places untested fuel elements in test tank and observes reading on ultrasonic chart to detect deviations from standard to determine acceptability of elements. Removes fuel elements from tank and places elements in designated cart. Records serial number of rejected fuel elements and type of defects causing rejection. Periodically places standard fuel element in tank and runs test to verify calibration of equipment.
GOE: 06.03.01 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 77

709.687-058 WIRE BENDER (furniture)
Bends wire to form frames for mattress and box-spring assemblies, using wire-bending jig: Positions bending pegs on jig table according to specifications and tightens with wrench. Inserts one or more wires in holding device and depresses pedal to drive bending arms around pegs to bend wire to required angle or bends wire around pegs, using lever. Connects frame edge-wire ends with metal sleeve and rivet sleeve, using hammer and punch.
GOE: 06.04.24 STRENGTH: M GED: R1 M1 L1 SVP: 3 DLU: 77

709.687-062 WIRE-BASKET MAKER (metal prod., nec)
Bends rolled wire-meshing into specified shapes and sizes, using pliers and crimping tool to form such items as fry baskets and waste baskets. May shape wire, using bending jig.
GOE: 06.04.24 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

71 OCCUPATIONS IN FABRICATION AND REPAIR OF SCIENTIFIC, MEDICAL, PHOTOGRAPHIC, OPTICAL, HOROLOGICAL, AND RELATED PRODUCTS

This division includes occupations concerned with assembling, fabricating, and repairing scientific, engineering, and medical equipment, photographic and optical goods, clocks and watches, and related products including fabrication of precision optical and ophthalmic lenses, using specialized handtools and bench-type machines.

710 OCCUPATIONS IN FABRICATION AND REPAIR OF INSTRUMENTS FOR MEASURING, CONTROLLING, AND INDICATING PHYSICAL CHARACTERISTICS

This group includes occupations concerned with fabricating and repairing instruments for measuring, controlling, and indicating temperature, pressure and vacuum, fluid flow, liquid level, mechanical motion, rotation, humidity, density, acidity or alkalinity, and combustion, including those used to control home air-conditioning and heating systems and as components in household appliances; dial pressure gauges; scales and balances; and apparatus for testing such physical properties as hardness, tension, torsion, compression, and elasticity. Occupations concerned with instruments for measuring, recording, and controlling electrical characteristics are included in Division 72.

710.131-010 SUPERVISOR, GAS METER REPAIR (utilities)
Supervises and coordinates activities of workers engaged in testing, adjusting, and repairing gas meters: Trains workers in testing and repair of meters. Requisitions and distributes supply of repair parts. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.02 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

710.131-014 SUPERVISOR, INSTRUMENT MAINTENANCE (any industry) alternate titles: instrument repair supervisor
Supervises and coordinates activities of workers engaged in inspecting, testing, repairing, adjusting, and calibrating instruments, such as altimeters, ammeters, barometers, compasses, position indicators, steam gauges, tachometers, and voltmeters: Prepares work orders indicating malfunctions of instruments. Inspects and tests shop equipment and repaired instruments for conformance to quality control standards, using testing equipment, such as oscilloscope, pressure chamber, ammeter, and voltmeter. May disassemble, adjust, alter, repair, calibrate, and reassemble damaged or defective instruments, using tweezers and handtools. May train workers in inspecting, testing, repairing, and calibrating procedures. Performs other tasks as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.11 STRENGTH: L GED: R4 M4 L4 SVP: 8 DLU: 88

710.131-018 SUPERVISOR, INSTRUMENT MECHANICS (utilities)
Supervises and coordinates activities of INSTRUMENT TECHNICIANS (utilities) engaged in repairing, adjusting, and calibrating meters, gauges, and remote-control equipment of steam-generating plant: Trains workers in repair of instruments. Develops standard methods and procedures for servicing, repairing, and calibrating instruments and control equipment, applying knowledge of repair procedures, using manufacturers maintenance and repair manuals. Sets up instruments to conduct efficiency and performance tests, performs necessary calculations to determine performance of instruments, and records data for use in future repairs. Submits requisitions for parts and test equipment. May assist workers in repair of instruments. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.10 STRENGTH: L GED: R4 M4 L4 SVP: 8 DLU: 77

710.131-022 SUPERVISOR, INSTRUMENT REPAIR (any industry)
Supervises and coordinates activities of workers engaged in installing, inspecting, and renovating meters and other instruments used to measure, regulate, and control chemical and thermal processes and flow of liquids through pipelines: Inspects new and repaired instruments and verifies dimensions of parts, using test stand, gauges and micrometers. Trains new workers to install, inspect, and renovate instruments. Requisitions new parts and instruments. Assists workers in repair of instruments. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.10 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

710.131-026 SUPERVISOR, METER REPAIR SHOP (utilities)
Supervises and coordinates activities of workers engaged in testing and repairing watt-hour meters, watt-hour demand meters, graphic demand meters, and instrument transformers in meter repair shop of electric power companies: Directs workers engaged in storing and issuing meters and meter repair parts and in making periodic stock inventories. May test electrical metering mechanisms used as standards for accuracy, using meters and instruments mounted on test board. May test rubber protective goods for dielectric strength [RUBBER-GOODS TESTER (elec. equip.; utilities)]. May supervise and coordinate activities of workers engaged in testing and repairing electrical indicating instruments, such as ammeters, voltmeters, frequency meters, phase angle meters, phase rotation indicators, gas detectors, metal detectors, and analysers. May supervise and coordinate activities of workers engaged in testing and repairing clock movements in demand meters and other electric-power-system timing equipment. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.10 STRENGTH: L GED: R4 M3 L4 SVP: 8 DLU: 77

710.131-030 SUPERVISOR, METER SHOP (waterworks)
Supervises and coordinates activities of workers engaged in installing, maintaining, removing, and repairing water meters: Instructs workers in methods of repairing and maintaining water meters. Inspects industrial plants, office buildings, and apartments to determine size, number, and type meters required. Requisitions materials and supplies required to clean, maintain, and repair meters. Tests accuracy of meters, using calibrated testing equipment and turns dials and indicators to adjust meters. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.02 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

710.131-034 SUPERVISOR, SHOP (petrol. & gas) alternate titles: electronics supervisor; supervisor, research shop
Supervises and coordinates activities of INSTRUMENT-MAKER AND REPAIRER (petrol. & gas) in constructing, maintaining, and repairing mechanical

and electronic instruments and equipment used in petroleum prospecting and oil and gas well surveying and servicing. Assists subordinates in constructing, maintaining, and repairing instruments and equipment, using handtools. Inspects work of subordinates, using testing instruments. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.10 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

710.131-038 SUPERVISOR, INSTRUMENT ASSEMBLY (electron. comp.; inst. & app.)

Supervises and coordinates activities of workers engaged in assembling electronic, electrical, mechanical, and electromechanical instruments, devices, subassemblies, and component parts: Reads work orders, production schedules, product specifications, and parts lists to determine work priorities and material requirements, such as fixtures, tools, supplies, and equipment. Assigns duties to workers. Sets up, or directs other workers to set up, machines and equipment at workstations, such as drill presses, tappers, and riveters. Observes assembly operations and examines product to ensure conformance to specifications, utilizing knowledge of assembly methods and procedures and established quality control standards. Performs other tasks as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 90

710.131-042 SUPERVISOR, THERMOSTATIC CONTROLS (inst. & app.)

Supervises and coordinates activities of workers engaged in assembly, repair, inspection, or calibration of thermostatic controls used to regulate household equipment, such as refrigerators, clothes dryers, and air-conditioners: Plans assembly, repair, inspection, or calibration of thermostats according to blueprints, product specifications, and engineering requirements, and assigns work to subordinates. Performs other tasks as described under SUPERVISOR (any industry) Master Title. May prepare requisitions for repair or maintenance of assembly machines, equipment, jigs, and fixtures. May be designated according to activity as Supervisor, Assembly Line (inst. & app.); Supervisor, Calibration (inst. & app.); Supervisor, Inspection (inst. & app.); Supervisor, Rework (inst. & app.).
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 89

710.137-010 SUPERVISOR, ASSEMBLY I (office machines)

Supervises and coordinates activities of workers engaged in assembling, testing, adjusting, and calibrating scales, balances, and dynamometers. May dismantle and test scale components to determine cause of defects. Performs other tasks as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

710.137-014 SUPERVISOR, METER-AND-REGULATOR SHOP (petrol. refin.; utilities)

Supervises and coordinates activities of workers engaged in repairing, adjusting, installing, and testing meters, regulators, gauges, and recording instruments for measuring and regulating flow of gas, water, and petroleum: Inspects completed work to ensure adherance to company specifications. Submits requisitions for supplies and materials needed. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.02 STRENGTH: L GED: R4 M3 L4 SVP: 8 DLU: 77

710.261-010 INSTRUMENT REPAIRER (any industry)

Repairs and calibrates speedometers and other automotive gauges and meters, using handtools and test equipment: Confers with customer to determine nature of malfunction. Inspects components, connections, and drive mechanisms to detect defects. Removes instrument from vehicle and disassembles, cleans, and inspects instrument to determine which parts are defective. Replaces worn and defective parts, using handtools. Tests and calibrates instruments, using mechanical and electronic devices, such as voltmeters, pressure generators, and speedometer tester. Installs instruments in vehicle, using handtools. Computes speedometer drive ratio changes for modified vehicles. Maintains stock and parts inventory. May operate jeweler's lathe and other machines to fabricate instrument parts. May repair automotive clocks [WATCH REPAIRER (clock & watch)].
GOE: 05.05.11 STRENGTH: L GED: R4 M3 L4 SVP: 8 DLU: 77

710.281-010 ASSEMBLER AND TESTER, ELECTRONICS (office machines)

Assembles subassemblies into electronic scale, dynamometer, or other force measuring instruments, following specifications, and tests for, diagnoses, and adjusts operating malfunctions: Assembles computer readout printer, scale, and scanner into one unit, using interconnecting cables and handtools. Assembles electronic components, such as frames, chassis boards, resistors, capacitors, circuit breakers, switches, transformers, and condensors into dynamometer or other force measuring instrument, using handtools, soldering iron, bench lathe, and drill press. Measures voltages, using voltmeter, and adjusts voltages to specified value. Varies line voltage, and interprets wave pattern on oscilloscope screen to determine operational accuracy of instrument under varying line voltage conditions. May adjust, repair, or replace parts and code colored wires. May be designated according to type instrument assembled as Dynamometer Assembler And Tester (office machines); Electronic-Scale Assembler And Tester (office machines).
GOE: 06.01.04 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

710.281-018 ELECTROMECHANICAL TECHNICIAN (inst. & app.)

Fabricates, tests, analyzes, and adjusts precision electromechanical instruments, such as accelerometers, altimeters, electromedical instruments, gyroscopes, temperature probes, and x-ray inspection systems, according to blueprints and other specifications, using handtools, metalworking machines, and precision measuring and testing instruments: Operates metalworking machines, such as bench lathe, milling machine, punch press, and drill press to fabricate housings, fittings, jigs, and fixtures, and verifies dimensions, using precision measuring instruments. Assembles wires, insulation, and electrical components, such as resistors and capacitors, following method layouts, using fixtures, binocular microscope, soldering equipment, tweezers, and handtools. Installs electrical assemblies and hardware in housing, using handtools and soldering equipment. Tests assembled instruments for circuit continuity and operational reliability, using test instruments, such as multimeter, oscilloscope, oscillator, electronic voltmeter, and bridge. Analyzes test results and repairs or adjusts instruments according to analysis. Records test results and writes report on fabrication techniques used. May calibrate instruments according to specifications. May specialize in assembly of prototype or production instruments and be designated Development Technician (inst. & app.).
GOE: 05.05.11 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 90

710.281-022 GAS-METER PROVER (utilities) alternate titles: gas-meter adjuster

Tests ability of gas meters to accurately measure specified volume of gas at maximum and average cubic-feet-per-hour capacity and adjusts meters to correct excessive registration error: Connects hoses from prover to meter inlet and outlet and raises prover bell until prover gauge registers zero. Turns valve to allow measured amount of air or gas to pass through meter at specified flow-rate. Closes valve and compares registration on meter gauge. Screws fitting into meter outlet to retard flow of gas and repeats test. Turns setscrews to adjust meter and repeats test until meter registration is within specified limits according to prover and meter gas readings. Analyzes test results to determine cause of persistent registration errors. Segregates meters requiring repair. Records test results and date on meter card. May maintain temperature of oil used as gas seal in prover within specified limits to ensure accurate and uniform test readings. May test ability of flowmeters to accurately measure gas and liquid and be designated Flowmeter Test And Certification Technician (inst. & app.).
GOE: 06.01.05 STRENGTH: M GED: R3 M3 L3 SVP: 7 DLU: 77

710.281-026 INSTRUMENT MECHANIC (any industry) alternate titles: instrument repairer

Installs, repairs, maintains, and adjusts indicating, recording, telemetering, and controlling instruments and test equipment, used to control and measure variables, such as pressure, flow, temperature, motion, force, and chemical composition, using precision instruments, and handtools: Disassembles malfunctioning instruments or test equipment, such as bargraphs, electrical ovens, multimeters, environmental cabinets, and weatherometers, and examines and tests mechanisms and circuitry for defects. Replaces or repairs defective parts, using handtools. Reassembles instrument or test equipment, and tests assembly for conformance to specifications, using instruments, such as potentiometer, resistance bridge, manometer, and pressure gauge. Inspects instruments and test equipment periodically and adjusts calibration to ensure functioning within specified standards. May calibrate instruments or test equipment according to established standards. May be designated according to type of instrument repaired as Aircraft Instrument Repairer (air trans.); Panel-Instrument Repairer (any industry); X-Ray-Control-Equipment Repairer (any industry).
GOE: 05.05.10 STRENGTH: M GED: R4 M3 L4 SVP: 7 DLU: 89

710.281-030 INSTRUMENT TECHNICIAN (utilities) alternate titles: oscillograph technician

Inspects, tests, adjusts, and repairs electric, electronic, mechanical, and pneumatic instruments and systems used to indicate, record, and control generating operations in conventional or nuclear power electric generating plant: Inspects meters, indicators, and gauges to detect abnormal fluctuations. Tests accuracy of flowmeters, pressure gauges, temperature indicators, controllers, radiation counters or detectors, and other recording, indicating or controlling instruments to locate defective components in system, using test equipment, such as pressure gauges, mercury manometers, potentiometers, pulse and signal generators, oscilloscopes, transistor curve tracers, and ammeters, voltmeters, and wattmeters. Traces out and tests electronic solid state and vacuum tube circuitry and components to locate defective parts in analog and digital, protection, or radiation monitoring systems, using test equipment, schematics, and maintenance manuals. Removes defective instruments from system, decontaminates, disassembles, and cleans instruments, and replaces defective parts, using handtools. Reassembles instruments and replaces instruments in system, using handtools. Lubricates instruments and replaces defective wiring and tubing. Calibrates readings on instruments according to standards and adjusts phasing and aligns stages to ensure accuracy of recording and indicating function. Records calibrations made, parts and components used, and inventory of parts on hand. Prepares schematic drawings, sketches, and reports to reflect changes or alterations made in instruments, circuits, and sytems. May be designated according to type power plant as Nuclear-Plant-Instrument Technician (utilities); Instrument Repairer, Steam Plant (utilities).
GOE: 05.05.11 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

710.281-034 METER REPAIRER (any industry)

Disassembles, cleans, adjusts, repairs, and tests oil, gas, and water meters, using handtools and testing equipment: Connects meter to testing apparatus. Turns valve to permit specified quantity of oil, gas, or water to pass through meter under varying pressure to test meter for leaks and accuracy of recording.

Disassembles meter, removing gear train and disk assembly, using handtools. Removes plant growth, rust, and scale from internal housing and parts, using wire brush, electric buffer, and acid. Repairs or replaces warped or broken disks and gears, and grinds and straightens parts to specified tolerance to fit parts to meter, using grinding machine and hydraulic press. Reassembles and tests meter. Tests large capacity meters in industrial plants to determine accuracy of operation. Records materials used and meters repaired. May install meters [WATER-METER INSTALLER (waterworks)]. May read meters [METER READER (utilities; waterworks)].
GOE: 05.10.02 STRENGTH: M GED: R4 M2 L3 SVP: 5 DLU: 77

710.281-038 TAXIMETER REPAIRER (automotive ser.)
Repairs and adjusts taxicab meters: Disassembles meters to determine cause of incorrect or nonregistering of time, mileage, or fare readings. Cleans meters, and repairs or replaces broken or worn parts. Adjusts registering mechanism gears, using handtools. Reassembles meters and makes final adjustments to registering mechanism control gear to meet test specifications.
GOE: 05.05.11 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

710.281-042 INSTRUMENT-TECHNICIAN APPRENTICE (utilities)
Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.11 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

710.360-010 SCALE ASSEMBLY SET-UP WORKER (office machines)
Installs, sets up, and adjusts machines, equipment, tools, jigs and fixtures at scale assembly workbench according to engineering specifications and drawings: Selects parts, components, materials, and tools according to engineering parts list and conveys parts to work station. Reads engineering specifications to determine scale or scale component to be assembled. Installs, sets up, and adjusts machines, tools, equipment, and work aids, such as drill press, kick press, air screwdrivers, engraving machine, soldering equipment, jigs, and fixtures, according to engineering specifications, using handtools. Assembles and tests balance scale or components to determine if equipment is set up according to specifications and readjusts equipment to meet specifications. Explains use of equipment to workers.
GOE: 06.01.02 STRENGTH: L GED: R4 M4 L3 SVP: 7 DLU: 77

710.361-010 MODEL MAKER, SCALE (office machines)
Assembles, tests, and adjusts prototype weight scales according to drawings, using handtools and power tools and metal fabricating machines: Selects prefabricated parts or fabricates parts required to assemble scale, using handtools and metal fabricating machines, such as drill press and bench lathe. Assembles mechanical and electrical parts and subassemblies of scale according to drawing, using handtools and power tools. Tests function and calibration of assembled scale, using test weights. Disassembles scale to determine type error and replaces or adjusts parts to correct error. Adds weight to poise or lever to calibrate scales or drills holes, hones, or twists levers or *pivots* to reduce weight. Informs engineering department of findings and recommends changes in design to correct or improve performance of prototype scale.
GOE: 05.05.11 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

710.361-014 TEST EQUIPMENT MECHANIC (aircraft mfg.) alternate titles: engineering test mechanic; structural test mechanic
Plans, lays out, constructs, modifies, tests, and maintains laboratory test equipment and related structural assemblies used to test experimental aircraft and space vehicle parts and assemblies, using precision instruments, handtools, power tools, and shop equipment: Reads and interprets blueprints, engineering drawings, and sketches, or receives verbal instructions, to determine methods and sequence of operations to lay out and construct mechanical, electrical, electronic, pneumatic, or hydraulic test equipment and related structures. Lays out and fabricates parts from assorted materials, such as aluminum, steel, wood, plastic, and graphite composites, using measuring instruments and shop equipment, such as saws, shears, drill presses, lathes, and routers. Fits, aligns, and assembles parts, equipment, specialized test devices, and structural framework to build test units, using precision measuring instruments, such as transit and level, power tools, rivets, bolts, clamps, pins, and other fasteners. Installs, or assists other workers in installing, test specimens in test equipment, using hoist, overhead crane, or related equipment. Assists engineers in operating test equipment to obtain research data on performance of experimental parts and assemblies under varying operational conditions. Diagnoses test equipment malfunctions and services and repairs equipment as required. May repair test specimens damaged during testing to prepare item for retesting. May specialize in constructing mechanical, electrical, electronic, pneumatic, hydraulic, or structural test equipment.
GOE: 06.01.04 STRENGTH: M GED: R4 M4 L4 SVP: 7 DLU: 88

710.381-010 ASSEMBLER II (office machines)
Assembles components and subassemblies of various types of scales: Verifies scale parts requirement list against parts inventory in work area to ensure supply for assembly. Assembles parts and subassemblies, such as base, levers, *stirrups*, pins, charts, indicators, and pendulums, into scale housing, using handtools and powered tools, jigs and fixtures, and plug and go-not-go gauges. Fills cavities with hot lead or lead shot to weight required for specific type scale, as fan type and cylinder type. Drills holes, twists levers, hones pivots, and files parts to ensure clearance, alignment, and accuracy. May assemble complete scale or work at position on assembly line. May test scales for accuracy, using master weights, and adjust parts and calibrate scale, using handtools.
GOE: 06.02.23 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

710.381-014 BALANCER, SCALE (office machines) alternate titles: inspector, scales
Inspects, tests, and adjusts scale mechanisms and repairs or replaces defective parts to ensure balance and accuracy of scales, using handtools and test equipment: Rolls test weights to and from position on scale platform and reads dial indications or weight tickets (if scale is so equipped) to verify accuracy of scales. Adjusts parts, such as *loading box*, rack, pendulum weights, and cams, for travel and leverage to determine type of error and coordinate readings with weights. Adjusts and tightens parts, such as locking handle, cam holddowns and ribbons, pendulum lever assembly, and stops for tare-beam lever, using handtools. Reduces friction to minimum in all bearings and parts of scale, using chisels, taps, tin snips, hacksaw, plumb bob, and electric drill. Repairs or replaces defective parts. May install parts in conjunction with balancing operation.
GOE: 06.01.05 STRENGTH: L GED: R4 M2 L2 SVP: 6 DLU: 77

710.381-022 GAS-METER MECHANIC I (utilities) alternate titles: meter tester
Reconditions, tests, and calibrates positive displacement gas meters, using handtools and test equipment: Dismantles gas meter case, diaphragm assembly, and connecting rods, using soldering iron and handtools. Positions and solders diaphragm and diaphragm rings in dismantled meter case. Inserts and solders flow-control valves in place, using soldering iron and guide wires. Moves shaft connected to valve to test freedom of movement. Adjusts shaft, using pliers, or resolders shaft to correct defective operation. Solders index assembly in position and connects assembly to activating mechanism. Moves activating arms to extreme extension to test freedom of movement. Adjusts valve mechanism to calibrate meter registration in accordance with public utilities commission specifications. Repositions and resolders connecting rods to provide sufficient clearance. Resolders case seams to seal meter. Attaches airhose at meter inlet to pressurize meter and test ability to register passage of low air volume. Attaches pressurized meter to fixture which submerges meter under water to test for leaks. May inspect, repair, and maintain gas meters used to measure volume of natural gas flowing from producing wells to processing plant and be designated Field Operator (petrol. & gas).
GOE: 05.10.02 STRENGTH: L GED: R3 M3 L3 SVP: 5 DLU: 77

710.381-026 GAS-REGULATOR REPAIRER (petrol. refin.; pipe lines; utilities)
Tests, repairs, and adjusts regulators (gas governors), relief valves, and related equipment used to control gas pressure in city gas mains and service pipes, pipelines, in-plant gas systems, and petroleum refineries: Dismantles regulator and examines such parts as springs, valves, and diaphragm for wear or deterioration. Cleans corrosion and tar deposits from serviceable parts, using solvents and wire brush. Cuts seat to receive new orifice, taps inspection ports, and performs other repairs to salvage useable materials, using handtools and machine tools. Reassembles regulator with new and reconditioned parts, according to blueprints. Connects regulator to test stand and turns screw adjustment until test-stand gauges indicate regulator inlet and outlet pressures are according to specifications for regulator and type of service. Tests and adjusts pressure setting of relief valves in similar manner. Records work done, pressure adjustment, and related data for each instrument. May install regulators, and such related equipment as gas meters, odorization units, and gas-pressure-telemetering equipment.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

710.381-030 HYDROMETER CALIBRATOR (inst. & app.) alternate titles: hydrometer finisher
Calibrates hydrometer tubes, using chemical solutions, marking device, and graduating machine: Mixes solutions of high, medium, and low specific gravity according to formula. Tests solutions, using standard hydrometer, and adjusts specific gravity of solutions. Places specified ballast weight into hydrometer float and seals hydrometer, using sealing compound. Immerses hydrometer into prepared solutions and marks levels of each solution on hydrometer tube. Graduates hydrometer, using engraving machine. Lines paper or metal scale into degrees, using drafter's pen or metal scriber, and secures scale inside hydrometer to ensure lines correspond to graduations on hydrometer.
GOE: 06.01.04 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

710.381-034 CALIBRATOR (inst. & app.) alternate titles: calibration technician
Tests and calibrates controlling, indicating, and measuring instruments and devices, such as monochromators, pressure regulators, tachometers, temperature controls, and thermometers, to ensure specified operating performance, using handtools, testing and calibrating instruments and equipment, and precision measuring instruments: Reads quality control manual and testing specifications to obtain data to test or calibrate specific devices. Selects and installs accessories, such as adapters, indicating gauges, or holding devices on test or calibration fixture, and connects instrument or device to fixture, according to specifications, using handtools. Sets controls to regulate factors, such as current flow, timing cycle, pressure, temperature, or vacuum, according to specifications, and activates test or calibration equipment. Observes readings on meters and gauges, and other displays and performance of device or instrument to identify functional defects and determine calibration requirements. Adjusts calibration mechanisms to obtain specified operational performance of device or in-

strument, using handtools and precision measuring and calibrating instruments and equipment. Applies sealing compound on calibration mechanism to prevent readjustment of settings and loss of calibration. Rejects malfunctioning devices and routes devices to specified department for rework or salvaging of parts. May disassemble instrument or device to determine cause of defective operation and notify supervisory personnel of findings.
GOE: 06.01.04 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 90

710.381-042 CALIBRATOR, BAROMETERS (inst. & app.) alternate titles: instrument calibrator

Tests, calibrates, and adjusts aneroid barometers to obtain specified performance, using handtools and test equipment: Places barometer in vacuum chamber and connects barometer to master barometer (mercurial or electronic). Starts vacuum pump to decrease atmospheric pressure in vacuum chamber, and records variances of readings between aneroid and master barometer at different atmospheric pressures, manually or using computer. Calculates adjustments required and calibrates barometer, using handtools, or automatically calibrates barometer to specifications, using computer. Tests calibrated barometer to ensure calibration conforms to master barometer. Prepares and maintains manual or computerized test and calibration records. May test calibration of aneroid barometers, using radio frequency signals recorded on tape. May disassemble, inspect, and replace defective barometer parts.
GOE: 06.01.04 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 90

710.381-046 TESTER, ELECTRONIC SCALE (office machines)

Tests assembled electronic scale components to detect missing parts, loose wires, and defective solder joints, using oscilloscope and voltmeter. Disassembles and repairs or replaces parts.
GOE: 05.10.03 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

710.381-050 THERMOSTAT REPAIRER (inst. & app.) alternate titles: field return repairer; production repairer

Repairs defective thermostats used in refrigeration, air-conditioning, and heating equipment, following blueprints and other specifications: Disassembles and examines thermostats to locate and remove defective parts, using handtools. Replaces defective parts, such as bellows, range spring, and toggle switch, and reassembles thermostat according to blueprint specifications, using cam press and handtools. Measures tolerances of assembled parts, using micrometer and calipers. Repairs leaks in valve seats or bellows of automotive heater thermostats, using soft solder, flux, and acetylene torch. Examines thermostat for defects, such as loose screws and dents. Writes repair ticket to identify thermostat and places repaired thermostats in tote boxes. Calibrates thermostat for specified temperature or pressure settings [CALIBRATOR (inst. & app.) 710.381-034].
GOE: 05.10.02 STRENGTH: M GED: R3 M3 L3 SVP: 5 DLU: 77

710.381-054 REPAIRER, GYROSCOPE (inst. & app.) alternate titles: electromechanical instrument mechanic

Tests and repairs gyroscopes according to blueprints and other specifications, using tools and equipment: Tests functional performance of gyroscope, using electronic test equipment. Disassembles mechanical and electrical components of defective gyroscope, following blueprints, using handtools and power tools. Measures parts, using precision measuring instruments, and adjusts fit of parts and balances gimbal (stabilizer), using handtools, power tools, and bench machines. Cleans and replaces parts. Tests and reassembles repaired gyroscope. May repair other precision electromechanical instruments, such as accelerometers and potentiometers.
GOE: 05.05.10 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 89

710.384-010 GAS-REGULATOR-REPAIRER HELPER (petrol. refin.; pipe lines; utilities)

Assists GAS-REGULATOR REPAIRER (petrol. refin.; pipe lines; utilities) in repair and installation of regulators, relief valves, and related equipment: Dismantles and cleans regulators preparatory to repair. Performs regulator pressure-tests as directed. Cuts, threads, and joins pipe sections and fittings to fabricate pipe assemblies to be installed in regulating stations by other workers. Drives truck to haul tools and equipment to regulator station. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.10.02 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

710.384-014 INSPECTOR (office machines)

Inspects and tests parts, subassemblies, and finished scales and balances for conformance to quality standards, using written specifications, precision measuring instruments, and handtools: Inspects purchased or in-plant-fabricated parts for observable defects and tests specific components for hardness, dimensions and tolerances, using blueprints, hardness testing machine, and precision measuring instruments, such as micrometers, calipers, and thread gauges. Inspects and tests assembled scales and balances for appearance, allowable tolerances, reliability (repeated use), and accuracy (calibration), using master weights. Rejects unacceptable parts, subassemblies, and completed scales and prepares reports indicating defects and suspected cause.
GOE: 06.03.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

710.384-018 INSTRUMENT-REPAIRER HELPER (any industry)

Assists INSTRUMENT REPAIRER (any industry) I in installing, repairing, and adjusting recording and control instruments: Changes and collects charts on recording instruments. Observes operating condition of instruments and reports abnormal readings to INSTRUMENT MECHANIC (any industry). Drills holes in masonry or structural steel for installation of instruments, using electric and pneumatic tools. Repairs and finishes parts, using buffers, grinders, and drill press. Paints instrument casings and panels, using brush or spray gun. Carries tools and materials, cleans parts and work areas, and erects hoists and scaffolds. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.15 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

710.384-022 METER INSPECTOR (utilities)

Tests accuracy of gas flowmeters, using testing apparatus: Inserts measuring orifice disk between flanged ends of two metal pipe sections and connects pipe sections with bolts and nuts. Fastens one end of pipe to gas main leaving flowmeter and attaches rubber hose to free (discharge) end of pipe to deflect air currents. Sets frame containing manometer instruments on tripod and connects instruments to nipples on pipe and to flowmeter with rubber tubing. Reads instruments to obtain data, such as specific gravity and temperature of gas, and clocks number of seconds required for specified volume of gas to pass through meter. Computes accuracy of meter, using mathematical formulas based on readings and clocking tests and standard data stamped on orifice disk, and verifies calculations, using tabulated chart. Adjusts meters to correct inaccurate readings. May change recording charts on gas flowmeters [CHART CHANGER (clerical)].
GOE: 06.03.01 STRENGTH: L GED: R3 M3 L3 SVP: 4 DLU: 77

710.384-026 PARKING-METER SERVICER (government ser.)

Inspects, repairs, and maintains parking meters on designated route: Winds meters according to schedule, adjusts mechanisms, and repairs or replaces worn parts, using handtools. Straightens meter standards, using wrenches, and replaces broken glass. Disassembles meter and cleans and oils parts with gasoline and carbon tetrachloride. Keeps records of machine service histories to facilitate preventive maintenance or replacement of meters.
GOE: 05.10.02 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

710.384-030 THERMOMETER TESTER (inst. & app.)

Heats and cools thermometers to test flow of mercury, remove excess mercury, and establish calibration reference points: Places thermometer alternately into hot water and crushed ice and rubs thermometer across corrugated pad to force excess mercury and mercury vapor from thermometer into temporary top chamber of thermometer. Spins thermometer in centrifuge to force remaining mercury back into bulb at bottom of thermometer. Observes rise and fall of mercury column and rejects thermometer if particles of mercury or dirt cling to bore, or bore constrictions prevent specified rise and fall of mercury. Heats thermometer at two known temperatures and marks height of mercury column on tube as reference points for calibration.
GOE: 06.03.01 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

710.387-010 TESTER, REGULATOR (protective dev.; toy-sport equip.)

Tests and inspects compressed air or oxygen regulators to detect air leaks: Clamps regulator unit into vise on stage above water tank and attaches compressed airhose to intake ports of regulator. Varies pressure of air flowing into regulator, using manual control, and turns regulator handles to determine that valves and pistons are functioning properly. Lowers regulator into tank of water, using power-driven foot pedal. Alters flow of air passing through unit and reads pressure gauges to determine points of high and low air release speeds. Inspects unit for air leaks, using brush to remove normal submersion bubbles. Releases foot pedal to raise regulator from water tank. Unclamps unit and places unit in tray. Marks malfunctioning areas of defective units, utilizing knowledge of components.
GOE: 06.03.01 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

710.584-010 SCROLL ASSEMBLER (office machines)

Fastens metal or plastic covers to balance and scale frames to enclose mechanism, using handtools: Fits parts, such as backplates, front and back scrolls, glass lens, and name and patent plates to frame, according to blueprint, using handtools, such as file, drill, and screwdriver.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

710.681-018 REGISTER REPAIRER (r.r. trans.) alternate titles: farebox repairer

Cleans and repairs fare registers used in rapid-transit railway stations: Disassembles register, using pliers, screwdrivers, punch, and hammer. Cleans register case with soap and water and working parts with kerosene. Replaces defective parts, makes necessary adjustments, and repaints dial markings, using brush. Reassembles register, oils mechanism, and shellacks or paints outside of case, using brush and spray gun.
GOE: 05.10.02 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

710.681-026 THERMOMETER MAKER (inst. & app.)

Fills, shapes, seals, and marks glass tubes to fabricate thermometers, using vacuum tank, micrometer, gas burners, and handtools: Places thermometer tubes in vacuum tank filled with colored liquid and secures tank lid. Turns handle to create vacuum in tank that causes fluid to fill tubes. Holds end of filled tube over gas flame until glass changes color. Inserts air bulb into unheated end of tube and squeezes air into tube to form thermometer bulb. Rotates bulb in preset micrometer to attain specified size. Holds open end of tube over flame to soften glass and seal tube. Immerses tube in temperature controlled hot and cold water tanks to determine reference point for calibrating tubes. Scribes marker at reference points, using file. Heats and cools water in tanks to specified temperatures, using heater, ice, and master thermometer. May blow and

shape glass tubes used to make thermometers [GLASS BLOWER, LABORATORY APPARATUS (glass products; inst. & app.) 772.281-010].
GOE: 06.02.30 STRENGTH: S GED: R3 M2 L2 SVP: 4 DLU: 77

710.684-010 AGATE SETTER (office machines)
Positions, glues, and aligns *agate bearings* in scale housings and bridges, base plates, and spiders: Mixes cement ingredients according to formula. Cleans agate seats, using files. Positions part in holding fixture. Coats agates and part seats with cement, positions agates in seats, and screws clamp into fixture to hold agates in place. Places clamped part and fixture in oven to harden cement. Sights along rods or straightedge to verify alignment of agates. Repositions bearings to correct misalignment, using handtools, or resets agate bearing.
GOE: 06.02.32 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

710.684-014 BELLOWS FILLER (inst. & app.)
Fills thermostat bellows with gas or liquid to charge bellows, using vacuum tank or cabinet, crimping equipment, brazing iron, and solder seal equipment, by either of following methods: (1) Inserts capillary tube of bellows into *charging manifold* of cabinet and closes cabinet windows to seal cabinet. Manipulates controls of cabinet to purge capillary tubes of air and fill tubes with gas. Observes gauges to verify that internal temperature of cabinet meets specifications, and turns valve to maintain specified gas pressure in bellows. (2) Positions bellows assemblies into vacuum tank with bulb end down. Closes tank lids, tightens lugs to seal tank, and opens valves to create vacuum in tank. Turns valve on vacuum tank and connection line between vacuum tank and filling tank to draw liquid into tank and force liquid into bellows. Removes bellows from tank or cabinet and crimps bulb end of capillary tube to seal in gas or liquid fill, using crimping equipment. Brazes crimped end of tube, using brazing iron or solder seal equipment. Submerges portion of capillary tube in water, when filling tube with combination of liquid and gas, to partially condense gas. Places filled bellows in tray or storage boxes.
GOE: 06.04.36 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 89

710.684-018 DIAL MAKER (office machines)
Marks balance scale dials by hand or using silk screen equipment: Reads work order to determine type of dial required and selects specified dial blanks from stockroom. Lays out and marks special order dials, using pivoted straightedge, pen, and ink. Marks regular order dials, using silk screen, paint, and squeegee [SCREEN PRINTER (any industry)].
GOE: 06.02.31 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

710.684-026 GAS-METER MECHANIC II (utilities) alternate titles: gas-meter repairer
Performs any combination of following tasks to recondition displacement-type gas meters and governors: Cleans meter case, using wire brush or scraper and places meter in grit-blast chamber to remove paint and soil. Removes top, front, and back case panels and valve compartment panels, using soldering iron or gas-fired chamber. Removes internal parts, including valve covers, valve connecting arms, and recording mechanisms, using soldering iron and handtools. Cleans internal compartments and moving parts, using rags and cleaning compound. Repairs internal partition seams, using soldering iron. Replaces stuffing box, using handtools, and lubricates moving parts, using oil gun. Attaches airhose to meter inlet, plugs outlet, and observes gauges for loss of pressure to test internal seams for leaks. Solders top, front, and back case panels in place, using soldering iron. Connects meter to water chamber fixture to submerge meter in water and observes meter to detect leaks. Marks seams to identify leaks, using chalk. Caps inlet and outlet of meter to prevent paint from entering system and places meter on conveyor of electrostatic spray booth. Turns spray booth controls to paint meter. Places painted meter in shipping container.
GOE: 05.10.02 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

710.684-030 INSTRUMENT-TECHNICIAN HELPER (utilities)
Assists INSTRUMENT TECHNICIAN (utilities) in repair and maintenance of metering instruments for electric-power generating equipment, such as boilers and turbines: Removes, dismantles, and assembles instruments, using mechanic's and electrician's handtools. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.10.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

710.684-034 METER-REPAIRER HELPER (any industry)
Assists METER REPAIRER (any industry) in installing, adjusting, and repairing volumetrical gas, oil, or water meters: Disconnects meters with wrench and loads meters in truck. Disassembles meters, using handtools. Cleans parts, using solvents and wiping rags. Replaces defective parts and reassembles meters, using handtools. Connects meters to testing apparatus for inspection and adjustment by METER REPAIRER (any industry). Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.15 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

710.684-038 SEALER (office machines)
Assembles and seals scale poises and counterweights used in manufacture of balance scales: Weighs poises and counterweights, using microscale, and refers to weight chart to determine amount lead shot to be added to adjust weight. Drills hole in poise, using drill press. Verifies depth of hole, using depth gauge and drill chart. Hammers lead shot into hole to add necessary weight. Inserts shot into cavity of counterweight to and necessary weight, using tweezers. Files or grinds poise or counterweight to reduce weight, using file or power grinder. Positions plug over cavity of counterweight and seals plug in cavity, using pneumatic press.
GOE: 06.02.24 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

710.684-042 BELLOWS ASSEMBLER (inst. & app.)
Performs any combination of following tasks to fabricate bellows assemblies for thermostats: Spins bellows and flanges covers onto bellows, using spinning and flanging machines. Winds copper tubing around circular fixture and cuts tubing to specified length to form capillary tube. Attaches bulb to end of capillary tube, using staking machine, and solders bellows to opposite end of capillary tube, using soft or silver solder, soldering iron or torch, and brazing rod. Cleans bellows assembly to remove foreign material resulting from soldering and brazing operation. Places bellows assemblies on tray and loads tray into drying oven. Clips excess material from bellows assembly, using clipping machine. Examines assemblies for surface defects, such as cracks or pits, and places defective assemblies into boxes for salvage. Maintains production records.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 89

710.684-046 INSTRUMENT ASSEMBLER (inst. & app.)
Assembles instruments and devices, such as barometers, control valves, gyroscopes, hygrometers, speedometers, tachometers, and thermostats, using handtools, power tools, and measuring instruments: Visually examines parts for defects. Fits, aligns, and secures internal and external component parts to assemble finished unit, using handtools, power tools, soldering iron, and measuring instruments. May inspect assembled unit for conformance to specifications, using measuring and testing equipment. May test functional performance of unit, using test equipment. May be designated according to product assembled as Regulator Assembler (inst. & app.); Thermostat Assembler (inst. & app.); Valve Assembler (inst. & app.).
GOE: 06.02.23 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 90

710.684-050 INSTRUMENT INSPECTOR (inst. & app.)
Inspects measuring, indicating, and controlling instruments, such as speedometers, sequence timers, and thermostats, and component parts, for conformance to specifications: Examines components and housings for specified characteristics, such as smoothness and centering of holes, or defects, such as scratches and chips. Measures instrument parts to verify conformance to blueprint specifications, using measuring devices, such as ruler, thread gauge, micrometer, and dial indicator. May use microscope to inspect bearings or other component parts. May test functional performance of instrument, using test equipment. May write inspection reports concerning defective parts and assemblies.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 88

710.685-014 THERMOMETER PRODUCTION WORKER (inst. & app.)
Performs any combination of following tasks to fabricate and test clinical mercury thermometers: Reads work order to determine sequence of tasks and specifications. Tends machines that heat glass capillary tubes to form blister, constrict and adjust blister, fuse bulb to tube, form top chamber, seal end of tube, and fuse tops to form thermometer. Tends vacuum equipment that fills thermometer bores with mercury. Tends centrifuges, shakers, chill tanks, warming tanks, or related machines and equipment that disperse mercury in bore and remove excess mercury or air. Tends automated machines that grade and mark calibration reference points on thermometers. Tends equipment that prints scale on thermometer [SILK-SCREEN PRINTER, MACHINE (any industry) 979.685-010]. Tends heat tank that heats thermometer to standard temperature, and reads thermometer scale to test accuracy. Inspects thermometers to detect defects, such as cracks, cloudiness, and screen printing errors. Records production information, such as number of thermometers processed, number rejected, and reason for rejection.
GOE: 06.04.19 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 89

710.687-014 BELLOWS TESTER (inst. & app.)
Inspects and tests thermostat bellows for conformance to established standards, using test stand and charts: Examines bellows for surface defects, such as dents, cracks, or pits. Inserts bulb end of bellows assembly into dry ice to lower temperature of liquid in bulb to below zero. Connects bellows assembly to fitting on test stand. Turns dial on test stand to indicate zero reading. Removes bellows assembly from dry ice and inserts bulb end into tank of water heated to specified temperature. Reads test stand gauge to ensure expansion height of liquid in bellows conforms to specifications. Rejects bellows if defects exceed established standards or tags bellows for rework. Maintains records of bellows tested and rejected from each lot.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

710.687-034 TIE-UP WORKER (office machines)
Ties or bolts moving parts of scales, prior to packing and shipping, to prevent damage: Disconnects and secures mechanisms with screws and bolts at specified points, using handtools. Lifts levers to insert felt pads between pivots and thrusts. Ties installation instruction tags to parts. May package scales.
GOE: 06.04.38 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

711 OCCUPATIONS IN FABRICATION AND REPAIR OF OPTICAL INSTRUMENTS

This group includes occupations concerned with fabricating and repairing optical instruments, such as microscopes, field glasses, opera glasses, and tele-

scopes; optical measuring and testing instruments, such as refractometers, spectrometers, spectroscopes, colorimeters, and polariscopes; and optical range finders, bombsights, and fire-control instruments. Occupations concerned with fabricating and repairing optical lenses are included in Group 716.

711.137-010 SUPERVISOR, OPTICAL INSTRUMENTS (inst. & app.)
Supervises and coordinates activities of workers engaged in assembling, repairing, calibrating, and inspecting optical instruments, such as binoculars, telescopes, gunsights, compasses, and other sighting equipment. May inspect work to ensure conformance to product specifications. Performs tasks as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

711.281-010 INSPECTOR, OPTICAL INSTRUMENT (optical goods)
Inspects, cleans, adjusts and certifies precision optical measuring, sighting, aligning, and leveling instruments to ensure conformance to company, military, and governmental standards, using precision measuring instruments and handtools: Reads written and schematic specifications, handbooks, inspection manuals, and blueprints to determine inspection and certification data, such as required tolerances, adjustment and certification methods, formulas, and measuring instruments required. Inspects instruments to detect surface defects, such as chips, burrs, loose lenses, and mirrors, bent or broken parts, and presence of foreign matter. Removes defects, such as chips and burrs, using hand honing tool. Measures instrument parts, using gauges, and calculates degree of wear and looseness of parts, using established mathematical formulas. Verifies sighting and focal accuracy of instruments, such as transits and alignment scopes, using targets and mirror systems of established heights and distances. Turns setscrews to calibrate instruments to required tolerances. Cleans mirrors and lenses of instrument, using solvent, rags, and brushes, and secures certification tag to instrument. Routes defective instruments to repair or calibration laboratories. Maintains inspection records.
GOE: 06.01.05 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 77

711.281-014 INSTRUMENT MECHANIC, WEAPONS SYSTEM (inst. & app.)
Repairs, tests, and calibrates optomechanical instruments, such as range finders, gun directors, and fire-control instruments, according to specifications, using handtools, bench machines, and precision measuring instruments: Disassembles optomechanical instruments and inspects for defects, such as broken or worn mechanical parts and scratched or defectively coated optical elements. Fabricates replacement parts, using bench lathes, drill presses, and milling machines. Cleans optical element, using cloth, and immerses element in solution to remove defective coating. Files and hones mechanical parts to facilitate meshing of gears. Coats optical element, using coating equipment. Reassembles instruments and adjusts parts to ensure freedom of movement, using handtools. Installs instrument in test fixture or mount, and sights known objective of fixed distance and height to test sighting accuracy of instrument. Adjusts readings on instrument dials to calibrate instrument according to observation. Measures dial graduations and scales to verify accuracy, using precision measuring instruments. Engraves scales and graduations on instrument dials to correct errors, using pantograph engraving machine.
GOE: 05.05.11 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

711.381-010 OPTICAL-INSTRUMENT ASSEMBLER (optical goods)
Performs any combination of following duties to assemble optical instruments, such as telescopes, level-transits, and gunsights. Reads work order, blueprints, and sketches to determine assembly procedure. Cleans elements, using tissue, cleaning solution, and compressed air device. Coats optical elements according to specifications [OPTICAL ELEMENT COATER (optical goods)]. Cements multiple lens assemblies together [CEMENTER (optical goods)]. Picks up element, using vacuum-holding device, and positions element in mounting seat of instrument housing. Inserts and screws locking ring in housing to hold element in place. Applies cement to rings to prevent loosening. Assembles structural and mechanical parts of instrument according to blueprint specifications, using wrenches and screwdrivers. Computes standard trigonometric formulas to determine distance of test target from instrument. Positions target in darkroom tunnel and connects optical instrument to test devices, such as oscilloscope and collimator. Sights instrument on target and reads dials to determine optical center of instrument lens and to verify specified focusing power. Measures elements and instrument parts to verify dimensional specifications, using precision measuring instruments. Records inspection and test data. May set up and operate lathe to modify instrument parts. May paint instrument parts, using brush or spray gun. May fill instrument housing with nitrogen gas to minimize corrosive effects on internal optical surfaces, using vacuum pump.
GOE: 06.01.04 STRENGTH: L GED: R4 M3 L4 SVP: 6 DLU: 77

711.684-010 ASSEMBLY LOADER (inst. & app.)
Selects and arranges specified type and quantity of component parts in trays preparatory to line assembly of surveying instruments: Positions instrument base or support structure (standard) in jig, and spreads bracket of standard to specified width to facilitate attachment of parts, using tongs. Files burrs from bracket holes, using hand file. Selects component parts from stock bins, according to instrument being assembled, and examines parts for defects. Arranges parts in tray and places tray on assembly line conveyor. Tallies number of trays assembled, using counter.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

711.684-014 CEMENTER (optical goods)
Cements optical elements together to form units which have specific optical properties: Cleans elements, using solvent, tissue, brush, and compressed air device. Holds elements together to verify fit. Applies cement to element surfaces, using glass rod. Presses and rotates elements together to remove air pockets and distribute cement evenly over joined surfaces. Centers and clamps elements together. Places elements in curing oven for specified period.
GOE: 06.02.30 STRENGTH: S GED: R2 M2 L2 SVP: 5 DLU: 77

712 OCCUPATIONS IN FABRICATION AND REPAIR OF SURGICAL, MEDICAL, AND DENTAL INSTRUMENTS AND SUPPLIES

This group includes occupations concerned with fabricating and repairing dental, medical, surgical, ophthalmic, and veterinary instruments, apparatus, and supplies, other than electrical used by those in the professions, laboratories, and schools; orthopedic, prosthetic, and surgical appliances and supplies, such as arch supports and other foot appliances, fracture appliances, elastic hosiery, abdominal supporters, braces, trusses, bandages, surgical gauze and dressings, adhesive tapes and medicated plasters, and personal safety appliances and equipment; artificial teeth and dental metals, alloys, and amalgams. Occupations concerned with machine sewing trusses, elastic hosiery, and other surgical and orthopedic garments are included in Group 787.

712.131-010 SUPERVISOR, DENTAL LABORATORY (protective dev.)
Supervises and coordinates activities of workers engaged in fabrication, assembly, and repair of full or partial dentures: Reads prescription and consults with DENTIST (medical serv.) 072.101-010 to resolve problems concerning prescription specifications and to establish cost and delivery agreements. Trains new workers in performance of tasks, and fabricates and repairs dentures as needed to expedite work flow. Inspects work in progress and upon completion to ensure conformance to prescription specifications. Requisitions materials and supplies. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to department supervised as Supervisor, Denture Department (protective dev.); Supervisor, Gold Department (protective dev.); Supervisor, Partial Denture Department (protective dev.); Supervisor, Porcelain Department (protective dev.).
GOE: 05.05.11 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 79

712.132-010 SUPERVISOR, SURGICAL GARMENT ASSEMBLY (protective dev.)
Supervises and coordinates activities of workers engaged in fabricating surgical garments, such as trusses, hosiery, knee and elbow braces, corsets, and belts: Assigns workers to duties, such as laying out, cutting, sewing, and assembling surgical garments. Trains new employees. Inspects garments at various stages of production to verify conformance to specifications. Consults with management and orthopedic specialists and reads trade journals to develop new products. Requisitions materials and supplies. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

712.134-010 SUPERVISOR, ARTIFICIAL BREAST FABRICATION (protective dev.)
Supervises, coordinates, and participates in activities of workers engaged in fabricating cosmetic appliances from latex for use as artificial breasts: Explains and demonstrates work techniques and use of equipment to train new employees. Observes workers to ensure that work performance conforms to company standards. Weighs, pours, and mixes prescribed amounts of filtered water and chemicals, using scale and mixing tanks, to prepare latex gel. Places plastic roll on worktable, using hydraulic jack, unrolls plastic, and cuts plastic to specified sizes, according to work order, using portable rotary cutting machine. Molds shells, using vacuum forming machine, and cuts molded sheets into individual shells, using cutting machine. Fills inner shells with latex gel, using weighing and filling device, and imprints outer shell backing with identification data, using printing device. Fuses backing to shells to form cells, using heat sealing machine, inflates cells with airhose, and seals cells, using tacking device. Compiles inventory reports. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R4 M2 L2 SVP: 6 DLU: 86

712.137-010 SUPERVISOR, FACEPIECE LINE (protective dev.)
Supervises and coordinates activities of workers engaged in fabricating facepieces for military gas masks. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.04.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

712.137-014 SUPERVISOR, FINAL ASSEMBLY AND PACKING (protective dev.) alternate titles: packing-and-final-assembly supervisor
Supervises and coordinates activities of workers engaged in fabrication, assembly, and packing of military gas masks. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

712.281-014 DESIGNER (protective dev.)
Designs surgical belts and supports, fabricates prototype, and makes production patterns: Draws full-size outline of support on paper according to specifications, body measurements, and anatomical application of support, using mechanical drawing instruments. Cuts drawing into parts to make patterns, marks around patterns on specified cloth, and cuts cloth on marks, using scissors or

electrically powered knife. Sews pieces together, using any combination of single- two-, three- and four-needle, zigzag, square-stitch, and buttonhole sewing machines. Operates eyelet, hook-and-eye, and caps-and-studs machines to attach specified fasteners to supports. Inspects completed sample and makes alterations requested by management. Writes specifications for materials, straps, stays, fasteners, adjustments, and sizes to be produced. Traces patterns on fiberboard or cardboard and cuts out patterns to be used as master patterns. Enlarges and reduces master patterns to make patterns for range of sizes to be produced.
GOE: 05.05.11 STRENGTH: L GED: R4 M2 L3 SVP: 6 DLU: 77

712.381-010 ARCH-SUPPORT TECHNICIAN (protective dev.)

Fabricates steel arch support to fit patient's foot, according to medical prescription: Receives plaster cast of foot from PROSTHETIST (medical ser.) or PODIATRIST (medical ser.). Places protection cloth into cast and fills cast with plaster to mold model of patient's foot. Removes hardened model from cast and traces model outline on paper to use as pattern in cutting support. Selects stainless steel sheet of prescribed thickness and cuts sheet to specified dimensions, using shears, guided by pattern. Hammers steel into prescribed contours to form support and places support against plaster model to determine accuracy of fit. Splits support into front and back pieces when indicated according to prescription, using shears. Polishes support, using abrasive wheel. Glues leather to bottom of arch support to protect shoe, and rivets additional leather across top edge for foot comfort, using riveting tool.
GOE: 05.10.01 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

712.381-014 CONTOUR WIRE SPECIALIST, DENTURE (protective dev.)

Makes and repairs contoured wire frames and retainers for teeth used in partial dentures, using power tools and handtools: Examines model of oral impression and reads DENTIST'S (medical ser.) 072.101-010 prescription to determine design of wire frame. Marks pencil tracings on surface of model to indicate position of wire clasps, using *surveyor*. Cuts wire to specified lengths, using wirecutter. Bends and shapes wire around tooth impressions or along base of model, using pliers, knife, and tweezers. Applies investment to wire sections and model to hold sections in alignment, using spatula. Welds or solders wire joints, using special welding and soldering tools. Removes investment. Grinds and polishes wire frame to lustrous finish, using electric grinding and polishing wheel. Reworks or replaces wire sections and missing teeth to repair partial dentures, using acrylic bonding agent. Fabricates wire retainers to straighten teeth, using pliers, tweezers, and similar handtools. Inspects work for adherence to DENTIST'S (medical ser.) specifications.
GOE: 05.05.11 STRENGTH: S GED: R4 M3 L3 SVP: 7 DLU: 77

712.381-018 DENTAL-LABORATORY TECHNICIAN (protective dev.) alternate titles: dental technician

Performs any combination of following tasks to fabricate and repair dental appliances, according to DENTIST'S (medical ser.) 072.101-010 prescription, using handtools, molding equipment, and bench fabricating machines: Reads prescription and examines dental models and impressions to determine type of denture to be made or repaired applying knowledge of dental laboratory techniques. Fabricates full or partial dentures, using wax, plastic, and plaster models, articulators, grinders, and polishers. Casts plastic or plaster models of dentures to be repaired [DENTURE-MODEL MAKER (protective dev.) 712.684-046]. Selects and mounts replacement teeth in model to match color and shape of natural or adjacent teeth, using tooth color scales and tooth illustrations. Molds wax over denture setup to form contours of gums, using knives and spatula [DENTURE WAXER (protective dev.) 712.381-046]. Removes excess plastic and polishes surfaces of cast dentures, using grinding and polishing tools and ultrasonic equipment [FINISHER, DENTURE (protective dev.) 712.381-050]. Rebuilds denture linings to duplicate original thickness, contour, and color according to specifications. Tests repaired dentures for accuracy of occlusion, using articulator. Bends and solders gold and platinum wire to construct wire frames for dentures, using soldering gun and handtools [CONTOUR WIRE SPECIALIST, DENTURE (protective dev.) 712.381-014]. May confer with DENTIST (medical ser.) to resolve problems in design and setup of dentures. May be designated according to type of denture fabricated as Dental Technician, Crown And Bridge (protective dev.); Dental Technician, Metal (protective dev.).
GOE: 05.05.11 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 90

712.381-022 DENTAL-LABORATORY-TECHNICIAN APPRENTICE (protective dev.) alternate titles: dental-technician apprentice

Performs tasks as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.11 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

712.381-026 ORTHODONTIC BAND MAKER (protective dev.)

Fabricates metal bands used for dental products, such as braces, inlays, crowns, and bridges: Examines specification sheet to determine dimensions and physical characteristics of band. Cuts and rolls gold ingot to specified size and thickness, using handtools. Melts specified amount of gold, silver, or other metal and pours molten material into molds to cast inlays, crowns, and fixed bridges, using casting equipment. Solders or welds metal pieces together to form band, using soldering iron.
GOE: 05.05.11 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 90

712.381-030 ORTHODONTIC TECHNICIAN (protective dev.)

Constructs and repairs appliances for straightening teeth according to ORTHODONTIST'S (medical ser.) 072.101-022 prescription: Shapes, grinds, polishes, carves, and assembles metal and plastic appliances, such as retainers, tooth bands, and positioners, using spatula, pliers, soldering torch, and electric grinders and polishers. Tests appliance for conformance to specifications, using articulator.
GOE: 05.05.11 STRENGTH: S GED: R4 M3 L4 SVP: 6 DLU: 78

712.381-034 ORTHOTICS TECHNICIAN (protective dev.)

Fabricates, fits, repairs, and maintains orthotic devices, such as braces and surgical supports, according to specifications and under guidance of ORTHOTIST (medical ser.) 078.261-018 or ORTHOTICS ASSISTANT (medical ser.) 078.361-022: Bends, forms, welds, and saws metal brace structural components to conform to measurements, using hammers, anvils, welding equipment, and saws. Drills and taps holes for rivets, and rivets components together. Shapes plastic and metal around cast of patient's torso or limbs. Covers and pads metal or plastic brace structures, using layers of rubber, felt, plastic, and leather. May also perform functions of PROSTHETICS TECHNICIAN (protective dev.) 712.381-038 and be designated Orthotics-Prosthetics Technician (protective dev.).
GOE: 05.05.11 STRENGTH: M GED: R4 M3 L4 SVP: 6 DLU: 78

712.381-038 PROSTHETICS TECHNICIAN (protective dev.) alternate titles: restoration technician

Fabricates, fits, maintains, and repairs artificial limbs, plastic cosmetic appliances, and other prosthetic devices, according to prescription specifications and under guidance of PROSTHETIST (medical ser.) 078.261-022 or PROSTHETICS ASSISTANT (medical ser.) 078.361-026: Reads specifications to determine type of prosthesis to be fabricated and materials and tools required. Lays out and marks dimensions of parts, using precision measuring instruments and templates. Saws, carves, cuts, and grinds wood, plastic, metal, or fabric to fabricate parts, using rotary sawing and cutting machines and hand cutting tools. Drills and taps holes for rivets and screws, using drill press. Glues, welds, bolts, sews, and rivets parts together to form prostheses, such as artificial limbs. Makes wax or plastic impression of patient's amputated area, prepares mold from impression, and pours molten plastic into mold to form cosmetic appliances, such as artificial ear, nose, or hand. Assembles layers of padding over prosthesis and fits and attaches outer covering, such as leather, sheet plastic, or fiberglass, over device, using sewing machine, rivet gun, and handtools. Mixes pigments according to formula to duplicate skin coloring of patient and applies pigments to outer covering of prosthesis. Polishes finished device, using grinding and buffing wheels. Tests prostheses for freedom of movement, alignment of parts, and biomechanical stability, using plumbline, goniometer, and alignment fixtures. May harness prosthesis to patient's stump, applying knowledge of functional anatomy. May instruct patient in use of prosthesis. May also perform functions of ORTHOTICS TECHNICIAN (protective dev.) 712.381-034.
GOE: 05.05.11 STRENGTH: M GED: R4 M4 L4 SVP: 6 DLU: 77

712.381-042 DENTAL CERAMIST (protective dev.) alternate titles: ceramics technician

Applies layers of porcelain or acrylic paste over metal framework to form dental prostheses, such as crowns, bridges, and tooth facings, according to prescription of DENTIST (medical ser.) 072.101-010: Mixes porcelain or acrylic paste according to prescription to match color of natural teeth. Applies layers of mixture over metal framework, using brushes and spatula. Brushes excess mixture from denture and places denture in furnace to harden. Removes denture from furnace, brushes on additional layer of mixture, and shapes mixture to contour of denture, using spatula. Repeats mixture-application process and baking until denture conforms to specifications. Verifies accuracy of tooth dimensions and occlusion of teeth, using micrometer and articulator. Cleans and polishes dental prostheses, using ultrasonic machine and polishing machine.
GOE: 05.05.11 STRENGTH: S GED: R4 M3 L4 SVP: 7 DLU: 90

712.381-046 DENTURE WAXER (protective dev.) alternate titles: waxer

Molds wax over denture setup to form contour molds of gums, palates, bridges, and other denture surfaces for use in casting plaster models or metal framework of dentures, using molding equipment and handtools: Applies softened wax to base of denture setup and fills spaces between adjacent teeth, using spatula and fingers. Carves and shapes wax, using scraper, knife, and heated spatula to form natural-appearing denture contours. Verifies occlusion of teeth, using articulator. May mix plaster or melt metals and pour plaster or molten metal in contour molds to form model for duplicate casting [DENTURE-MODEL MAKER (protective dev.) 712.684-046]. May construct wax bite blocks and plastic trays [BITE-BLOCK MAKER (protective dev.) 712.684-014].
GOE: 06.02.32 STRENGTH: S GED: R3 M3 L3 SVP: 6 DLU: 90

712.381-050 FINISHER, DENTURE (protective dev.) alternate titles: denture finisher; finisher; finisher-polisher

Polishes, cleans, and adjusts dentures and dental appliances to obtain specified finish, using handtools, polishing wheels, and cleaning equipment: Removes mold from frame, using ejector press, and chips molding material from denture, using hammer and chisel. Smooths and polishes denture and denture frames to remove excess material, using polishing machine. Removes excess plastic from teeth, using sharp pointed tool. Fills chipped or low spots in surfaces of plastic areas with acrylic resins, using brush. Repairs and adjusts metal framework of dentures, using soldering torch and handtools. Verifies occlusion of dentures, using articulator.
GOE: 05.05.11 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 90

712.487-010 INSPECTOR, SURGICAL GARMENT (protective dev.)
Inspects surgical garments, such as belts, hosiery, trusses, braces, and sanitary napkins for conformance to specifications: Examines raw materials to detect dirt particles, discolorations, and other defects and rejects substandard materials. Weighs and measures component parts and completed garment to verify specified weight and dimensional specifications, using scale and gauges. Examines garment at various stages of production for correct positioning of parts and appearance. Inspects packaged garments for appearance and to detect excessive glue. Tags rejected items for rework or disposal. Maintains inspection records and computes level of quality control achieved, using mathematical formulas.
GOE: 06.03.01 STRENGTH: L GED: R3 M3 L2 SVP: 3 DLU: 77

712.664-010 DENTAL CERAMIST ASSISTANT (protective dev.) alternate titles: porcelain finisher; porcelain waxer
Performs any combination of following tasks to assist DENTAL CERAMIST (protective dev.) 712.381-042 in molding dental prostheses, such as crowns, bridges, and tooth facings: Brushes liquid separating solution on tip of tooth die and covers die with wax sheet. Invests wax impressions in plaster molds, and inserts mold in furnace to melt wax. Positions mold in casting machine to cast metal framework. Removes metal framework from mold, using sandblasting equipment or hammer. Smooths rough spots from framework, using abrasive grinding wheel. Mixes porcelain or acrylic resin solution to match color of natural teeth, under direction of DENTAL CERAMIST (protective dev.). Fills wax impression of tooth with graphite solution, plates impression in electroplating machine, removes die (plated impression) from electroplating machine, and applies acrylic resin to base of die, using spatula, to fabricate copper dies for dentures.
GOE: 05.05.11 STRENGTH: S GED: R3 M2 L3 SVP: 6 DLU: 78

712.684-010 ASSEMBLER, SURGICAL GARMENT (protective dev.)
Performs any combination of following tasks to assemble surgical garments and personal safety devices, such as colostomy pouches, trusses, belts, cervical collars, hosiery, and back, knee, wrist, elbow, and ankle braces: Reads work order to determine number and type of parts required to assemble garment. Measures and cuts required pieces, using ruler, templates, knife, and electric or hand shears. Punches holes in material, using punch press or hand punch. Attaches fasteners, such as eyelets or snaps, using rivet, snap-fastening, or eyelet machine. Grinds and polishes parts, using grinding wheel. Bends metal stays (springs) to specified curvature, using bending machine. Applies latex coating to parts or specified areas of parts, using coating machine. Fits and fastens parts together, such as straps, buckles, pads, belts, and stays to assemble garment, using handtools, gluing equipment, and machines, such as punch press, riveting machine, heat-sealing machine, and sewing machine. Weaves elastic thread into outer edges of garments, such as knee, wrist, and elbow braces, to increase elasticity. Places completed garments in boxes or plastic bags for packaging. May be designated according to type garment assembled or material worked with as Elastic Assembler (protective dev.); Latexer (protective dev.) II; Leather Worker (protective dev.); Spring Bender (protective dev.); Truss Assembler (protective dev.).
GOE: 06.02.23 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 78

712.684-014 BITE-BLOCK MAKER (protective dev.)
Forms wax bite blocks and impression trays used by DENTIST (medical ser.) 072.101-010 to take impressions of patients' teeth and adjacent portions of jaw, using molding equipment and handtools: Softens plastic or shellac wafer shaped material, using heated press or gas burner. Spreads and shapes wafer over model of preliminary impression to form tray, using flat-bladed molding tool. Imbeds metal strip in soft material for convenience in handling. Presses soft wax over plaster model of denture to form bite block. Trims excess wax from mold and smooths surface, using knife, spatula, and gas burner. Immerses mold in water to harden wax. Trims and smooths edges and surfaces of trays and bite blocks, using bench lathe equipped with grinding and buffing wheels. Rubs finished piece with cotton to obtain lustrous finish.
GOE: 06.02.23 STRENGTH: S GED: R3 M1 L1 SVP: 4 DLU: 77

712.684-018 FLANGER (inst. & app.) alternate titles: glass-cylinder flanger
Forms flange on open ends of glass tubes used in manufacturing laboratory and medical instruments and apparatus, using gas burner and handtools: Rotates glass tube over gas burner to heat end of tube. Inserts end-opening tool into tube to flare opening and closes jaws of flange-forming tool to shape flange. May rotate flange over gas burner to glaze flange or to add or remove glass to obtain uniformity of finished flare. May trim edge of flange, using cutting tool.
GOE: 06.04.30 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 89

712.684-022 GAS-MASK ASSEMBLER (protective dev.)
Assembles military gas masks, using kick press and handtools: Punches holes in facepiece, using kick press. Attaches valves to facepiece and seals joints, using wire strands, acetone, cement, and tape. Glues hoses to facepiece and canister units. Clinches metal clamps on strips of tape to form head harness and attaches harness to mask. Inserts lenses in eyepieces and crimps rims to seal lenses. May stitch reinforcement patches onto masks and seal stitching with cement.
GOE: 06.04.23 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

712.684-026 GLAZIER (inst. & app.)
Glazes tapered ends of glass tubes used in laboratory and medical instruments and apparatus, using gas burner and handtools: Heats tube on gas burner equipped with rolls that revolve tube in flame. Transfers tube between burners, set at graduated degrees of temperature, to expose tube to gradual heating and cooling process. May manually revolve tube on gas burner rolls to heat tube. May periodically glaze glass tubes, using hand torch.
GOE: 06.04.30 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 89

712.684-030 OPAQUER (protective dev.) alternate titles: porcelain-build-up assistant
Applies coating of opaque procelain over cast metal tooth cap, using brush: Mixes porcelain of specified color and water to required consistency. Brushes porcelain mixture over surfaces of metal cap. Places cap in electric oven for specified time to dry and harden porcelain. Removes cap and examines cap to ensure even application and smoothness of coating. Routes workpiece to specified department for application of finish porcelain. May grind and shape dried porcelain to contours of metal cap, using abrasive wheels. May measure dimensions of tooth cap and verify occlusion, using gauges and articulator.
GOE: 06.02.32 STRENGTH: S GED: R3 M2 L2 SVP: 4 DLU: 77

712.684-034 PACKER, DENTURE (protective dev.) alternate titles: molder
Packs plastic material in molds to form base for full or partial dentures: Mixes specified amounts of plastic powder and chemical solution, using spatula. Packs mixture around base of exposed artificial teeth and into cavities of mold sections. Positions sheet of plastic or wax paper or foil over bottom of mold to permit separation of mold from denture. Fits top section of mold over bottom and places assembly in press. Starts press that forces sections together and compresses mixture around teeth to form reproduction of gums. Removes model from press and trims excess plastic from mold, using knife. Submerges mold in hot water for specified time to cure plastic.
GOE: 05.05.11 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

712.684-038 REFINER (protective dev.)
Recovers precious metals, such as gold, platinum, and palladium from scrap dentures and extracted teeth, using furnace, retort, and laboratory equipment: Breaks scrap dentures, using hammer, and removes precious metals. Weighs each type metal and records weights. Places metal in retort and positions retort in furnace to melt metal particles. Turns valves to adjust temperature of furnace. Removes retort and pours molten metal solution into beaker, using tongs. Adds specified amounts of chemicals to molten metal solution to separate metal from solution. Pours solution through filter to recover precious dental metals.
GOE: 06.04.24 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

712.684-042 FABRICATOR, ARTIFICIAL BREAST (protective dev.)
Fabricates cosmetic appliances from latex for use as artificial breasts, using dies, molded plastic forms, heat-sealing device, and airhose: Places molded form in die, according to size, and positions die on balance scale under spigot of latex gel container. Pushes lever to open spigot to fill molded form, and to close spigot when mold reaches prescribed weight. Imprints mold size and other identification data onto plastic sheet used as backing for form, using printing device. Places imprinted backing in prescribed position over die containing gel-filled mold and fuses backing to molded form, using sealing device, to form inner shell. Inserts inner shell into outer plastic shell and fuses outer shell, using sealing device. Inflates shell to specified shape and firmness, using airhose, and seals opening, using heated rod. Tears excess plastic from edge of form.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 86

712.684-046 DENTURE-MODEL MAKER (protective dev.)
Forms plaster, metal, plastic, or rubber models and molds from dental impressions and wax models of dentures and dental appliances, using casting equipment and handtools: Mixes specified amounts of special plaster and water or other model-making ingredients, by hand or electric mixer-vibrator, to form compound used for models and molds. Pours mixture into impressions to form models for upper and lower dentures. Melts pieces of gold, silver, or other metal, using gas torch, and casts inlays, crowns, and pontics for fixed bridges, using centrifugal casting machine. Packs plastic mixture or composition rubber strips in molds to cast orthodontic appliances, such as tooth positioners, mouthguards, and retainers. Positions models in articulator and verifies occlusions. Packs plaster or other denture-making ingredient around wax model of denture to form model or matrix for casting denture. Places mold in boiling water to melt wax from cast model. Scrapes remaining wax from model, using knife, and washes model in soapy solution to remove dirt and foreign matter.
GOE: 05.05.11 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

712.684-050 INSPECTOR, SURGICAL INSTRUMENTS (inst. & app.)
Inspects surgical instruments, such as needles, needle holders, bandage scissors, forceps, and scalpels, for defects in finish and adherence to standards. Measures instruments for conformance to specifications, using measuring instruments, such as ruler and micrometer. May use microscope or other magnifying device to perform inspection.
GOE: 06.03.02 STRENGTH: L GED: R2 M2 L1 SVP: 2 DLU: 84

712.684-054 SURGICAL-FORCEPS FABRICATOR (inst. & app.)
Performs any combination of following tasks to fabricate radio-frequency cauterizing surgical forceps, according to written instructions: Cuts and strips coaxial wire and solders wire ends to plug terminals and forceps contacts. Applies bonding agent to metal surfaces requiring plastic insulation coating, using brush. Places plug terminals into mold, bolts mold together, and clamps mold

in vise. Injects liquid plastic into mold, using hand-operated pressure gun. Dips forceps into liquid plastic and hangs forceps on stand to drain. Places plug molds and dipped forceps into oven for specified time to cure plastic insulation. Inspects plastic insulation for bubbles and uniformity of thickness. Tests cured plugs and forceps for continuity, using ohmmeter. Trims plastic flash from plugs and forceps, using knife. Plugs forceps into radio-frequency generator and passes forceps along metal grounding plate to test for insulation leaks indicated by sparking. Applies electroplating solution onto contact points of forceps, using battery-powered plating paddle. Fabricates parts, such as plug pins, insulating collars, and fittings for assembly, using handtools, such as wire brush, pliers, drill press, and jeweler's lathe. Weighs and mixes ingredients for plastic compound.
GOE: 06.04.24 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 78

712.687-010 ASSEMBLER, PLASTIC HOSPITAL PRODUCTS (inst. & app.)

Performs any combination of following tasks to assemble and package disposable plastic hospital products, such as hypodermic syringes, catheters, and intravenous apparatus: Reviews work order and selects component parts to assemble specified product. Fits and assembles parts together, using adhesives and handtools, or heats, bonds, and welds parts together, using automatic equipment. Visually inspects products for defects, verifies conformance to specifications, and rejects defective products. Packages assembled product into plastic bag or other container and seals package, using sealing machine. Packs sealed product and instructional information into cartons, and labels cartons with identifying information. May stack cartons in sterilization chamber, seal chamber, and turn valves to admit gas into chamber to sterilize product.
GOE: 06.04.24 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 90

712.687-014 COILER (protective dev.) alternate titles: pinner

Inserts and solders metal coils and pins in base of artificial teeth to form means of attachment to denture: Inserts coil in tooth, using tweezers, and solders pin to coil, using soldering iron. Coats pins with flux.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

712.687-018 GAUGER (protective dev.) alternate titles: suture gauger; suture measurer

Sorts and measures strands of surgical sutures according to length and thickness: Places strand on measuring stick to determine length. Inserts each end and center of strand into slot of gauge that automatically registers thickness to 0.001 inch and compares gauge reading with prescribed limits of acceptable suture thicknesses. Rejects strands that fail to meet standards. Sorts acceptable strands by width and length, placing specially cut ends together, to ready them for subsequent clamping onto needles. May wind graded sutures onto spools.
GOE: 06.03.02 STRENGTH: S GED: R2 M1 L2 SVP: 2 DLU: 77

712.687-022 GAS-MASK INSPECTOR (protective dev.)

Inspects assembled gas masks for conformity to specifications: Examines chemical containers, facepieces, straps, and rubber hoses for defects, such as blisters, tears, and faulty stitching. Tests masks for leakage around glass eyepieces, using suction-cup device. Tests chemical containers for content, and for leakage under pressure, using gauge. Tests absorbing quality of chemicals, using smoke meter.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

712.687-030 SUTURE POLISHER (protective dev.)

Smooths and polishes sheep gut used in sutures: Fastens sheep gut in adjustable rack. Adjusts rack to hold gut taut. Smooths and polishes gut, using sandpaper.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

712.687-034 SUTURE WINDER, HAND (protective dev.) alternate titles: gut winder

Winds single or multiple lengths of surgical catgut onto fiber suture reel: Pulls out holding flaps on reel, inserts end of strand under one flap, and places reel on power-driven wheel. Presses pedal to actuate wheel and guides strand under holding flaps as wheel spins to wind precut lengths or counts wheel revolutions to measure lengths. Turns reels by hand when winding numerous strands. Cuts catgut from spool, using scissors. Inserts completed reels in plastic envelopes for subsequent sterilization, or into glass tubes for future use.
GOE: 06.04.23 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

712.687-038 TOOTH INSPECTOR (protective dev.)

Examines, sorts, and packages artificial teeth: Sorts teeth according to type, size, and color shade. Examines teeth to detect surface blemishes and removes blemishes, using brush or scraper. Rejects defective teeth. Packages acceptable teeth in wax-filled casing and stamps identifying information in wax.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

713 OCCUPATIONS IN FABRICATION AND REPAIR OF OPHTHALMIC GOODS

This group includes occupations concerned with fabricating and repairing ophthalmic frames and goods, fitting frames on customer, mounting lenses into frames, and molding ophthalmic goods, such as artificial eyes and contact lenses. Occupations concerned with generating, grinding, and polishing ophthalmic lenses are included in Group 716.

713.261-010 ARTIFICIAL-GLASS-EYE MAKER (optical goods) alternate titles: ocularist, glass

Fabricates artificial glass eyes for humans according to physician's prescription or customer specifications, applying knowledge of glass blowing and fabricating techniques: Holds and turns glass tube over gas burner to soften glass to viscous state. Blows into tube to form globe. Superimposes glass of required color on top surface of bulb to form iris. Fuses black glass in center of iris to simulate pupil and fuses clear glass over iris to form cornea. Positions and fuses red glass threads on globe to produce veins of eyeball. Fits artificial glass eyes to patients and makes adjustments for cosmetic correction.
GOE: 05.05.11 STRENGTH: L GED: R4 M2 L4 SVP: 8 DLU: 77

713.261-014 ARTIFICIAL-PLASTIC-EYE MAKER (optical goods) alternate titles: ocularist; plastic-eye technician

Fabricates artificial plastic eyes according to specifications and fits eyes into customer's eye sockets, using precision handtools, measuring instruments, molding devices, and bench fabricating machines: Measures customer's eye socket, using calipers, and measures natural eye to determine size and location of pupil and iris, using scale. Records data on examination card. Selects stock artificial eye approximating size and shape of customer's socket and inserts eye into socket. Fills eye area and questions customer to ascertain that eye fit is comfortable. Applies plastic as required to build up and shape stock eye to conform to customer's eye socket. Examines customer's natural eye to determine iris coloring, eye white shading, and number of eye white veins and records information on examination card. Selects samples of iris, pupil, and white to match eye. Positions artificial eye stock in plaster of paris to prepare mold for casting plastic eye. Pours plastic into mold to form artificial eye. Measures molded eye to determine position for pupil and iris, using rule. Positions and presses pupil and iris into place. Immerses eye in boiling water to set plastic. Paints iris and white of artificial eye to produce color of customer's natural eye according to information recorded on examination card. Draws veins on white of eye, using colored pencil or scratches grooves into eye to represent veins and fills grooves with pigment. Immerses eye in clear plastic solution to produce glassy finish. Examines eye for irregularities in shape and removes irregularities, using dental grinding machine. Polishes eye, using pumice and electric buffing wheel. Fits customer with artificial eye and compares artificial eye with natural eye to ensure centering of iris and pupils and matching of colors. May fit patients with ready-to-wear plastic eyes of standard sizes and colors. May fabricate implants (plastic and mesh devices fitted in eye socket for retention of eye muscles) and conformers (plastic disks placed in eye socket to maintain socket shape prior to fitting of artificial eye), using standard molds and grinding and polishing machines.
GOE: 05.05.11 STRENGTH: L GED: R4 M3 L4 SVP: 8 DLU: 77

713.381-010 LENS-MOLD SETTER (optical goods) alternate titles: mold setter

Assembles molds for casting contact lenses, using handtools, and inspects cast lenses for conformance to specifications, using precision measuring instruments: Selects mold and mold inserts. Positions inserts in mold and shims inserts as indicated by mold insert records. Sets holding pins, using wrench, and routes mold to CONTACT-LENS MOLDER (optical goods). Breaks seal on mold after casting and prys mold apart, using screwdriver and handpress. Peels lens and flashing from mold, using scalpel-like knife. Cuts lenses apart and places lenses in storage box. Inspects lenses, using power determining and optical centering instruments, thickness gauge, shadowgraph, and loupe magnifier, to verify correctness of characteristics, such as inside curve dimension and power, and to detect defects, such as scratches. Alters position of mold inserts to correct lens thickness, using shims. Cleans mold with solvent or routes mold to grinding room for polishing to eliminate defects.
GOE: 06.02.23 STRENGTH: L GED: R3 M3 L2 SVP: 5 DLU: 77

713.384-010 ASSEMBLER, GOLD FRAME (optical goods)

Assembles gold, aluminum, platinum, or other metallic wire eyeglass frames, using handtools: Enlarges predrilled holes and grooves in frame parts, using drills and files. Brushes holes and grooves with acetone to clean openings. Positions frame parts in holding fixture, aligns holes in parts, and inserts and tightens screws to secure parts together. Pushes eye-wires into grooves in frame and taps frame to tighten groove openings and secure wires. Attaches decorative or supportive wire sections to frame or temple pieces according to design specifications, using adhesive compound or soldering equipment.
GOE: 06.01.04 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

713.384-014 INSPECTOR, EYEGLASS (optical goods)

Inspects mounted eyeglasses for quality of work and compliance with prescription specifications, using precision optical measuring instrument: Examines frame for proper assembly, and for appearance of engraving and trim. Measures eyesize, temple length, and distance between lenses with ruler. Inspects alignment of lenses, nose pads, and temples with straightedge. Inspects lenses for color, seating in frame, and defects, such as striae, pits, and sharp edges. Examines lenses with power-determining and optical-centering instrument to ensure that optical center, focal center, power of lens, and refractive effect are in accordance with prescription. Returns defective articles for correction.
GOE: 06.01.04 STRENGTH: S GED: R3 M3 L2 SVP: 5 DLU: 77

713.667-010 INSPECTOR, CLIP-ON SUNGLASSES (optical goods)

Inspects assembled clip-on sunglasses for fit, tension of spring clip, and lens defects, using handtools, microscope, and light projector: Trims end of clip

spring, using diagonal cutter, and bends clip with fingers to achieve specified holding tension. Holds sunglasses over light to inspect lenses for matched color shading and scratches. Places sunglasses under microscope or in front of light projector to detect lens distortion, indicated by blurring of instrument crosshairs or of letters on projected chart. Returns rejected sunglasses to assembly workers and explains rework required.
GOE: 06.03.02 STRENGTH: S GED: R2 M1 L2 SVP: 3 DLU: 77

713.681-010 LENS MOUNTER II (optical goods)
Mounts prescription eyeglass lenses in metal, plastic, or combination frames, using handtools: Examines eyeglass prescription to determine style, color, and size of frame. Inspects lenses to detect flaws, such as pits, chips, and scratches. Holds and turns lenses against grinding wheel to remove flaws. Assembles eyeglass frame and attaches ornaments, shields, nose pads, and temple pieces, using pliers and screwdrivers. Drills holes in lenses for mounting on rimless frames, using diamond drill. Immerses plastic frame rims in hot salt solution to soften rims or stretches rims, using hot, metal cone. Inserts and aligns lenses in frame. Verifies frame dimensions and alignment of lenses, using protractor, ruler, and straightedge. Turns lenses in frame to correct alignment, using padded pliers. Immerses plastic frames in cold water to set plastic around lenses. Tightens screws to hold lenses in metal frames. Examines lenses under polarized light to detect stress caused by overtightening screws and adjusts screws as necessary. Heats plastic frame bridge and bends frame according to prescription specifications, using fingers and handtools. Immerses plastic frames in dye for specified period to color frames. Solders broken metal bridges and replaces damaged temples to repair frames, using soldering iron and handtools. Cleans and polishes finished eyeglasses, using cloth and solvent. May be designated according to type frame mounted as Metal-Frame Inserter (optical goods); Plastic-Frame Inserter (optical goods); or according to part assembled as Trim Mounter (optical goods) II.
GOE: 05.05.11 STRENGTH: M GED: R3 M2 L3 SVP: 6 DLU: 77

713.684-010 ASSEMBLER, CLIP-ON SUNGLASSES (optical goods)
Assembles clip-on sunglasses, using handtools and holding fixture: Fits metal frame into slots of plastic frame, presses lenses into metal frame grooves, and places assembly into holding fixture. Fits clip-on attachment into slots of plastic frame top. Inserts and sets screws in holes, using tweezers and jeweler's screwdriver. Examines glasses to ensure that both lenses are of same color and shading.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

713.684-014 ASSEMBLER, MOLDED FRAMES (optical goods) alternate titles: frame assembler
Assembles plastic eyeglass frames, using drill press and rivet press: Positions frame parts in jig and drills holes in parts, using drill press. Inserts rivets through holes, positions clips and hinges on rivets, and depresses pedal of pneumatic press to set rivets.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

713.684-018 BENCH WORKER (optical goods)
Performs any combination of following activities to prepare plastic eyeglass frames for assembly, using bench-mounted machines and handtools or power tools: Drills or punches holes in frame components, using drill or punch press. Inserts and tightens screws, nuts, and bolts to assemble parts, using handtools. Inserts and expands rivets to assemble parts, using rivet gun. Aligns and miters frame part edges, using mitering machine. Cuts grooves in parts for insertion of lenses, using grooving machine. May be designated according to activity as Groover (optical goods).
GOE: 06.04.24 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

713.684-022 EMBOSSER (optical goods)
Imprints identifying information on eyeglass frames according to prescription, using embossing press: Reads prescription to obtain information to be imprinted, such as owner's name, address, and telephone number. Sets type in type bar and slides bar into position in press. Turns knob to lock type bar in place. Positions eyeglass temple in spring clip below type bar. Places metallic foil over temple and pulls handle to lower electrically heated type bar and imprint information on temple. May mount trim on frame and be designated Trim Mounter (optical goods) I. Routes printed and trimmed eyeglasses to inspection section.
GOE: 06.04.37 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

713.684-026 EYEGLASS-FRAME TRUER (optical goods)
Bends and adjusts plastic or metal eyeglass frames according to prescription specifications, using jeweler's handtools, such as hammers, screwdrivers, and pliers. Measures frames to determine amount of adjustment required, using gauges and jigs.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

713.684-030 FRAME CARVER, SPINDLE (optical goods)
Carves spectacle nose pieces of celluloid, plastics, and other material, using rotary spindle carving tool: Measures designated sample nose piece to determine dimensional specifications, using precision measuring instruments. Mounts specified cutting tool in machine chuck, using handtools. Starts machine and holds and turns nose piece blank against cutting tool to fabricate nose piece according to specifications.
GOE: 06.04.24 STRENGTH: S GED: R2 M2 L2 SVP: 3 DLU: 77

713.684-034 MULTIFOCAL-LENS ASSEMBLER (optical goods) alternate titles: multifocal-button assembler
Fits and secures multifocal lens parts together preparatory to fusing, utilizing adhesive compound or asbestos tape: Dips multifocal button in cleaning solution and wipes dry. Brushes button and countersink blank to remove dust and lint. Positions button on polished surface of countersink blank. Performs test to detect presence of foreign matter between button and countersink blank, using instrument that indicates foreign matter when pressure is applied to outside edge of button. Recleans surfaces and performs test until instrument indicates lens parts are free of foreign matter. Places spring clamp on blank to hold button in position. Inserts metal peg between button and blank to allow air to escape during fusing, using tweezers. Applies cement to surface contact points around edge of button, using needle applicator, or wraps asbestos tape around button and countersink blank assembly to hold button in place. Removes spring clip and metal peg after cement is set. Places assembled unit in tray for transfer to fusing room.
GOE: 06.04.23 STRENGTH: S GED: R2 M1 L2 SVP: 3 DLU: 77

713.684-038 POLISHER, EYEGLASS FRAMES (optical goods)
Polishes plastic eyeglass frames and temple pieces to remove scratches and pit marks, using polishing wheel: Applies abrasive compound to wheel surface, using brush. Starts machine and holds and turns frame parts against wheel to polish parts and remove defects. Inspects and feels polished parts to verify removal of flaws. Presses sandpaper against polishing wheel to remove abrasive residue in preparation for next sequence.
GOE: 06.04.24 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

713.684-042 WASHER (optical goods)
Performs any combination of following duties to clean finished eyeglasses, dye plastic eyeglass lenses, and electroplate metal frames: Washes, rinses, dries, and buffs eyeglasses, using cleaning solution, cloth, and buffing wheel. Mixes trays of dye according to formula and places trays on heating plate to maintain specified temperature. Mounts plastic lenses in holder and immerses lenses in dye for specified period. Compares lens with sample to verify color and immerses lens in dye to correct color as necessary. Immerses metal frames in plating solution for specified period to electroplate frames.
GOE: 06.04.39 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

713.687-010 CLIP COATER (optical goods) alternate titles: clip baker; dipper
Coats tips of sunglass clips with protective plastic and cures coated clips in oven: Slides metal clips onto rack and immerses rack in molten plastic to coat tips of metal clips, or applies plastic to tips, using brush. Places racks of clips in oven for specified period to cure plastic. Removes racks, examines coating for proper baking, indicated by color of plastic, and places racks on table for further processing or in oven for further baking.
GOE: 06.04.33 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

713.687-014 CONTACT-LENS-FLASHING PUNCHER (optical goods) alternate titles: puncher
Punches flashing from molded plastic contact lenses, using handpress: Places compartmentalized box under openings in press-holding fixture to catch lens after punching. Positions lens in holding fixture and pulls lever to lower hollow punch which cuts flashing from lens. Repeats punching, allowing only lenses of same specifications to fall in same compartment. Labels and routes lenses in envelopes or boxes to stockroom or other work stations.
GOE: 06.04.24 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

713.687-018 FINAL ASSEMBLER (optical goods)
Attaches nose pads and temple pieces to optical frames, using handtools: Positions parts in fixture to align screw holes. Inserts and tightens screws, using screwdriver.
GOE: 06.04.23 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

713.687-022 INSPECTOR, EYEGLASS FRAMES (optical goods)
Examines eyeglass frames and frame parts, such as temples, rims, nose pads, and bridge pieces, for defects and conformance to dimensional specifications. Feels and visually inspects frames to detect soldering irregularities, rough spots, and scratches. Verifies measurements of frame parts, using ruler and gauges.
GOE: 06.03.02 STRENGTH: S GED: R2 M1 L2 SVP: 3 DLU: 77

713.687-026 LENS INSERTER (optical goods) alternate titles: roll-over loader
Fits lenses into plastic sunglass frames and places frames on conveyor belt that passes under heat lamps which soften frames preparatory to setting of lenses.
GOE: 06.04.23 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

713.687-030 LENS MATCHER (optical goods)
Examines and matches colored goggle lenses to obtain pairs and places matched lenses of same shade in box. May inspect lenses for defects.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

713.687-034 POLISHER, IMPLANT (optical goods)
Polishes plastic implants used to fill eye socket of person with artificial eye, using polishing cloths and chamois: Cuts emery cloth and chamois cloth into strips, using scissors. Clamps plastic implant in vise, and pulls emery cloth strip back and forth through implant opening to remove rough edges and enlarge opening. Examines implant to verify smoothness and freedom from defects, using eye loupe.
GOE: 06.04.24 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

713.687-038 SALVAGER (optical goods)
Examines and dismantles sunglasses to salvage components, such as lenses, clips, and frames, using handtools: Examines sunglasses to determine salvage-

able components. Punches out rivets, using hammer and punch. Removes ornamental jewels, hinges, clips, and other parts and places parts in storage boxes. Cuts, unscrews, springs, or otherwise loosens frames to remove lenses. Stacks lenses by color, grind, shape, and shading. Sorts metal frames by style, and plastic frames by color for reprocessing.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

713.687-042 SUNGLASS-CLIP ATTACHER (optical goods) alternate titles: heating-fixture tender; melter

Bonds metal spring clip to plastic clip-on sunglass frames, using electric heating equipment: Pulls lever or slides rod to clamp frames in heating fixture. Removes bonded frames and examines attachment and action of clip for freedom of movement.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

714 OCCUPATIONS IN FABRICATION AND REPAIR OF PHOTOGRAPHIC EQUIPMENT AND SUPPLIES

This group includes occupations concerned with fabricating and repairing photographic apparatus, such as still and motion picture cameras and projectors, photocopy and microfilm equipment, blueprinting and diazo-type equipment, and other photographic equipment, parts, and attachments; sensitized film, plates, cloth, and papers; and prepared chemicals packaged for photographic use. Occupations concerned with electronic components are included in Group 726 and bulbs are included in Group 725.

714.131-010 SUPERVISOR, MOTION-PICTURE EQUIPMENT (motion picture; photo. appar.) alternate titles: cinetechnician supervisor

Supervises and coordinates activities of workers engaged in assembling, repairing, remodeling, and maintaining photographing, projecting, sound, and related motion-picture equipment: Inspects malfunctioning equipment to determine extent of work to be performed and directs individuals or groups to make repairs or modifications. Trains new workers in equipment assembly and maintenance. May assign repair crews to motion picture production units. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.11 STRENGTH: L GED: R4 M4 L4 SVP: 8 DLU: 77

714.281-010 AIRCRAFT-PHOTOGRAPHIC-EQUIPMENT MECHANIC (photo. appar.) alternate titles: research assembler; research mechanic

Assembles, adjusts, tests, and modifies aircraft cameras according to engineering drawings and sketches, using handtools and bench machines: Reads and interprets engineering drawings and verbal instructions to determine fabrication methods and sequence of fabrication. Lays out reference points and dimensions on parts to be machined, using precision measuring instruments. Fabricates parts to specifications, using bench lathe, milling machine, shaper, and grinder. Measures parts to verify specified dimensions, using micrometer, dial gauges, and vernier caliper. Cuts, bends, drills, and fastens parts to assemble, repair, or modify camera, using handtools. Fabricates and installs electrical assemblies and wiring in camera housing, using handtools and soldering equipment. Tests camera units for operational efficiency, using calibrating instruments, multimeter, and stroboscope and adjusts mechanisms to correct inefficient operation. Installs film in camera and adjusts camera mechanisms to record sharpest image consistent with speed of aircraft, weather conditions, and object or terrain to be photographed. Records test data, prepares reports on fabricating techniques used, and recommends modifications to resolve problems.
GOE: 05.05.09 STRENGTH: L GED: R4 M4 L4 SVP: 8 DLU: 77

714.281-014 CAMERA REPAIRER (photo. appar.)

Repairs and adjusts cameras, using specialized tools and test devices: Disassembles camera, using handtools. Tests and aligns diaphragm, lens mounts, and film transport to minimize optical distortion, using precision gauges. Adjusts range and view finders, using fixed focusing target. Calibrates operation of shutter, diaphragm, and lens carriers with dial settings, using electronic or stroboscopic timing instruments. Fabricates of modifies parts, using bench lathe, grinder, and drill press.
GOE: 05.05.11 STRENGTH: S GED: R4 M4 L4 SVP: 8 DLU: 77

714.281-018 MACHINIST, MOTION-PICTURE EQUIPMENT (motion picture; photo. appar.) alternate titles: cinetechnician; motion-picture-camera repairer

Assembles, repairs, remodels, and services photographing, projecting, editing, sound-recording, and power equipment used in motion picture production, using handtools and bench machines: Reads job order and blueprints to plan work procedures. Disassembles defective equipment, using handtools. Constructs replacement parts (except camera lenses and other optical parts) used to repair or remodel equipment, using machines, such as bench lathes, milling machines, gear cutters, grinders, and drill presses. Finishes, fits, and installs parts, using precision handtools and calibration devices. Measures installed parts for conformance to specifications, using micrometers and calipers. Operates repaired equipment to verify operational efficiency. Cleans and lubricates equipment.
GOE: 05.05.09 STRENGTH: M GED: R4 M4 L4 SVP: 8 DLU: 77

714.281-022 PHOTOGRAPHIC EQUIPMENT TECHNICIAN (photo. appar.)

Assembles, repairs, tests, and maintains still and motion picture cameras and photographic equipment according to customer, blueprint, or work order specifications, using handtools, bench machines, and test equipment: Reads diagrammatic and verbal specifications to determine repairs needed and sequence of operations. Inspects cameras and equipment to locate defects, using jewelers' loupe. Disassembles cameras to gain access to defects. Tests focus of lens system, using optical measuring equipment, and adjusts and repairs lens system to correct defective focusing, using handtools. Measures camera shutter speed, using electronic measuring instrument, and adjusts shutter mechanism to manufacturer's specifications, using handtools. Compares light meter readings with readings of light measuring instrument to verify accuracy of camera light meters. Adjusts light meters to correct defective readings, using handtools. Measures operating speed of movie cameras, using frequency counter and turns camera speed control, using screwdriver, to correct defective operation. Cleans and lubricates cameras and polishes camera lenses, using air gun, ultrasonic cleaning device, cloth, syringe, and tissue paper. May fabricate parts for cameras and related equipment, using machines, such as bench lathe, milling machines, cutters, and grinders.
GOE: 05.05.11 STRENGTH: L GED: R4 M4 L4 SVP: 8 DLU: 77

714.281-026 PHOTOGRAPHIC-EQUIPMENT-MAINTENANCE TECHNICIAN (photo. appar.) alternate titles: technical-maintenance technician

Fabricates, assembles, and repairs photographic equipment except cameras, using handtools and power tools: Examines equipment, such as photograph printers, print washers, driers and straighteners, and mounting presses. Replaces defective wood and metal parts and makes minor repairs, such as cleaning and tightening connections, soldering and welding broken metal parts, and bending and installing piping. Lays out framework dimensions on channel and angle stock, using tape measure, square, and scribe and cuts and grinds stock to dimensional specifications to fabricate equipment parts, using power saws, sanders, grinders, and files. Assembles frames and installs parts according to blueprint specifications, using handtools, such as drills, wrenches, reamers, and hole punches. Installs electrical wiring, following blueprints. Requisitions parts and materials.
GOE: 05.05.09 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

714.281-030 SERVICE TECHNICIAN, COMPUTERIZED-PHOTOFINISHING EQUIPMENT (photofinishing)

Analyzes malfunctions in computerized electromechanical photofinishing equipment and replaces or repairs defective components, utilizing knowledge of equipment operation and repair: Examines and tests equipment to determine nature and probable cause of malfunction, using work aids such as voltmeter, ohmmeter, schematic drawings, and equipment specifications. Removes and replaces defective electronic, electrical, mechanical, and plumbing components, such as pipes, valves, printed circuit boards, wiring, switches, thermostats, heaters, motors, pumps, gears, and drive chains, using handtools and following drawings and manufacturer's manuals. Tightens or solders loose connections and fittings, and performs related repairs. Adjusts equipment to manufacturer's specifications, using handtools and measuring instruments. Test operates equipment to ensure that defects have been corrected.
GOE: 05.05.11 STRENGTH: M GED: R4 M3 L4 SVP: 6 DLU: 86

714.381-010 ASSEMBLER, PHOTOGRAPHIC EQUIPMENT (photo. appar.) alternate titles: assembler, precision-mechanical

Assembles and adjusts photographic apparatus, such as motion picture cameras, projectors, film developing machines, and microfilm equipment, according to blueprint specifications, using handtools and portable power tools: Examines blueprints to determine specifications. Aligns, fits, and bolts components together to assemble mechanisms, subassemblies, and assemblies of photographic apparatus, using handtools, portable power tools, and drill press. Connects electrical wiring according to circuit diagram, using soldering iron. Tests function of assembled units, using precision mechanical, electrical, optical, and sound measuring instruments; and adjusts mechanisms to attain specified functional performance, using handtools. May repair defective products returned to production.
GOE: 06.01.04 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 78

714.381-014 INSPECTOR, PHOTOGRAPHIC EQUIPMENT (photo. appar.) alternate titles: inspector, precision

Inspects parts, subassemblies, and assembled photographic apparatus, such as still and motion picture cameras, magazines, enlargers, flash units, and film developing machines for conformance to verbal and diagrammatic specifications, using precision measuring and testing instruments: Examines blueprints, wiring diagrams, and other specifications to determine parts, dimensions, and tolerances required. Examines equipment for defects, such as missing parts, incorrect serial numbers, flaws in castings, and light leakage. Measures parts to ensure conformance to dimensional specifications, using micrometers, gauges, rules, and other precision measuring instruments. Tests functioning of electronic components, using test instruments, such as voltmeters, oscilloscopes, and signal generators. Trips camera shutters to verify timing, using timing device. Measures focal distance of lenses, using depth micrometer or collimator. Traces electrical wiring and examines connections to detect assembly defects and tests electrical circuits for continuity, using wire diagrams and continuity meter. Examines test film to detect faulty operation of cameras, using projector, viewing screen, and hand lens. Records inspection data and marks or stamps inspection tag to indicate acceptance or rejection of equipment inspected.
GOE: 06.01.05 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

714.381-018 PHOTOGRAPHIC-PLATE MAKER (electron. comp.) alternate titles: photographic-process attendant

Prepares photographic plates used to print pattern of aperture masks on sensitized steel: Examines unexposed plate to detect foreign particles or emulsion flaws. Transfers image from master plate to unexposed plate by means of contact exposure and immerses plate in series of chemical and water baths to develop image on plate [DEVELOPER (photofinishing)]. Examines plate over light box in darkroom to detect flaws and verify conformity of pattern with master plate. Measures dot size and center distance, using calibrated microscope, and examines master and production plates for dot damage. Repairs defective plates by filling in missing dots, using photographic touch-up tool and ink. Installs and aligns plates in printing case for DISPLAY-SCREEN FABRICATOR (electron. comp.). Prepares developing solutions, following formula.
GOE: 05.10.05 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

714.667-010 SENSITIZED-PAPER TESTER (photo. appar.)

Tests tensile strength and light value of samples of photocopy, blueprint, and other sensitized paper to ensure conformance to specifications, using duplicating machines and testing devices: Inserts paper sample in duplicating machine and starts machine. Removes developed print and compares sample with printed standard to detect variations in color and clarity. Cuts paper sample into strips and clamps ends of strips in tensile strength measuring device. Turns handle of testing device until paper breaks. Records pounds of force required to break paper. Records test data in log.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

714.684-010 ASSEMBLER, PRODUCTION LINE (photo. appar.)

Assembles components of cameras, camera magazines, camera shutters, movie projectors, and electronic photographic apparatus, such as exposure meters, using electric riveting press, punch press, soldering iron, and handtools: Screws, rivets, solders, and otherwise fastens and installs parts, following blueprints. Operates assemblies to test for specified functioning and adjusts mechanisms to attain specified functioning, using handtools, gauges, and meters. May be designated according to type of apparatus assembled as Camera Assembler (photo. appar.); Meter Assembler (photo. appar.); Projector Assembler (photo. appar.); or according to part assembled as Synchro Assembler (photo. appar.).
GOE: 06.02.23 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 78

714.684-014 BELLOWS MAKER (photo. appar.) alternate titles: bellows assembler

Builds or repairs camera bellows, using handtools, power tools, and gluing equipment: Selects cardboard cone bellow form according to size of bellows. Cuts paper pattern of cone. Cuts lining and cover materials for bellows, according to pattern, using scissors or electric knife. Stretches lining around cone and glues overlapping edges to cone. Cuts cardboard strips (ribs) and glues strips to lining. Glues cover over ribbed lining and attaches front and rear metal frames, using glue and clamps. Trims excess material from assembly, using scissors and removes dried glue, using solvent and cloth. Compresses assembly over special frame to pleat material and form completed bellows.
GOE: 06.02.32 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

714.687-010 CHECKER, FILM TESTS (photo. appar.)

Identifies, wraps, and packages samples of sheet film for in-process testing according to specified procedures: Reads test requests for film in various stages of production and locates, removes, and batches sample sheets of specified film. Wraps, packages, and labels samples according to process stage and characteristics of film selected. Routes samples to testing department. Examines tested film, sorts rejected and approved sheets, and segregates rejected sheets with salvageable areas for cutting. Maintains records of film tested and test results.
GOE: 06.03.02 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

715 OCCUPATIONS IN FABRICATION AND REPAIR OF WATCHES, CLOCKS, AND PARTS

This group includes occupations concerned with fabricating and repairing complete mechanical or electric watches and clocks, and mechanical movements used in clockwork-operated devices, such as timers, electric meters, and recorders.

715.131-010 SUPERVISOR (clock & watch)

Supervises and coordinates activities of workers engaged in assembling watches, clocks, and related units, and testing assembled units: Inspects finished work at production stations to ensure conformance to specifications, using loupe and gauges. Trains workers in performance of tasks. Requisitions materials and supplies. Confers with other supervisory personnel to coordinate interdepartmental workflow. Sets up machines and equipment. Performs duties of workers supervised to expedite production. May supervise workers engaged in fabricating watch and clock parts. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

715.131-014 SUPERVISOR, DIALS (clock & watch)

Supervises and coordinates activities of workers engaged in blanking, cleaning, brushing, soldering, polishing, plating, printing, and lacquering watch dials: Trains new workers in performance of tasks. Requisitions supplies and materials. Confers with other supervisory personnel to coordinate interdepartmental workflow. Confers with workers' representatives to resolve grievances. Sets up machines and equipment. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

715.131-018 SUPERVISOR, HAIRSPRING FABRICATION (clock & watch)

Supervises and coordinates activities of workers engaged in fabricating watch hairsprings: Trains workers in performance of tasks. Requisitions supplies and materials. Confers with other supervisory personnel to coordinate interdepartmental workflow. Confers with workers' representatives to resolve grievances. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

715.131-022 SUPERVISOR, INSPECTION (clock & watch)

Supervises and coordinates activities of workers engaged in inspecting and testing fabricated and assembled parts of watches, clocks, and related units for conformance to company standards: Demonstrates methods of work and use of equipment to train workers. Inspects randomly selected parts and units to ensure conformance to standards, using loupe, gauges, and comparator. Confers with other supervisory and quality control personnel to coordinate interdepartmental workflow and to determine corrective action required. May supervise workers engaged in inspecting and testing tools, dies, gauges, and other precision measuring instruments used in inspection. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

715.131-026 SUPERVISOR, MAINSPRING FABRICATION (clock & watch)

Supervises and coordinates activities of workers engaged in fabricating watch mainsprings. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

715.131-030 SUPERVISOR, TUMBLING AND ROLLING (clock & watch)

Supervises and coordinates activities of workers engaged in deburring, smoothing, and burnishing precision clock and watch parts: Trains workers in performance of tasks. Confers with other supervisory personnel to coordinate interdepartmental workflow. Confers with workers' representatives to resolve grievances. Requisitions supplies and equipment. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

715.221-010 INSTRUCTOR, WATCH ASSEMBLY (clock & watch)

Instructs workers in all operations concerned with assembly of watch movements: Conducts lectures on function of various parts and assemblies, and demonstrates assembly activities, such as *overcoiling, putting-in-beat, truing II, poising,* colleting, staking, and *vibrating.* Instructs workers in handling of minute parts with loupe, microscope, and tweezers. May be designated according to assembly operation taught as Instructor, Hairspring (clock & watch).
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

715.261-010 MECHANICAL TECHNICIAN, LABORATORY (clock & watch)

Performs variety of experiments on watch parts, lubricants, and abrasives used in manufacture of horological instruments to ascertain conformance to production standards: Heats or cools watch parts to specific temperatures in oven or refrigerator. Subjects heated or cooled watch parts to stress tests and records results. Tests lubricants and abrasives used in watch manufacture for conformance to established lubricity and abrasion levels. Analyzes test results to detect deficiencies in watch parts, lubricants or abrasives and suggests modifications in production methods to overcome deficiencies. Recommends new test procedures or testing devices as necessary. May assist in fabrication and installation of new testing devices. May repair ovens or refrigerators.
GOE: 02.04.01 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 77

715.281-010 WATCH REPAIRER (clock & watch) alternate titles: clockmaker; watch adjuster; watchmaker

Repairs, cleans, and adjusts watches, clocks, and related instruments, using watchmaker's tools, measuring instruments, bench machines, and cleaning equipment: Removes mechanism from case and examines mechanism for defective parts or accumulation of foreign matter, using loupe. Disassembles parts, such as hands, mainspring, *escape wheels,* and balance wheel, using pliers, screwdriver, and tweezers. Places parts into watch-cleaning machine and starts machine that cleans, rinses, and dries parts. Tests *truing II* of balance wheel assembly, using truing calipers and trues assembly, using tweezers. Repairs damaged or worn parts, using watchmaker's lathe and drill press. Replaces broken parts, such as mainsprings, hairspring, jewels, stems, escape wheel, and pinions, using handtools. Assembles mechanism and oils moving parts. Places mechanism in demagnetizing machine that automatically removes magnetic properties from mechanism. Replaces mechanism in case and tests assembled instrument for accuracy, using watch-rate recorder. Adjusts balance wheel speed regulator to synchronize reading of instrument with recorder. May repair jewelry [JEWELER (jewelry-silver.) 700.281-010]. May salvage and repair watchcases and be designated Repairer, Watchcases (clock & watch). May repair clocks used in electric power system timing equipment and be designated Time-Clock Repairer (clock & watch). May be designated according to type of

instrument or instrument subassembly repaired as Demand Equipment Repairer (utilities). Repairer, Hairspring (clock & watch).
GOE: 05.05.11 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 90

715.281-014 WATCH REPAIRER APPRENTICE (clock & watch) alternate titles: clockmaker apprentice; watchmaker apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.11 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

715.381-010 ASSEMBLER (clock & watch)

Assembles and installs chime-controlling mechanisms in master clocks according to blueprints and sketches, using watchmaker's tools. Bolts mounting casting which houses clock and chimes mechanisms to inner rear panel of master clockcase. Installs toggle switch and cut-off secondaries, for opening and closing chime-mechanism circuit, on panel, and makes wire connections. Disassembles, examines, repairs, or adjusts spring-wound clock, and reassembles clock [WATCH REPAIRER, (clock & watch)], adding strike-control parts, such as hour-strike spring to hour mechanism, night-spot cutout to hour hand sleeve-wheel, and minute-meteor ring to minute mechanism. Bolts assembled clock mechanism in position on mounting casting. Assembles parts, such as dial, hour and minute hands, contact springs, motor drum and condenser, and makes wire connections to complete master clock mechanism. Installs completed assembly into master clockcase.
GOE: 06.01.04 STRENGTH: M GED: R4 M2 L3 SVP: 7 DLU: 77

715.381-014 ASSEMBLER, WATCH TRAIN (clock & watch)

Assembles, inspects, and adjusts watch train (center, third, fourth, and *escape* wheels with pinions), using watchmaker's tools, loupe, and holding fixture. Examines parts to ensure freedom from defects, using loupe. Positions *pillar plate* in holding fixture and inserts pivots of wheel staffs into holes drilled in pillar plate jewels, using tweezers. Positions train bridge over wheels, aligns pivots with jewels in bridge, and screws bridge to pillar plate, using tweezers and screwdriver. Inspects assembled watch train for meshing of wheels and pinions and endshake (vertical play) of wheels, using tweezers and loupe [INSPECTOR, WATCH TRAIN (clock & watch)]. Moves jeweled bearings specified distance to correct endshake, using micrometer and hand staking tool.
GOE: 06.01.04 STRENGTH: S GED: R4 M2 L2 SVP: 6 DLU: 77

715.381-018 BANKING PIN ADJUSTER (clock & watch) alternate titles: escapement matcher

Inspects and adjusts position of watch banking pins to limit angle through which pallet swings to point where escape wheel clears pallet stones, using loupe and watchmaker's tools. Turns screw to move eccentrically placed banking pin until impulse face of escape wheel drops off pallet jewel. Moves pallet back and forth to test jewel pin shake (distance between pallet fork and jewel pin), to verify that shake is equal in both pallet positions, using tweezers. Bends pallet to equalize shake, using tweezers. Examines locking motion of escape wheel when guard pin is pressed against safety roller to verify guard pin shake (distance between guard pin and safety roller). Moves guard point out or files point to obtain correct length. Heats pallet to liquefy jewel adhesive, using hot plate, and moves jewel to correct slide, using tweezers. Examines pallet action to verify sufficient clearance between pallet and roller. Increases or decreases clearance between pallet and roller to correct deficiency, using tweezers.
GOE: 06.01.04 STRENGTH: S GED: R3 M2 L2 SVP: 5 DLU: 77

715.381-022 BARREL ASSEMBLER (clock & watch)

Assembles, tests, and adjusts mainspring barrel assembly, using watchmaker's tools, handpress, and loupe. Attaches inner coil of mainspring to arbor of hand-operated mainspring winder, and winds spring within body of winder. Inserts wound spring into mainspring barrel, utilizing plunger inside winder. Presses barrel arbor into position and turns arbor until hook in arbor engages hole in center of coiled spring, using tweezers. Places drop of oil on spring, using hypodermic syringe. Presses barrel cover into place, using handpress. Moves arbor up and down to test endshake (vertical clearance of arbor between cover and bottom of barrel), using tweezers and loupe. Corrects insufficient or excessive endshake (BARREL ENDSHAKE ADJUSTER (clock & watch)]. May press rounded punch against barrel hub to correct side-shake (clearance between arbor and barrel hole).
GOE: 06.01.04 STRENGTH: S GED: R3 M2 L2 SVP: 6 DLU: 77

715.381-026 BARREL-BRIDGE ASSEMBLER (clock & watch)

Assembles barrel, setting lever, ratchet wheel, and barrel bridge to *pillar plate* to form barrel-bridge assembly, using watchmaker's tools, loupe, and holding fixture. Positions pillar plate on holding fixture and places barrel in plate recess, using tweezers and loupe. Screws barrel bridge with assembled crown wheel and click (pawl) in position over barrel and screws setting lever and ratchet wheel in place, using screwdriver. Holds ratchet wheel in position and tightens ratchet screw, using screwdriver. Positions clutch wheel and winding pinion in place and inserts stem through hole in pillar plate to secure assembly, using tweezers and loupe.
GOE: 06.01.04 STRENGTH: S GED: R3 M2 L2 SVP: 5 DLU: 77

715.381-030 BARREL-ENDSHAKE ADJUSTER (clock & watch)

Tests and adjusts barrel endshake (vertical clearance of arbor between cover and bottom of barrel), using holding fixture and jeweler's tools: Places barrel assembly in holding fixture and moves arbor up and down to test endshake, using tweezers. Estimates from experience whether shake is within acceptable limits (between 0.015 and 0.02 mm). Actuates arms of holding tool to bend barrel cover sufficiently to correct endshake error.
GOE: 06.01.04 STRENGTH: S GED: R3 M2 L2 SVP: 6 DLU: 77

715.381-034 BLOCKER AND POLISHER, GOLD WHEEL (clock & watch)

Trues, blocks, and polishes gold watch wheels, using handpress, block adhesive, and polishing stones: Flattens (trues) wheel, using handpress. Blocks wheels in recess of disk-shaped block, using adhesive [BLOCKER (clock & watch)]. Rubs wheel on wet stone to rough polish wheel. Applies polishing compound to steel block and rubs wheel on block to polish wheel to required luster. Examines wheel to verify required luster and freedom from defects, using loupe.
GOE: 06.01.04 STRENGTH: S GED: R3 M2 L2 SVP: 5 DLU: 77

715.381-038 CHRONOMETER ASSEMBLER AND ADJUSTER (clock & watch)

Assembles, tests, and adjusts marine chronometers, using watchmaker's tools and loupe: Assembles parts, such as plates, bridges, train wheels, mainspring, and fusee, in specified sequence, using tweezers and watchmaker's tools. Greases and assembles fusee and barrel assembly. Tests assembled parts, such as fusee and barrel and train wheels for specified endshake (vertical movement), using tweezers. Bends parts, such as bridges, to correct insufficient or excessive endshake. Oils and greases bushings and other surfaces requiring lubrication. Cleans parts, such as plates, mainspring, barrel, and hands, using buff stick moistened with benzine. Tests operation and fit of parts and subassemblies during assembly and makes adjustments to eliminate any improper fit or malfunctioning. Changes timing weights on balance wheel to correct deficient timing and tightens or replaces loose jewels, using watchmaker's tools.
GOE: 06.01.04 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

715.381-042 CHRONOMETER-BALANCE-AND-HAIRSPRING ASSEMBLER (clock & watch)

Assembles and trues balance and hairspring assemblies used in marine chronometers, using *truing H* calipers and watchmaker's tools: Attaches hairspring to collet, using watchmaker's tools. Positions hairspring and collet assembly in truing calipers and bends hairspring to correct deficient truing, using tweezers. Attaches stud to hairspring and screws balance staff into balance wheel. Trues balance wheel, using truing calipers. Fastens balance screws, weights, and timing screws in balance wheel, using screwdriver. Inserts impulse and unlocking rollers in assembly. Poises balance wheel, using truing calipers. Connects hairspring and collet to balance wheel assembly, using watchmaker's tools.
GOE: 06.01.04 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

715.381-046 DIAL MAKER (clock & watch) alternate titles: watch-dial maker

Performs any combination of following tasks to fabricate clock and watch dials: Cuts out dial blanks, using handtools. Solders holding feet to dial, using soldering iron. Brushes, buffs, and polishes dial, using variety of abrasive wheels. Plates dials with silver, gold, nickel, or other metals [PLATER (electroplating)]. Stakes numerals and numeral indicators, such as diamonds, to dial [STAKER (clock & watch)]. Prints designs, numerals, and company's name on dials [TRANSFERRER (clock & watch)]. Inspects completed dials for dirt and scratches, completeness of printed designs, and adherence to dimension specifications.
GOE: 06.01.04 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

715.381-050 FINAL INSPECTOR (clock & watch) alternate titles: adjuster and inspector; finishing inspector; watch-assembly inspector; watch inspector, final movement

Inspects and tests watch and clock subassemblies and completed watch movements for mechanical and visual defects and makes adjustments to correct defects, using watchmaker's tools and loupe: Inspects banking of pallet, lock, drop, and slide of escapement. Verifies that hairspring is level and centered [INSPECTOR, HAIRSPRING TRUING (clock & watch)], and inspects and adjusts *beat* [PUT-IN-BEAT ADJUSTER (clock & watch)]. Tests endshake (vertical play of wheels), using tweezers, to verify that shake is within acceptable limits. Examines spring to verify centering between regulator pins and centers regulator lever. Examines movement for scratches, and blows out dust or dirt, using airhose. Activates watch and clock movements and compares time indicated with master clock to verify accuracy of movements. Listens to movements in operation to detect excessive noise. Turns time and alarm shafts and pulls alarm buttons to test alarm mechanisms for freedom of movement. Examines external surfaces for defects, such as cracked or scratched cases or crystals, loose or misaligned hands, and faulty printing on dials. Oils or inspects oiling of pallet stones and jeweled bearings. Disassembles movement to point of error and replaces defective parts, using watchmaker's tools. Observes minute parts with aid of loupe. May clean parts with soft leather and polish case with chamois.
GOE: 06.01.05 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

715.381-054 HAIRSPRING ASSEMBLER (clock & watch) alternate titles: watch-hairspring assembler

Assembles, inspects, and adjusts watch hairspring and balance assemblies, using watchmaker's tools: Attaches hairspring to collet and stud [COLLETER (clock & watch) 715.684-066; STUDDER, HAIRSPRING (clock & watch) 715.684-186], and assembles parts of hairspring and balance, using punch, stak-

ing tool, tweezers, and other watchmaker's tools. Grooves spring [OVERCOILER (clock & watch) 715.684-150], and trues spring [HAIRSPRING TRUER (clock & watch) 715.381-058]. Poises balance wheel. Locates vibrating point [HAIRSPRING VIBRATOR (clock & watch) 715.381-066?]. Inspects and adjusts hairspring and balance assembly [INSPECTOR, HAIRSPRING (clock & watch) I 715.381-066].
GOE: 06.01.04 STRENGTH: L GED: R3 M1 L2 SVP: 5 DLU: 77

715.381-058 HAIRSPRING TRUER (clock & watch)
Examines and adjusts hairspring assemblies to ensure horizontal and circular alignment of hairspring, using *truing II* calipers, loupe, and watchmaker's tools. Mounts hairspring and balance wheel assembly between jaws of truing calipers. Turns wheel of caliper and examines spring to determine if center coils appear as perfect circles, using loupe. Bends inner coil of spring away from or toward collet to locate center of collet in center of spring and to correct errors resulting from faulty colleting of coil, using tweezers. Estimates space between collet and first inner coil to determine if space is within acceptable limits, and bends coil to correct errors, using tweezers. Examines plane of hairspring to determine if coils are parallel to plane of collet and raises or lowers individual coils to correct discrepancies, using tweezers.
GOE: 06.01.04 STRENGTH: S GED: R3 M2 L2 SVP: 6 DLU: 77

715.381-062 HAIRSPRING VIBRATOR (clock & watch)
Locates *vibrating* point (point at which length of spring is such as to cause attached balance wheel to oscillate at specified rate) on clock and watch hairsprings and cuts hairspring at specified point to synchronize oscillation of movements, utilizing one or both of following methods: (1) Fastens free end of spring of hairspring assembly in fixture of electronic vibrating device, and adjusts bed of device until it touches pivot of vertically oscillating balance wheel, as indicated on cathode-ray tube. Observes second cathode-ray tube to determine excess length of spring as vertical swings are translated into corresponding horizontal oscillations. Winds excess length of spring into holding fixture of device and readjusts bed until cathode-ray tube readings are within acceptable limits. Starts shears to cut excess spring at specified distance from vibrating point for attachment to stud. (2) Inserts end of spring into holding tweezers of master balance wheel assembly, and adjusts tweezers until pivots and arms of test and master balances are aligned. Releases lever that gives starting impulse to both balances simultaneously, and observes operation to determine if balances are synchronized. Resets holding point of vibrator tweezers and repeats operation until balances are synchronized. Cuts off spring at specified distance from vibrating point for attachment to stud, using cutting pliers.
GOE: 06.01.04 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

715.381-066 INSPECTOR, HAIRSPRING I (clock & watch)
Inspects completed hairspring assemblies, using loupe and watchmaker's tools. Verifies that spring and balance wheel are true in flat and round [INSPECTOR, BALANCE TRUING (clock & watch)], and that mass of balance wheel is equally distributed around axis of rotation [INSPECTOR, POISING (clock & watch)]. Examines positioning of parts to determine that parts are in *beat*, and that *overcoil* is in specified relationship to spring, using loupe. Verifies that parts are securely staked, using tweezers. Separates unsatisfactory assemblies. Observes minute parts and functioning of parts with loupe. May test parts to determine if *vibrating* point has been accurately located, using master balance [HAIRSPRING VIBRATOR (clock & watch)].
GOE: 06.01.05 STRENGTH: S GED: R3 M2 L2 SVP: 6 DLU: 77

715.381-070 INSPECTOR, WATCH ASSEMBLY (clock & watch)
Inspects watch subassemblies and incomplete watch movements for mechanical and visual defects, using watchmaker's tools and loupe. Inspects parts, such as bridges, jewels, and screws, for cracks, scratches, and other surface defects, using loupe. Turns wheels to detect amount of vertical play (endshake) and to ascertain if wheels have sufficient freedom, using tweezers and picks. Winds mainspring to determine wheel characteristics, such as flatness of path and freedom of movement. Examines wheels and pivots for bends and alignment, using loupe. Records defects found.
GOE: 06.01.05 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

715.381-074 INSPECTOR, WATCH TRAIN (clock & watch)
Inspects assembled watch train (center, third, fourth, and *escape wheels* with pinions) for vertical play of wheels (endshake), meshing of gears, and cleanliness of movement, using watchmaker's tools and loupe. Moves wheels up and down to test endshake, using tweezers, and determining from experience whether shake is within acceptable limits. Turns center wheel to ascertain that gears mesh and that train turns easily. Examines assembly for cleanliness, oiling of cap jewels, and to determine that wheels are level and in parallel planes, using loupe. Rejects or accepts watch train assemblies and places defective assemblies in trays according to type of defect.
GOE: 06.01.05 STRENGTH: S GED: R4 M2 L3 SVP: 7 DLU: 77

715.381-078 LOCATION-AND-MEASUREMENT TECHNICIAN (clock & watch)
Inspects machined watch parts to ensure that hole locations, contour measurements, and shapes conform, within prescribed tolerances, to blueprint specifications, using coordinate measuring machine (precision optical device) and working to tolerances of up to 0.00001 inch. Places watch part on viewing table of projector, adjusts focus of projector, and installs glass chart on viewing screen preparatory to inspection. Aligns part with specified locations or measurement points on chart and examines projected enlargement to determine if hole locations, contour, and shape of part fall within tolerance lines etched on chart. Positions part on microscope table of coordinate measuring machine to reexamine part and to obtain precise coordinate measurements. Observes part through microscope and adjusts calibrated controls of measuring machine to center watch part and to determine vertical and horizontal measurements. Compares readings with chart and blueprint specifications and calculates differences between readings and specifications. Records inspection data and interprets findings to supervisory personnel. May operate coordinate measuring machine equipped with spotting and scribing device to locate, spot, and scribe tool, gauge, fixture, and die blanks and be designated Location-And-Measurement Technician, Tool Room (clock & watch).
GOE: 06.01.04 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

715.381-082 PALLET-STONE INSERTER (clock & watch)
Sets pallet stones in watch pallets, using tweezers and pallet-stone inserting fixture: Positions pallet over projecting pins in seat of fixture. Manipulates fixture attachments to squeeze sides of stone-holding recesses together to produce friction-tight holding recesses. Inserts stones in recesses, using tweezers.
GOE: 06.02.32 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

715.381-086 PALLET-STONE POSITIONER (clock & watch)
Adjusts position of pallet stones to extend each stone specified amount from face of holding recess, using positioning fixture: Fits pallet in fixture beneath binocular microscope. Examines pallet stones through microscope and inserts needle between base of stones and holding recess to force stones upward from recess. Swings fork end of pallet against positioning pins of fixture to force stones specified distance into recess.
GOE: 06.01.04 STRENGTH: S GED: R3 M2 L2 SVP: 6 DLU: 77

715.381-090 SCREWHEAD POLISHER (clock & watch)
Polishes screwheads to produce watch screws of specified dimensions and finish, using blocking equipment and polishing wheels: Fits screws in block, using tweezers and suction device. Applies shellac over screws, heats block to melt shellac, and seats screws in block, using handpress. Grinds block screwheads to remove burrs, using grinding wheel. Polishes screwheads to specified dimensions and finish, using flat-lap polisher [FLAT POLISHER (clock & watch)], or manually oscillates screwheads on polishing stones, using overhead pole or hand stick to apply pressure. Examines and measures screws to verify required finish and dimensional specifications, using loupe and precision gauge. Washes and boils block to remove loose polish and to liquefy shellac. Taps block to remove screws. Rinses, dries, and places screws in beakers for inspection.
GOE: 06.01.04 STRENGTH: S GED: R3 M2 L2 SVP: 5 DLU: 77

715.381-094 WATCH ASSEMBLER (clock & watch)
Assembles, tests, and adjusts complete watch movements according to specifications, using watchmaker's tools and loupe: Attaches hairspring and balance assembly, train, escapement, winding and setting mechanism, mainspring, jeweled bearings, and bridges, using tweezers, hand staker (press), and other watchmaker's tools, and loupe. Inspects movement for accuracy, diagnoses cause of defects, and replaces defective parts. Adjusts subassemblies, such as *truing II* balance and banking escapement.
GOE: 06.01.04 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

715.384-010 BALANCE ASSEMBLER (clock & watch)
Screws watch balance and balance bridge assembly to *pillar plate*. Places pillar plate in holding fixture, and positions balance and bridge assembly on plate securing with screws. Tests balance for endshake (vertical play) by gently moving balance, using tweezers, and determining from experience if shake is within acceptable limits. Raises bridge lightly, using tweezers, or disassembles bridge and presses down on reverse side to correct shake. Touches oil-filled hypodermic needle to jewel to oil lower balance jewel prior to assembling. Observes minute parts with aid of loupe and handles parts with tweezers.
GOE: 06.02.23 STRENGTH: S GED: R3 M2 L2 SVP: 3 DLU: 77

715.384-014 INSPECTOR, MECHANISM (clock & watch)
Inspects assembled watch winding and setting mechanisms for mechanical and surface defects, using tweezers and loupe: Moves stem in and out to verify clicking into winding and setting positions and turns stem in each position to test for ease of winding and setting. Moves barrel of mechanism to test for amount of vertical play (endshake), using tweezers, and determining from experience whether shake is within acceptable limits. Examines movement for scratches and presence of dirt, using loupe.
GOE: 06.03.01 STRENGTH: S GED: R3 M2 L2 SVP: 4 DLU: 77

715.384-018 INSPECTOR, POISING (clock & watch)
Inspects *poise* of watch balance wheels to determine if mass of wheel is equally distributed around balance wheel staff, using poising tools and loupe. Mounts wheel in poising tool that supports staff on knife edges as wheel is rotated in channel, using tweezers. Observes rotating wheel to verify evenness of turning, using loupe. Removes screw from uneven or heavy area of wheel and mills screw to decrease weight, using hand milling tool. Rejects and segregates units if balance wheels are out of poise or if general condition of unit does not meet specifications.
GOE: 06.01.05 STRENGTH: S GED: R3 M2 L2 SVP: 4 DLU: 77

715.384-022 INSPECTOR, WATCH PARTS (clock & watch)
Examines and measures watch and clock components, such as pinions, wheels, gears, *pillar plates*, shafts, pallets, wheel and pinion assemblies, and

escapement assemblies to ensure conformance to tolerance specifications and quality standards, using loupe, precision measuring instruments, and electronic timing devices: Reads blueprints and inspection specifications for parts to be inspected to determine types and sequences of inspection and measuring instruments required. Examines components for surface defects, such as scratches, burrs, nicks, and blemishes, using loupe, optical comparator, microscope, and tweezers. Measures components to ensure adherence to dimensional specifications, using precision measuring instruments, such as gauges, calipers, dial indicators, comparascopes, and micrometers. Approves or rejects components according to inspection results and records reasons for rejection. Checks accuracy of measuring instruments using calibrating equipment. May project watch parts on screen to inspect parts [COMPARATOR OPERATOR (any industry)]. May weigh fine parts, such as timing, balance, and gold screws to ensure conformance to weight specifications, using balances and scales. May test hardness of watch parts [HARDNESS INSPECTOR (heat treating)]. May be designated according to component inspected as Arbor Inspector (clock & watch); Balance-Staff Inspector (clock & watch); Barrel Inspector (clock & watch); Case Inspector (clock & watch); Hands Inspector (clock & watch); Mainspring-Strip Gauger (clock & watch). May be designated: Mainspring-Strip Inspector (clock & watch); Pinion Inspector (clock & watch); Plate Inspector (clock & watch); Screw Inspector (clock & watch).
GOE: 06.01.04 STRENGTH: S GED: R3 M2 L3 SVP: 6 DLU: 77

715.584-010 DIAL REFINISHER (clock & watch)
Refinishes watch dials, according to specifications: Removes original finish and dial markings, such as numerals and calibrations on faceplate, using chemical solution and buffing wheel or wire brush. Applies specified finish to dial, using plating solution. Embosses and retouches markings, using stamping equipment, paint, and brush. Sprays dial with lacquer to preserve finish. May attach numerals to faceplate with rivets. May apply radium to dial markings to form luminous dial.
GOE: 06.04.33 STRENGTH: S GED: R2 M1 L2 SVP: 5 DLU: 77

715.584-014 REPAIRER, AUTO CLOCKS (clock & watch)
Repairs surface defects in battery-operated clocks for motor vehicles, using handtools: Examines rejected clock for defects, such as scratched or broken lens, damaged backplate, and bent or missing hands. Removes and replaces defective parts, using handtools, such as punch, tweezers, staking tool, and screwdriver. Places repaired clock in tray for retiming. Records quantity and type of clocks repaired.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

715.584-018 STONER, HAND (clock & watch)
Stones (polishes) watch parts, such as winding wheels and clicks (pawls), to specified thickness, using blocking equipment and polishing stone: Adjusts stops on block corners to specified height indicated by gauge, using screwdriver. Brushes block surface with vaseline to hold wheels or clicks in place. Fits wheels or clicks over protruding pins of block, using tweezers. Places block, face down, on stone. Fits projecting pin of handle in block recess and rubs block against stone with circular motion until touch indicates parts are stoned to size. Verifies thickness of part, using loupe and indicator gauge.
GOE: 06.02.24 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

715.660-010 SET-UP WORKER (clock & watch)
Sets up and adjusts staking machines used to assemble clock and watch parts according to blueprints and operation sheets: Confers with department supervisor and reviews operation sheets to determine parts or assemblies to be processed, assembly specifications, and instructions for machine setup. Bolts or screws specified dies into beds of machines according to blueprints, using handtools. Operates machines to press or rivet parts together to form sample assemblies. Examines and measures sample assemblies for adherance to surface and dimensional specifications, using gauges such as micrometers and calipers, and confers with quality control personnel to gain approval of sample for production. Demonstrates operation of machines to production workers and examines work to detect production defects. Oils and cleans machines, using oilcans and cloths.
GOE: 06.01.02 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

715.681-010 TIMING ADJUSTER (clock & watch) alternate titles: poiser, balance
Alters weight of watch balance wheels to correct timing of movement, using jeweler's tools and loupe: Receives movement from INSPECTOR, TIMING (clock & watch) with indication of rate of gain or loss in time. Replaces balance wheel screw with one of heavier weight or adds washer of specified weight when movement is fast, using screwdriver. Repeats operation on opposite side of balance wheel to maintain *poise*. Replaces balance wheel or files angle of screw point to reduced weight, using hand file. Repeats operation on opposite side of wheel to maintain poise. Observes minute parts, using loupe.
GOE: 06.02.24 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

715.682-010 BARREL FINISHER (clock & watch)
Operates lathe to turn watch gear blanks (barrels) to size preparatory to milling. Positions barrels into chuck of lathe. Starts lathe and holds tool against material. Gauges finished barrels, using measuring device.
GOE: 06.02.02 STRENGTH: S GED: R2 M1 L2 SVP: 3 DLU: 77

715.682-014 COUNTERSINKER (clock & watch)
Operates vertical- or horizontal-drill press to countersink drilled holes in watch parts: Places part in bed or chuck of press. Aligns countersinking bit and hole, using loupe, and advances bit manually to automatic stop device. Removes part from press and measures depth of countersink, using precision dial gauge. May countersink screw holes around periphery of balance wheels and be designated Countersinker, Balance Screw Hole (clock & watch).
GOE: 06.02.02 STRENGTH: L GED: R2 M2 L1 SVP: 3 DLU: 77

715.682-018 POLISHER (clock & watch)
Operates lathe and rag wheel polisher to smooth and polish edges of watch plates and bridges: Selects basswood *lap I* of specified size to polish recessed or curved surfaces and mounts lap in lathe. Holds bar of abrasive against rotating surface to charge lap. Manipulates bridge or plate against lap to smooth corners and edges. Strings cut parts on wire and pushes parts against revolving edge of rag wheel to polish parts to specified finish. Washes polished parts in benzine to remove cutting and polishing compound. Holds and turns wooden lap against lathe to dress lap.
GOE: 06.02.02 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

715.682-022 TAPPER, BALANCE-WHEEL SCREW HOLE (clock & watch)
Operates powered horizontal tapping machine to cut internal threads in screw holes around periphery of watch balance wheel: Places center hole of balance wheel over protruding pin of machine chuck. Turns wheel to align hole with tap and presses handle to starts tap forward into hole. Verifies size of holes, using precision plug gauge. Replaces worn taps.
GOE: 06.02.02 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

715.682-026 TOOTH POLISHER (clock & watch)
Operates bench-polishing machine to remove scratches and burrs and to impart polished finish to watch pinion teeth: Positions pinion in machine holder, using tweezers. Depresses pedal to engage lapping wheel and holds abrasive and polishing compound against rotating wheel to dress wheel. Presses machine lever to lower and hold lapping wheel against pinion to remove defects and polish pinion teeth. Releases pedal to stop machine after prescribed period and raises lever to gain access to polished pinion. Depresses pedal of hot air device to melt polishing compound adhered to pinion and to blow pinion into container. Mounts pinion in holding calipers and cleans pinion, using electric brush and cleaning compound. Examines and measures cleaned pinions to verify specified finish and dimensional specifications, using loupe and precision gauges.
GOE: 06.02.02 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

715.684-010 ADJUSTER, ALARM MECHANISM (clock & watch)
Adjusts alarm mechanism and lubricates moving parts of electric alarm clock assemblies, using handtools: Clamps lead wires of clock motors to current outlet. Bends alarm striker, turns alarm indicators to specified setting, and pulls and turns set shafts to adjust and set alarm, using tweezers, pliers, and knife. Observes mechanism in operation to verify freedom of moving parts. Lubricates moving parts, using brush and lubricant. Places acceptable assemblies on conveyor for further processing and places defective assemblies in tray for repair. Tallies number of mechanisms adjusted, using counter, and records production.
GOE: 06.04.34 STRENGTH: S GED: R2 M1 L2 SVP: 2 DLU: 77

715.684-014 ASSEMBLER, MOVEMENT (clock & watch)
Assembles watch, clock, and appliance timer movements, using handtools and power tools: Positions front plate assembly in holding fixture. Positions setting and winding mechanisms on front plate and positions escapement, pallet, and train pivot in pivot holes of front plate, using tweezers and loupe. Positions backplate over pillars and aligns pivots of parts with pivot holes in backplate. Fastens backplate to movement, using pneumatic screwdriver. Attaches alarm components to alarm clock movements, installs motors in electric clocks, and assembles motors and appliance timers, using handtools and pneumatic screwdriver. Records quantity of movements assembled.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

715.684-018 BALANCE TRUER (clock & watch)
Tests and adjusts watch balance wheels to ensure that rim is concentric with staff axis: Mounts balance wheel and staff on test stand or between jaws of *truing II* calipers, using tweezers, and twirls wheel by hand. Determines that dial gauge readings are within acceptable limits as rim of revolving wheel brushes against gauge arm on test stand, or determines no clearance variation between rim of wheel and caliper index pointer placed above rim, using loupe. Bends rim to eliminate distortions, using tweezers or rim wrench.
GOE: 06.01.04 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

715.684-022 BALANCE-BRIDGE ASSEMBLER (clock & watch)
Attaches balance assembly to balance bridge: Positions regulator in nest of holding block and places balance bridge over regulator to fit balance bridge jewel into hole in regulator. Presses bridge into place, using tweezers. Positions balance wheel and hairspring assembly over bridge, and places hairspring stud into hole in bridge. Tightens screw to hold stud securely. Oils balance bridge jewel, using oil-filled hypodermic needle. Observes minute parts, using tweezers and loupe.
GOE: 06.02.23 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

715.684-026 BENCH HAND (clock & watch)
Positions screws in rims of balance wheels and secures screws in place, using screwdriver.
GOE: 06.04.23 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

715.684-030 BEVELER (clock & watch)
Bevels watch hands to form rounded surface, using ram: Positions watch hand in nest on bed of die, using tweezers, and starts ram. Blows dirt from die after each operation, using compressed-air hose.

GOE: 06.02.24 STRENGTH: S GED: R2 M1 L1 SVP: 3 DLU: 77

715.684-034 BLOCKER (clock & watch) alternate titles: blocker, polishing

Positions flat pieces, such as clutch levers and escape wheels, on circular metal blocks or into recesses in blocks preparatory to grinding operation: Heats block and applies shellac. Places pieces over surface of block, using tweezers. Reheats block, places sheet of paper on top of block, fits press block directly over circular block, and applies pressure in screw press to position pieces firmly in shellac. Removes pieces from press, and inspects parts for proper position prior to grinding process. Blocks parts, such as wheels and screws, using suction device. Heats, shellacs, and presses loaded blocks to secure parts. May spread layer of vaseline over block to hold parts.
GOE: 06.02.24 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

715.684-038 BURNISHER, BALANCE WHEEL ARM (clock & watch)

Burnishes chamfer on watch balance wheel arm, using burnishing tool and loupe: Fits balance wheel in work plate of jig and tightens jig to hold wheel in place. Burnishes arm by hand to round and polish edges. Inspects finished wheel, using loupe.
GOE: 06.02.24 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

715.684-042 BURRER (clock & watch) alternate titles: burrer, hand; scraper burrer

Removes burrs from rims, edges, and recesses of watch parts, such as pillar plates and barrel bridges, using burring tool. Inspects parts to ensure removal of burrs, using loupe.
GOE: 06.02.24 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

715.684-046 CANNON-PINION ADJUSTER (clock & watch)

Attaches and adjusts cannon pinion to arbor of center wheel, using hand punch: Lubricates arbor, using oil-filled hypodermic needle. Positions cannon pinion over center wheel arbor and secures pinion onto arbor, using tweezers or hand punch. Pinches arbor with pliers at specified points to loosen or tighten pinion. Observes minute parts, using tweezers and loupe.
GOE: 06.04.23 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

715.684-050 CAP-JEWEL PLATE ASSEMBLER (clock & watch)

Attaches cap jewel plate to train and balance bridges: Places bridge in holding fixture and positions cap jewel plate over bridge, aligning cap jewel with hole in bridge. Inserts minute screw into hole with tweezers and screws plate to bridge. Observes minute parts with loupe. May insert screw in hole of balance bridge to facilitate subsequent fastening of hairspring stud.
GOE: 06.02.23 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

715.684-054 CASER (clock & watch)

Performs any combination of following duties to insert clock and watch assemblies in cases: Inserts and secures crown and stem into clock and watch movements, using loupe, tweezers, screwdriver, and other jeweler's tools. Cleans case, using airhose, and inserts movement into case. Presses revolving plastic cup against crown or rubs crown against plastic strip to wind movement. Sets watch to specified time prior to testing. Secures watertight cases, using pliers, or places assembly in device that tightens case automatically. May remove temporary crown and stem prior to assembly, using handtools. May measure stem, using gauge, and file stem to specified length. May screw crowns onto stems. May test waterproof watches in air pressure and water tanks.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

715.684-058 CLOCK ASSEMBLER (clock & watch)

Attaches power cords, cases, dials, and hands to electric clock movements to assemble electric clocks, using handtools: Inserts end of power cord through opening in clock case and splices wires from motor of clock movement to cord, using plastic connectors. Fastens case to clock movement, using pneumatic screwdriver. Positions dial over front plate of movement and attaches hour, minute, and second hands to cannon pinion, using wrench. Aligns clock hands and alarm indicator and pulls alarm button to test mechanism. Snaps plastic crystal into case, affixes label to back of case and places assembled clock on conveyor for further processing.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

715.684-062 COLLET DRILLER (clock & watch)

Tends drill press that drills holes in metal collars (collets) prior to assembly with watch escapement movement. Positions collets on bed of drill press, using tweezers. Lowers revolving drill to bore and countersink hole in collets.
GOE: 06.02.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

715.584-066 COLLETER (clock & watch)

Attaches inner coil of watch hairspring to collet preparatory to assembly to balance wheel: Positions collet over arbor of colleting tool, using tweezers and forces collet into place, using hand punch. Places hairspring over arbor and inserts end of inner coil into hole in collet, using tweezers and loupe. Inserts tapered brass pin into hole in collet and pulls pin through hole to secure hairspring against wall of collet, using tweezers and pliers. Cuts protruding ends of pin with pliers. May examine plane of hairspring and collet to ensure conformance to specifications.
GOE: 06.04.23 STRENGTH: S GED: R2 M1 L2 SVP: 3 DLU: 77

715.684-070 CROWN ATTACHER (clock & watch)

Attaches watch crowns to stem: Inserts stems into chuck of machine and places crown in holding tool. Presses holding tool against revolving stem that automatically screws on crown. May hold stem with pliers and screw crown onto stem by hand.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

715.684-074 CROWN-WHEEL ASSEMBLER (clock & watch)

Attaches watch crown wheel and click (pawl on ratchet wheel) to barrel bridge, using tweezers and loupe: Places bridge in holding fixture. Positions and secures crown wheel center (washer) over post in bridge and crown wheel over washer, using screw, tweezers, and loupe. Positions and secures click in bridge. Inserts click spring into position. May lubricate friction points of assembly, using oil-filled hypodermic needle.
GOE: 06.02.23 STRENGTH: S GED: R3 M2 L2 SVP: 3 DLU: 77

715.684-078 CRYSTAL CUTTER (clock & watch)

Grinds improperly fitting watch crystals to specified size and to remove rough or chipped edges, using abrasive wheel. Brushes crystal with lacquer and dries crystal under heat lamp to protect surface of crystal. Examines and measures crystals to ensure conformance to specifications, using loupe, calipers, and micrometer.
GOE: 06.04.30 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

715.684-082 DIAL-SCREW ASSEMBLER (clock & watch)

Attaches dial screws to pillar plates preparatory to securing dial to watch, using screwdriver, tweezers, and loupe. Aligns number of pillar plates in holding fixture. Inserts and fastens screws to plates.
GOE: 06.04.23 STRENGTH: S GED: R2 M1 L2 SVP: 2 DLU: 77

715.684-086 DIALER (clock & watch)

Attaches clock or watch dials to movements: Places movement in holding fixture, and positions hour wheel and one or more dial washers over cannon pinion, using punch or hand staking tool. Positions dial over movement, and inserts dial feet into holes in pillar plate or rod. Inserts feeler gauge between dial and plate to facilitate specified fit, tightens screws to secure dial, and removes gauge. Observes minute parts, using loupe and handles parts with tweezers. May snap clock dials in place in faceplate grooves. May attach clock hands, using hand staking tool.
GOE: 06.02.23 STRENGTH: S GED: R3 M2 L2 SVP: 3 DLU: 77

715.684-090 DISASSEMBLER (clock & watch)

Disassembles defective auto clocks for salvage or reuse of parts, using watchmakers' tools: Turns screws and nuts and separates parts, such as case, lens, backplate, hands, and dial, using screwdrivers, pliers, and tweezers. Segregates parts in trays for reuse. Places scrap parts in tray for salvage. Removes date stamp markings from parts, using solvent and cloth. Places dented or bent cases and backplates on metal block and straightens or smooths defective part, using mallet. Records quantity and type of clocks disassembled.
GOE: 06.02.24 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

715.684-094 FINAL INSPECTOR, MOVEMENT ASSEMBLY (clock & watch)

Inspects completed watch and clock movements and motors for defects, such as surface blemishes, missing parts, and misalignment of parts, using loupe, watchmaker's tools, and gauges: Winds and activates movements to verify prescribed wheel motion. Examines movements and motors for defects, such as misalignment of parts, missing parts, cracked or broken parts, and deficient oil content on jewels. Replaces or tightens missing screws, using screwdriver; removes scratches on parts, using buffing stick; and oils jewels, using hypodermic syringe. May test performance of motors used in electric clocks and timers, using voltmeter and ammeter and be designated Motor Checker (clock & watch). May be designated according to type of movement inspected as Final Inspector, Balance Wheel (clock & watch).
GOE: 06.01.05 STRENGTH: S GED: R3 M2 L2 SVP: 4 DLU: 77

715.684-098 FINER (clock & watch)

Attaches balance wheel and hairspring assembly to watch or clock movement, using handtools: Positions balance wheel and hairspring assembly between balance stud and balance screw of watch or clock movement assembly, using tweezers. Tightens balance screw to secure balance wheel and hairspring assembly to movement, using wrench. Inserts end of hairspring through eye (slot) of regulator and into hole of hairspring stud, and inserts hairspring wedge into hole of hairspring stud to secure end of spring to stud, using tweezers. Engages *impulse pin* to pallet to activate movement, using tweezers. Oils specified parts of watch or clock assembly, using oil-filled hypodermic needle.
GOE: 06.04.23 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

715.684-102 HAIRSPRING ADJUSTER (clock & watch)

Inspects and adjusts watch hairsprings after assembly to *pillar plate* for conformance to mechanical specifications, using loupe, holding device, and tweezers: Mounts assembly in holding device. Examines outer coil to verify that coil is centered between regulator pins, and that positioning of *overcoil* is within acceptable limits, using loupe. Pinches segment of coil to position and level coil, using tweezers. Spins balance wheel to verify that all coils of spring are within same plane and concentric with collet when oscillating. Adjusts coils to correct discrepancies, using tweezers.
GOE: 06.01.04 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

715.684-106 HAND FILER, BALANCE WHEEL (clock & watch)

Removes excess metal from inside rim of balance wheel, using radius file: Positions wheel in slot of work jig filing plate. Files excess metal between arm

and inside rim of wheel to obtain specified balance of wheel, using file and loupe. Inspects wheels to ensure conformance to specifications. Shapes files on emery wheel.
GOE: 06.02.24 STRENGTH: S GED: R2 M1 L1 SVP: 3 DLU: 77

715.684-110 HANDS ASSEMBLER (clock & watch)
Attaches hands to faces of clocks and watches: Places movement in holding fixture of hand staking tool. Positions hour hand on hour wheel and forces hand over arbor to secure friction tight fit, using staking punch. Positions minute hand over cannon pinion of minute wheel and secures fit, using staking punch. Aligns hour hand with specified hour marking, and minute hand with numeral twelve. Bends tips of hands with tweezers to conform to curvature of dial. Presses second hand over fourth wheel arbor and secures fit. Winds watch and observes movement of hands to determine specified clearance between hands, dial, and crystal. Observes and handles minute parts, using loupe and tweezers.
GOE: 06.04.23 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

715.684-114 INSPECTOR, BARREL ASSEMBLY (clock & watch)
Inspects and adjusts mainspring barrel assembly, utilizing either of following methods: (1) Grasps barrel arbor with pliers and locks arbor by means of adjustable ring on plier arms. Holds barrel and turns arbor to wind mainspring. Allows pliers to hang freely to observe spinning motion as result of spring unwinding, indicating faulty assembly. Separates faulty assemblies and places rejected assemblies by type of reject in containers for repair. (2) Winds spring to determine if arbor hook is secured in hole of center coil, using hand winding device. Tests endshake (vertical play) of barrel, using tweezers. Separates faulty barrel assemblies.
GOE: 06.01.05 STRENGTH: S GED: R3 M2 L2 SVP: 6 DLU: 77

715.684-118 INSPECTOR, HAIRSPRING TRUING (clock & watch)
Examines assembled watch hairsprings to determine if spring is in same plane and concentric with collet, and that space between collet and first inner spring is within acceptable limits, using loupe. Separates faulty assemblies for adjustment by HAIRSPRING TRUER (clock & watch).
GOE: 06.03.02 STRENGTH: S GED: R3 M2 L2 SVP: 4 DLU: 77

715.684-122 INSPECTOR, HAIRSPRING II (clock & watch)
Examines unassembled hairsprings for flatness and concentricity, using tweezers and loupe: Stretches spring to ensure specified plane and spacing between coils, using tweezers. Examines spring to detect defects, such as blemishes and bent or short tongues, using loupe. Segregates standard and defective springs in boxes for salvage, storage, and shipping. Records inspection data for identification purposes.
GOE: 06.01.05 STRENGTH: S GED: R2 M1 L2 SVP: 3 DLU: 77

715.684-126 INSPECTOR, WHEEL AND PINION (clock & watch)
Inspects and adjusts assembled watch wheels and pinions for surface and mechanical defects, using tweezers, gauges, and loupe: Examines wheels for levelness, using gauges, and adjusts wheels to correct discrepancies [STRAIGHTENER, HAND (any industry)]. Tests and adjusts endshake (vertical movement) of wheels, using loupe and tweezers. Mounts wheels in gauge and observes gauge readings to verify that wheels and pinions are concentric with staff. Places straightedge on flat surface of wheels and turns wheels, observing wheels to detect passage of light, to test wheels for flatness. Examines wheels to detect scratches and broken teeth, using loupe. Segregates faulty and acceptable assemblies.
GOE: 06.01.05 STRENGTH: S GED: R3 M2 L2 SVP: 4 DLU: 77

715.684-130 JEWEL INSERTER (clock & watch)
Inserts jewels in jewel settings: Squirts oil over settings on sheet of paper. Moistens tip of wooden peg with oil, picks up individual jewel, and positions jewel in setting, using peg. Presses jewel into setting, using staking tool. Inspects specified number of completed settings to ensure proper seating of jewels, using loupe.
GOE: 06.04.23 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

715.684-134 JEWEL STAKER (clock & watch)
Presses jewels to watch bridges and plates, using staking tool: Positions part in nest of tool, using tweezers and loupe. Presses identifying mark or part on bridge or plate, using hand-operated punch. May press jeweled or metal markers onto dial for use as numerals, using adhesive-tipped stick.
GOE: 06.04.23 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

715.684-138 LACQUERER (clock & watch)
Covers watch dials with lacquer to protect dials preparatory to polishing or plating numerals, or preparatory to final assembling. Dries lacquer in heated cabinets.
GOE: 06.04.33 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

715.684-142 MECHANISM ASSEMBLER (clock & watch)
Assembles parts of watch winding and setting mechanism to *pillar plate*: Positions clutch lever, clutch-lever spring, setting wheel, and minute wheel on plate, using loupe and tweezers. Places yoke over parts, and secures yoke with screws. May oil clutch and winding pinion, using oil-filled hypodermic.
GOE: 06.04.23 STRENGTH: S GED: R2 M1 L2 SVP: 3 DLU: 77

715.684-146 OILER (clock & watch)
Oils watch parts, such as jeweled bearings, on center, third, fourth, and escape wheels, using oil-filled hypodermic needle or automatic oil dispenser. Observes minute parts, using loupe to determine specified amount of oil applied. May oil industrial motor assemblies.
GOE: 06.04.33 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

715.684-150 OVERCOILER (clock & watch)
Raises and bends outer coil of watch hairsprings to ensure *overcoiling*: Positions balance assembly in holding fixture, using tweezers. Threads stud end of spring through fixture and clamps end securely. Adjusts series of levers to raise outer coil specified distance above plane of spring and straighten raised portion parallel with plane of spring. Pinches and bends outer coil to obtain concentric position with inner coils and to ensure overcoiling, using loupe and tweezers.
GOE: 06.04.23 STRENGTH: S GED: R2 M1 L2 SVP: 3 DLU: 77

715.684-154 PALLET ASSEMBLER (clock & watch)
Attaches pallet assembly to *pillar plate*: Places pallet arbor into hole in jewel of pillar plate. Places pallet bridge over pallet, aligns hole in jewel with pallet staff, and secures bridge to form assembly, using tweezers, loupe, and screwdriver. Moves pallet up and down, using tweezers, to test and adjust endshake (vertical movement) and estimates movement within acceptable limits. May disassemble pallet and bridge and move pallet bridge jewel to adjust endshake, using hand-operated press.
GOE: 06.04.23 STRENGTH: S GED: R2 M1 L2 SVP: 3 DLU: 77

715.684-158 PALLET RECTIFIER (clock & watch)
Adjusts passing hollow (crescent-shaped notch) and sizes jewel-hole slots of pallets, using holding fixture and burnishing wheel: Locates pallet over hole in fixture. Pushes pallet into stop against V-shaped lap to adjust passing hollow. Holds pallet against carbide burnisher to size jewel slots according to specified width and depth. Turns fixture during burnishing to round walls of jewel slot.
GOE: 06.02.24 STRENGTH: S GED: R2 M2 L2 SVP: 4 DLU: 77

715.684-162 PEARLER (clock & watch)
Cuts cone-shaped notch in face of watch dial for use as numerals: Positions dial on bed of press, aligns second and center holes with pins in press. Raises bed of press to bring dial in contact with diamond-cutting tool that automatically cuts cone-shaped notch.
GOE: 06.02.24 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

715.684-166 PIN INSERTER, REGULATOR (clock & watch)
Secures regulator pin in regulator, using jeweler's tools. Positions regulator in holding fixture and places pin in hole of regulator, using tweezers and loupe. Taps pin with hammer and cuts off protruding excess of pin, using pliers. Secures fit of pin, using staking tool.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

715.684-170 POLISHER, DIAL (clock & watch)
Polishes watch dial blanks, using abrasive belt or wheel: Holds blanks against rotating belt or wheel to buff dials, using jeweler's rouge. May rub dial over hone to impart distinctive mat finish to dial and be designated Watch-Dial Stoner (clock & watch). May polish raised numerals on watch dials and be designated Polisher, Numeral (clock & watch).
GOE: 06.02.24 STRENGTH: S GED: R2 M1 L1 SVP: 3 DLU: 77

715.684-174 PUT-IN-BEAT ADJUSTER (clock & watch)
Aligns hairspring stud with center of roller and roller jewel with line of center on *escape wheel* pallet to ensure *in-beat* of watch movement: Positions balance wheel assembly in fixture of tool, using tweezers, and engages crescent of roller with lever to prevent balance wheel from turning. Engages slot in hairspring collet, using plunger, and turns collet and attached hairspring until stud on outer coil of hairspring is aligned with indicator on balance wheel. Observes minute parts, using loupe.
GOE: 06.02.23 STRENGTH: S GED: R3 M2 L2 SVP: 3 DLU: 77

715.684-178 SET-STAFF FITTER (clock & watch)
Installs wheel and sleeve assembly in clocks preparatory to inserting hour hand: Places wheel and sleeve assembly over center staff protruding through front frame and meshes assembly with dial wheel pinion. Places time and alarm train onto staff and inserts staff through hole in clock frame. Places clock frame in jig of press that secures assemblies by means of washer and collet.
GOE: 06.04.23 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

715.684-182 STAKER (clock & watch) alternate titles: staking-machine operator; staking-press operator
Presses or rivets parts together for use in assembly of watches, clocks, timers, and industrial motors, using staking machine or hand staking tools: Positions parts in specific relationship to each other in recess of die (bed) or fits part in punch of machine, using tweezers and loupe. Activates machine to lower punch that presses or rivets parts together. Places assembled parts on conveyor, in tray, or on table for further processing. May be designated according to parts assembled as Balance-Staff Staker (clock & watch); Hairspring Staker (clock & watch); Pin Inserter (clock & watch); Pinion Staker (clock & watch); Roller Staker (clock & watch).
GOE: 06.04.23 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

715.684-186 STUDDER, HAIRSPRING (clock & watch)
Attaches stud to watch hairspring preparatory to assembly to balance bridge, using studding fixture, loupe, and watchmaker's tools: Positions stud in recess of studding fixture, using tweezers, and broaches hole in stud, using handtool. Inserts end of outer hairspring coil into hole, and forces tapered brass pin through hole to wedge spring in place, using loupe and watchmaker's tools. Cuts off protruding ends of pin, using pliers.
GOE: 06.04.23 STRENGTH: S GED: R2 M1 L1 SVP: 3 DLU: 77

715.684-190 TRANSFERRER (clock & watch) alternate titles: watch-dial printer

Prints numerals, minute and second tracks, and company name onto timepiece dials, using printing equipment: Positions holding fixture and gelatinous head in printer. Places engraved metal plate in holding fixture and spreads ink over plate. Removes excess ink, using spatula. Lowers gelatinous head of transfer printer onto plate to transfer design from plate to head. Moves watch dial into position and lowers gelatinous head to print design on dial. Applies lacquer to specific parts of dial to protect them during brushing operations.
GOE: 06.01.04 STRENGTH: L GED: R3 M1 L1 SVP: 3 DLU: 77

715.684-194 TRUER, PINION AND WHEEL (clock & watch)

Inspects and adjusts electric-clock wheel parts to correct *truing H* of pinion and wheel assemblies, using comparator, loupe, and truing tools: Places part in rotating jig of comparator and projects part onto calibrated screen to determine degree of truing defect [COMPARATOR OPERATOR (any industry) 699.384-010] or examines part to determine defect, using loupe. Bends parts manually to correct truing defect or forces truing tool against rotating part to correct defect.
GOE: 06.01.04 STRENGTH: S GED: R2 M1 L1 SVP: 3 DLU: 77

715.685-010 COLLET GLUER (clock & watch)

Applies glue to hairspring and balance wheel assembly of auto clocks and tends oven that dries glue to secure parts together: Places hairspring and balance wheel assembly in slots of die, using tweezers. Applies glue to inner coil of hairspring to join hairspring to balance staff collet, using glue dispenser. Sets time and temperature controls on bench-mounted oven and places tray of dies containing balance and hairspring assemblies in oven. Pulls trays from oven subsequent to curing of glue and stacks trays on rack for cooling. Pulls hairspring and balance wheel assemblies from dies and places assemblies in tray for further processing.
GOE: 06.04.24 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

715.685-014 CUTTER, V-GROOVE (clock & watch) alternate titles: groove turner

Tends lathe that cuts decorative V-shaped circular groove in faces of heattreated watch wheels. Depresses pedal to open chuck, inserts wheel, and releases pedal to secure wheel in chuck. Brushes lubricant on cutter and turns wheel to advance cutter into rotating watch wheel to cut groove.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

715.685-018 DEBURRER, MACHINE (clock & watch)

Tends bench lathe that removes burrs and polishes watch parts, such as pinions and wheels: Inserts part in chuck of lathe, using loupe and tweezers. Positions deburring tool on tool rest, starts lathe, and moves tool against part to smooth surface.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

715.685-022 DRILLER AND BROACHER (clock & watch)

Tends vertical drill that bores and broaches pinholes in watch regulators: Positions regulator in drilling jig, using tweezers, and closes jig. Places jig on table beneath drill, aligns bushing guide holes of jig with drill, using loupe, and depresses drill to bore holes in regulator. Removes drilled regulator from jig, positions and aligns holes under tapered broach (boring tool), and pulls handle to automatic stop to shape and enlarge holes.
GOE: 06.02.02 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

715.685-026 END POLISHER (clock & watch) alternate titles: pivot-end polisher

Tends polishing machine that smooths and imparts specified finish to pivot (staff) ends of pinions and arbors: Pulls spindle handle to insert and position pinion in holder of workpiece. Depresses pedal to start felt-wheel lap rotating across pivot end to polish ends. Charges wheel with lime stick as needed. Inspects ends to detect defects, such as burrs and rough surfaces, using loupe. Performs minor adjustments to machine.
GOE: 06.02.02 STRENGTH: L GED: R2 M2 L2 SVP: 4 DLU: 77

715.685-030 GRINDER II (clock & watch)

Tends jigging machines that grind pivots of watch parts to specified lengths: Pulls spindle handle to open spindle, inserts pinion with tweezers, and releases handle to force pinion into place in chuck. Depresses pedal to start rotating grinding wheel across end of pivot to grind pivot to specified size. Measures pinions to ensure specified lengths, using loupe and precision upright gauge.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

715.685-034 INSPECTOR, TIMING (clock & watch) alternate titles: reliability inspector; timer; timing-machine operator

Tends electric timer that verifies timing *beat* of clock, watch, and timer movements and adjusts movements to correct timing defects, using watchmaker's tools and loupe: Sets up timing device for specified type movement. Positions movement in holding fixture and connects movement to timing device. Activates timing device that automatically compares timing beat of test movement with standard and records discrepancies on tape. Adjusts movements to attain accurate beat or routes movement to TIMING ADJUSTER (clock & watch) 715.681-010. Records timing beat defects. Places acceptable movements in tray for assembly.
GOE: 06.01.05 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

715.685-038 MAINSPRING WINDER AND OILER (clock & watch) alternate titles: mainspring-winding-machine operator

Tends semiautomatic mainspring-winding machine that winds mainspring into shell (barrel) and lubricates bearing surfaces: Opens chuck, inserts arbor, and fits spring assembly over arbor. Depresses pedal that allows winding and oiling mechanism to wind spring around arbor, and oil spring. Places barrel over spring by hand and removes assembly from chuck. May wind mainspring, using hand-operated spring-winding tool. May reverse mainspring to coil spring in direction used in watch and be designated Mainspring-Reverse Winder (clock & watch).
GOE: 06.04.02 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

715.685-042 PINION POLISHER (clock & watch)

Tends lathe that polishes leaves, pivots, or staffs of clock pinions: Clamps part in chuck of lathe. Starts lathe and swings tool rest into position. Forces slip of bell metal against rotating part to smooth surface. Repeats process, polishing part with slip of oilstone and buffing part with rouge to produce smooth, even surface. Examines part for surface defects, using loupe and tweezers. May be designated according to part polished as Pivot Polisher (clock & watch).
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

715.685-046 POLISHER, BALANCE SCREWHEAD (clock & watch) alternate titles: screwhead polisher

Tends semiautomatic turning lathe that bevels and polishes balance wheel screwheads: Places screw, using tweezers, into threaded chuck and depresses pedal to turn screw firmly into chuck. Turns, bevels, and polishes screwhead by manually feeding diamond tool against rotating head until automatic stop is reached. Depresses pedal to reverse direction of rotating chuck and to remove finished screw. Observes parts, using loupe and tweezers.
GOE: 06.04.02 STRENGTH: S GED: R2 M1 L1 SVP: 3 DLU: 77

715.685-050 PRESS OPERATOR, PIERCE AND SHAVE (clock & watch)

Tends automatic press that pierces holes and shaves corners and holes of watch parts: Cleans work plate of press, using airhose. Positions part in recessed nest or over protruding pins of work plate. Presses button to activate press that automatically pierces and shaves part. Removes finished part from press and measures dimensions of hole, using plug gauge.
GOE: 06.04.02 STRENGTH: S GED: R2 M1 L1 SVP: 5 DLU: 77

715.685-054 PROFILER, HAND (clock & watch)

Tends profiling machine that cuts grooves and recesses in watch parts: Clamps part in chuck. Moves forward and lateral guide handles simultaneously to press model against guide point as cutting progresses. Measures profiled dimensions, using precision indicator gauge and loupe.
GOE: 06.02.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

715.685-058 SOLDERER (clock & watch)

Tends machine that solders holding feet (used to secure dial to watch movement) to back of watch dials: Places dial on asbestos holding fixture. Positions soldering rings over specified points on dial and positions dial foot in each ring, using tweezers. Lowers weights onto holding feet to secure feet in fixture. Starts machine that automatically moves lighted gas torch into position to solder feet to blank.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

715.685-062 TAPPER II (clock & watch)

Tends tapping machine that cuts internal threads in watch-setting levers: Places levers in holding fixture of machine and aligns hole in lever under tap. Starts machine that lowers tap into holes to cut threads. Verifies size of hole, using plug and thread gauges. Removes burrs from tapped hole, using powered burr cutter.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

715.685-066 TORQUE TESTER (clock & watch) alternate titles: mainspring-torque tester

Tends torque-testing machine that measures strength of watch mainsprings: Positions barrel in testing holder. Moves controls and reads scale indicating strength of coiled spring. Segregates assemblies into trays according to strength measurements.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

715.685-070 TUBING-MACHINE TENDER (clock & watch)

Tends bench-mounted punch press that forms pivot holes in watch hour-hand tubes. Positions hand in nest on bed of press, using tweezers. Activates press that automatically forms hole in hour hand for insertion of pivot.
GOE: 06.04.24 STRENGTH: S GED: R2 M1 L1 SVP: 3 DLU: 77

715.686-010 DESTATICIZER FEEDER (clock & watch)

Feeds auto clock lenses into machine that coats lenses with anti-electrostatic solution: Wipes dust from lenses, using cloth, and examines lenses for imperfections. Discards defective lenses. Presses lenses in clamps of circular conveyor that carries lenses through spray booth for application of solution that dissipates electrostatic charges and prevents further accumulation of charges on lenses. Presses buttons to start and stop conveyor and to activate sprayer. Removes lenses from clamps subsequent to spraying and places lenses in box.
GOE: 06.04.21 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

715.686-014 MACHINE FEEDER (clock & watch)

Feeds jeweled settings, right-side-up, into hoppers of automatic machines in clock and watch manufacturing plant, using tweezers.
GOE: 06.04.09 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

715.687-010 BAND ATTACHER (clock & watch)

Attaches wrist bands to watches, using handtools: Removes holding pins from case, using handtool, and inserts pins into holes in band. Reattaches pins

in case to secure band. Threads band through hole in women's watchcases, and crimps metal cord ring around band to secure band.
GOE: 06.04.23 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: ..

715.687-014 BARREL-CAP SETTER (clock & watch)
Attaches cap (cover) to mainspring barrel assembly, using handtools: Places barrel assemblies in nests of special holder. Positions caps on assemblies, using tweezers, and presses caps firmly in place, using cap press (handtool). Oils assembly, using fountain oiler or oil-filled hypodermic syringe.
GOE: 06.04.23 STRENGTH: S GED: R2 M1 L1 SVP: 3 DLU: 77

715.687-018 CRYSTAL ATTACHER (clock & watch)
Inserts watch crystals into bezels (grooved holding rings) by hand.
GOE: 06.04.23 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

715.687-022 DIAL BRUSHER (clock & watch) alternate titles: scratch brusher
Cleans and polishes timepiece dials or dial blanks, using power brushing wheel or handbrush: Applies abrasive powder to dials. Holds dials against rotating brush or manipulates brush over dials to clean and polish dials. Examines surface of dials subsequent to cleaning and polishing to verify specified cleanliness and finish, using loupe. Rinses dials in water or alcohol and dries dials in heated centrifuge.
GOE: 06.04.33 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

715.687-026 DIPPER, CLOCK AND WATCH HANDS (clock & watch)
Dips watch and clock hands, mounted on board, into lacquer to cover perforations in hands preparatory to painting with radioactive paint. Skims off film of thickened lacquer from surface of tank before repeating process, using spatula.
GOE: 06.04.33 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

715.687-030 FOOT STRAIGHTENER (clock & watch)
Straightens timepiece dial holding feet, using holding device and gauge: Positions dial in holding device, aligning feet with holes in fixture of device. Closes collet of device that squeezes and straightens feet. Places dial in gauge that duplicates watch movement to determine that feet are straight and properly positioned and that center and second holes are correctly placed.
GOE: 06.02.24 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

715.687-034 GAUGER (clock & watch)
Measures height of pinions on wheel to ensure conformance to specifications, using gauge: Adjusts pointer of dial gauge to zero mark according to standard pinion on gauge block. Places test wheel and pinion in nest of gauge block, using tweezers, and reads gauge to determine height of pinion. Separates pintons according to acceptable grade.
GOE: 06.01.05 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

715.687-038 HAIRSPRING CUTTER I (clock & watch)
Cuts off end of inner coil of watch hairspring to provide sufficient clearance for spring to slip over collet, using tweezers, hand clippers, and loupe. Places spring over gauge to determine if fit is correct.
GOE: 06.02.24 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

715.687-042 HAIRSPRING CUTTER II (clock & watch)
Cuts individual hairspring wires to specified length, using hand-operated cutting device: Pulls wire from spool and positions and clamps wire end in cutting stop. Pulls wire taut and cuts wire to specified length, using pivoted cutting blade.
GOE: 06.02.24 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

715.687-046 HAMMER ADJUSTER (clock & watch)
Shapes hammers used to strike bells in alarm clocks, using holding fixture: Fits ends of hammers into holding fixture. Bends arms to required shape by hand.
GOE: 06.02.24 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

715.687-050 INSPECTOR, BALANCE TRUING (clock & watch)
Inspects watch balance wheels to verify that rim lies in single plane and that plane is perpendicular to staff axis, using *truing II* caliper, tweezers, and loupe. Mounts balance wheel and staff between jaws of truing calipers, using tweezers, and adjusts index pointer above end of balance arm. Turns and examines wheel to verify that space between index and both arms is identical, using loupe. Adjusts index pointer over rim of wheel and verifies that width of light slit between rim and index does not vary as wheel is rotated. Rejects wheels that are not true.
GOE: 06.01.05 STRENGTH: S GED: R3 M2 L2 SVP: 3 DLU: 77

715.687-054 INSPECTOR, BALANCE WHEEL MOTION (clock & watch)
Examines motion of watch balance wheel to verify that wheel swings around an arc of at least 180 degrees, using holding fixture and loupe: Winds and positions watch in holding fixture. Examines swing of wheel utilizing balance arm as point of reference, to verify that swing is at least 180 degrees of arc, using loupe. Disassembles faulty balance wheel movements for repair.
GOE: 06.03.02 STRENGTH: S GED: R2 M2 L2 SVP: 3 DLU: 77

715.687-058 INSPECTOR, BALANCE-BRIDGE (clock & watch)
Examines assembled watch balance bridges to detect scratches and damaged screws and cap jewels, using loupe and tweezers. Centers regulator, using tweezers, and verifies that jewel is properly oiled, using loupe. Segregates faulty balance bridges.
GOE: 06.03.02 STRENGTH: S GED: R2 M1 L2 SVP: 3 DLU: 77

715.687-062 INSPECTOR, CASING (clock & watch)
Inspects assembled watches, clocks, and appliance timers for conformance to company standards: Scans assemblies to detect defects, such as surface blemishes, broken or scratched crystals, faulty plating, tightness of case, and presence of foreign matter. Turns crown and set buttons on assemblies to determine ease of setting and winding. Compares accuracy of watches and clocks with master clock to determine conformance to specified tolerances. Marks type of defects found on assemblies, using pencil or crayon, and places defective assemblies in containers for repair.
GOE: 06.03.02 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

715.687-066 INSPECTOR, DIALS (clock & watch) alternate titles: hands-and-dial inspector
Examines clock and watch dials for surface and mechanical defects, using loupe, gauges, and pick: Examines dials for surface defects, such as scratches, finger marks, double lines in printing of numerals, and defective lacquer coating, using loupe. Turns movement, dial side down, to determine if watch hands slip. Inspects hands to determine if they are aligned with numerals, are specified distances apart, and that they do not touch dial or crystal, using gauges. Moves second hand to ascertain if hand slips on arbor, using pick. Inspects dials for centering of center and second holes, using gauges. May bake dials in oven for specified time to harden lacquer coating.
GOE: 06.03.02 STRENGTH: S GED: R3 M2 L3 SVP: 4 DLU: 77

715.687-070 INSPECTOR, SOLDERING (clock & watch)
Inspects soldered dial feet to verify that solder has melted evenly and that feet are held securely. Tests positioning of feet, using go-not-go gauge. May mix flux for use in soldering dial feet.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

715.687-074 INSPECTOR, TIMERS (clock & watch)
Examines appliance timers for surface defects and sets timers preparatory to testing: Examines timers for defects, such as scratched dials, dents, and broken or missing parts. Places defective timers in carton for repair. Plugs test light into timer and turns dial of timer to specified setting. Places timer on vertical rack for testing and connects timer cord to electrical outlet. Flips switch of timer to verify that test light burns and that timer functions.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

715.687-078 MAINSPRING FORMER, ARBOR END (clock & watch)
Forms arbor end and arbor spiral on watch mainsprings so arbor end will fit snugly around arbor hole, using hand forming tool. Mounts mainspring and arbor blanks in forming tool, using tweezers, and moves levers to form specified end and spiral.
GOE: 06.02.24 STRENGTH: S GED: R2 M1 L2 SVP: 2 DLU: 77

715.687-082 MAINSPRING FORMER, BRACE END (clock & watch)
Bends brace end of watch mainspring to match inside of mainspring barrel, using hand bending tool. Places brace end against pin in center of tool, using tweezers. Turns clamp to secure brace end in tool and manipulates tool handle to bend brace end to specified shape.
GOE: 06.02.24 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

715.687-086 MASKER (clock & watch)
Brushes lacquer in second track recess of timepiece dial to prevent removal of finish during polishing and brushes lacquer over trylons (numerical markings) of dial to prevent trylons from being plated during dial-plating operation.
GOE: 06.04.33 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

715.687-090 MOTOR POLARIZER (clock & watch)
Polarizes motors used in timers and clocks, using electromagnet: Oils rotor pinion of motor, using oil-soaked cloth. Inserts motor between poles of electromagnet and activates electromagnet to polarize motor. Places polarized motor on conveyor for further processing. Tallies each polarized motor, using counting device, and records daily production.
GOE: 06.04.23 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

715.687-094 MOUNTER, CLOCK AND WATCH HANDS (clock & watch)
Mounts clock and watch hands on board preparatory to dipping in lacquer: Presses eyelet end of hand onto adhesive material on board with pointed end extending specified distance over edge of board, using tweezers. Examines mounted hands to ensure that all hands on board are aligned and parallel.
GOE: 06.04.23 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

715.687-098 PAINTER, CLOCK AND WATCH HANDS (clock & watch)
Brushes short narrow stripes of radioactive paint on watch and clock hands so that hands will be visible in dark, using artist's brush.
GOE: 06.04.33 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

715.687-102 PARTS REMOVER (clock & watch)
Removes watch parts from metal polishing blocks, utilizing one of following methods: (1) Heats block on hot plate to melt shellac, and pushes parts off block, using spatula, or holds block upside down and blows parts off block, using compressed airhose. (2) Heats and places block upside down on bed of handpress. Lowers ram to force parts out. (3) Places blocks in caustic solution to dissolve shellac and loosen parts.
GOE: 06.04.34 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

715.687-106 RACKER (clock & watch)
Places electric clocks or electric motors used in clocks and timers on rack and connects lead wires to current outlets preparatory to testing. Records quantity racked, identification number, rack number, and date.
GOE: 06.04.34 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

715.687-110 REAMER, CENTER HOLE (clock & watch)
Reams center holes of balance wheels subsequent to recessing operation to clean holes, using hand reamer and loupe.
GOE: 06.02.24 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

715.687-114 ROTOR ASSEMBLER (clock & watch)
Assembles rotors used in electric timer motors, using glue dispenser and die. Places rotor disk in die attached to conveyor. Positions rotor shaft, with hub attached, through hole of rotor disk. Presses tip of pencil-shaped glue dispenser against hub of rotor shaft and rotor disk to join parts. Places plastic pinion in die, lifts glued assembly from die, and presses rotor shaft through hole in pinion to complete rotor assembly. Places completed assemblies in tray for further processing.
GOE: 06.04.23 STRENGTH: S GED: R2 M1 L2 SVP: 2 DLU: 77

715.687-118 SET-KEY DRIVER (clock & watch)
Attaches time and alarm setting keys to assembled alarm clock movement, using press: Places keys into holding fixture of press and positions clock movement over keys so that ends of staff protrude through keyholes. Starts press that forces staffs into keys.
GOE: 06.04.23 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

715.687-122 SPRING LAYER (clock & watch)
Straightens, shapes, and forms clock springs, using holding fixture and pliers. Winds coiled spring around peg or pin of fixture and bends and shapes spring to specifications, using needle-nosed pliers.
GOE: 06.02.24 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

715.687-126 WASHER (clock & watch)
Immerses watch parts in series of cleaning and rinsing solutions to wash parts: Empties parts onto wire screen subsequent to washing and rinsing, and adds sawdust. Shakes screen causing sawdust to absorb moisture from parts and to drop parts through screen. Separates parts according to size, or places parts in box, for transfer to next operation. May dry parts, using electric lamp, centrifugal drier, or tumbling barrel. May weigh parts on balance scale. May mix cleaning solutions. May dip polishing blocks in caustic and soap solutions to remove shellac or vaseline and be designated Block Cleaner (clock & watch). May clean mainspring barrel assemblies, using buff stick dipped in naptha and be designated Mainspring-Barrel-Assembly Cleaner (clock & watch).
GOE: 06.04.39 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

715.687-130 WINDER (clock & watch)
Winds assembled watch movements and adjusts watch hands to indicate correct time preparatory to testing: Turns crown of movement against soft plastic sheet or holds crown against revolving plastic cup to wind movement or winds movement by hand. Rewinds movement after specified period and segregates movements that have gained or lost time in excess of specified amount.
GOE: 06.03.02 STRENGTH: S GED: R2 M1 L2 SVP: 3 DLU: 77

716 OCCUPATIONS IN FABRICATION AND REPAIR OF ENGINEERING AND SCIENTIFIC INSTRUMENTS AND EQUIPMENT, N.E.C.

This group includes occupations concerned with grinding, polishing, and coating optical lenses, reflectors, filters, and prisms and ophthalmic eyeglass, sunglass, and contact lenses.

716.130-010 SUPERVISOR (optical goods)
Supervises and coordinates activities of workers engaged in fabricating and inspecting eyeglass, contact, and precision optical lenses: Inspects lenses for defects and adherence to specifications, using devices such as polariscope, magnifying glass, protractor, and power determining instrument. Trains workers in operation of lens processing machinery, theory of optics, and lens handling. Keeps records and prepares reports on machine maintenance, lens breakage and spoilage, inventory and requisition of supplies, and personnel production and assignments. Sets up, adjusts, and repairs lens generators, polishers, edgers, and hardeners, using handtools. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to type of lens manufactured as Supervisor, Contact Lens (optical goods); Supervisor, Multifocal Lens (optical goods); Supervisor, Precision Optical Elements (optical goods); Supervisor, Sunglasses (optical goods); or according to department as Supervisor, Fusing Room (optical goods); Supervisor, Grinding And Polishing (optical goods). May be designated: Molding-Room Supervisor (optical goods); Supervisor, Inspecting (optical goods); Supervisor, Lens Generating (optical goods).
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 86

716.280-010 OPTICIAN APPRENTICE (optical goods; retail trade) alternate titles: ophthalmic-technician apprentice; optical-mechanic apprentice
Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.11 STRENGTH: L GED: R4 M4 L4 SVP: 8 DLU: 77

716.280-014 OPTICIAN (optical goods; retail trade) alternate titles: optical mechanic
Sets up and operates machines to grind eyeglass lenses to prescription specifications and assembles lenses in frames: Reads lens and frame specifications from prescription. Selects lens blanks from stock. Sets up and operates machines, such as generator, polisher, edger, and hardener, to fabricate lenses to specifications. Mounts lenses in metal, plastic, or rimless frames. Inspects mounted lenses for conformance to specifications [INSPECTOR, EYEGLASS (optical goods)]. Examines broken lenses to identify original lens prescription, using power determining and optical centering instruments.
GOE: 05.05.11 STRENGTH: L GED: R4 M4 L4 SVP: 8 DLU: 77

716.280-018 OPTICIAN (optical goods) alternate titles: flat optical element maker; optical model maker and tester; precision lens technician
Sets up and operates machine tools to fabricate optical elements and systems, applying knowledge of layout and machining techniques and procedures, shop mathematics, and properties of optical and abrasive materials: Studies work order, blueprints, and sketches to formulate machining plans and sequences. Measures and marks dimensions and reference points to lay out stock for machining. Selects premixed compounds or mixes grinding, polishing, and holding compounds according to formula. Mounts workpiece on holding fixture, using adhesive, friction, or vacuum. Mounts and secures workpiece and tooling in machines. Operates machines, such as saws, lathes, grinders, milling machines, generators, polishers, and edgers to fabricate optics, fixtures, tools, and mountings of specified sizes and shapes. Grinds and polishes optics, using handtools, as required. Measures and tests optics, using precision measuring and testing instruments. May develop specifications and drawings from verbal description. May perform experimental work and research to develop new production methods and procedures applying shop mathematics and knowledge of production techniques. May train and direct other workers.
GOE: 05.05.11 STRENGTH: L GED: R4 M4 L4 SVP: 8 DLU: 77

716.360-010 SIZER, MACHINE (optical goods)
Sets up machines to grind and polish edges or surfaces of lens blanks: Selects specified grinding and polishing tools and secures tools to machine spindles, using handtools. Turns adjustment screws to set radius of grinding and polishing arm stroke according to size of lens holding block. Sets time cycle which automatically stops machines on completion of grinding and polishing process. Tilts and secures generator machine head at required angle with workpiece according to specified curve and thickness of lens. Installs and adjusts lens holders and diamond wheel on edging machines according to diameter of lens. May dress grinding wheel.
GOE: 06.01.02 STRENGTH: L GED: R3 M3 L3 SVP: 7 DLU: 77

716.381-010 INSPECTOR, PRECISION (optical goods) alternate titles: inspector, optical elements; lens inspector
Inspects precision optical and ophthalmic lenses at various stages of production to ensure specified standards have been met, using precision measuring instruments: Reads prescription and work order to ascertain lens specifications. Examines lenses for defects, such as pits, scratches, unpolished areas, bubbles, and chips, using magnifying glass and polarized light. Verifies lens dimensions, such as thickness, size, curve, and position of bifocal element, using mechanical and fixed measuring instruments, such as calibrated microscope, micrometer, and test glass. Compares lens to sample to verify specified color. Mounts lenses on optical centering and power determining instrument, adjusts dials to focus and center test pattern, and compares power, centering, and axis readings with prescription to ensure specified standards have been met. Measures properties, such as coating thickness, angles, curves, and focal length of lens, using electronic, optical, and electromechanical measuring instruments, such as spectrometer, collimator, goniometer, and facimeters. Marks and routes defective lenses for rework or salvage. May clean optics to facilitate inspection. May be designated according to stage in production as Final Inspector (optical goods); In-Process Inspector (optical goods); or according to type lens inspected as Camera-Lens Inspector (optical goods); Contact-Lens Inspector (optical goods); Instrument-Lens Inspector (optical goods); Ophthalmic-Lens Inspector (optical goods); Prism Inspector (optical goods); Reticle Inspector (optical goods).
GOE: 06.01.05 STRENGTH: S GED: R4 M3 L4 SVP: 7 DLU: 78

716.381-014 LAY-OUT TECHNICIAN (optical goods)
Locates and marks centers, axes, and terminal points on ophthalmic lens blanks, draws reference lines, and writes specifications to guide workers who surface or finish lenses: Reads work order to ascertain lens specifications. Examines lens blank to ensure freedom from defects and to verify color and size specifications. Positions lens blank to be surfaced on protractor and marks center, direction of cylinder axis, and position of reading lens segment. Mounts lens blank to be finished in optical centering and power determining instrument and adjusts dials to align and focus target. Compares dial readings with work order to ensure lens blank has been surfaced to meet power and axis specifications. Rejects defective lenses. Depresses marking device on instrument to mark optical center and horizontal axis of lens blank. Writes specifications on lens blank to guide lens fabricating workers. May be designated according to department worked in as Bench-Lay-Out Technician (optical goods); Surface-Lay-Out Technician (optical goods).
GOE: 06.01.04 STRENGTH: S GED: R3 M3 L3 SVP: 6 DLU: 77

716.382-010 LATHE OPERATOR, CONTACT LENS (optical goods) alternate titles: contact-lens cutter

Operates jeweler's lathe to cut inside or outside curvature in contact lens blanks: Reads prescription to determine lens thickness and dioptric power and converts specified dioptric power to radius dimensions, using conversion table. Inserts plastic blank in holding chuck of lathe. Adjusts cutting tool mechanism for specified radius of inside or outside curvature and depth of cut. Starts lathe and turns crank to advance cutting tool. Observes gauge and readjusts lathe to prevent excessive cutting. Pulls control arm to move cutting tool across face of lens. Removes lens from chuck and examines lens for smoothness of cut. Measures lens to verify compliance with specifications, using thickness gauge and calipers. Tapes finished lens to work order and places lens in routing box.
GOE: 06.02.08 STRENGTH: L GED: R3 M3 L3 SVP: 5 DLU: 77

716.382-014 OPTICAL-ELEMENT COATER (optical goods)

Controls vacuum coating equipment to coat optical elements with chemical or metal film to alter reflective properties of elements: Reads work order to ascertain thickness of optical element and type coating material specified. Installs heating filament in coating machine according to type coating applied, using screwdriver. Fills crucible with coating material and positions crucible under heating filament. Secures optical element in jig and centers jig in vacuum chamber of machine to ensure uniform coating of optical surface. Places dome-shaped lid (vacuum bell) over jig or lowers lid equipped with window depending upon machine used. Starts machine that creates vacuum and releases chemicals or metal to form coating on optical element by process of sublimation or atomization. Observes changing colors of element through vacuum bell or through window in lid to determine when element is coated to specifications, or reads exposure meter to determine coating thickness. Applies and removes strip of cellophane to test adherence of coating to optical element. May immerse elements in chemical solution to clean elements. May operate ultrasonic vibrator to clean element. May inspect optical elements prior to coating to detect defects, such as blemishes, abrasions, and rough edges, using microscope. May cement optical elements together to form multiple laminated elements [CEMENTER (optical goods)]. May spray emulsion on lens preparatory to coating.
GOE: 06.02.21 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

716.382-018 PRECISION-LENS GRINDER (optical goods) alternate titles: lens grinder; optical technician

Sets up and operates grinding and polishing machines to make lenses, optical flats, and other precision optical elements for optical instruments and ophthalmic goods, such as telescopes, aerial cameras, military optical systems, and eyeglasses: Operates machine to rough-grind blanks of optical glass to approximate size and shape or manually positions and turns blanks against grinding wheel or *lap I*. Blocks optical element in plaster or other compound. Mounts blocked element in machine and operates machine to oscillate and rotate element against abrasive to fine-grind element to final size and shape. Periodically stops machine to inspect and measure elements for accuracy and degree of completion. Polishes surfaces, using lens-polishing machine [PRECISION-LENS POLISHER (optical goods) 716.682-018]. May cement lens elements together to obtain corrected lens assemblies. May mount optical elements in holders or adapters for use in instruments. May be designated according to type of lens ground as Eyeglass-Lens Grinder (optical goods); Instrument-Lens Grinder (optical goods); Multifocal-Button Grinder (optical goods).
GOE: 06.02.08 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 86

716.382-022 PRECISION-LENS-GRINDER APPRENTICE (optical goods) alternate titles: instrument-lens-grinder apprentice; lens-grinder apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 06.02.08 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

716.462-010 PRECISION-LENS CENTERER AND EDGER (optical goods)

Operates grinder to edge and bevel precision ophthalmic optical lenses: Reads work order or blueprint to determine edge specifications. Selects lens holding tool of specified size and mounts tool in truing machine. Starts machine and turns handwheel to move cutting tool into lens holding tool to true holding tool. Applies heated pitch or other adhesive to lens holding tool and affixes lens on tool. Passes beam of light through lens and repositions lens on holding tool until beam remains stationary to center lens on tool or centers lens, using collimator. Secures holding tool and lens assembly in fixture of edge grinder. Adjusts grinder for variables, such as speed, rate of feed, and depth and angle of cut. Starts machine and turns handwheel to bring grinding wheel in contact with lens. Observes machine operation; stops machine to measure lens edge, using precision measuring instruments, such as micrometers and calipers; and adjusts machine to grind and bevel edge to specifications. May hold lens against grinding wheel to bevel edges to specified angle. May set up machines for other workers and train workers to operate machines.
GOE: 06.02.08 STRENGTH: L GED: R3 M3 L2 SVP: 6 DLU: 77

716.681-010 BLOCKER AND CUTTER, CONTACT LENS (optical goods)

Blocks contact lens blanks and cuts lenses to specified diameter, using jeweler's lathe and handtools: Immerses *laps I* in molten wax and embeds lens in wax or presses two-faced adhesive tape into depression of lap, using rounded tool, and affixes lens to tape. Trims excess tape, using knife. Positions lens and lap assembly in blocking device. Presses plunger to center and fasten lens to blocking device. Mounts blocked lens in chuck of jeweler's lathe. Turns crank and observes gauge to set cutting tool for specified diameter. Starts lathe and turns handle to feed cutting tool into lens. Removes cut lens from lathe and smooths burrs, using emery cloth. Places laps in container of solvent to remove tape or wax residue before reuse.
GOE: 06.01.04 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

716.681-014 GLASS CUTTER, HAND (optical goods)

Lays out and cuts optical glass to specified dimensions and weight for molding into lens blanks, using templates, balance scale, and glass cutting tool: Examines optical glass stock or molded blanks for defects, such as bubbles, cracks, and scratches, and rejects defective stock. Weighs glass stock to facilitate cutting to specified weight, using balance scale. Traces outline according to dimension specifications, using template. Cuts glass according to pattern, using glass cutter. Grinds rough edges from blank, using rotating grindstone.
GOE: 06.01.04 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

716.681-018 LENS POLISHER, HAND (optical goods)

Hand polishes optical elements, such as lenses, prisms, and optical flats, to finish element or remove defects, using jeweler's rouge, polishing cloth or device, precision measuring instruments, and jeweler's lathe: Examines surface of element to detect defects, such as stains and scratches, and measures element to determine amount of finish required, using precision measuring instruments. Rubs rouge onto chamois, using jeweler's rouge stick, or onto polishing device mounted on workbench, using sponge. Rubs chamois over surface of element or oscillates element against polishing device to remove defects from element. Mounts element on spindle of jeweler's lathe, starts lathe, and holds rouge-coated chamois against element to finish element. Verifies dimensions of finished element, using precision measuring instruments, and examines elements to ensure all defects have been corrected, using magnifying glass. Cleans finished elements, using lens cleaning solution, cloth, and paper.
GOE: 06.01.04 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

716.681-022 OPTICAL-GLASS ETCHER (optical goods) alternate titles: glass etcher

Etches numerals and graduation lines on prisms and other optical glass surfaces for use in optical instruments, using pantograph engraver: Mounts glass specimens in holder. Dips glass elements in molten wax to obtain uniform protective coating. Positions tracing stylus of pantograph on template and guides stylus around template. Inscribes pattern of lines and numerals on elements in wax coating with needle which is affixed to pantograph arm. Exposes glass to hydrofluoric acid fumes to etch pattern. Cleans glass with water and solvents. Fills etched characters with opaque paste to improve readability. Inspects etched work for uniformity, using calibrated microscope.
GOE: 06.02.30 STRENGTH: S GED: R3 M2 L2 SVP: 4 DLU: 77

716.682-010 EYEGLASS-LENS CUTTER (optical goods) alternate titles: lens cutter

Sets up and operates bench-mounted cutting machine to cut eyeglass lenses to specified size and shape: Selects metal pattern according to prescription specifications and mounts pattern in spring clamp of cutting machine. Sets control dial for specified lens diameter plus allowance for edge grinding. Aligns center and axis marks on lens with markings on pad of cutting machine and lowers cushioned pressure arm of machine which holds lens in position. Lowers cutting arm over lens and turns crank which rotates lens under cutting wheel to determine if machine settings are correct. Presses cutting arm down to hold cutting wheel against lens and turns crank to cut lens. Removes lens from machine and chips excess material from lens edges, using chipping pliers. Routes cut lenses to edging department.
GOE: 06.02.08 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

716.682-014 PRECISION-LENS GENERATOR (optical goods)

Sets up and operates lens generating machine to grind ophthalmic and optical element blanks, such as lenses, prisms, and optical flats, to specified curvature and thickness: Reads work orders, sketch, or blueprint to ascertain grinding specifications. Selects specified size holding tool or fabricates tool to fit optic blank. Presses blank into holding tool and mounts tool in generator. Selects specified diamond grinding wheel and secures wheel on generator spindle. Adjusts generator controls to regulate rotation speed of tool and blank, rate of feed, angle of arc, and depth of cut. Positions coolant nozzle over blank and starts generator to grind blank to specified curvature and thickness. Observes generator operation. Stops generator after specified time lapse and measures optic blank to verify curvature and thickness, using precision measuring instruments, such as dial gauge, spherometer, and micrometer. May utilize pitch or vacuum holding device to secure blank on holding tool. May move generator controls manually to grind blank. May operate surface grinder or milling machine to generate optical surfaces. May be designated according to type lens ground as Cataract-Lens Generator (optical goods); Eyeglass-Lens Generator (optical goods); Instrument-Lens Generator (optical goods); Multifocal-Button Generator (optical goods). May operate lens generator to remove scratches and true surface of lens and be designated Truer (optical goods).
GOE: 06.02.08 STRENGTH: L GED: R3 M3 L3 SVP: 6 DLU: 77

716.682-018 PRECISION-LENS POLISHER (optical goods)

Operates polishing machines to polish ophthalmic lenses or optical elements, such as lenses, prisms, and flats for use as contact or eyeglass lenses or in pre-

cision optical instruments: Mounts optical element on holding tool, using tape or cement. Selects *lap I*, according to size of optical element and applies pitch or other adhesive to polishing face of lap. Presses optical element into adhesive to form polishing surface. Mounts holding tool on polishing machine spindle and positions lap and element assembly over tool. Applies abrasive, or positions abrasive flow nozzle over element, and starts machine that polishes element. Observes polishing operation and periodically stops machine to rinse element with water and to test element for conformance to specifications, using test lens, monochromatic light, microscope, and power determining and optical centering instruments. May guide polishing lap manually over element. May mix adhesive according to formula. May be designated according to type of lens polished as Contact-Lens Polisher (optical goods).
GOE: 06.02.08 STRENGTH: L GED: R3 M2 L2 SVP: 7 DLU: 78

716.684-010 BLOCKER, HAND (optical goods)
Affixes precision optical or ophthalmic lens blanks in metal blocks used to hold blanks during grinding and polishing operations: Selects blocks according to size of lens blank and heats blocks or lenses over gas burner to prepare for adherance of pitch or wax. Pours molten pitch into block, using ladle, or melts wax over holding surface of block, using torch. Presses and centers lens blank into wax or pitch. Pushes lens to test for adherance to block and positions blocked lens under fan for cooling. May smooth and remove sharp edges from lens, using grinding wheel. May test centering of lens in block, using lapping machine.
GOE: 06.02.30 STRENGTH: L GED: R3 M1 L1 SVP: 3 DLU: 77

716.685-010 BLOCKING-MACHINE TENDER (optical goods)
Tends *blocking machine* that seals optical or ophthalmic lens blanks in metal blocks preparatory to grinding and polishing of lenses: Applies lacquer to lens blank, using spray gun or brush. Mounts lens and block in blocking machine, aligns marks on lens blank and block, and clamps lens and block in place. Pulls lever to admit molten pitch or metal alloy and water through holes in block and starts machine that bonds lens blank to block. Pours molten pitch or loads solid metal into machine to replenish supply. May tend machine that casts metal block and bonds lens to block in one operation.
GOE: 06.04.08 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

716.685-014 DRILLER (optical goods)
Tends bench-mounted, single-spindle drill press that bores holes in optical lenses for attachment of ear and nosepieces: Holds lens against base of drill bit and puts drop of cutting oil over spot to be bored. Starts drill and regulates lever to lower and hold drill bit against lens. Wipes lens with soft cloth to remove cutting oil and glass grindings.
GOE: 06.04.08 STRENGTH: S GED: R2 M1 L1 SVP: 3 DLU: 77

716.685-018 GRINDER, HAND (optical goods) alternate titles: backside grinder
Tends machine that grinds approximate curves on lens blanks preparatory to fine grinding: Selects lens blanks as specified on production order. Places lens blank in holder and positions holder and lens assembly on diamond *lap I* of grinding machine. Lowers spindle of weighted arm onto lens holder to hold lens on lap. Starts machine and moves control arm back and forth to grind lens blanks to specified curvature or holds lens blank against grinding wheel to grind blank. Removes blank from holder and washes blank in water to remove grinding abrasive. Measures blanks to verify specified curvature, using lens gauge.
GOE: 06.04.08 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

716.685-022 LENS-FABRICATING-MACHINE TENDER (optical goods)
Tends one or more bench machines that generate, grind, edge, or polish ophthalmic lenses and precision optical elements: Mounts blocked element in machine holding device. Verifies machine settings or adjusts machines for variables, such as speed, machining time, and flow rate of abrasive or coolant. Starts machine that automatically generates, grinds, polishes, or edges optical element. Removes element after specified machining time, rinses element in water, and measures to verify specified dimensions of element, using micrometer, caliper, dial gauge, and shadowgraph. May deblock and clean element in degreasing tank. May be designated according to fabricating process or type lens fabricated as Contact-Lens-Curve Grinder (optical goods); Contact-Lens-Edge Buffer (optical goods); Fusion-Juncture Grinder (optical goods); Lens-Edge Grinder, Machine (optical goods); Lens-Generating-Machine Tender (optical goods); Multifocal-Button Countersink Grinder (optical goods).
GOE: 06.04.08 STRENGTH: L GED: R2 M2 L2 SVP: 4 DLU: 77

716.687-010 DEBLOCKER (optical goods) alternate titles: cleaner
Performs one or more of following duties to deblock and clean precision ophthalmic or optical elements, such as lenses, flats, prisms: Chills blocked element to crystallize pitch or other block adhesive and strikes block with mallet to separate element from block, or heats block to soften adhesive and removes element with fingers. Places lenses and elements in basket and immerses basket in degreasing tank or automatic cleaning machine. Places elements in tray of solvent. Cleans finished surfaces of element with pad and brush and rubs unfinished surfaces on board dusted with abrasive to remove foreign substances. Inspects lens to ensure cleanliness and freedom from defects. Sprays or brushes protective coating on element, allows coating to dry, and places in element tray or wraps in tissue. Replenishes solvents in trays and tanks. Drains molten metal block adhesive from machine or tank for reuse. May clean pitch from surface of block, using hammer, knife, and wire wheel.
GOE: 06.04.39 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

716.687-014 GLASS CHECKER (optical goods)
Tests glass stock for color density to determine acceptability of stock for colored lenses, using light transmitting equipment. Inserts colored glass stock in transmission equipment that passes light through stock and registers color density. Reads machine dial and rejects or accepts glass stock according to chart listing density specifications.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

716.687-018 INSPECTOR, MULTIFOCAL LENS (optical goods)
Inspects multifocal lenses or lens parts, at various stages of processing, for defects caused by flaws in glass or improper assembly. Examines lenses or lens parts, such as polished multifocal buttons, polished lens blanks, and fused multifocal buttons, for defects, such as scratches or chips on surface or presence of dust or water stains along fused juncture. Measures dimensions of lenses or parts, using lens gauge or millimeter ruler. Places lenses or lens parts in trays for transfer to other departments. Keeps production record. May chill mounted lenses in freezer to contract mounting pitch for ease of lens removal. May remove lenses or lens parts from block by tapping block with hammer. May be designated according to lens or lens part inspected as Fusing-Line Inspector (optical goods); Multifocal-Button Inspector (optical goods); Topside Inspector (optical goods).
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

716.687-022 LENS EXAMINER (optical goods) alternate titles: inspector-in-process; lens assorter; lens inspector
Performs one or more of following tasks to inspect glass and plastic lens blanks for defects: Removes paint and wax from blank with solvent and razor blade. Rinses blank in water. Examines surface and edges to detect defects, such as pits, scratches, and chips. Inspects blanks with polariscope to detect annealing defects, such as bubbles, striae, fire cracks, or seal checks. Marks defective blanks for rework or salvage, using crayon or pencil. Sorts blanks by grade and type of defect. Weighs lens blanks and records weight for determining shipping costs. May pack blanks in cartons for shipping. May gauge blanks [LENS-BLANK GAUGER (optical goods)]. May assemble nonprecision optical element into mechanical housing.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 4 DLU: 77

716.687-026 LENS-BLANK GAUGER (optical goods) alternate titles: clocker; lens assorter; neutralizer; sizer
Measures lens blanks for conformance to specified dimensions, using fixed curvature and thickness gauges, dial indicator, rule, or eye wire. Matches lens blanks with standard lenses to verify focal strength of blanks. Sorts blanks according to size, shape, or focal strength.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

716.687-030 LENS-BLOCK GAUGER (optical goods)
Examines blocked lens to determine whether lens blanks are positioned evenly on block, using template. Positions template over blocked lens blank, holds assembly against light, and examines assembly to detect presence of light between blank and template indicating uneven positioning of lens blank on block.
GOE: 06.03.02 STRENGTH: S GED: R2 M1 L2 SVP: 2 DLU: 77

716.687-034 WET INSPECTOR, OPTICAL GLASS (optical goods) alternate titles: optical-glass inspector
Inspects optical glass immersed in chemical bath, to detect striae (internal stresses): Selects premixed chemical solution or mixes liquid chemicals in tank according to refraction index and grade of glass. Immerses glass in bath and focuses Burton lamp, collimating light, or striae scope on glass to detect internal stresses (striae). Marks defective areas with pencil. Writes inspection results and maintains permanent records for each melt. Sorts and grades glass according to type of defect noted. May operate transmission machine [GLASS CHECKER (optical goods)] to examine glass for strain. May saw glass stock [GLASS CUTTER (any industry)].
GOE: 06.03.02 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

719 OCCUPATIONS IN FABRICATION AND REPAIR OF SCIENTIFIC AND MEDICAL APPARATUS, PHOTOGRAPHIC AND OPTICAL GOODS, HOROLOGICAL, AND RELATED PRODUCTS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with assembling, fabricating, and repairing scientific and medical apparatus, photographic and optical goods, watches and clocks and related products.

719.261-014 RADIOLOGICAL-EQUIPMENT SPECIALIST (inst. & app.) alternate titles: radiologic electronic specialist
Tests, repairs, calibrates, and assists in installation of radiological and related equipment used in medical diagnosis or therapy, applying technical knowledge of electronic, radiological, and mechanical systems, and user knowledge of computers, and using manuals, test equipment, measuring instruments, handtools, and power tools: Confers with supervisor, manufacturers' representatives, equipment operators, and other workers to discuss and establish work priorities, resolve equipment related problems, and plan installation, pre-

ventive maintenance, and repair procedures. Inspects and tests malfunctioning equipment to determine cause of malfunction, following learned procedures and repair manual instructions, using specialized test and analysis instruments and manufacturers' specifications. Disassembles malfunctioning equipment and removes, replaces, or repairs defective components, and readjusts components to manufacturers' specifications, using handtools, power tools, and measuring instruments. Removes old equipment, prepares space for installation of new equipment, and oversees installation of new equipment by manufacturer. Tests and calibrates equipment at regular or required intervals, using test and measuring instruments and handtools to maintain manufacturers' operational specifications. Selects, devises, designs, and installs mechanical or structural hardware, using tools and utilizing knowledge of mechanics and structures to resolve special equipment operation problems. Maintains records of maintenance and repair work and approved updates of equipment as required by manufacturer. Demonstrates operational procedures for equipment to users. May fabricate hardware, using machine and power tools, handtools, and related equipment. May work for manufacturer and specialize in particular line of equipment.
GOE: 05.05.11 STRENGTH: M GED: R5 M5 L5 SVP: 7 DLU: 89

719.381-014 HEARING-AID REPAIRER (inst. & app.)
Tests and repairs hearing aids, using oscilloscope, electrical test meters, and handtools, following schematic diagram: Tests circuits for shorts, open wires, or defective parts, using electrical test meters. Solders loose connections and replaces defective parts, such as resistors, condensers, batteries, and transistors. Repairs or replaces transformer, microphone, and volume control, using handtools. Cleans and lubricates mechanical parts with solvent and oil.
GOE: 05.10.03 STRENGTH: S GED: R4 M3 L4 SVP: 6 DLU: 78

719.381-018 BLOCK MAKER (protective dev.)
Molds lead blocks to be used as shields in radiation therapy treatments: Lays out x-ray film taken of patient in treatment position and tapes film over grid on lighted table. Sets distances on mold cutting machine, duplicating distances from which x ray was taken. Calculates required thickness of block, based upon equipment to be used in treatment and applying knowledge of geometry. Aligns template and styrofoam piece in blocking tray over x-ray film. Guides hand held stylus along lines drawn on x-ray film or print showing area to be treated, simultaneously cutting styrofoam piece with hot wire to form styrofoam mold used in making block. Sets mold in vise and tightens metal clamps to hold mold securely in position. Pours heated lead alloy into mold to form block. Mounts cooled block on lucite board, using screws. Installs finished block in tray of machine and views superimposed outline of block on x-ray film to verify accuracy of block and adherence to standards. Records patient information on finished block. May transport patients to and from treatment area.
GOE: 05.12.13 STRENGTH: M GED: R3 M3 L3 SVP: 3 DLU: 90

72 OCCUPATIONS IN ASSEMBLY AND REPAIR OF ELECTRICAL EQUIPMENT

This division includes occupations concerned with assembling, fabricating, or repairing equipment, components, and parts for equipment to transmit, control, or convert electrical power; signaling and detection equipment; and home radios, television sets, and phonographs.

720 OCCUPATIONS IN ASSEMBLY AND REPAIR OF RADIO AND TELEVISION RECEIVING SETS AND PHONOGRAPHS

This group includes occupations concerned with assembling and repairing radio and television receivers, recorders, phonographs, and related items. Occupations concerned with sound recording and transcription are included in Group 194.

720.281-010 RADIO REPAIRER (any industry) alternate titles: trouble shooter, radio
Repairs radio receivers, phonographs, recorders, and other electronic-audio equipment, using circuit diagrams and test meters: Tests wiring, tubes, resistors, and other parts, using electronic test equipment, such as voltmeters and oscilloscopes, to locate defects. Replaces defective parts, using handtools, and solders loose connections with soldering iron. May compute charges for labor and materials. May install radios in automobiles [AUTOMOBILE-ACCESSORIES INSTALLER (automotive ser.)]. May be designated according to type of radio repaired as Automobile Radio Repairer (any industry); Radio Repairer, Domestic (any industry).
GOE: 05.10.03 STRENGTH: L GED: R4 M2 L2 SVP: 6 DLU: 77

720.281-014 TAPE-RECORDER REPAIRER (any industry)
Tests, repairs, and adjusts tape-recording machines, following schematic diagrams and manufacturer's specifications, using handtools and electronic testing instruments: Disassembles machine and replaces worn parts, such as sprocket wheels, drive belts, electrical switches, and guide rollers, using handtools. Records voice and listens to playbacks to detect distortion in sound. Tests circuits, using instruments, such as voltmeters, oscilloscopes, audiogenerators, and distortion meters. Replaces defective resistors, condensers, and tubes. Solders loose connections. Tests operation of repaired recorder.
GOE: 05.10.03 STRENGTH: M GED: R4 M3 L2 SVP: 7 DLU: 77

720.281-018 TELEVISION-AND-RADIO REPAIRER (any industry) alternate titles: television repairer
Repairs and adjusts radios and television receivers, using handtools and electronic testing instruments: Tunes receiver on all channels and observes audio and video characteristics to locate source of trouble. Adjusts controls to obtain desired density, linearity, focus, and size of picture. Examines chassis for defects. Tests voltages and resistances of circuits to isolate defect, following schematic diagram and using voltmeter, oscilloscope, signal generator, and other electronic testing instruments. Tests and changes tubes. Solders loose connections and repairs or replaces defective parts, using handtools and soldering iron. Repairs radios and other audio equipment [RADIO REPAIRER (any industry)]. May install television sets [TELEVISION INSTALLER (any industry)].
GOE: 05.10.03 STRENGTH: M GED: R4 M3 L2 SVP: 7 DLU: 77

720.684-010 ASSEMBLY ADJUSTER (comm. equip.) alternate titles: record-changer adjuster
Tests and adjusts assembled phonograph turntable and record-changer unit for specified operation: Adjusts speed of turntable to specified number of revolutions per minute, using screwdriver and stroboscope. Listens for and eliminates noise in bearing. Removes humming noise from coil. Adjusts pickup arm, record magazine, elevator shafts and pads, and transfer lever to positions for accurate automatic record transfer.
GOE: 06.04.34 STRENGTH: L GED: R2 M2 L1 SVP: 3 DLU: 77

720.684-014 PHONOGRAPH-CARTRIDGE ASSEMBLER (comm. equip.) alternate titles: cartridge assembler
Assembles parts into components and components into complete phonograph cartridge assemblies: Positions, fits, and fastens together variety of small parts to make contact block assembly, using tweezers, toothpick, cement stick, and screwdriver. Welds ground piece to contact block, using spot welder. Solders fine wires from coils to contact block, seam in copper shield, and ground piece to shield, using pencil soldering iron. Plugs completed contact block assembly into ohmmeter to test for continuity. Assembles parts of magnet holder and stylus arm, using handpunch, tweezers, cement stick, holding fixture and loupe. Bakes subassembly in small oven to join parts and fix stylus angle. Fits subassemblies into potting assembly, verifies stylus alignement, and screws them together, using screwdriver.
GOE: 06.04.23 STRENGTH: S GED: R2 M2 L2 SVP: 5 DLU: 77

720.687-010 RECORD-CHANGER ASSEMBLER (comm. equip.)
Performs one or more repetitive operations to assemble record changers, such as positioning plates in jig, screwing and bolting parts together, soldering pickup and motor leads, and inserting springs and other small parts, using screwdrivers, wrenches, and soldering iron.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

720.687-014 RECORD-CHANGER TESTER (comm. equip.)
Tests automatic record changers for accuracy of record transfer and pickup movement by placing several records on changer and observing performance. Segregates for adjustment record changers not meeting performance standards.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

721 OCCUPATIONS IN ASSEMBLY AND REPAIR OF MOTORS, GENERATORS, AND RELATED PRODUCTS

This group includes occupations concerned with assembling and repairing electric motors, power generators, motor-generator sets, railway motors and control equipment; and motors, generators, and control equipment for gasoline-electric and oil-electric buses and trucks. Occupations concerned with winding and assembling coils, magnets, armatures, and related components are included in Group 724.

721.131-010 ELECTRIC MOTOR REPAIRING SUPERVISOR (any industry)
Supervises and coordinates activities of ELECTRIC-MOTOR ANALYST (any industry) and ELECTRIC-MOTOR REPAIRER (any industry) engaged in repairing electric motors, generators, switches, starting devices, and other electrical equipment. Estimates cost of repairs. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.10 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

721.131-014 SUPERVISOR, INSPECTION AND TESTING (elec. equip.)
Supervises and coordinates activities of workers engaged in inspecting and testing parts and subassemblies of electric motors and generators, such as armatures, stators, and field assemblies for conformance to specifications: Assigns workers to inspect parts for defects, such as improperly connected, broken, or cracked leads, surface defects on commutators, and for dimensional specifications of parts and subassemblies. Designates type of test, method and procedure, and equipment to be used in testing parts and subassemblies. Analyzes test data to diagnose cause of malfunctions and schedules repair of products not meeting specifications. Trains workers in use of testing equipment. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to operation coordinated as Supervisor, Coil And Armature Inspection (elec. equip.); Supervisor, Electric Motor Testing (elec. equip.).
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

721.261-010 ELECTRIC-MOTOR ANALYST (any industry)

Determines causes of failures in electric motors, following drawings and specifications and using handtools and electrical test meters: Dismantles motor, using handtools. Examines bearings, brackets, and other parts for wear and damage. Tests armature and stator for shorted, grounded, or broken wires, using electrical test meters. Lists causes of motor failures and repairs required and reports adjustment and repair requirements to repairer. May repair mechanical parts and reassemble motor, using handtools and power tools. May rebuild motor.

GOE: 05.07.02 STRENGTH: L GED: R4 M3 L2 SVP: 7 DLU: 77

721.261-014 FINAL TESTER (elec. equip.)

Conducts final test on electrical equipment, such as generators, motors, motor generator sets, switchgear, and control apparatus to determine conformity to specifications, using electrical testing equipment, measuring instruments, and mechanics' and electricians' handtools: Sets up test circuit by connecting unit to power supply, resistors, transformers, meters, and test panels in prescribed sequence. Operates and tests unit under specified conditions by moving levers, handwheels, knobs, and pushbuttons to apply prescribed voltages and current. Observes instruments, such as meters, tachometer, vibrometer, oscilloscope, thermometer, and potentiometer, and makes calculations, using slide rule, to determine resistance, starting torque heat, load, saturation, and other electrical characteristics. Observes and measures mechanical performance, such as ventilation, bearing noise, *airgap*, and end play, using micrometers, vernier, torsion meters, and other measuring and testing devices. Adjusts controls, such as resistors, relays, and circuit breakers to correct malfunctions. Records findings in test log and forwards findings to engineering department for analysis. May conduct dynamometer test on large motors and generators. May diagnose mechanical or electrical difficulties and suggest changes in design and operating function to engineering department. May mount units to test base.

GOE: 06.01.05 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

721.281-010 AUTOMOTIVE-GENERATOR-AND-STARTER REPAIRER (automotive ser.)

Tests, repairs, and rebuilds automotive generators and starters: Tests generator unit to ascertain amperage and voltage output, using voltmeter and ammeter. Disassembles unit and cleans brushes, bearings, shafts, and armatures in solvent and examines parts for wear or defects. Refaces commutator using lathe. Tests starter spring tension, using testing device. Replaces or repairs defective parts, and reinstalls generator in vehicle. Adjusts fan belt tension and voltage output. May charge or replace battery. May be designated according to part repaired as Automotive-Generator Repairer (automotive ser.); Automotive-Starter Repairer (automotive ser.).

GOE: 05.05.05 STRENGTH: M GED: R4 M3 L2 SVP: 6 DLU: 77

721.281-014 ELECTRIC-MOTOR ASSEMBLER AND TESTER (any industry) alternate titles: motor assembler

Assembles and adjusts repaired electric motors to meet specified ratings, using handtools and electrical meters: Cleans motor parts with gasoline. Repairs or replaces damaged parts and assembles motor, using handtools. Measures velocity, horsepower, and current consumption of motor, using electrical meters and mechanical testing devices. Adjusts motor to ratings specified on motor nameplate. May ream and fit motor bearings and grind, turn, and polish parts, using machine tools, such as grinder and lathe.

GOE: 06.02.23 STRENGTH: L GED: R4 M3 L2 SVP: 7 DLU: 77

721.281-018 ELECTRIC-MOTOR REPAIRER (any industry)

Repairs electric motors, generators, and equipment, such as starting devices and switches, following schematic drawings, and using handtools, coil-winding machines, power tools, and test equipment: Disassembles and removes armature, stator, or rotor from housing. Examines coil connections for broken or defective wiring. Tests coils, armatures, stator, rotor, and field coils for continuity, shorts, and grounds and insulation resistance, using test lamp, ammeter, and ohmmeter. Cuts out or removes defective coils and removes insulation from core slots. Cuts and forms insulation and inserts insulation into armature, rotor, or stator slots. Rewinds coils on core while in slots manually or makes replacement coils, using coil-winding machine. Installs and aligns prewound coils in slots, using hammer, drift, or mallet. Replaces defective coil leads and solders connections of coils in specified sequence. Examines bearings, shafts, and other moving parts for excessive wear or defects. Refaces commutators and machines parts to specified tolerances, using machine tools. Assembles and tests motor for specified performance. May be designated according to size of motor repaired as Fractional-Horsepower Motor Repairer (any industry); equipment repaired as Dynamotor Repairer (any industry); or part repaired as Armature Straightener (elec. equip.); Coil-Connector Repairer (elec. equip.); Commutator Repairer (any industry); Field-Coil Repairer (elec. equip.); Stator Repairer (any industry).

GOE: 05.05.10 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

721.281-022 MAGNETO REPAIRER (any industry)

Tests and repairs magnetos used in gasoline and diesel engines, using meters, gauges, and handtools: Connects magneto to motor and electrical test panel and starts motor to determine source of malfunction. Disassembles magneto and inspects coils, condenser, and armature for shorts. Repairs or replaces worn or defective parts, using handtools. Verifies polarity of armature. Cleans parts with alcohol or solvent and reassembles unit. Adjusts breaker points, using feeler gauge. Installs magneto in engine.

GOE: 05.05.05 STRENGTH: L GED: R4 M2 L2 SVP: 6 DLU: 77

721.281-026 PROPULSION-MOTOR-AND-GENERATOR REPAIRER (automotive ser.)

Reconditions defective motors and generators of electric buses: Lifts propulsion motors or generators onto worktable, using chain hoist. Disassembles defective units, using handtools. Inspects parts to determine required repairs. Repairs or replaces worn and defective parts, such as carbon brushes, cables, and connecting wires. Reassembles motors and generators. Tests circuitry, using testing lamp.

GOE: 05.05.10 STRENGTH: M GED: R4 M3 L2 SVP: 7 DLU: 77

721.281-030 TESTER, MOTORS AND CONTROLS (elec. equip.)

Tests endurance and performance of electric motors and electrical-control components, such as motor reversers, cam and unit switches, shunt contactors, and magnet valve adapters under simulated operating conditions, in laboratory or production areas, following specified procedures, using testing equipment: Positions motors or parts, such as switches, contacts, and magnetic cores on test rack, and connects leads to power source and test panels. Pulls switch to start equipment and regulates controls for prescribed timing, speeds, and voltages. Turns off lamps and moves rheostat controls of generators to adjust load resistance. Observes and adjusts measuring instruments, such as ammeters and voltmeters, in prescribed sequence, to measure electrical characteristics, such as blow-out, drop-out, pick-up, resistance, electrical stress, and iron content of cores. Examines parts for mechanical defects or failures. Records test data. May replace worn brushes on power supply generator. May be known according to item tested as Transformer Tester (elec. equip.).

GOE: 06.01.05 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

721.361-010 INSPECTOR, MOTORS AND GENERATORS (elec. equip.)

Examines electric motors, generators, and parts, such as coils, commutators, armatures, and stators, for compliance with specifications, using measuring devices and test equipment: Examines parts to detect defects, such as faulty insulation, broken wires, burrs, and nicks. Compares windings, soldered connections, and location of parts with schematics and blueprints to ensure compliance with specifications. Verifies dimensional specifications of parts and measures *airgap* between parts, using micrometers, vernier, calipers, and scale. Tests windings for resistance, shorts, and grounded wires, using testing apparatus. Tags rejected parts and assemblies for repair. Records inspection data.

GOE: 06.01.05 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

721.381-010 ELECTRIC-MOTOR FITTER (railroad equip.) alternate titles: car repairer; motor assembler; motor overhauler

Cleans, assembles, and tests motors of locomotives and streetcars: Disassembles motors by removing bolts and nuts from motor case heads, fastening crane hook to case heads and armatures, and directing HOISTING ENGINEER (any industry) to hoist parts from motor cases. Routes armatures to repair shop. Cleans case heads in hot ammonia bath. Scrapes inside of motor cases to remove grease and dirt, and applies insulating paint. Inspects motor lead wires and replaces worn insulation tape. Reassembles motors working with HOISTING ENGINEER (any industry) in handling heavy parts. Connects motor lead wires to power source and tests motor for r.p.m. and overheating, using speed gauges and thermometers.

GOE: 05.05.05 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 77

721.381-014 ELECTRIC-MOTOR-CONTROL ASSEMBLER (elec. equip.) alternate titles: control-panel assembler; panelboard assembler; power-panel assembler

Assembles electric-motor control units, such as transmitters, relays, switches, voltage controls, and starters and mounts unit on panel according to drawings and specifications, using handtools and power tools: Cleans parts, using liquid cleaner, airhose, and cloth. Assembles units, using handtools, pneumatic nut runners, power press, and torque wrenches. Lays out and drills mounting holes and mounts units to panel, using scribers, rule, dividers, drill press, portable power drill, reamer, screwdrivers, and wrenches. Adjusts and aligns parts to maintain specified *airgap*, contact wipe, dimensions, and part movement, using feeler gauges and micrometers. Solders electric wire connections and secures spring guides, setscrews, and spring post to units, using soldering iron and acetylene torch. Tests electrical circuits for resistance, current, and potential difference, using instruments, such as ohmmeter, ammeter, and voltmeter. May be designated according to control assembled as Transmitter Assembler (elec. equip.); Voltage-Regulator Assembler (elec. equip.). May also operate sheet metal forming machines to fabricate housing for synchro-units and be designated Synchro-Unit Assembler (elec. equip.).

GOE: 06.01.04 STRENGTH: M GED: R4 M3 L2 SVP: 6 DLU: 77

721.381-018 GOVERNOR ASSEMBLER, HYDRAULIC (elec. equip.)

Assembles and adjusts mechanical and electrical parts to construct governors for hydraulic turbines, according to specifications, using pneumatic tools, handtools, gauges, and micrometers: Aligns motor mounts and motors on reservoir base and marks location. Removes motors and drills and taps foundation holes. Inserts steel pins in holes to secure motors to base. Positions mechanical parts, such as actuator, *kaplan*, oil basket, strainers, oil ramp, hydraulic cylinder, valves, and subassemblies to base and inside of reservoir, to form governor unit subassembly. Joins frame, doors, trim, and deck plates to assemble metal cabinet, using handtools. Attaches governor unit subassembly to cabinet frame. Assembles meters, gauges, indicators, switches, and control panels and mounts on unit. Shapes conduit for electrical lines and laces electrical cables,

using soldering iron to secure connections. Assembles pump and fits pipelines, valves, vents, and pressure lines, using plumbers' tools. Tests performance of completed unit for conformance to specifications. Disassembles unit and crates and wraps parts to prepare parts for shipping. Attaches name plates, marks, and other identification on items. May machine and fabricate parts to complete job when drawing changes occur.
GOE: 06.01.04 STRENGTH: M GED: R4 M3 L2 SVP: 7 DLU: 77

721.484-010 ELECTRIC-MOTOR WINDER (elec. equip.) alternate titles: armature-and-rotor winder; coil assembler

Assembles and tests electric motor and generator stators, armatures, or rotors: Inspects cores for defects and aligns laminations, using hammer and drift. Files burrs from core slots, using hand file, portable power file, and scraper. Lines slots with sheet insulation and inserts coils into slots. Cuts, strips, and bends wire leads at ends of coils, using pliers and wire scrapers. Twists leads together to connect coils. Taps coil and end windings to shape, using hammer and fiber block. Tests windings for motor-housing clearance, grounds, and short circuits, using clearance gauge, growler, spring-steel blade, telephone receiver, insulation tester, and resistance bridge. Winds new coils on armatures, stators, or rotors of used motors and generators. May rewind defective coils. May be designated according to motor part wound as Armature Winder (elec. equip.); Rotor Winder (elec. equip.); Stator Winder (elec. equip.).
GOE: 06.02.23 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

721.484-014 FIELD-RING ASSEMBLER (elec. equip.) alternate titles: assembler dc field ring; assembler dc field yoke; brush maker; carbon-brush maker; motor-and-generator-brush cutter

Assembles field poles and interpoles to steel housing ring (yoke) to build field rings for dc motors and generators: Slips insulated coils over pole piece and drives fiber spacing wedges between them. Bolts field poles and interpoles to inside face of yoke, adjusting airgap by measuring with micrometer and inserting shims. Lays out, cuts, drills, punches, and forms copper strap to connect coils of large units. Fastens coil connections with bolts.
GOE: 06.02.23 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

721.484-018 INSULATION CUTTER AND FORMER (elec. equip.)

Cuts and forms insulation, gaskets, and wedges used in electric motors and generators, performing any combination of following duties: Measures and marks dimensions and holes on insulation material, such as felt, fiber, mica, and fiberglass, using specifications or template. Places sheet of insulation against shearing machine stops, depresses pedal to lower blade to cut strips, or inserts sheet under roller-type holddown and against stops of circular saw to cut strips. Places cut material into bending machine and depresses pedal to rotate movable section around fixed mandrel to shape sides. Holds flat and wedge insulation against pedestal grinder to grind U-shaped bevel in end or inserts mica sheets between drums of drum sander to wear down to specified thickness. Measures thickness of each mica sheet, using micrometer, and stacks sheets according to dimensions. May cut shaped wooden or fiber strips to lengths for wedges, using bandsaw.
GOE: 06.02.32 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

721.484-022 SKEIN WINDER (elec. equip.)

Inserts loops of prewound skein of wire into slots of stators for fractional-horsepower motors: Loops skein end and inserts two sides in adjacent coil slots, manipulating wire with fingers. Forms additional loops in skein and inserts in other pairs of slots until entire skein is wound into core.
GOE: 06.02.32 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

721.684-010 ARMATURE-WINDER HELPER, REPAIR (any industry)

Assists ARMATURE WINDER, REPAIR (any industry) in repairing electric motors and generators: Burns old insulation from coils, using blowtorch, and strips old coils from armatures and stators, using handsaw and wirecutter. Scrubs mechanical parts of motors, such as shafts, gears, and laminations, using cleaning fluid, wire brush, and scraper. Guides compressed air stream on parts to dry and remove loose dirt. Winds coils, using coil winding machine. Tapes coils by hand or using machine. Dips armatures and stators in enamel or varnish tank to insulate coils and paints motor and generator housings, using brush. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.16 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

721.684-014 ASSEMBLER, CARBON BRUSHES (elec. equip.)

Assembles carbon brushes by performing any of following tasks: Drills hole in precut carbon block, using drill press. Cuts copper wire to specified lengths, using hand shears. Positions and clamps block on workbench. Inserts wire into hole and wedges wire with copper pin, fastens wire with rivet or screw, or solders wire, using soldering iron. Attaches copper eyelet to free end of wire and solders eyelet to wire. Immerses brush in electroplating solution to cover brush with copper coating. Stamps manufacturer's name on brush, using die. May cut carbon to specified size.
GOE: 06.02.23 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

721.684-018 COIL CONNECTOR (elec. equip.) alternate titles: connector

Twists ends of coil wires together to connect prewound coils of electric motor and generator parts, such as stators, rotors, and armatures, using soldering equipment and handtools: Lifts or hoists unit with crane to workbench or winding buck. Pounds coils, using hammer, block, and drift to compact and align coils in slots and form leads on strap coils. Cuts protruding insulating material, skins ends of coil wire, and splices lead connections of stator coils, using pliers. Places leads of armature coils into commutator bar slots and secures leads, using drift and hammer. Brazes or pours molten solder over connections, using brazing torch or soldering pot and ladle. Tapes connections, and laces and ties coil leads to stator end windings or commutator risers, using tape hook [LACER AND TIER (elec. equip.)]. May test unit for short circuit, grounds, and weak insulation. May be known according to motor part connected as Armature Connector (elec. equip.) I; Stator Connector (elec. equip.).
GOE: 06.02.32 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

721.684-022 ELECTRIC-MOTOR ASSEMBLER (elec. equip.) alternate titles: assembler; assembly hand

Assembles subassemblies and parts of dynamotors, converters, and electric motors used in instruments, appliances, and power tools, performing any combination of following tasks, using power tools and handtools: Bolts field windings and brush holders into motor housings, using wrenches, screwdrivers, and holding fixtures. Presses bushings and bearings into motor head, using arbor press. Secures fans and gears to armature shaft, using nuts and lock washers, and places armature shaft in bearings. Solders or screws electrical leads to brushes, and switch and cord assembly, using soldering iron. Assembles end brackets and base to housing and fastens assembly with screws. Lubricates gears and other moving parts, using oilcan, paddle, or grease gun. Turns shaft to ensure free movement of parts. May screw covers on motor ends to keep out dirt and moisture during shipment. When replacing defective parts in motors is designated Repairer, Electric Motor (elec. equip.). May be designated according to type motor assembled as Assembbler, Instrument Motors (elec. equip.) or part assembled as Brush-Holder Assembler (elec. equip.).
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

721.684-026 SPIDER ASSEMBLER (elec. equip.) alternate titles: assembler, caterpillar spider; revolving field assembler; rotating field assembler

Assembles coils, poles, and fastening devices to rotor spider to build rotating field for motors and alternators (generators): Aligns poles on spider and secures with nuts and lockwashers. Slips coil over insulated core (pole) and bolts pole shoe in place over coil and pole piece. Drills and taps holes to fasten clamps with bolts to secure connecting cable between coils. Secures collector rings to shaft, using keys, bolts, and washers or presses rings to shaft, using hydraulic press, or heats rings, using portable gas oven and allows to shrink. May cut, drill, and form copper and steel bar stock for leads and clamps, using electric drill, power saw, and forming fixture.
GOE: 06.02.23 STRENGTH: M GED: R4 M2 L2 SVP: 6 DLU: 77

721.687-010 CLEANER AND PREPARER (elec. equip.)

Cleans and applies paint and masking materials on motor and generator subassemblies to preserve surface for further processing: Brushes solvents onto parts or dips parts into caustic solutions to loosen paint, grease, dirt, and other foreign substances. Rinses parts with hot water. Removes loosened paint, using scraper, wire brush, or portable buffer. Brushes grease and masking compound on subassemblies, inserts cork plugs into holes, and tightens screws to keep insulating material or paint from specified areas. Coats parts with paint or insulating material, using spray gun or dipping tank.
GOE: 06.04.33 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

722 OCCUPATIONS IN ASSEMBLY AND REPAIR OF COMMUNICATIONS EQUIPMENT

This group includes occupations concerned with assembling and repairing wire and wireless telephone and telegraph equipment and parts, radio and television broadcasting equipment and parts, electronic field detection apparatus, light and heat emission operating apparatus, object detection apparatus and navigational electronic equipment, aircraft and missile control systems, electronic data processing equipment, and electronic and electric communication and signaling products.

722.131-010 INSTRUMENT-SHOP SUPERVISOR (tel. & tel.)

Supervises and coordinates activities of INSTRUMENT REPAIRERS (tel. & tel.) in repair and maintenance of telephone and telegraphic equipment: Examines and tests equipment, such as telephones, teletypewriters, station and switching apparatus, private-branch-exchange systems, and perforation equipment to determine repairs required, using electrical and electronic testing devices. Assigns workers to repair tasks. Supervises final inspection of equipment to ensure conformance to specifications. May be designated according to type of equipment maintained as Communications-Equipment Supervisor (tel. & tel.); Telegraphic-Instrument Supervisor (tel. & tel.); Telephone-Instrument Supervisor (tel. & tel.). Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.10 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 77

722.281-010 INSTRUMENT REPAIRER (tel. & tel.) alternate titles: shop repairer

Repairs, tests, and modifies telephone and telegraphic equipment, such as telephones, teletypewriters, tickers, and switchboards, using handtools and power tools: Adjusts component parts of equipment, such as dials, coin tracks, springs, and relays to conform to specifications. Verifies wiring and location of parts, using schematic drawings. Tests and calibrates reassembled equipment, using electrical testing devices, such as ohmmeter and circuit analyzers. Rewires and modifies equipment in accordance with engineering changes and traf-

fic-handling requirements. Cleans instruments and parts, using specified solvents. Maintains daily record of instruments and equipment repaired. May assist in sorting, cataloging, and storing repaired parts and equipment.
GOE: 05.05.10 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

722.381-010 ASSEMBLER (tel. & tel.) alternate titles: assembler, equipment; wirer

Wires switchboards, operating tables, and other telegraph apparatus to specifications, using handtools and soldering iron. May test wiring installations, using meters.
GOE: 06.01.04 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

722.381-014 INSTRUMENT INSPECTOR (aircraft mfg.; air trans.)

Inspects, tests, and adjusts navigational and control instruments and components for aircraft and aerospace vehicles, according to blueprints, technical orders, manufacturers' data, and other specifications, using precision measuring instruments and testing equipment: Examines instruments and components for defects, such as broken dials and scratched surfaces. Tests functional and operational performance of instruments and components, such as altimeters, airspeed indicators, turn and bank indicators, radar beacon sets, and directional gyroscopes, to determine conformance to specifications, using testing equipment. Inspects, calibrates, and adjusts instruments and components, using precision instruments. Records inspection information. May contact vendors, customers, or others to exchange information or coordinate inspection activities. May interpret inspection information and recommend corrective action for recurring instrumentation problems. May be required to maintain Federal Aviation Administration certification to repair and adjust instruments. May be designated according to type of instruments inspected as Inspector, Radar And Electronics (aircraft mfg.).
GOE: 06.01.05 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 88

722.687-010 SWITCHBOX ASSEMBLER I (comm. equip.)

Inserts metal dovetails of box sides into slots of metal box bottoms, and hammers to clamp parts together to form switchboxes for telephones.
GOE: 06.04.23 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

723 OCCUPATIONS IN ASSEMBLY AND REPAIR OF ELECTRICAL APPLIANCES AND FIXTURES

This group includes occupations concerned with assembly and repair of small appliances, such as toasters, grills, mixers, and coffee makers; lighting fixtures; and cord sets, switches, sockets, and related products.

723.131-010 SUPERVISOR, SMALL APPLIANCE ASSEMBLY (house. appl.) alternate titles: supervisor, assembly line

Supervises and coordinates activities of workers engaged in assembly, inspection, testing, repair, and packing of toasters, irons, percolators, and related small electrical appliances: Reviews inspection and test reports to determine causes of appliance defects, such as motors heating up, insufficient revolution per minute, and short and grounded circuits. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

723.132-010 SUPERVISOR, FABRICATION DEPARTMENT (light. fix.)

Supervises and coordinates activities of workers engaged in fabricating and assembling wall lamps, floor lamps, and hanging fixtures. Requisitions parts and materials according to design sketches and knowledge of fixture making. Trains workers in operation of equipment. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

723.361-010 MODEL MAKER, FLUORESCENT LIGHTING (light. fix.)

Lays out and constructs experimental models of fluorescent lighting fixtures, such as those used in buildings and tunnels, following blueprints, designs, and engineering sketches: Computes dimensions and lays out outline of fixture on sheet metal, using rule, scribe, and drafting tools. Cuts and shapes metal, using hand and power brakes and shears, files, and mallets. Assembles fixture and installs electrical components and wiring, using spot-welding machine and handtools. Fastens glass or plastic lens in place, using clips, bolts, or screws, and tightens fluorescent tube in sockets. Connects fixture to electrical outlet and tests continuity of fixture's circuit, using circuit tester. Records dimensions, bending angles, hole locations, and other specifications, for use in production of fixture. May inspect installed fixtures and make minor repairs.
GOE: 05.05.06 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

723.381-010 ELECTRICAL-APPLIANCE REPAIRER (any industry) alternate titles: appliance-service representative; small-appliance repairer

Repairs electrical appliances, such as toasters, cookers, percolators, lamps, and irons, using handtools and electrical testing instruments: Examines appliance for mechanical defects and disassembles appliance. Tests wiring for broken or short circuits, using voltmeters, ohmmeters, and other circuit testers. Replaces defective wiring and parts, such as toaster elements and percolator coils, using handtools, soldering iron, and spot-welding equipment. May compute charges for labor and materials. May assist ELECTRICAL-APPLIANCE SERVICER (any industry) in repairing such appliances as refrigerators and stoves.
GOE: 05.10.03 STRENGTH: L GED: R4 M2 L3 SVP: 6 DLU: 77

723.381-014 VACUUM CLEANER REPAIRER (any industry)

Repairs and adjusts vacuum cleaners, using handtools: Observes ammeter reading and listens to sound of cleaner motor to detect cause of faulty operation. Repairs, adjusts, or replaces defective brushes, belts, fans, control switches, extension cords, electric motors, or other mechanical or electrical parts, using handtools. Lubricates cleaner parts, using grease gun. May sell and demonstrate vacuum cleaners.
GOE: 05.10.03 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

723.584-010 APPLIANCE REPAIRER (house. appl.) alternate titles: repairer

Repairs portable, household electrical appliances, such as fans, heaters, vacuum cleaners, toasters, and flatirons, on assembly line: Refers to inspector's checklist, or defect-symbol marked on appliance, to identify defective or malfunctioning part. Disassembles appliance to remove defective part, using power screwdrivers, soldering iron, and handtools. Installs new part, and reassembles appliance. Records nature of repair in log or on mechanical counting device. Maintains stock of replacement parts. May determine repair requirements by connecting appliance to power source or examining parts for defects while disassembling. May file or bend parts to remove burrs or to improve alignment and fit. May hold appliance against buffing or polishing wheel to remove scratches from metal surfaces. May touch up paint defects, using brush or spray gun. May be designated according to part repaired as Heating-Element Repairer (house. appl.); or appliance repaired as Electric-Frying-Pan Repairer (house. appl.); Food-Mixer Repairer (house. appl.); Toaster-Element Repairer (house. appl.); Vacuum-Cleaner Repairer (house. appl.).
GOE: 05.10.03 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 77

723.684-010 ASSEMBLER (house. appl.)

Assembles parts and subassemblies to form portable electrical appliances, power tools, and other products, using fixtures, handtools, and power tools: Inserts screws, bolts, or rivets through holes in parts or subassemblies and tightens fasteners to secure components, such as field windings, fan blades, pulleys, heating elements, thermostats, switches, and timers, using handtools and power tools. Reams bearing holes in housing assembly, using hand reamer, and places armature shaft in bearings of product. Turns setscrew to adjust end play of motor. Hooks lug ends of wires to terminals, tightens bolts, or solders connection to fasten instruments with burner, motor, or outlet cord. May be designated according to product assembled as Deep-Fryer Assembler (house. appl.); Electric-Fan Assembler (house. appl.); Electric-Heater Assembler (house. appl.); Food-Mixer Assembler (house. appl.); Power-Tool Assembler (house. appl.); Steam-Iron Assembler (house. appl.).
GOE: 06.04.23 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

723.684-014 ASSEMBLER I (light. fix.) alternate titles: lamp wirer

Assembles component parts to make subassemblies or completed units of lighting fixtures, such as chandeliers, lamps, shades, or reflectors: Threads and pulls wire through lighting fixture body or frame. Strips insulation from ends of wire and attaches ends to terminal or socket lugs, using knife, pliers or stripping tool, and screwdriver. Bolts or screws wired parts together, using screwdriver and other handtools. Inserts incandescent bulb or fluorescent tube into fixture and connects wire to electrical outlet to test unit. May be designated according to type of fixture assembled as Assembler, Fluorescent Lights (light. fix.); Assembler, Incandescent Lights (light. fix.).
GOE: 06.02.23 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

723.684-018 ASSEMBLER II (light. fix.)

Assembles metal lighting fixtures, using handtools and drill press: Screws together threaded parts by hand. Bores holes in fixtures, using drill press. Fastens together parts with bolts or screws by hand, or using tools, such as wrenches and screwdrivers. Inserts wire into fixture. May work from blueprints or sketches.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

723.684-022 FLASHER ADJUSTER (light. fix.)

Tests and adjusts flasher units used in automobile directional signals, using chuck, meter, and handtools: Inserts flasher into socket of chuck. Observes reading on meter and bends frame of flasher, using pliers, until meter reading is accurate.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

723.685-010 HEATING-ELEMENT WINDER (elec. equip.; house. appl.)

Tends machine that winds spiral-spring resistance wire onto mica-plate core to form heating element: Inserts core in slotted shaft of winding motor, and hooks wire end to core. Depresses pedal to start motor that rotates core, and guides wire between thumb and fingers to seat turns of wire in slots at edge of mica plate. Controls core-rotation speed by pressure of hand on brake wheel attached to motor shaft, and stops motor when end of wire is reached. May test heating element, using ohmmeter.
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

723.687-010 PATCHER (house. appl.)

Covers wired electrical appliance components, such as thermostats used in heating pads, with insulating fabric: Tears piece of adhesive from dispenser roll, and places adhesive on workbench. Positions thermostat on fabric and arranges lead wires to prevent strain on soldered connections. Folds and seals fabric over thermostat, using fingers. May touch lead wires to test terminals and observe signal light to verify wiring continuity.

GOE: 06.04.34 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

723.687-014 TESTER AND INSPECTOR, LAMPS (light. fix.)

Inspects and tests lamps after assembly to determine if they are in satisfactory condition. Plugs lamp into electric outlet and turns on switch. Touches metal parts of lamp with exposed ends of live testing wires for indication of short circuit. Inserts metal test rod into lamp socket and touches contact point to ascertain continuity of circuit. Affixes gummed inspection ticket on each lamp found to be satisfactory.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

723.687-018 TESTER, WASTE DISPOSAL LEAKAGE (house. appl.)

Tests household waste disposal units for leaks, using air pressure device: Places unit on test stand and pulls lever to secure unit in place. Attaches air-hose and fills unit with air. Observes warning light which indicates leakage. Places defective units on bench for rework. Hangs acceptable units on overhead conveyor.
GOE: 06.03.02 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

723.687-022 WIPER (light. fix.)

Cleans copper or brass lamp components and assemblies to remove excess paint or smudge, using cloth and solvent. Removes tape around edges or rims of lamps, using wiper and solvent. Dips cloth into solvent and wipes around unpainted areas of lamp component or assembly. Stacks parts or lamps for removal to lacquering section.
GOE: 06.04.39 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

724 OCCUPATIONS IN WINDING AND ASSEMBLING COILS, MAGNETS, ARMATURES, AND RELATED PRODUCTS

This group includes occupations concerned with cutting, winding, taping, forming, stripping, connecting, and soldering wire to fabricate, assemble, and repair coils, magnets, armatures, and related products.

724.130-010 SUPERVISOR, ELECTRONIC COILS (elec. equip.; electron. comp.)

Supervises and coordinates activities of workers engaged in winding, assembling, and testing electronic inductor devices, such as coils, filters, and transformers. Analyzes production schedule to plan assignments for section and assigns duties to workers. Examines product for conformance to manufacturing and quality standards. Demonstrates method and sequence for performing duties, and trains workers in operation and control of machines and equipment. Initiates or recommends personnel actions, such as hiring, transferring, promoting, or disciplining. Maintains records and prepares cost, yield and breakage, and maintenance reports. Inventories and requisitions tools, equipment, and supplies for department activities. May be required to set up, adjust, and repair machines and equipment. May be designated according to product assembled or activity involved, as Supervisor, Coil Winding (elec. equip.; electron. comp.); Supervisor, Filter Assembly (elec. equip.; electron. comp.); Supervisor, Test and Inspection (elec. equip.; electron. comp.).
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L4 SVP: 8 DLU: 87

724.131-010 SUPERVISOR, COIL WINDING (elec. equip.) alternate titles: armature-and-field-assembly supervisor

Supervises and coordinates activities of workers engaged in winding electric motors and generators. Plans and schedules department activities, utilizing knowledge of motor controls, winding machine operations, insulation characteristics, and types of windings. Plans and inspects machine adjustments. Assigns duties to utilize available machines to complete job order according to specifications, such as number of pieces, number of turns, size of coils or armatures, and type of wire. Schedules dipping and baking of coils and coil assemblies to group products requiring identical insulation and baking time. Adjusts work procedure for inserting prewound coils into rotors and stators, connecting coil groups, and taping wound assembly to utilize abilities of available workers. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

724.131-014 TRANSFORMER SHOP SUPERVISOR (any industry)

Supervises and coordinates activities of TRANSFORMER REPAIRERS (any industry) and other workers engaged in testing and repairing distribution, street light, and instrument transformers. Trains new employees. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.13 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

724.281-010 TRANSFORMER TESTER (utilities)

Tests insulation, current resistance, loss of current, and performance of transformers and tests insulating strength of transformer oil, using electrical testing mechanisms. Attaches transformer wires to terminal board mounting various testing meters and to live wire for energizing transformer. Adjusts testing-meter indicators at settings governed by test to be made and volt specifications on transformer coil, employing extensive knowledge of transformers. Successively turns switches which control transmission of current through transformer to testing meters, such as voltmeter, ammeter, and ohmmeter, for testing insulation, resistance, and loss of current. Notes action of circuit breaker which automatically stops flow of current if transformer does not react correctly to test applied. Tests insulating strength of transformer oil by passing current through oil sample placed in box containing two electrodes. Notes whether current will break down oil, causing arc between electrodes, actuating dielectric meter and indicating oil is of insufficient insulating strength. Tests fuse strength by regulating switch and sending excessive current through transformer. Diagnoses transformer defects and routes rejected transformers for repairs.
GOE: 06.01.05 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

724.360-010 SET-UP MECHANIC, COIL-WINDING MACHINES (elec. equip.)

Sets up, adjusts, and maintains machines used to wind, tape, form, strip, or connect wire for electrical coils, using setup charts and handtools: Changes fixtures in automatic coil-winding machines and core-insulating machines, replaces wire supply, and threads wire or insulating paper through tension devices to accommodate different size coils and windings. Turns screws and knobs to adjust settings of electrical switches and counters in automatic armature-and-field-coil-winding machines, using wrenches and screwdriver. Tightens bolts to align pulleys and adjust belt tension. Removes winding jaws from automatic winding machines and holds against powered buffing wheel to smooth surfaces, using *lapping compound*. Changes forming dies and holding devices in coil forming presses and changes cutting blades in wire-stripping machine to accommodate different sizes of wire. Replaces defective parts. Operates power grinder to make specialty tools used in winding department, such as picks, winding hooks, and scrapers.
GOE: 06.01.02 STRENGTH: M GED: R4 M3 L4 SVP: 6 DLU: 87

724.362-010 WIRE COILER (house. appl.)

Sets up and operates wire-coiling machine to coil wire for electrical appliance heating element: Selects wire of specified thickness. Bolts coiling disks to machine to make coils of specified size. Positions electric eye to activate automatic cutting mechanism, allowing for trimming of coil ends, using handtools. Threads wire through guides and between disks and starts machine. Hangs coil of each run to contacts of testing device, pulls switch, and reads watt and voltage input on meters. Resets electric eye, changes disks, or threads different gauge wire into machine to correct discrepancies. May cut wire at end of coil, using wire snips, watching meter for desired length. May use wire-cutting-and-stripping machine [LEAD FORMER (elec. equip.) 691.685-018].
GOE: 06.02.02 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

724.364-010 WINDING INSPECTOR AND TESTER (elec. equip.)

Performs any combination of following tasks to inspect and test stators, armatures, or rotors wound with prewound coils, using electrical testing equipment: Tests armatures, rotors, or stators for misconnected leads and insulation breakdown, using oscilloscope or test panel. Determines test hook-up from work ticket and connects coded stator leads to test clips. Turns dials to select specified voltage and current. Closes circuit and observes meter reading or oscillograph pattern. Interprets readings and patterns and records data. Touches one lead from high voltage source to stator or armature core and other lead to each coil lead in stator or armature. Watches for spark which indicates grounded circuit. Places spring steel blade of growler against inside face of stator or drum of armature and rotates over circumference. Observes steel blade for vibration which indicates shorted coils. Inspects lead and end windings for mechanical damage and conformance to specifications, using gauge, rule, or template to measure length and shape. Taps steel die to stamp code on core, using hammer. May inspect alignment of stacked commutators. May bunch and wrap stator leads to protect them until further assembly. May be designated according to item tested and inspected as Armature Tester (elec. equip.) III; Inspector And Shaper, End Windings (elec. equip.); Stator Tester (elec. equip.).
GOE: 06.03.01 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

724.381-010 ADJUSTER, ELECTRICAL CONTACTS (elec. equip.)

Adjusts contacts and springs of electrical apparatus, such as relays and switches, to permit opening and closing of circuits and flow of current: Examines apparatus for defects, such as damaged coil cover, bent springs and contacts, misaligned armatures and contacts, and missing parts. Verifies clearance and tension of parts, using feeler and tension gauges and shadowgraph. Turns dials of test equipment to specified settings. Positions apparatus in holding fixture, shadowgraph, or test board and presses control buttons to activate test equipment. Observes meters and lights on test equipment to determine factors, such as amperage required to close contacts, operating sequence and release timing of contacts, and electrical continuity. May verify mechanical operation of apparatus by manipulating apparatus with fingers. Bends parts, such as armature, contacts, and tension springs, to assure apparatus operates as specified, using handtools. Stamps and sorts defective and adjusted apparatus into stock pans for repair or further processing. May be designated according to type of apparatus adjusted as Crossbar-Switch Adjuster (elec. equip.); Relay Adjuster (elec. equip.); Switch Adjuster (elec. equip.); Wire-Spring-Relay Adjuster (elec. equip.). May verify adjustment of relays on sample basis and be designated Relay Checker (elec. equip.). May adjust fluorescent lamp starters and be designated Starter Adjuster (light. fix.).
GOE: 05.10.03 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

724.381-014 COIL WINDER, REPAIR (any industry)

Winds coils for repair of electric motor and generator parts, such as rotors, stators, and armatures, using original winding as guide to determine number of turns and size of wire: Winds coil on machine or directly into slots of rotors, stators, and armatures or pounds heavy copper over template to form coils. Op-

erates coil spreading machine to shape rigid coils for placement into slots. Tends coil taping machine or winds tape around coils by hand to insulate coils. Cuts and forms sheet insulation to fit slots, using paper cutter and forming fixture. Inserts coils into slots and pounds, using mallet and block, to compress and shape windings. Twists coil leads together to form groups of coils according to original winding and solders connections, using soldering iron. May paint coils with insulating varnish or enamel. May be designated according to coil wound as Field-Coil Winder (any industry).
GOE: 06.02.32 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

724.381-018 TRANSFORMER REPAIRER (any industry) alternate titles: transformer assembler; transformer rebuilder

Cleans and repairs distribution, streetlight, and instrument transformers: Disassembles transformers, using handtools, and opens valve to drain oil. Boils metal transformer case and cover in chemical solution to remove grease, rinses with hose, and dries with cloth to remove dirt and oil. Reassembles transformer, replacing worn or defective parts, using handtools. Solders input and output wires in position and pours compound in transformer-case terminal openings to seal out moisture. Pours oil into transformer until coils are submerged.
GOE: 05.10.03 STRENGTH: M GED: R3 M2 L2 SVP: 7 DLU: 77

724.384-010 ARMATURE TESTER I (elec. equip.) alternate titles: tester, armature or fields; rotor-and-armature hander

Tests armatures and field assemblies for motors to locate short, open, or grounded circuits, using electrical test apparatus that shows defects on panel meters or oscillograph patterns: Places armature in fixture equipped with brush contactors or touches test prods to commutator bars to make bar-to-bar and similar tests. Compares meter readings with fixed calibration on meter to determine shorts, opens, and grounds. Connects master unit, such as armature or field assembly, to terminals of winding tester. Looks into oscilloscope to compare test pattern of each unit tested with master unit. Turns dials to create different test situations and recognizes differences from master pattern. Inspects unit for mechanical defects. Scrapes chips and dirt from commutator slots, using brush and pick. Records quantity and classification of rejects and total number tested. May replace and revarnish string bands, reconnect leads, and resolder connections to repair armatures.
GOE: 05.10.03 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

724.384-014 STATIC BALANCER (any industry)

Tests products, such as armatures, fans, and rotors for balance, using static balancer, and adds or removes metal from product to correct imbalance: Rolls parts on two parallel, level, knife edges or rotates part on two pairs of overlapping, narrow, faced rollers and observes point of rest. Removes excess metal from heavy areas, using drill press, bench grinder, chisel and hammer, or files. Adds rivets, washers, or metal wedges to light areas, using handtools to correct balance. May attach parts to mandrel for balancing. May be designated according to part balanced as Armature Balancer (elec. equip.); Fan Balancer (elec. equip.); Rotor Balancer (elec. equip.).
GOE: 06.03.01 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 77

724.684-010 ARMATURE BANDER (any industry)

Winds steel wire around coil slots in armature core to hold coils in position when armature rotates, using banding machine: Lifts or hoists armature to horizontal spindle of banding machine. Shapes exposed parts of coils to specified size, using rawhide hammer. Mounts spool of specified wire and threads wire through guides of machine. Wraps sheet of insulation around core and attaches wire to pin wedged in core or twists first turn around armature, using pliers. Inserts metal clips under wire and turns crank to rotate armature or starts machine that winds wire around armature. Guides wire manually or mechanically to maintain tension. Turns ends of metal clips over wire and solders to hold wires in place. Solders armature leads to commutator and caps riser, using electric soldering iron. May shape coils [COIL SHAPER (any industry)].
GOE: 06.02.24 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

724.684-014 ARMATURE CONNECTOR II (elec. equip.)

Inserts lead wires of armature coils into commutator slots to connect armature to commutator. Places armature in holding fixture on workbench and strips insulation from ends of coil wires, using wire scraper or knife. Bends wire leads to conform with curvature of armature and inserts leads into commutator slots, using handtools. Winds and ties cord around coil leads to hold in specified commutator slots. Cuts excess wire from leads, using wirecutter or scissors. May shape end windings, using hammer and fiber block. May test connected armatures by touching contact points to test light. May repair connections by splicing, reconnecting, or reinsulating wires. May dip commutator into solder pot to solder wires into commutator slots. May press commutator on armature shaft, using arbor press. May be designated according to coil leads connected as Primary Connector, Armature (elec. equip.); Secondary Connector, Armature (elec. equip.).
GOE: 06.04.23 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 86

724.684-018 ARMATURE WINDER, REPAIR (any industry) alternate titles: armature repairer

Winds new coils on armatures of used generators and motors: Cuts insulating material to fit slots on armature core. Places insulating material in bottom of core slots. Cuts wire to length and winds in place, or counts turns of wire in coil being replaced and winds on corresponding number. Occasionally inserts and hammers readymade coils in place. May test armatures, solder ends of coils to commutator segments, wind field coils, test motors for defects, and perform other duties pertaining to motor repairing. May wind new coils on armatures for use in motor vehicles and be designated Armature Winder, Automotive (automotive ser.).
GOE: 06.02.24 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

724.684-022 COIL SHAPER (any industry) alternate titles: coil spreader

Spreads and shapes coils to fit armature, rotor, and stator slots, using coil-spreading machine: Moves levers and handwheels to position side clamps, end clamps, spreader bars, or forming blocks which set specified span and angle of knuckle. Places coil in clamp holders and closes clamps, using hand lever. Depresses pedal or pulls levers to spread and shape coils. Aligns and curves coil ends, using rawhide hammer. Releases hand clamps, removes coils, and verifies dimensions of coil, using rule or template.
GOE: 06.02.24 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

724.684-026 COIL WINDER (elec. equip.; electron. comp.)

Winds coils used in electrical equipment and instruments, or as electronic components, according to wiring diagrams, sample coil, or work order, using coil-winding machines and handtools: Reviews wiring diagrams and work order or examines sample coil to ascertain type and size of wire specified, and type, size, length, circumference, and primary and secondary windings of coil to be wound. Selects coil-forming device for specified coil and fastens device onto machine arbor, mandrel, or spindle or fastens device between chuck and tail stock. Threads end of wire from reel through tension device, guides, and spreader, bends wire ends to form lead, and attaches lead to coil core. Turns setscrews to adjust tension on wire and sets counter for number of turns specified. Starts machine and manually feeds wire over coil core or spreader to obtain even and uniform winding and shape of coil. Observes counter and stops machine at specified number of coils. Wraps insulation between layers and around wound coil or inserts plastic blocks between turns to form cooling ducts. Cuts wire to form leads, using wire or bolt cutters. Pounds coil with hammer or mallet to shape end windings or remove coil from fixtures. Winds asbestos, cotton, glass mica, paper, or tape around coil, and brushes varnish on coil or dips coil in varnish, epoxy, or wax to reinforce and seal coil. Strips insulation from end of lead wires, threads lead wires through insulating sleeves or slides sleeves over leads, and solders lead wires to terminals. May test coils for winding continuity, using test lamp. May cut and form insulating materials and be known as Insulator Cutter And Former (elec. equip.); or insert insulation in core slots and be known as Insulator (elec. equip.). May wind heavy ribbon, strap, or round wire over fixture to form coil and be designated Coil Former, Template (elec. equip.); Coil Winder, Open Slot (elec. equip.); Coil Winder, Strap (elec. equip.). May be designated according to type of coil wound or work station as Armature Coil Winder (elec. equip.); Audio-Coil Winder (electron. comp.); Bender, Armature Coil (elec. equip.); Bobbin-Coil Winder (electron. comp.); Coil Finisher (elec. equip.; electron. comp.); Coil Taper (elec. equip.). May be designated: Coil Winder, Hand (electron. comp.); Field-Coil Winder (elec. equip.); Filament-Coil Winder (electron. comp.); Helix-Coil Winder (elec. equip.; electron. comp.); Resistor Winder (elec. equip.; electron. comp.); Transformer-Coil Winder (elec. equip.; electron. comp.).
GOE: 06.04.23 STRENGTH: L GED: R2 M2 L2 SVP: 4 DLU: 88

724.684-030 COMMUTATOR ASSEMBLER (elec. equip.) alternate titles: commutator presser; regulator assembler; swedger

Fabricates and undercuts commutators for electric motors and generators, using stacking and holding fixtures, handtools, metalworking machines, and measuring devices: Cuts copper bars of specified thickness into designated lengths and widths, and cuts sheet mica into separators, sleeves, and collars, using power saw. Stacks bars, separated by mica inserts, in stacking sleeve and aligns bars, using dial indicator and mallet. Places bar and mica assembly in fixture and presses assembly together, using hydraulic press. Heats assembly in oven to soften insulation and presses heated assembly to specified circumference, using press. Positions mica collars at ends of bar assembly, and if V-ring is used, presses ring against collar, using arbor press. Secures assembly with bolts and nuts or threaded ring, using wrenches or hammer and drift. Mounts assembly in *indexing* fixture on circular saw or slotting machine, and undercuts mica or slots commutator risers to specified depth. Removes burrs, chips, and foreign matter from commutator, using picks, knives, cloths, solvent, or compressed air. Connects leads to power source for testing commutator. Touches leads from bars onto steel frame to ensure that commutator is not grounded or shorted. May braze or solder resistor or capacitor leads to commutator. May be designated according to operation performed as Commutator Undercutter (elec. equip.); Commutator V-Ring Assembler (elec. equip.).
GOE: 06.02.24 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

724.684-034 MAGNET-VALVE ASSEMBLER (elec. equip.)

Fits together bushings, needle valve, springs, washers, and coil into housing to assemble electromagnet valves used to control flow of liquids or gases in diesel equipment: Presses washer-type ring over needle stem to assemble valve stem. Slides collar over stem and turns one-fourth turn to seat ring. Clamps valve stem in fixture and inserts needle valve and spring. Adjusts setscrew to hold needle valve in specified position shown on dial indicator. Inserts assembled valve stem into housing and plugs with bottle cap to hold in position temporarily. Clamps housing in holding fixture, removes bottle cap, and seats brass bushing in opening in valve housing around valve stem, using special tool and hammer. Dips plastic washer and bottom of magnet coil into varnish to form insulation between coil and housing. Wraps coil in paper and bolts and screws coil, springs, and washers, to inside of housing, using ratchet wrench and screwdriver.

GOE: 06.04.23 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

724.684-038 MOTOR-AND-GENERATOR-BRUSH MAKER (elec. equip.) alternate titles: wire-brush maker

Cuts, winds, and presses wire gauze to fabricate brushes of specified size for collecting and distributing electric current in generators and motors, using hand shear, mandrel, and hydraulic press: Cuts wire gauze to specified lengths, using hand shears. Winds cut gauze on mandrel to form roll of several thicknesses. Adjusts setscrews on bed of hydraulic press and positions rolled gauze in bed of press which compresses gauze to specified width and thickness. Immerses compressed brush into molten lead, using tongs, and solders end of gauze to fasten exposed flap. Holds gauze against bandsaw to bevel brush end.
GOE: 06.02.24 STRENGTH: L GED: R3 M2 L1 SVP: 4 DLU: 77

724.685-010 ELEMENT WINDING MACHINE TENDER (elec. equip.; inst. & app.)

Tends wire winding machine that automatically winds elements used in electrical and electronic components, equipment, instruments, and devices, following work orders and wiring diagrams, using handtools: Reads work orders and specifications to determine materials required. Loads wire spools onto machine spindles and adjusts machine controls at specified positions, following machine setup instructions and wiring diagrams. Threads specified wire through winding guides or over coil, using handtools, such as tweezers, hook, or spreader. Clamps element or coil onto machine fixture and attaches wire to element or coil, using handtools, such as tweezers, hook, flux, soldering iron, and microscope. Sets winding counter or tension adjustments, and manipulates hand or foot controls to start machine. Observes and monitors machine winding to detect deviations from standards, and to stop or ensure automatic shut-off of machine after specified number of windings. Severs wire manually, using scissors, wire snippers, or cutters, or pushes lever to activate automatic machine wire cutting. May record production information. May mix and apply cement, glue, or varnish to element or coil and heat element or coil in curing oven to reinforce, insulate, and prevent raveling of wire. May test and measure elements and coils for resistance factors and linearity, using ohmmeter, computer, and calipers.
GOE: 06.04.09 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 90

724.685-014 WELD INSPECTOR (elec. equip.)

Tends machine that tests welds of contact disks to spark-breaker arms used in automobile distributors: Positions arm in machine that strikes contact disk with hammer. Discards spark-breaker arms if contact disks break off. Weighs out spark-breaker arms in lots, using scales, and places parts in cartons.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

724.687-010 LACER AND TIER (elec. equip.) alternate titles: binder

Laces and ties cotton tape to cover joint formed by soldering coil leads of adjacent coils in one pole phase group: Laces tape through and over wires of joint, loops tape around open leads, and ties tape.
GOE: 06.04.23 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

725 OCCUPATIONS IN ASSEMBLY OF LIGHT BULBS AND ELECTRONIC TUBES

This group includes occupations concerned with fabricating and assembling filaments, grids, plates, masks, guns, and other parts and inserting them into bulbs to complete electron tubes and light bulbs.

725.381-010 TUBE REBUILDER (electron. comp.) alternate titles: television-picture-tube rebuilder

Rebuilds cathode ray tubes used in television receivers and display instruments according to specifications, applying knowledge of electronics: Inspects tube for physical defects, such as cracks, scratches, burns, and pits to determine if tube is repairable. Tests display function, such as horizontal fade, color purity, and convergence to locate cause of malfunction, using test equipment. Cuts off glass neck holding electron gun, using hot wire or gas torch. Paints dag (graphite paint) inside bulb to provide conductive surface, using brush. Places bulb and replacement electron gun in lathe equipped with gas torch to weld and anneal parts together. Operates ovens and pumps to seal and evacuate tube. Places rebuilt tube in chamber to age (stabilize) tube. Coats exterior surface of tube with dag, using spray gun. Tests tube function and operation for conformance to specifications. Buffs and polishes display screen surface to remove scratches, using power buffer and abrasive compound.
GOE: 05.05.10 STRENGTH: M GED: R4 M3 L4 SVP: 6 DLU: 88

725.384-010 TUBE ASSEMBLER, ELECTRON (electron. comp.)

Performs any combination of following tasks to fabricate parts and assemble custom or production electron tubes: Reads work orders, receives verbal instructions, and follows drawings and sample assemblies to fabricate and assemble parts. Winds wire around grid core or mandrel to form filaments, grids, and heaters, using manual or automatic winding machines. Stretches and presses wound grid cores to designated shape, and cuts cores to specified size, using manual or power tools. Forms parts, such as grids, stems, and leads, using special purpose automatic machines. Coats designated parts with specified materials to change conductive properties of parts or provide electrostatic shield for tube elements, using spray equipment, paint brush, pressurized needle, or other coating method. Positions parts, such as grids, spacers, plates, caps, shields, stems, heaters, and radiators, in specified relationship to one another. Mounts parts in holding fixtures and bonds parts together, using welding and brazing techniques and equipment. Fills bases or top caps of designated tubes with adhesive and attaches bases or caps to glass bulbs and metal shells. Places assembled tube in equipment to remove impurities, create vacuum, and seal tube. Stamps and etches identifying information on tube and tube parts, using printing or etching equipment. Polishes designated parts and assemblies, using buffing wheel. Tends ovens that cure adhesives, inks, and coatings. Assembles parts for cathodes, using microscope. Tests and inspects parts and assemblies for conformance to specifications, using test equipment, precision measuring instruments, and microscope. Tends electronic ageing equipment that stabilize electrical characteristics of tubes. May be designated by duties performed as Electron Gun Assembler (electron. comp.); Stem-Lead Former (electron. comp.); Tube-Component Assembler (electron comp.); Tube Fitter (electron. comp.).
GOE: 06.02.23 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 88

725.684-010 COILED-COIL INSPECTOR (light. fix.)

Examines tungsten filament coils of electric light bulbs for concentricity and burrs by rolling coils under fingers on workbench, using tweezers to separate coils. Measures length of coils, using metric scale. Determines brittleness of coils by stretching occasional coil to breaking point. Places approved coils in labeled glass jars and sets aside rejected coils. Maintains record of material examined.
GOE: 06.03.01 STRENGTH: S GED: R3 M2 L2 SVP: 3 DLU: 77

725.684-014 MOUNTER, HAND (light. fix.)

Mounts tungsten filament coils on bead mounts or stems used in incandescent lamps by either of following methods: (1) Positions hooked ends of pair of stem lead wires on bed of press, slips filament coil ends under hooks with tweezers, and presses pedal to lower die on stem that clamps hooks over ends of coil. May clamp tungsten filament coil to lead wires which have no end hooks. (2) Slips one end of filament coil through lead wire hook of bead mount, using tweezers and magnifying glass, and clamps part in place, using press. Twists filament through loop in bead-mount anchor wire, through tip of other lead wire, and clamps part in place, using press. Pulls tip of anchor wire to tighten loop around filament coil, using tweezers. Inserts two completed mounts in each light bulb.
GOE: 06.04.23 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

725.684-018 STEM MOUNTER (light. fix.)

Fastens tungsten wire (filament) to glass stem to form mount for electric light bulb: Loops wire over hooks on glass stem held in revolving table and clinches hooks in place, using pliers. Cements ends to lead wires, using brush and carbon cement.
GOE: 06.04.23 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

725.684-022 TUBE ASSEMBLER, CATHODE RAY (electron. comp.)

Performs any combination of following tasks to assemble cathode-ray tubes used in television and display equipment: Removes funnel from rack and places funnel onto conveyorized washing, rinsing, and drying equipment. Positions funnel in rotatable holding chuck to secure funnel for painting. Inserts brush into rotating funnel and paints dag (conductive graphite) coating as indicated by chuck guide to provide electric conductivity. Verifies that aperture mask and display screen fit together according to corresponding numbers. Examines aperture mask and screen in light box to detect misaligned color dots, using microscope. Positions funnel in rotatable chuck equipped with automatic frit dispenser. Moves controls that index frit dispenser around edge of funnel mouth to dispense sealant. Removes frit-coated funnel from chuck and secures funnel in jig for joining display screen assembly onto funnel. Positions display screen assembly on funnel edge and aligns screen with reference points on funnel. Pushes jig onto conveyor leading into oven to fuse funnel and display screen assembly into bulb. Places bulb on holding fixture of sprayer to coat interior surface of bulb with protective layer of lacquer. Places bulb onto holding fixture of evaporation equipment to apply aluminized coating to interior surface of bulb. Places bulb onto conveyor that carries bulb through processing stations to preheat bulb, insert and fuse gun to neck of bulb to form tube, and anneals and cools tube assembly. Places tube onto cart or conveyor for further processing. Inspects tube for imperfections, such as blemishes, coating defects, scratches, bubbles, or stains, using magnifier, ultraviolet light, inspection booth, or unaided vision. May be designated according to duties performed as Aluminizer (electron. comp.); Bulb Assembler (electron. comp.); Dag Coater (electron. comp.); Frit Coater (electron. comp.); Funnel Coater (electron comp.); Gun-Sealing-Machine Operator (electron. comp.); Lacquer Sprayer (electron. comp.).
GOE: 06.02.23 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 89

725.684-026 CATHODE RAY TUBE SALVAGE PROCESSOR (electron. comp.)

Performs any combination of following duties to disassemble salvaged cathode ray tubes for reprocessing: Removes vacuum and electron gun from bulb of salvaged cathode ray tube, using portable air drill. Places bulb on fixture of deband machine and activates machine that cuts metal band that surrounds joint between funnel and viewing screen of bulb. Places debanded bulb on conveyor that carries bulb through series of acid and water baths to loosen and dissolve frit that bonds funnel to viewing screen. Positions bulb on chuck of machine and presses pedal on machine that pneumatically separates funnel from viewing screen. Places funnel and screen in vats of acid and water to remove remaining frit from parts. Examines funnel and screen to ensure all frit was removed during acid processing. Places funnel and screen on cart for further processing.

GOE: 06.02.32 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 88

725.685-010 DISPLAY-SCREEN FABRICATOR (electron. comp.)

Tends equipment that forms and prepares aperture masks and display screens for oscilloscope and television picture tubes: Feeds specified sections of sensitized steel between plates in photographic printing chase to flatten sheet to specification. Sets timer for specified exposure and turns on heliarc lamp to imprint pattern of aperture mask from photographic plate onto steel. Verifies alignment of plates, using microscope. Tends furnace that blackens aperture masks and rings. Feeds mask through series of rollers that flatten mask. Positions mask on bed of forming press and lowers die to form mask. Tends processing equipment to clean, dry, and coat phosphor on inside face of display screen. Positions aperture mask and screen on fixture over time-cycled light source to print color-emitting dots on phosphor coating. Starts cycle to expose coating to light through mask aperture. Marks mating screen and aperture mask with matching numbers for future assembly. Fastens screen in holder on conveyor that carries screen through equipment that develops exposed phosphor, removes unexposed phosphor, and dries screen. May be designated according to process as Aperture-Mask Etcher (electron. comp.); Mask Former (electron. comp.); Screener (electron. comp.).
GOE: 06.04.19 STRENGTH: M GED: R2 M2 L2 SVP: 2 DLU: 89

725.687-010 BEAD INSPECTOR (light. fix.)

Inspects molded glass beads, used in incandescent lamps, for defects: Scoops up beads on prongs of metal forklike device. Examines beads to determine if beads are whole. Moves beads up and down on prongs to gauge diameter; rejects beads that do not slide easily. Breaks or puts aside defective beads, and pours satisfactory beads into containers.
GOE: 06.03.02 STRENGTH: S GED: R2 M2 L2 SVP: 3 DLU: 77

725.687-014 COILER (light. fix.)

Tests incandescent lamps for air leaks, using high-frequency electric ray gun: Spreads completed lamps on table, three sides and top of which are covered by black hood. Depresses switch on high-frequency ray gun which releases electric current through exposed wire protruding from gun. Passes exposed wire over lamps and observes each to ascertain its turning specified shade of blue on contact. Segregates defective lamps from those meeting standards.
GOE: 06.03.02 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

725.687-018 FOCUSER (light. fix.)

Observes magnified shadow of lamp filament projected on coordinate lines of dark screen to determine if coil has been properly centered within bulb. Pulls stem to center filament, using tweezers.
GOE: 06.03.02 STRENGTH: S GED: R2 M1 L2 SVP: 3 DLU: 77

725.687-022 GETTERER (light. fix.)

Applies getter (chemical solution) to stems of lead wires used in making incandescent lamps: Picks stem from tray and applies getter on lead wires, using brush. Places stem in tray to dry. Adds thinners to getter and stirs mixture to maintain specified consistency.
GOE: 06.04.33 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

725.687-026 QUALITY-CONTROL INSPECTOR (light. fix.)

Examines machine-made light bulbs for defects: Selects sample carton from each lampmaking unit, tests lamps (bulbs) for lighting, and visually examines bulbs for other defects. Records number of defectives and informs department supervisor when percentage of defective lamps exceeds allowable limits, requiring inspection of entire unit output. May open tips of sample bulbs with knife, immerse bulbs in water, measure amounts of water remaining in bulbs, and compare amounts with standard chart to determine whether sufficient gas is injected by machine.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

726 OCCUPATIONS IN ASSEMBLY AND REPAIR OF ELECTRONIC COMPONENTS AND ACCESSORIES, N.E.C.

This group includes occupations, not elsewhere classified, concerned with fabricating resistors, inductors, transformers, capacitors, crystals, diodes, semiconductors (solid state), potentiometers and controls, printed circuitry, harness, and similar products for electronic end products, and assembling and repairing accessories, such as speakers, antennas, and related items.

726.130-010 SUPERVISOR, ELECTRONICS PRODUCTION (comm. equip.; electron. comp.; office machines)

Supervises and coordinates activities of workers engaged in fabricating, assembling, testing, inspecting, and repairing electronic products, systems, subassemblies, components, or parts: Analyzes manufacturing requirements, prepares production schedule, and distributes work assignments according to order priorities and worker availability. Reviews work orders, product specifications, and technical instructions to determine facility requirements, and requisitions tools, equipment, and supplies to meet production goals. Demonstrates work methods, such as machine setup, wire routing, assembly, inspection sequence, repair, and test equipment operation. Examines product for defects, utilizing knowledge of manufacturing and quality standards, to ensure conformance to product specifications. Performs other tasks described under SUPERVISOR (any industry) Master Title. May assist subordinates to adjust and repair machines and equipment. May confer with interdepartmental personnel to discuss production procedures and resolve problems. May be designated according to function supervised as Quality Assurance Supervisor (office machines); Supervisor, Electronics Assembly (electron. comp.; office machines); Supervisor, Electronics Inspection (electron. comp.); Supervisor, Electronics Testing (electron. comp.); Supervisor, Television-Chassis Repair (comm. equip.).
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 88

726.131-014 SUPERVISOR, HEARING-AID ASSEMBLY (protective dev.)

Supervises and coordinates activities of workers engaged in assembling and repairing hearing aids: Reads assembly orders and repair tickets to determine work priorities, and assigns work to those workers responsible for assembly or repair. Records production, such as type of hearing aids to be assembled, number of units, and date assigned. Monitors work in progress to determine whether production is maintained according to schedule. Confers with workers' representatives to resolve grievances. Demonstrates job tasks to train new workers and assigns experienced workers to assist in training. Compiles weekly and monthly production reports of hearing aids assembled and repaired. Requisitions supplies and equipment as required. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R3 M3 L3 SVP: 7 DLU: 86

726.131-018 SUPERVISOR, PRINTED CIRCUIT BOARD TESTING (electron. comp.) alternate titles: supervisor, electronic testing; supervisor, functional testing; supervisor, in-circuit testing

Supervises and coordinates activities of workers engaged in repairing and testing performance of printed circuit boards (PCB's) during and after assembly, applying knowledge of electronic theory and circuitry, test procedures, and documentation: Directs training of workers in areas such as test procedures and equipment operation, troubleshooting and repairing, and interpretation of specifications and documentation. Coordinates testing and repair work to ensure completion of work assignment. Monitors repair activities to verify PCB's conform to documentation standards. Performs other duties as described under SUPERVISOR (any industry) Master Title. May supervise activities of workers engaged in assembling PCB's.
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L4 SVP: 8 DLU: 86

726.134-010 SUPERVISOR, PRINTED CIRCUIT BOARD ASSEMBLY (electron. comp.)

Supervises and coordinates activities of workers engaged in assembling, testing, and inspecting printed circuit boards: Directs training of workers in interpreting shop specifications, component recognition, equipment operation, and performance of job duties to ensure conformance to assembly standards. Plans and coordinates work assignments to meet production goals. Examines assembled printed circuit boards, applying knowledge of assembly and quality standards, to ensure specifications are met. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to stage of assembly as Supervisor, Final (electron. comp.); Supervisor, Post-Wave (electron. comp.); Supervisor, Pre-Wave (electron. comp.). May be designated according to function supervised as Supervisor, Assembly (electron. comp.); Supervisor, Quality Control (electron. comp.); Supervisor, Testing (electron. comp.).
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 88

726.261-010 ELECTRONICS ASSEMBLER, DEVELOPMENTAL (any industry) alternate titles: developer-prover, electrical; electrical and electronics development mechanic; prototype assembler, electronics

Assembles, tests, and modifies prototype or custom electronic parts, systems, and apparatus to develop assembly methods and techniques for use by production workers, applying knowledge of electronic theory and assembly techniques: Reads blueprints, wiring diagrams, process sheets, and assembly and schematic drawings, and receives verbal instructions regarding work assignment. Aligns and assembles parts, such as leads, coils, wires, tabs, and terminals into housing, using handtools, power tools, soldering iron, brazing fixture, and welding head. Routes and laces cables [CABLE MAKER (elec. equip.; electron. comp.) 728.684-010]. Installs components and parts, such as switches, coils, transformers, relays, transistors, and semiconductor circuits on chassis, circuit boards, panels, and other units, using handtools, power tools, soldering and welding equipment, and thermocompression bonding, wave soldering, or resistance welding techniques. Routes and attaches wires and connectors to form circuitry and connects assembly to power supply sources, switch panels, or junction boxes. Attaches hardware and seals assembly, using rivets, screws, handtools, power tools, resistance welder or thermocompression bonding. Examines parts for defects, such as pinholes or chips. Test-operates unit to locate defects, measure performance, determine need for adjustment, and verify specified operation, using ohmmeter, oscilloscope, signal generator, and other electronic test instruments. Replaces defective components and wiring, using handtools and soldering iron. Calibrates unit according to specifications. Enters information on production records, logs, and other report forms. May assemble prototype microelectronic units, using binocular microscope. May repair defective units rejected by inspection or test personnel [ELECTRONIC EQUIPMENT REPAIRER (comm. equip.; electron. comp.) 726.381-014].
GOE: 05.05.05 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 89

726.261-014 ELECTRICIAN, RESEARCH (aircraft mfg.)

Develops, lays out, fabricates, tests, and modifies radio, electrical, and electronic systems and assemblies, and test equipment, for aeronautical and aerospace developmental test projects: Plans method and sequence of operations for developmental test project. Lays out, fabricates, and assembles radio, electrical, and electronic systems and assemblies, following engineering data, sketches, and blueprints, utilizing knowledge of electrical and electronic theory, using measuring instruments, handtools, and shop equipment. Sets up and operates test equipment to evaluate performance of developmental parts, assemblies, or systems under simulated operating conditions. Records, analyzes, and interprets test information. Collaborates with engineering and other personnel to solve developmental problems. Modifies parts, assemblies, and systems as required. Constructs, maintains, repairs, calibrates, and modifies test equipment. May develop and fabricate tooling for developmental projects.

GOE: 05.03.05 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 88

726.261-018 ELECTRONICS TESTER (any industry) alternate titles: quality-control-assembly-test technician; technician, test systems; tester, systems; test technician; trouble shooter

Performs variety of electronic, mechanical, and electromechanical tests on electronic systems, subassemblies, and parts to ensure unit functions according to specifications or to determine cause of unit failure, using electronic test instruments: Reads test schedule, work orders, test manuals, performance specifications, wiring diagrams, and schematics to determine testing procedure and equipment to be used. Tests functional performance of systems, subassemblies, and parts under specified environmental conditions, such as temperature change, vibration, pressure, and humidity, using testing devices, such as temperature cabinets, shake-test machines, and centrifuges. Calibrates test instruments according to specifications. Connects unit to be tested to test equipment, such as signal generator, frequency meter, or spectrum analyzer. Reads dials or digital displays that indicate electronic characteristics, such as voltage, frequency, distortion, inductance, and capacitance. Compares results with specifications and records test data or plots test results on graph. Analyzes test results on defective units to determine cause of failure, applying knowledge of electronic theory and using electronic test equipment. Replaces defective wiring and components, using handtools and soldering iron, or records defects on tag attached to unit and returns unit to production department for repair. Confers with engineers, technicians, production personnel, and others regarding testing procedures and results and to resolve problems. May write computer programs to control semiconductor device and electronic component test equipment prior to testing, utilizing knowledge of programming techniques, electronics, test equipment, and testing specifications. May explain and demonstrate testing procedures to other workers. May verify dimensions of pins, shafts, and other mechanical parts, using calipers, vernier gauges, and micrometers. May operate x-ray equipment to verify internal assembly and alignment of parts according to specifications. May devise test equipment setup to evaluate performance and operation of nonstandard or customer returned units. May be designated according to unit tested as Memory-Unit Test Technician (electron. comp.); Television-Receiver Analyzer (electron. comp.); Transmitter Tester (electron. comp.); Tube-Test Technician (electron. comp.).

GOE: 06.01.05 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 90

726.361-014 GROUP LEADER, PRINTED CIRCUIT BOARD ASSEMBLY (electron. comp.)

Assists SUPERVISOR, PRINTED CIRCUIT BOARD ASSEMBLY (electron. comp.) 762.134-010, in coordinating activities of workers engaged in assembling printed circuit boards (PCB's), applying knowledge of PCB assembly techniques, specifications, and production scheduling: Confers with SUPERVISOR, PRINTED CIRCUIT BOARD ASSEMBLY (electron. comp.), and reviews production schedules, specifications, and priorities to plan department work assignments. Requisitions, obtains, and distributes supplies and materials, such as PCB's, electronic components and parts, solder and flux, antistatic bags and wristbands, and schematic drawings and work orders. Assigns duties to assembly workers and oversees department activities. Revises work assignments to meet production schedules and contract priorities. Explains and demonstrates PCB assembly line procedures and techniques to workers. Interprets schematic drawings, specifications, and work orders for workers. Assists workers in resolving technical problems and advises SUPERVISOR, PRINTED CIRCUIT BOARD ASSEMBLY (electron. comp.) of complex production problems. Reads, prepares, collects, and maintains reports, such as individual and department production reports, employee time and attendance records, and component waste reports. Substitutes for absent workers or assists workers to alleviate work overload situations. May assemble sample PCB's, using schematic drawings, handtools, and soldering equipment, to use as work aids. May preform lead wires for electronic components, using forming machines or handtools, and supply preformed parts to assemblers.

GOE: 06.02.23 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 88

726.361-018 GROUP LEADER, PRINTED CIRCUIT BOARD QUALITY CONTROL (electron. comp.)

Assists SUPERVISOR, PRINTED CIRCUIT BOARD ASSEMBLY (electron. comp.) 726.134-010 in coordinating activities of workers engaged in inspecting, testing, and repairing printed circuit boards (PCB's), applying knowledge of electronic theory, test procedures, repair techniques, and quality standards: Confers with SUPERVISOR, PRINTED CIRCUIT BOARD ASSEMBLY (electron. comp.), and reviews production schedules to determine quantity and type of PCB's to be inspected, tested, or repaired. Compiles list of test and inspection personnel and assists in planning department work assignments. Assigns duties to inspection, test, and repair personnel, using knowledge of workers' experience and capabilities. Collects PCB's and components for processing from receiving and assembly departments and distributes PCB's and components to inspection, test, or repair personnel. Oversees department activities and revises work assignments to meet production schedules and contract priorities. Explains inspection, test procedures, and specifications, and demonstrates use of testing equipment and PCB repair techniques to workers. Interprets schematic drawings, procedure changes, and work orders for workers. Assists workers in resolving technical problems, utilizing knowledge of electronic theory, test procedures, and specifications. Confers with technical personnel and department supervisors to report and resolve assembly and testing problems, and reports unresolved problems to SUPERVISOR, PRINTED CIRCUIT BOARD ASSEMBLY (electron. comp.). Requisitions, obtains, and distributes supplies, materials, and equipment, such as electronic components and parts used for repair work, test and inspection specifications and test equipment, fixtures, and handtools. Inspects test equipment to verify equipment functions according to standards. Reports substandard equipment performance to supervisor or maintenance personnel. Reads, prepares, collects, and maintains reports, such as individual and department production reports and test results, employee time and attendance records, and product waste reports. Maintains vendor files. Substitutes for absent workers and assists workers to alleviate work overload situations.

GOE: 06.03.01 STRENGTH: L GED: R3 M3 L3 SVP: 6 DLU: 88

726.361-022 REPAIRER, PROBE TEST CARD, SEMICONDUCTOR WAFERS (electron. comp.)

Replaces and realigns broken, worn, or misaligned probes on probe test cards, using handtools and equipment, to maintain probe cards for wafer probe (electrical test) equipment: Reads specification sheets, manuals, and diagrams to determine probe card wiring and probe positions. Inspects probe cards, using microscope, to detect defects, such as loose wiring and loose, split, or worn probes. Removes, replaces, and re-solders defective wiring and probes, using tweezers and soldering iron. Observes probe card through microscope and aligns probes in specified position over test wafer, using tweezers. Aligns probes on even plane, using tweezers and test equipment. Maintains repair and replacement records. Maintains probe and inventory records, using computer terminal.

GOE: 06.01.04 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 86

726.362-010 GROUP LEADER, SEMICONDUCTOR TESTING (electron. comp.) alternate titles: production aide

Assists SUPERVISOR, ELECTRONICS TESTING (electron. comp.) 726.130-010 in coordinating and monitoring activities of workers engaged in testing electronic devices (components), such as integrated circuits (ICs), transistors, and diodes, on semiconductor wafers, utilizing knowledge of equipment, procedures, and test specifications: Answers questions from workers pertaining to test procedures and test equipment operation. Monitors and expedites flow of materials through testing cycle. Enters test program into test equipment, using computer terminal, and examines test equipment printout to verify test equipment is functioning according to company and manual specifications. Notifies maintenance workers of test equipment malfunctions. Operates or tends equipment to substitute for absentee workers. Maintains production records. Trains workers in equipment operation and test procedures.

GOE: 06.01.05 STRENGTH: S GED: R3 M2 L2 SVP: 7 DLU: 86

726.362-014 WAVE-SOLDERING MACHINE OPERATOR (comm. equip.; electron. comp.; inst. & app.; office machines) alternates titles: flow-solder machine operator

Controls wave-soldering machine or system to solder electronic components onto printed circuit boards (PCB's), according to processing specifications: Reads production schedules and operations manuals and receives verbal instructions regarding sequential start up and operation of wave-soldering machine or system. Moves controls to activate machine or equipment, such as preheater, lead wire cutter, wave-soldering units, and conveyors. Adjusts controls of machines to regulate operating speed and temperature and height of flux, wax, and solder waves. Verifies specific gravity of flux, using hydrometer. Adjusts dimensions of conveyor pallets and rails used to hold and transport PCB's through wave-soldering process, using precision instruments and handtools. Places loaded master pallet and production pallets on conveyor line of wave soldering machine or system and monitors pallets moving through process to verify that timing, temperatures, and dimensions are set according to standards. Observes heat-sensitive color marks or strips placed on PCB's to verify boards have been preheated to specified temperatures. Observes meters, gauges, and indicator lights to ensure that soldering of PCB's conforms to processing standards. Examines samples of soldered boards to detect substandard soldering. Discusses quality of soldering with supervisor and adjusts controls according to instructions. Cleans parts and interiors of machines and replenishes fluids in machines and equipment. Performs preventive maintenance on machines and equipment, using handtools. May return substandard boards to workers for repair. May feed or off bear boards or pallets to or from conveyor system.

GOE: 06.02.19 STRENGTH: M GED: R3 M2 L3 SVP: 4 DLU: 88

726.364-010 LEAD HAND, INSPECTING AND TESTING (electron. comp.)

Assists supervisor in coordinating activities of workers engaged in inspecting and testing electronic components for compliance to company standards: Re-

ceives boxes of components and records identifying information on specified forms. Collects random lot samples, according to lot volume and following company guidelines. Distributes components to workers responsible for testing specific components. Instructs new workers in testing equipment operation, component testing sequence, and specification sheet interpretations. Modifies workers' assignments to meet priorities and to adjust work loads according to worker absenteeism. Completes requisition forms to obtain items requested and delivers items to workers. Observes calibration maintenance sheets to verify maintenance of test equipment and notifies designated personnel of unscheduled verification of equipment as warranted by questionable test results. Maintains records that indicate material discrepancies and records information on vendor history forms.
GOE: 06.03.02 STRENGTH: M GED: R3 M2 L3 SVP: 6 DLU: 86

726.364-014 TEST FIXTURE DESIGNER (electron. comp.)

Plots and draws schematics for test fixture heads used in testing printed circuit boards (PCB's) for electrical shorts and breaks, utilizing knowledge of printed circuit design, electronics, and customer specifications: Reviews blueprint to determine customer requirements and beginning and end points of PCB conductor paths. Confers with engineer to resolve questions concerning design of test fixture heads. Refers to blueprint and method sheets and chooses electrical points to be tested, making sure to include critical points along conductor path. Plots electrical points to be tested on layout sheet, using pencil. Chooses drill size to be used in drilling test head, according to test design and engineering specifications. Forwards layout of test points with requested drill size to numerical-control drilling department to be used as guide to drill test head. Reviews blueprints to determine logical and most efficient method to wire test head to frame of test fixture. Draws schematics for TEST FIXTURE ASSEMBLER (electron. comp.) 726.684-098 to follow in wiring test head to test fixture frame. May review schematics with assembler to answer questions regarding correct wiring procedures. May monitor building of test fixture by assembler. May record data regarding completed job.
GOE: 05.03.02 STRENGTH: S GED: R4 M3 L3 SVP: 7 DLU: 86

726.364-018 ELECTRONICS UTILITY WORKER (comm. equip.; electron. comp.) alternate titles: setup worker, electronics

Arranges layout of work stations for workers engaged in fabricating, processing, or assembling electronic equipment and components, such as semiconductor devices, printed circuit boards (PCB's), chassis assemblies, and wire harnesses and cables: Reads specifications, such as process guide, bill of material, wiring diagram, *mechanical print*, and schematic diagram, to determine materials and equipment needed, such as component parts, chemicals and gases, tools, test instruments, and jigs and fixtures, for work stations. Prepares and submits requisitions for equipment, parts, or tools required to initially set up or resupply work stations. Positions materials and equipment in specified arrangement at work stations. May explain or demonstrate work procedures to other workers in fabricating, processing, and assembly functions. May perform fabricating, processing, or assembly work in absence of line worker. May set and adjust controls for processing, fabricating, and assembly line equipment, such as furnaces, process chambers, power supplies, timers, and multimeters. May test assemblies, using testing machines or instruments, such as meters, resistance bridges, and automatic component testers. May repair or rework assembled items by removing, adding, or replacing parts or resoldering or rebonding defective connections, using handtools or power tools.
GOE: 06.04.34 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 88

726.367-010 GREEN INSPECTOR (elec. equip.)

Inspects newly extruded (green) carbon electrodes to detect defects, such as cracks and blisters, and to determine disposition of electrodes: Notifies other personnel to investigate cause of defective electrodes. Weighs and measures dimensions of electrodes to determine if specifications are met, using scale, calipers, and straightedge. Marks disposition of electrodes on parts, using chalk, and records findings and disposition of electrodes. May compute density of electrodes, according to plant formula, using slide rule. May inspect samples of graphitized electrodes or green carbon stock impregnated with pitch or linseed oil and be designated Impregnation Inspector (elec. equip.).
GOE: 06.03.01 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

726.380-010 ELECTRONIC EQUIPMENT SET-UP OPERATOR (electron. comp.)

Sets up and operates equipment, such as shearing machine, laminator, and drill, to fabricate single- and multi-layer printed circuit boards (PCB's), following diagrams and specifications: Determines dimensions and tolerances of boards, sequence of operations, and tools and equipment required, according to diagrams and specifications, and measures and marks dimensions and reference points to lay out boards for machining. Sets up and operates shearing machine and drills to cut, form, and drill holes into boards according to specifications. Bevels edge connectors, using slotter, and verifies dimensions and tolerances, using calipers. Sets up and controls laminating and other plating equipment, to apply copper plating and photoresist to boards. Photographs design image and exposes film to produce and develop acid resisting circuitry pattern, using photographic equipment. Etches and retouches circuitry on boards, using etcher. Bonds two or more PCB's together to form multilayer boards, using laminating press.
GOE: 06.01.03 STRENGTH: L GED: R4 M4 L3 SVP: 6 DLU: 88

726.381-010 ELECTRONICS INSPECTOR (comm. equip.; electron. comp.; inst. & app.) alternate titles: quality control inspector; systems inspector

Performs any combination of following tasks to inspect electronic systems, assemblies, subassemblies, components, and parts for conformance to specifications, following blueprints, drawings, and production and assembly manuals: Examines layout and installation of wiring, cables, subassemblies, hardware, and components to detect assembly errors. Compares assembly with parts list to detect missing hardware. Examines joints, using magnifying glass and mirror, and pulls wires and cables to locate soldering defects. Examines alignment of parts and measures parts for conformance to specified dimensions, using precision measuring instruments, such as micrometers, vernier calipers, and gauges. Twists dials, knobs, shafts, and gears to verify freedom of movement. Traces cables and harness assemblies, following cable wiring diagram, to verify routing of wires to specified connections and conformance of cable lacing and insulation to manufacturing standards. Measures plated areas for uniformity and thickness, using micrometers or dial indicators. Verifies location of bolt and rivet holes, using templates, check fixtures, and precision measuring instruments. Examines parts for surface defects, such as chips, scratches, and pinholes. Examines production documents to ensure that all assembly, inspecting, and testing steps were performed according to specifications. Calculates percentage of defective parts, using calculator. Records inspection data, such as serial number, type and percent of defects, and rework required. Resolders broken connections on components and parts. Performs functional and operational tests, using electronic test equipment such as frequency meter, oscilloscope, and signal generator [ELECTRONICS TESTER (any industry) 726.261-018], or performs destructive tests to determine tensile strength of product or part. May inspect and lay out optic axis of raw quartz crystals, using optical inspection equipment, and be designated Inspector, Raw Quartz (electron. comp.). May inspect parts at random and be designated Check Inspector (electron. comp.). May inspect units on assembly line and be designated In-Process Inspector (electron. comp.) or final product and be designated Final Inspector (electron. comp.). May be designated according to type of unit inspected as Inspector, Subassemblies (electron. comp.); Inspector, Tubes (electron. comp.).
GOE: 06.01.05 STRENGTH: L GED: R4 M4 L4 SVP: 6 DLU: 89

726.381-014 ELECTRONIC EQUIPMENT REPAIRER (comm. equip.; electron. comp.) alternate titles: production repairer

Repairs electronic equipment, such as radio and television receivers, radio transmitters, speakers, amplifiers, and related antenna and cable assemblies, according to product specifications, manufacturing instructions and diagrams, using test equipment, handtools, and soldering iron: Reads inspection tag and examines unit to locate defects, such as broken wires, burned-out components, or scratches on cabinet, using model schematics and electronic test equipment. Inspects wiring and removes broken wires from units, using soldering iron and pliers. Cuts new wires to specified lengths, using wire cutters, or obtains precut wires and re-routes and solders wires to specified terminals, following wiring diagram. Repairs defective soldering, using soldering iron. Removes, repairs, or replaces defective components, such as resistors, transformers, and capacitors, using soldering iron and handtools. May brush touch-up paint on cabinet or case, and varnish on exposed wiring.
GOE: 05.10.03 STRENGTH: H GED: R3 M3 L3 SVP: 6 DLU: 88

726.382-010 SEQUENCING-MACHINE OPERATOR (electron. comp.)

Sets up and operates sequencing machine to insert electronic components in programmed sequence onto paper tape for use in machine insertion of components onto printed circuit boards (PCB's): Reads instructions to determine sequence, quantity, and types of components required. Mounts supply reels of components on spindles and threads component supply reel tape through machine. Installs and spaces holding devices on machine according to number of components to be sequenced, using wrench. Mounts paper tape reels onto spindles of machine to receive sequenced components. Keys data into computer terminal to enter program number that controls release of components in prescribed sequence onto paper tape. Presses button to activate machine and observes panelboard light indicators to verify sequencing procedures and to detect machine stoppages. Clears jams in holding devices and splices tapes, using handtools and adhesive tapes. Straightens bent wire leads or cuts damaged component from supply tape, using wire snips. Replaces defective components. Records production information. May operate sequencing machine equipped with verifier that automatically identifies faulty components.
GOE: 06.02.20 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 86

726.384-014 INSPECTOR, CIRCUITRY NEGATIVE (electron. comp.) alternate titles: film inspector

Inspects circuitry film negatives (artwork) for conformance to specifications and touches up defects on negatives to prepare negatives for use in printed circuit board (PCB) fabrication: Compares size and location of hole images on circuitry negative with drilled holes in sample PCB panel to verify conformance of negative to specifications, using light table. Examines circuitry negatives to detect defects, such as under-exposure or over-exposure of negatives, circuitry width, and spacing, using light table and microscope. Fills nicks, scratches, and gaps in circuitry pattern on negatives with pen or plastic tape, removes excess ink from negatives with cotton swab, and cuts flaws and excess film from circuitry negatives to correct and prepare negatives for use in PCB fabrication, using utility knife. Measures circuitry negative for conformance to specified dimensions, using precision-measuring instruments.

GOE: 06.03.01 STRENGTH: L GED: R3 M3 L3 SVP: 5 DLU: 86

726.384-018 INSPECTOR, SEMICONDUCTOR WAFER PROCESSING (electron. comp.)

Inspects semiconductor wafers, using microscope, to identify processing defects: Places wafers on stage of microscope, using tweezers or vacuum wand. Examines surface of wafer and test patterns on wafers, using microscope, and compares wafers to specification diagrams to identify processing defects, such as scratches, contamination, pattern misalignment, photoresist peel, and circuit bridges. Measures specified dimensions of test patterns on wafers, using electronic measuring devices attached to microscope at work station, to verify that wafers meet company specifications. Routes defective wafers to engineering department. Records observations onto processing sheets and log. Cleans inspecting area, using cleaning solution.
GOE: 06.03.01 STRENGTH: S GED: R3 M2 L2 SVP: 4 DLU: 86

726.384-022 PHOTO MASK INSPECTOR (electron. comp.) alternate titles: mask inspector

Inspects master or production photo mask plates used in fabrication of semiconductor devices for defects and to ensure conformance to specifications: Positions photo mask plate on stage of microscope or computer-aided inspection equipment. Focuses and aligns lens with predetermined coordinates on photo mask plate. Inspects photo mask plate for defects, such as misalignment of design, contamination, cracks, pinholes, and streaking, and compares photo mask pattern to original design to verify conformance to specifications. Enters commands to activate computer-aided inspection equipment that automatically scans surface of photo mask plate to locate and record defects. Records inspection information, and sorts photo mask plates according to inspection results. May measure critical dimensions of pattern on photo mask plate and compares dimensions to design requirements, using microscopes with attached calibrated viewing or image shearing apparatus. May photograph surface of defective photo mask plate, using instant-print camera. May operate laser-beam equipment to repair circuitry defects on photo mask plate [LASER-BEAM-TRIM OPERATOR (electron. comp.) 726.682-010]. May tend equipment that removes contaminants and photoresist from surface of photo mask plate [PHOTO MASK CLEANER (electron. comp.) 590.684-034].
GOE: 06.01.05 STRENGTH: L GED: R4 M3 L4 SVP: 6 DLU: 86

726.682-010 LASER-BEAM-TRIM OPERATOR (electron. comp.)

Operates computer-controlled laser machine to trim excess material from electronic components: Reads production sheet to determine specified operation code and enters commands, using control console, to retrieve programmed instructions. Inserts electronic component into holding fixture of laser machine, using tweezers, and presses console buttons to actuate laser beam that automatically trims excess metal and glass from component. Observes light indicator on control panel or monitor to determine if component meets specifications. Removes trimmed component from holding fixture and examines component for defects and completeness of trim, using microscope. May repair holding fixture on laser machine, using handtools, such as allen wrench, wire strippers, hand drill, and soldering iron.
GOE: 06.02.02 STRENGTH: L GED: R3 M3 L3 SVP: 4 DLU: 89

726.682-014 WIRE-WRAPPING-MACHINE OPERATOR (electron. comp.)

Operates computer-controlled semiautomatic machine that wraps wires around electronic-pin connectors: Mounts connector panel on machine pallet that moves panel along programmed path, using wrench and screwdriver. Depresses specified button to start automatic programmed tape for pin sequence and observes panel lights that indicate size of wire prescribed in program. Selects and mounts specified wire on machine spindle. Threads wire through bit of wire-wrap gun, positions gun in support to align gun with pins on connector panel, and depresses trigger of wire-wrap gun to wrap wire on pins. Observes directional lights of machine to determine movement of pallet and gun support. Inspects wire-wrap of completed panels for tightness, neatness of fold, or broken wire.
GOE: 06.02.09 STRENGTH: L GED: R3 M3 L3 SVP: 2 DLU: 86

726.682-018 COORDINATE MEASURING EQUIPMENT OPERATOR (electron. comp.) alternate titles: mechanical inspector

Operates coordinate measuring equipment to measure dimensions of printed circuit boards (PCB's): Reads blueprints to determine dimensions and tolerance specifications for selected PCB's. Positions PCB's on measuring table of equipment, views PCB's on monitor screen, and turns calibrated cranks on equipment to position control bar, with attached camera, over specified sections of PCB's. Flips toggles to lock camera in position, activates digital readout equipment, and records specified measurement of PCB's on inspection sheets. Repeats process to cover all sections of PCB's, including locations of specified drilled holes and samples of routed PCB's. Compares recorded measurements to blueprint dimensions and tolerances and notifies specified persons of discrepancies.
GOE: 06.03.02 STRENGTH: L GED: R3 M3 L2 SVP: 3 DLU: 86

726.682-026 SAW OPERATOR (electron. comp.)

Operates battery of circular saws to cut plastic blocks containing ceramic-coated aluminum rods to length for processing into electronic resistors: Reads job order to determine length of rods required. Secures blocks in clamps of automatic-feed saw, preset to specified length. Closes safety cover and depresses controls to start saw and activate automatic feed. Loads additional saws and monitors sawing operations to detect machine malfunctions. Removes sawed blocks from saws at end of automatic cycle. Holds sawed block against stop of manual-feed saw, starts saw, and feeds block into blade to complete specified cuts. Holds cut blocks under running water to remove debris. Measures cut and washed blocks to verify conformance with job order, using calipers and micrometers. Periodically replaces cog in automatic-feed saw to change length of cut, following identification number on cog and using wrench. Replaces worn or damaged saw blades, using handtools. Cleans work area. Records specified data on production report. May assist maintenance personnel with saw maintenance and repair.
GOE: 06.02.09 STRENGTH: M GED: R3 M2 L1 SVP: 4 DLU: 86

726.684-010 CAPACITOR-PACK-PRESS OPERATOR (elec. equip.) alternate titles: pack-press operator

Presses metal capacitor container over paper-wound packs, using power press: Adjusts fixture according to size of capacitor, using handtools. Folds fiber insulation around pack and bends electrodes by hand to position electrodes for pressing. Places open end of container over pack in holding fixture of machine, engages ram, and depresses pedal to start machine that presses packs into can. Lifts capacitor from machine, straightens electrodes by hand, fills out process tag, and clips tag to capacitor.
GOE: 06.04.34 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

726.684-014 ELECTRONIC-SCALE SUBASSEMBLER (office machines)

Assembles parts to make electronic subassemblies for scales: Assembles color-coded wires, tube sockets, resistors, capacitors, terminal strips, and printed circuit boards following diagrams, instruction sheets, or samples, using handtools, such as wire stripper and soldering iron.
GOE: 06.02.23 STRENGTH: L GED: R3 M1 L1 SVP: 3 DLU: 77

726.684-018 ELECTRONICS ASSEMBLER (comm. equip.; electron. comp.; inst. & app.)

Performs any combination of following tasks to assemble electronic components, subassemblies, products, or systems: Reads work orders, follows production drawings and sample assemblies, or receives verbal instructions regarding duties to be performed. Positions and aligns parts in specified relationship to each other in jig, fixture, or other holding device. Crimps, stakes, screws, bolts, rivets, welds, solders, cements, press fits, or performs similar operations to join or secure parts in place, using handtools, power tools, machines, and equipment. Mounts assembled components, such as transformers, resistors, transistors, capacitors, integrated circuits, and sockets, on chassis panel. Connects component lead wires to printed circuit or routes and connects wires between individual component leads and other components, connectors, terminals, and contact points, using soldering, welding, thermocompression, or related bonding procedures and equipment. Installs finished assemblies or subassemblies in cases and cabinets. Assembles and attaches hardware, such as caps, clamps, knobs, and switches, to assemblies. Performs intermediate assembly tasks, such as potting, encapsulating, sanding, cleaning, epoxy bonding, curing, stamping, etching, impregnating, and color coding parts and assemblies. Tends machines that press, shape, or wind component parts. Adjusts or trims materials from components to achieve specified electrical or dimensional characteristics. Performs on-line go-not-go testing and inspection, using magnifying devices, measuring instruments, and electronic test equipment, to ensure parts and assemblies meet production specifications and standards. May perform assembly operations under microscope or other magnifying device. Occupations related to assembly of printed circuit boards and fabrication of integrated circuit chips are defined under separate definitions.
GOE: 06.02.23 STRENGTH: L GED: R2 M1 L2 SVP: 4 DLU: 89

726.684-022 ELECTRONICS INSPECTOR (electron. comp.) alternate titles: checker; inspector, component parts; line inspector

Inspects electronic assemblies, subassemblies, parts, and components for defects, following samples, production illustrations, or using comparator: Examines unit for physical defects, such as broken or missing leads, excess solder, holes in sealing material, unevenly wound coil, coating and plating blemishes, oil leaks, faulty welds, scratches, cracks, and chips. Compares hardware on assemblies, subassemblies, and parts to parts list to verify installation. Examines hardware for specified contact with conductor area. Rejects faulty assembly, part, or component and records type and quantity of defects. May measure parts to verify accuracy of dimensions, using precision measuring instruments. May sort defective components and parts for salvage or scrap. May inspect parts, using microscope or magnifier. May be designated according to item inspected, as Capacitor Inspector (electron. comp.); Electron Gun Inspector (electron. comp.); Filter Inspector (electron. comp.); Resistor Inspector (electron. comp.); Tube Inspector (electron. comp.).
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 88

726.684-026 ELECTRONICS TESTER (comm. equip.; electron. comp.; inst. & app.; office machines)

Tests function of electronic assemblies, components, and parts according to established procedures, using computerized or standard test equipment: Connects electronic assembly, component, or part to test instrument, such as ohmmeter, voltmeter, ammeter, resistance bridge, or oscilloscope, or to automatic or computerized test equipment, and turns switch to actuate test equipment. Reads instrument dial or scope, or observes viewing screen, that indicates resistance, capacitance, continuity, and wave pattern or defect, such as short circuit or current leakage. Compares instrument reading or monitor display with

standard and rejects defective units. Records type and quantity of defect. May verify dimensions of parts, using standard gauges. May examine assembly, component, or part for defects, such as short leads, bent plate, or cracked seal. May tend equipment that subjects unit to stress prior to testing. May replace defective components or repair defective wiring after testing. May operate burn-in oven to elevate printed circuit board temperature prior to testing. May adjust circuits in radios and televisions for maximum signal response. May be designated according to unit tested or test equipment used as Auto-Test Equipment Operator (electron. comp.); Solid State Tester (electron. comp.); Tester, Printed Circuit Boards (electron. comp.); Tube Tester (electron. comp.).
GOE: 06.03.02 STRENGTH: L GED: R3 M3 L3 SVP: 3 DLU: 89

726.684-034 ASSEMBLER, SEMICONDUCTOR (electron. comp.) alternate titles: microelectronics processor

Assembles microelectronic semiconductor devices, components, and subassemblies according to drawings and specifications, using microscope, bonding machines, and handtools, performing any combination of following duties: Reads work orders and studies assembly drawings to determine operation to be performed. Observes processed semiconductor wafer under scribing machine microscope and aligns scribing tool with markings on wafer. Adjusts scribing machine controls, according to work order specifications, and presses switch to start scribing. Removes scribed wafer and breaks wafer into dice (chips), using probe. Places dice under microscope, visually examines dice for defects, according to procedures, and rejects defective dice. Positions mounting device on holder under bonding machine microscope, and adjusts bonding machine controls according to work order specifications. Positions die (chip) on mounting surface according to diagram. Presses switch on bonding machine to bond die to mounting surface. Places mounted die into holding fixture under microscope of lead bonding machine. Adjusts bonding machine controls according to work order specifications. Views die and moves controls to align and position bonding head for lead bonding according to diagram. Presses switch to bond lead and moves bonding head to points indicated in bonding diagram to attach and route leads as illustrated. Inserts and seals unprotected assembly into designated assembly container device, using welding machine and epoxy syringe, to protect microelectronic assembly and complete device, component, or subassembly package. Examines and tests assembly at various stages of production, using microscope, go-not-go test equipment, measuring instruments, pressure-vacuum tanks, and related devices, according to standard procedures, to detect nonstandard or defective assemblies. Rejects or routes nonstandard components for rework. Cleans parts and assemblies at various stages of production, using cleaning devices and equipment. Maintains records of production and defects. Bonds multiple dice to headers or other mounting devices. Important variations are kinds of equipment used, such as thermal compression, wedge, wire ball, and wobble bonders, items assembled, or procedure performed.
GOE: 06.02.23 STRENGTH: S GED: R3 M2 L2 SVP: 3 DLU: 86

726.684-042 DIE ATTACHER (electron. comp.)

Attaches *dies* to empty integrated circuit (IC) packages to assemble complete semiconductor packages, using welding and gluing equipment. Places empty IC packages on heated chuck of equipment, using tweezers. Deposits bonding material, such as epoxy or gold alloy, on specified location of empty packages, and positions and aligns dies on bonding material in packages, using equipment or handtools. Removes packages with attached dies from chuck and places packages in trays, using tweezers. May place loaded trays in oven to set bonding material. May view positioning of epoxy and die in empty packages through microscope.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 88

726.684-050 FILM TOUCH-UP INSPECTOR (electron. comp.)

Inspects and repairs circuitry image on photoresist film (separate film or film laminated to fiberglass boards) used in manufacture of printed circuit boards (PCB's): Inspects film under magnifying glass for holes, breaks, and bridges (connections) in photoresist circuit image. Removes excess photoresist, using knife. Touches up holes and breaks in photoresist circuitry image, using photoresist ink pen. Removes and stacks finished boards for transfer to next work station. Maintains production reports. May place lint free paper between dry film sheets to avoid scratching circuit images on film.
GOE: 06.03.02 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 86

726.684-054 INSPECTOR, CRYSTAL (electron. comp.) alternate titles: crystal evaluator

Inspects, measures, and tests semiconductor crystal ingots to determine compliance with specifications, using measuring devices and test equipment: Transports ingot to workbench by cart or by hand. Measures ingot *flat*, diameter, and length, using calipers and ruler. Weighs ingots on scales and calculates weight loss due to grinding and sawing. Tests ingot resistivity, using electronic probes. Records weights, measurements, and other test results in logbook and on labels, and attaches labels to ingots. May operate saws to cut off ends of crystal or to cut sample wafers. May tend furnace that heat-treats ingots to alter resistivity to meet specifications. May determine *crystal orientation*, using x-ray machine. May operate grinding machine to bevel ends of crystals. May operate sandblasting machine to remove glaze from ingot surface. May tend equipment that etches ingots to remove surface material. May calculate proportion of impurities, using resistivity readings and specified formula.
GOE: 06.03.02 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 86

726.684-058 INSPECTOR, INTEGRATED CIRCUITS (electron. comp.)

Inspects integrated circuit (IC) assemblies, semiconductor wafers, and IC *dies* for conformance to company standards, using microscope: Reads work order to determine inspection criteria. Places group of items in trays on microscope stage, or positions items individually on stage for inspection, using vacuum pencil or tweezers. Turns knobs on microscope to adjust focus and magnification as required to view items for inspection. Views and inspects items according to company standards to detect defects, such as broken circuit lines, bridged circuits, misalignments, symbol errors, and missing solder. Discards defective items. May remove contaminants from items, using brush or airhose. May use magnifying glass to inspect electronic items.
GOE: 06.03.02 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 86

726.684-062 INSPECTOR, PRINTED CIRCUIT BOARDS (electron. comp.) alternate titles: circuit board inspector; touch-up inspector, printed circuit boards

Performs any combination of following tasks to inspect and repair printed circuit boards (PCB's): Inserts plug gauges into drilled holes of PCB panels to verify conformance to specified dimensions. Measures thickness and dimensions of plating on PCB panels to verify that plating meets specifications, using micrometers, dial indicators, calipers, rulers, eye loupes, and electronic measuring devices. Examines PCB circuitry to detect defects, such as shorts, breaks, excess or missing solder, scratches, cracks, and incorrect layout, using *light table*, eye loupe, magnifier, or microscope. Brushes solder mask ink on PCB's to repair defects in screen printing. Scrapes excess plating, or solder mask ink from PCB's, using utility knife. Repairs broken circuitry, using soldering iron or circuit bonding equipment. Records type and quantity of defective PCB's. Tests adherence of solder mask ink to PCB's, using tape. Tests continuity of PCB circuits, using bare board tester. May inspect inner layers of multilayer PCB's to verify that internal alignment and location of drilled holes meet specifications and be designated X-Ray Technician, Printed Circuit Boards (electron. comp.).
GOE: 06.03.01 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 86

726.684-066 INSPECTOR, SEMICONDUCTOR WAFER (electron. comp.)

Performs any of following duties to inspect, measure, and test semiconductor wafers for conformance to specifications: Inspects wafers under high intensity lamp to detect surface defects, such as scratches, chips, stains, burns, or haze. Measures thickness and resistivity of wafers, using electronic gauges or automated sorting machine. Measures diameter and *flat* of wafers, using calipers. Inspects bow or flatness of wafers, using electronic gauges, or examines surface of wafers under high intensity lamp. Tests for positive or negative conductivity of wafers, using electronic probe and gauge. Determines *crystal orientation* of wafers, using x-ray equipment. Encloses containers of inspected wafers in plastic bags for protection, using heat sealer. Records inspection data on production records or in computer, using computer terminal. May tend equipment that cleans surface of wafers [WAFER CLEANER (electron. comp.) 590.685-102].
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 86

726.684-070 PRINTED CIRCUIT BOARD ASSEMBLER, HAND (comm. equip.; electron. comp.; inst. & app.; office machines)

Performs any combination of following duties in assembly of electronic components onto printed circuit boards (PCB's) according to specifications, using handtools: Reads worksheets and wiring diagrams, receives verbal instructions, or follows sample board to determine assembly duties, and selects components, such as transistors, resistors, relays, capacitors, and integrated circuits. Twists, bends, trims, strips, or files wire leads of components or reams holes in boards to insert wire leads, using handtools. Inserts color-coded wires in designated holes and clinches wire ends, using pliers. Press-fits (mounts) component leads onto board. Places plastic insulating sleeves around specified wire leads of components and shrinks sleeves into place, using heat gun. Crimps wire leads on underside of board, using handtools or press. Applies sealer or masking compound to selected parts of board to protect parts from effects of wave solder process. Solders wire leads and joints on underside of board, using soldering iron, to route and connect lead wires to board and between individual components. Installs heat sinks, sockets, faceplates, and accessories on boards, using handtools. May be designated according to unit installed as Socket Assembler (electron. comp.) or stage of production as Post-Wave Assembler (electron. comp.); Pre-Wave Assembler (electron. comp.). May assist other workers in wave-soldering PCB's.
GOE: 06.02.23 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 88

726.684-074 PRINTED CIRCUIT BOARD COMPONENT TESTER, CHEMICAL (electron. comp.)

Tests electronic components for compliance to company standards, using chemicals and soldering equipment: Places droplets of acid on surface of petri dish to prepare for lead (metal) test, using eyedropper. Positions wire lead of component or pin on integrated circuit in acid, places acid-coated wire lead or pin on chemically prepared filter paper, and observes reaction on paper that indicates lead content. Soaks components that do not pass lead test in freon to remove acid from wire leads or pins and repeats test. Refers to vendor list to determine whether components are listed as acceptable. Dips wire leads of components in beaker of liquid flux, solder pot, and beaker of freon to conduct solderability test on wire leads, using metal tongs. Observes solder on wire leads for questionable conditions, such as bending of solder, discoloration, or no solder present, using magnification lamp. Sets aside components of questionable acceptance for approval by engineer. Maintains record of test results.
GOE: 06.03.02 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 86

726.684-078 PRINTED CIRCUIT BOARD COMPONENT TESTER, PRE-ASSEMBLY (electron. comp.)

Tests electronic function of components preparatory to printed circuit board (PCB) assembly for compliance to company standards, using test equipment: Selects and positions test fixture on test equipment panel according to type of component being tested. Keys data into computer keyboard or turns dials and presses buttons to set tolerances on equipment, following company standards guide. Positions components in test fixture or mounts reels containing components on tape onto machine spindle and threads component tape through test machine guides. Activates equipment to start test and observes colored panel lights on equipment to determine whether components meet specifications. Replaces defective components. Verifies dimensions of components, using calipers and specification book. Obtains vendor history file for reference when excessive component defects result during testing. Maintains records of test results. May solder electronic components to test boards prior to testing. May be designated according to unit tested as Capacitor Tester (electron. comp.); Hybrid Tester (electron. comp.); Inductor Tester (electron. comp.); Relay Tester (electron. comp.); Resistor Tester (electron. comp.); Transformer Tester (electron. comp.).
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 86

726.684-082 PRINTED CIRCUIT BOARD INSPECTOR, PRE-ASSEMBLY (electron. comp.)

Inspects printed circuit boards (PCB's) preparatory to assembly for compliance to company guidelines, using test equipment: Examines PCB's on light table for breaks in copper foil circuits. Examines PCB's to detect circuit shorts, using magnification lamp. Measures dimensions of PCB's, using ruler. Views inside edges of solder holes to detect irregular surfaces, using eye loupe. Inserts leads to components in solder holes to verify spacing of holes and ease of component insertion. Verifies plating integrity of copper foil circuits and composition of solder through solder holes, using electronic test equipment. May record inspection results to maintain vendor history files.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 86

726.684-086 PRINTED CIRCUIT BOARD ASSEMBLY REPAIRER (electron. comp.)

Performs any combination of following tasks to repair defective printed circuit board (PCB) assemblies, using soldering and desoldering equipment: Examines PCB's under magnifying lamp and reads inspection tags to locate defects, such as insufficient or excess solder and missing or defective components and parts. Solders or resolders missed or defective connections, joints, wiring, and terminals found to be defective or missing after original soldering process. Removes excess solder from connections and clears solder from component holes, using desoldering equipment. Repositions misaligned components, such as resistors, capacitors, and integrated circuits (IC's), and removes and replaces damaged or missing components. Trims long leads, replaces eyelets and rivets, and repairs damaged substrate, using handtools and power tools. Modifies PCB's following shop instructions, using handtools and soldering equipment. Tests soldered connections on PCB's to detect open circuits or shorts, using continuity tester.
GOE: 06.02.23 STRENGTH: L GED: R3 M1 L3 SVP: 4 DLU: 86

726.684-090 REWORKER, PRINTED CIRCUIT BOARD (electron. comp.) alternate titles: reworker

Repairs defective surfaces and circuitry on printed circuit boards (PCB's), using power and handtools, utilizing knowledge of electronic repair techniques: Reads work orders to determine number of PCB's to be repaired, type of repairs required, and method and tools to be used in reworking. Positions PCB's under microscope to examine circuitry. Cuts and removes defective wires, using knife, and positions replacement wire on circuit, using magnetic tweezers. Repairs defective circuitry, using handtools and soldering or welding equipment. Repairs board surface faults, such as excess solder on board or gold plating on connectors, using handtools, and washes solder or liquid gold over specified areas to restore board surfaces. Cleans repaired boards with solvent, using brush and rags. Inspects boards to determine that repairs meet specifications. Removes and stacks repaired boards on racks for movement to next work station. Places PCB's in industrial oven to cure solder mask. May prepare production reports.
GOE: 06.02.23 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 86

726.684-094 SOLDER DEPOSIT OPERATOR (electron. comp.)

Cleans assembled semiconductor packages, coats package leads with flux, and applies solder to package leads, using solder dip machine, to complete semiconductor package assembly: Places packages in holding cases and immerses cases in series of acid baths to clean packages. Places packages in holding fixtures and immerses loaded fixtures in flux bath to coat leads of packages. Pushes button to activate solder pumps of solder-dip machine and places loaded fixtures on conveyor of machine that deposits solder on leads of packages to enhance electrical conductivity of leads. Removes fixtures from conveyor, inspects leads of packages for uniform soldering, and removes solder from top of packages, using needle-nose pliers. Places loaded fixtures in baskets and immerses baskets in series of acid and soap baths to clean packages. Removes packages from fixtures, places packages on trays, and positions loaded trays in oven to dry packages. Removes tray from oven and loads packages into lot box and cleans and maintains solder pot of machine. Maintains production records.
GOE: 06.04.10 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 86

726.684-098 TEST FIXTURE ASSEMBLER (electron. comp.)

Assembles test fixtures used to test electrical circuitry of printed circuit boards (PCB's), according to diagram instructions: Receives test fixture kits, work orders, and diagrams. Positions test fixture boards on worktable and inserts copper sleeves in designated holes of boards as indicated on diagrams. Positions pins flush with fixture board surface, using mallet. Places copper test pins in sleeves previously inserted and positions spacer blocks in prescribed pattern on top and bottom of boards. Inserts screws in spacer blocks and secures blocks to boards, using screwdriver. Positions wires against pins and blocks, following specified pattern, and secures wires around pins or blocks, using wire wrapping gun. Positions fixture cover over spacer blocks on top of test fixture boards and positions metal back on assembled test fixture. Secures cover and back, using screws and screwdriver.
GOE: 06.04.23 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 86

726.684-102 TESTER, SEMICONDUCTOR WAFERS (electron. comp.)

Tests electrical characteristics of circuits on semiconductor wafers, using test equipment: Reads processing documents to determine test specifications. Obtains specified probe cards from invertory and slides probe cards into designated slot on testing equipment. Activates testing equipment and places wafer on chuck of test equipment, using tweezers. Observes wafer through test equipment microscope and aligns wafer under probes of test equipment. Pushes buttons to activate test cycle. Records test readings from printouts or display screen in test log. Compares test readings with specifications manual to identify wafers failing electrical tests. Maintains production records. May clean and maintain test equipment.
GOE: 06.03.02 STRENGTH: S GED: R2 M2 L2 SVP: 3 DLU: 86

726.684-106 TESTER, WAFER SUBSTRATE (electron. comp.)

Tests semiconductor wafer substrate, using testing equipment, such as probe tester, spectophotometer, and curve tracer, to evaluate electrical characteristics of wafer substrate: Places wafer, using tweezers, on test equipment that measures electrical characteristics of wafer substrate, such as resistivity, capacitance, and voltage. Starts equipment and observes equipment readout to determine wafer electrical measurements. Records measurements in production log. Compares measurements with specification sheets to determine if wafer substrate meets company standards. Sorts, boxes, and labels tested wafers. Delivers wafers and process sheets to production line workers. Maintains production records. May inspect wafer substrate surfaces, using ultraviolet lamp, to detect scratches and contamination.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 86

726.684-110 TOUCH-UP SCREENER, PRINTED CIRCUIT BOARD ASSEMBLY (electron. comp.)

Inspects printed circuit board (PCB) assemblies for defects, such as missing or damaged components, loose connections, or defective solder: Examines PCB's under magnification lamp and compares boards to sample board to detect defects. Labels defects requiring extensive repairs, such as missing or misaligned parts, damaged components, and loose connections, and routes boards to repairer. Performs minor repairs, such as cleaning boards with freon to remove solder flux; trimming long leads, using wire cutter; removing excess solder from solder points (connections), using suction bulb or solder wick and soldering iron; or resoldering connections on PCB's where solder is insufficient. Maintains record of defects and repairs to indicate recurring production problems. May reposition and solder misaligned components. May measure clearances between board and connectors, using gauges.
GOE: 06.03.02 STRENGTH: S GED: R2 M1 L2 SVP: 2 DLU: 86

726.685-010 MAGNETIC-TAPE WINDER (recording) alternate titles: cartridge loader

Tends machines that wind magnetic tape into reels or cassette hubs for use in communication and control equipment, instruments, and computers: Positions tape supply reels or cassette hubs on letoff and windup spindles of tape winding machines. Loops tape from supply reels through machine guides and into blank reels or hubs. Turns knob of footage counter devices that automatically cut tape and stop machines when specified length of tape has been wound into blank reels or hubs. Pushes switches to start individual machines and removes wound reels or hubs when machines stop. Scrapes detected surface defects from tape with knife. Splices tape ends together to form continuous loops in cassettes, using bench splicer. Inserts filled and blank hubs into cassettes and attaches covers. Packs reels and cassettes into containers and labels containers for shipment.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 86

726.685-014 INSERTION MACHINE TENDER, ELECTRONIC COMPONENTS (comm. equip.; electron. comp.; office machines) alternate titles: automatic component insertion operator; component insertion operator

Tends computer-controlled machine that automatically inserts electronic components, such as resistors, capacitors, diodes, and integrated circuits, into holes of printed circuit boards (PCB's): Inserts specified program tape into machine or types commands on keyboard to enter program that directs machine to insert components in specified sequence and location on PCB's. Positions paper tape reels or plastic tubes containing components into feeding mechanism to load machine. Positions PCB's on machine bed holding fixtures, starts machine, and monitors machine operation. Removes assembled PCB's from machine bed and inspects PCB's for defects, such as missing components or incomplete insertion. Stops machine and notifies supervisor or maintenance mechanic of machine malfunctions. Records production information such as production levels, machine downtime, and defects. May make minor machine adjustments and

clear machine jams. May manually insert missing components or route defective boards to repair department. May tend semiautomatic or manually controlled machines and position PCB's or components on board by hand.
GOE: 06.04.09 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 88

726.685-018 BREAK-AND-LOAD OPERATOR (electron. comp.)
Tends machine that breaks resistor plates along previously scored lines and loads resistors into magazines for further processing: Attaches guides of specified size to track on machine that feeds resistors into magazine, using allen wrench. Snaps magazine onto machine. Breaks scrap edges from plates. Places plates into feed mechanism of machine and starts machine that automatically breaks plates into columns of resistors which slide down track. Taps column of resistors at bottom of track, using plastic rod, to break column into single resistors that fall into magazine. Clears machine jams, using plastic rod or tweezers. Breaks plates by hand to remove premarked, defective resistors. Fills out job order and production report. Cleans machine and work station, using brush. Carries magazines to storage room and picks up box of plates for next work order.
GOE: 06.04.19 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 86

726.685-022 DEFLASH AND WASH OPERATOR (electron. comp.)
Tends equipment that automatically removes rubber *flash* from resistor ladders (rubber encased resistors) and cleans ladders: Loads resistor ladders into feed chute of machine and starts machine that automatically conveys resistor ladders through abrading chamber that removes flash from ladders. Visually inspects ladders to ensure that flash has been removed. Turns knob to adjust conveyor speed, if necessary, to increase or decrease abrading time. Clears jams on conveyor, using tweezers. Hits chamber of machine with mallet to loosen packed plastic abrading beads. Removes deflashed resistor ladders from conveyor, by hand, and places ladders in wire basket for subsequent cleaning and rinsing. Hangs basket of ladders on travel arm of wash equipment and starts equipment that ultrasonically cleans and rinses deflashed ladders in chemical baths.
GOE: 06.04.19 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 86

726.685-026 DIE ATTACHING MACHINE TENDER (electron. comp.)
Tends *die* attaching machine that bonds dies to semiconductor packages: Loads package carriers, magazines containing dies, and gold pieces, used to attach dies to packages, into designated slots of machine. Starts machine that automatically positions and melts gold on packages and positions dies in packages to form assembled semiconductor packages. Observes operation of machine to ensure that alignment of packages, gold, and dies meets company specifications, using video monitor. Turns knobs on machine to adjust alignment of parts assembled, regulate operation speed, and set temperature of molten gold. Removes magazines of packages for further processing.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 86

726.685-030 DIE TESTER (electron. comp.)
Tests voltage of *dies* containing individual devices, such as diodes and transistors, using computerized testing system, to ensure that dies meet company and manufacturer specifications: Reads production sheets and computer code books to determine test instructions and codes. Keys instructions and codes into computer, using computer terminal. Pours dies into equipment bowl that automatically conveys each die to probe, tests voltage of each die, and sorts dies into specified bottles. Observes equipment operation to detect misfeeds, using built-in microscope. Maintains production records. Records voltage reading on bottle labels. Cleans and maintains testing equipment.
GOE: 06.03.02 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 86

726.685-034 LEAK TESTER, SEMICONDUCTOR PACKAGES (electron. comp.)
Tends testing equipment that detects leaks in semiconductor packages: Loads tubes containing semiconductor packages into canister. Places loaded canister in equipment that replaces air in canister with liquid freon or flushes canister with radioactive isotopes. Pushes buttons and flips switches to activate equipment. Removes loaded canister and places either canister or tube of semiconductor packages in leak testing equipment, such as bubble pot or geiger counter tank, that detects gross and fine leaks in semiconductor packages. Inspects tube of packages in bubble pot, using magnifying glass, to identify packages with bubbles, indicating gross leaks. Observes control panel of geiger counter tank to identify radioactive semiconductor packages, indicating fine leaks. Removes tubes and canisters from leak detection equipment and places defective semiconductor packages in containers, using tweezers. Places accepted semiconductor packages in tubes, using tweezers. Maintains production records.
GOE: 06.03.02 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 86

726.685-038 REFLOW OPERATOR (electron. comp.)
Tends reflow equipment that melts solder on printed circuit boards (PCB's) to redistribute and fuse solder on boards to improve appearance, hardness, and solderability for PCB component assembly: Immerses boards in cleaning solution or places boards in cleaning machine that cleans and removes contaminants from boards before reflow process. Starts reflow equipment and adjusts conveyor speed and temperature of infrared heating units to meet specifications. Feeds PCB's onto conveyor of equipment that applies liquid flux and infrared heat to boards to melt, redistribute, and fuse existing solder on boards and cleans, rinses, and dries boards following reflow process. Observes boards moving on conveyor to monitor flow and operation of reflow process. Removes boards upon completion of process and inspects boards for reflow process defects. May add chemicals to flux solution. May tend soldering equipment. May tend reflow equipment that automatically cleans, rinses, and dries boards before and after reflow process.
GOE: 06.04.19 STRENGTH: M GED: R2 M2 L2 SVP: 2 DLU: 86

726.685-042 ROD TAPE OPERATOR (electron. comp.)
Tends rod tape machine that separates and tapes ceramic coated aluminum rods and winds tape containing rods onto reels for subsequent processing: Places rods onto feed tray of taping machine that aligns rods in parallel configuration, applies tape to secure rods in place, and winds taped rods onto reel. Monitors operation of machine to detect malfunctions. Replaces empty tape rolls and removes full reels of taped rods from machine. May perform duties as described under SCREENER OPERATOR (any industry) 599.685-082 to separate defective slugs (rods cut to specified lengths, approximately one inch or less).
GOE: 06.04.19 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 86

726.685-046 SAW OPERATOR, SEMICONDUCTOR WAFERS (electron. comp.) alternate titles: scriber
Tends sawing machine that automatically scribes semiconductor wafers prior to separating wafers into individual *dies*: Flips switches and presses buttons to activate sawing machine. Places wafer mounted on laminated plastic onto moveable chuck of sawing machine, using tweezers. Presses buttons and turns knobs and dials to adjust saw to specifications and to start sawing cycle. Monitors sawing cycle, using magnified viewer or TV monitor, to verify that wafers are scribed according to specifications and adjusts controls if required. Removes scribed wafer from machine and places wafer in container, using tweezers. May mount wafers on plastic laminate, using mounting device. May visually inspect wafers to identify misalignment of scribe lines. May maintain and clean sawing machine. May separate sawn wafers into dies [WAFER BREAKER, SEMICONDUCTORS (electron. comp.) 726.687-046]. May clean sawn wafers or dies, using cleaning equipment and solutions.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 88

726.685-050 SOLDER-LEVELER, PRINTED CIRCUIT BOARDS (electron. comp.)
Tends processing equipment that prepares and applies solder to copper circuit areas of printed circuit boards (PCB's) or panels: Reads process specifications and activates equipment units, such as conveyors, sprayers, pumps, brushes, air knives (blower mechanism), and solder bath. Adjusts equipment controls to regulate processing factors, such as temperatures, pressures, and speeds, according to specifications. Feeds boards on motorized conveyor leading into series of processing units, such as sprayers, brushes, dryers, and flux rollers, that clean copper circuit areas and apply flux preparatory to solder application. Removes boards from precleaning equipment conveyor and clamps boards to feeding mechanism of solder leveling equipment. Pushes button to activate equipment that automatically lowers board into molten solder bath, lifts boards out of bath, and moves boards past hot-air knives that smooth solder off noncopper areas. Monitors equipment operation and corrects minor malfunctions, such as board misfeeds, conveyor speeds, and temperature settings. Removes board from solder equipment and visually examines boards for completeness of soldering. Notifies supervisor of equipment malfunctions and board defects, such as discolored, missing, or unlevel solder. May reroute defective boards through processing equipment to correct defects. May maintain production records.
GOE: 06.04.21 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 86

726.685-054 TESTER, SEMICONDUCTOR PACKAGES (electron. comp.)
Tends automatic equipment that test functions of semiconductor packages: Reads production documents to determine test specifications. Inserts specified test program (magnetic card) in test equipment to program equipment. Places tubular magazines containing semiconductor packages in feeder mechanism of equipment. Flips switch to activate test cycle. Monitors operation of test equipment to detect misfeeds. Sorts tested semiconductor packages into specified containers. Maintains production records. May tend centrifuge or temperature-cycle machine that places semiconductor packages under stress to cause circuit failure of weak sections during subsequent testing.
GOE: 06.03.02 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 86

726.685-058 WAFER MOUNTER (electron. comp.)
Tends press that mounts semiconductor wafers in templates for polishing: Cleans templates, using cleaning solution and brush or towel, or tends machine that automatically cleans templates. Places cushion in template depressions and places wafers on cushion, or places wafers on waxed template. Positions templates in press and activates press that presses wafers into templates. May tend machine that automatically removes polished wafers from templates. May tend machine that laps templates to restore flatness. May tend press that attaches template to carriers before mounting wafers.
GOE: 06.04.09 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 86

726.685-062 PROGRAMMING EQUIPMENT OPERATOR (electron. comp.) alternate titles: die equipment operator; prom burn-off operator
Tends equipment that automatically transfers programmed information onto integrated circuits (ICs) on *dies* or IC packages, such as PROMs (programmable read only memory): Reads work order that accompanies ICs for processing to determine programming specifications. Secures master PROM or die in equipment. Keys in codes, using computer keyboard and presses buttons to acti-

vate equipment that reproduces master program in programmer. Observes digital displays on equipment to ensure that master program is not defective and to determine when reproduction of program is completed in programmer. Positions blank PROMs and pushes lever to lock PROMs in sockets of programmer; or positions blank dies on platform of die probe equipment, views dies through microscope, and turns knobs on equipment to position specified areas of dies under probes prior to programming. Presses switches to activate programmer that reproduces program on blank PROMs or dies. Observes defect indicator lights to detect defective PROMs or dies and to determine completion of programming. Maintains production records. May load defective PROMs into equipment that exposes PROMs to ultraviolet light for timed intervals to erase programmed information in order to reuse PROMs.
GOE: 06.04.19 STRENGTH: S GED: R3 M2 L3 SVP: 3 DLU: 86

726.685-066 BONDER, SEMICONDUCTOR (electron. comp.)

Tends automatic bonding machine that bonds gold or aluminum wire to integrated circuit dies to connect circuitry to package leads: Reviews schematic diagram or work order to determine bonding specifications. Turns dials to set bonding machine temperature controls and to regulate wire feeding mechanism. Mounts spool of wire onto holder and inserts wire end through guides, using tweezers. Positions semiconductor package into magazine of automatic feed mechanism, and observes package, using microscope or equipment display screen, to ensure connections to be bonded are aligned with bonding wire. Adjusts alignment as necessary. Activates machine that automatically bonds wire to specified connections on semiconductor package leads. Removes packages from bonding machine and places packages in work tray. May test tensile strength of bonded connections, using testing equipment. May locate connections and bond wire to connect circuitry of hybrid circuits, using precision-bonding machine.
GOE: 06.04.09 STRENGTH: S GED: R2 M1 L2 SVP: 2 DLU: 86

726.686-010 WAVE-SOLDER OFFBEARER (electron. comp.)

Removes printed circuit boards (PCB's) from discharge conveyor of automatic wave-soldering machine following completion of soldering process: Places empty carrier on workbench at discharge end of wave-soldering machine conveyor. Removes pallets containing wave-soldered PCB's from conveyor and places pallets in carrier. Examines boards to detect defects, such as missing solder, spots, or warped boards. Submits defective boards to supervisor for approval or correction of defects. Stacks acceptable boards on carrier or in tub for final assembly. May assist others in setting up and operating equipment for wave-soldering process. May assist in cleaning equipment, using scraper and airhose. May complete production report for supervisory use.
GOE: 06.04.40 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 86

726.687-010 ELECTRONICS WORKER (electron. comp.)

Performs any combination of following tasks to clean, trim, or prepare components or parts for assembly by other workers: Receives verbal or written instructions from supervisor regarding work assignment. Cleans and deglosses parts, using cleaning devices, solutions, and abrasives. Trims flash from molded or cast parts, using cutting tool or file. Applies primers, plastics, adhesives, and other coatings to designated surfaces, using applicators, such as spray guns, brushes, or rollers. Fills shells, caps, cases, and other cavities with plastic encapsulating fluid or dips parts in fluid to protect, coat, and seal parts. Prepares wires for assembly by measuring, cutting, stripping, twisting, tinning, and attaching contacts, lugs, and other terminal devices, using handtools, and power tools and equipment. Positions and fastens together parts, such as laminates, electron tube mounts and cages, variable capacitor rotors and stators, paper loudspeaker cones, faceplates, and shells and cases for various electronic components, using handtools and power tools. Prints identifying information on components and parts, using silk screen, transfer press, or electro-etch printing devices, or ink pad and stamp. Moves parts and finished components to designated areas of plant, such as assembly, shipping and receiving, or storage. Loads and unloads parts from ovens, baskets, pallets, and racks. Disassembles and reclaims parts, using heating equipment and handtools.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 88

726.687-014 PLUG WIRER (elec. equip.)

Attaches insulated wire to terminals of electric plugs, using handpress: Positions wire in slot of plug shell and places brass terminal prongs in clamp of press. Moves lever that causes press to force exposed ends of wire into contact with prongs and secures contacts firmly in plug.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

726.687-022 ENCAPSULATOR (elec. equip.; electron. comp.)

Performs any combination of following tasks to encapsulate electrical and electronic parts, components, and assemblies with epoxy, plastic, and other protective coating material: Weighs and mixes encapsulating material, following prescribed formula. Positions module or transformer case under outlet of encapsulating fluid tank and moves controls to force preset amount of fluid from tank into module or transformer case. Places components on racks or hooks, dips racks or hooks containing components into encapsulating fluid, and places dipped components on drying frame or into oven to harden coating. Fills capacitor shells or semiconductor caps with encapsulating fluid or applies encapsulating fluid to specified surfaces on component, using manually- or electrically-powered syringe or other applicator. Molds protective casing around component, using compression molding machine. Places component into mold and pours encapsulating fluid into mold to surround component. Heats component in oven or curing device prior to or after encapsulating to remove moisture or cure encapsulating material. Inspects encapsulation for defects, such as chips and pinholes. Stamps color code or trademark on encapsulated components. Bonds flexible printed circuit boards to rigid boards, using bonding solution and potting equipment. May weigh and mix materials, following formula, and be designated Compound Mixer (elec. equip.; electron. comp.). May be designated Bonder (electron. comp.); Dipper (elec. equip.; electron. comp.); Filler (elec. equip.; electron. comp.); Potter (electron. comp.).
GOE: 06.04.24 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 87

726.687-026 LAMINATION ASSEMBLER, PRINTED CIRCUIT BOARDS (electron. comp.)

Assembles layers of laminating materials and printed circuit board (PCB) panels to prepare for multilayer PCB laminating process: Assembles and aligns inner and outer layers of PCB panels and laminating materials over guide pins in holding fixture to prepare multilayer PCB panels for laminating process, following established procedures. Examines inner layers of panels during assembly for defects, such as chips, dust, or dents. May tend laminating machine that bonds assembled panels to form multilayer PCB panels [LAMINATOR, PRINTED CIRCUIT BOARDS (electron. comp.) 692.685-282]. May heat materials in oven to remove moisture prior to laminating process.
GOE: 06.04.34 STRENGTH: M GED: R2 M2 L2 SVP: 2 DLU: 88

726.687-030 LOADER, SEMICONDUCTOR DIES (electron. comp.)

Loads *dies*, using vacuum wand, into carriers that hold and protect dies during fabrication of semiconductor packages: Pours dies from container onto filter paper. Picks up and places dies circuit-side up in indentations in carrier, using vacuum wand. Secures lid on carrier, using manual pressure. May clean dies prior to loading, using solutions and cleaning equipment. May sort semiconductor devices to remove defective devices marked in inspection department.
GOE: 06.04.40 STRENGTH: S GED: R2 M1 L2 SVP: 2 DLU: 86

726.687-034 MASKER (electron. comp.)

Applies liquefied soldering mask to designated terminal areas of printed circuit boards (PCB's) to prevent molten solder from collecting on circuitry during wave soldering process, using squeeze bottle of soldering mask, and following premasked sample. Removes excess mask from PCB's, using towel. Places masked PCB's in storage racks for movement to next work station.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 88

726.687-038 PREASSEMBLER, PRINTED CIRCUIT BOARD (electron. comp.)

Attaches preassembled components, such as terminal pins, connectors, and labels, to printed circuit boards (PCB's) and stamps identification codes on boards preparatory to further assembly: Examines PCB's for illegible issue numbers and removes and restamps numbers, using eraser and handstamp. Reads work specifications to determine type of labels, components, and locations on PCB's to attach items. Cuts component pins (wires) to specified length, using wire cutters, inserts pins in specified holes on PCB's, and secures pins to PCB's, using holding block and hammer or pneumatically powered stamping device. Affixes labels and tape to boards and stamps identification codes on boards.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 86

726.687-042 SEALER, SEMICONDUCTOR PACKAGES (electron. comp.)

Positions and seals solder-coated lids or tops on semiconductor packages, using heated chuck or automatic furnace: Places lids on semiconductor packages, using tweezers. Places semiconductor packages on heated chuck in nitrogen box or places container of semiconductor packages on furnace conveyor to heat and seal semiconductor packages. Maintains production records.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 86

726.687-046 WAFER BREAKER, SEMICONDUCTORS (electron. comp.)

Breaks semiconductor wafers into individual *dies*, using equipment and handtools: Places semiconductor wafer on pad, using tweezers. Taps wafer, using pencil tip, awl, or tweezers to break wafer into quarters. Places semiconductor wafer quarter on plastic square. Presses semiconductor wafer, using roller or air pressure equipment, to break wafer quarter into individual dies. Places individual dies in containers, using vacuum wand or brush. May break wafers, using chemical solutions and breaking equipment.
GOE: 06.04.34 STRENGTH: S GED: R2 M1 L2 SVP: 2 DLU: 86

727 OCCUPATIONS IN ASSEMBLY OF STORAGE BATTERIES

This group includes occupations concerned with assembling grids, plates, separators, and connectors to form wet- and dry-cell batteries, and filling with electrolyte.

727.130-010 SUPERVISOR, BURNING, FORMING, AND ASSEMBLY (elec. equip.)

Supervises and coordinates activities of workers engaged in assembly and repair of storage batteries: Coordinates activities pertaining to grouping and fusing plates into elements and elements into complete batteries, processing (forming and drying) plates preparatory to final assembly, charging finished batteries, and repairing defective batteries. Adjusts machines or equipment, such as automatic plate stackers and burners, dry-charge processing machine, and sealing

machines. Inspects in-process or finished units, such as elements, batteries, and containers to determine conformance to specifications. Observes meters, thermometers, hydrometers, temperature controls, and operation of machines and equipment to detect malfunction. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to process supervised as Supervisor, Battery Assembly (elec. equip.); Supervisor, Lead Burning (elec. equip.); Supervisor, Plate Forming (elec. equip.).
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

727.137-010 SUPERVISOR, DRY-CELL ASSEMBLY (elec. equip.)
Supervises and coordinates activities of workers engaged in producing and assembling components of primary (dry) cells to make batteries: Coordinates activities, such as extruding cores, inserting cores and carbon rods in cans, welding wires (pins) to cans, capping and sealing cells, soldering pins to rods of other cells to make battery, inserting cells in tubes or sleeves, and testing, repairing, and packaging batteries. Inspects subassemblies and finished units for conformance to specifications. May assist machine operators with setup or adjustment of machines for change in size of cans or to correct malfunction. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

727.381-010 BATTERY RECHARGER (elec. equip.)
Tests and treats rejected storage batteries and mixes acid solutions: Determines specific gravity of electrolyte in rejected batteries and adjusts solution to specified concentration and height in cells [ACID FILLER (elec. equip.)]. Tests batteries for specific defects [BATTERY TESTER (elec. equip.); FINAL INSPECTOR (elec. equip.)]. Fills batteries with fresh electrolyte, charges battery and tests battery for performance, using voltmeters and ammeters. Segregates batteries that fail performance test. Turns valves to fill vats with specified quantity of acid and water for use in forming and charging processes. Activates agitator to diffuse liquids, and tests solutions for specified concentration, using hydrometer.
GOE: 06.02.32 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

727.381-014 BATTERY REPAIRER (any industry) alternate titles: battery tester; storage-battery charger
Repairs and recharges electric-storage batteries: Melts sealing compound on cover, using gas torch. Loosens compound from sides of case, using putty knife. Removes and disassembles cells and inspects parts to detect defects. Replaces defective parts, fuses lead parts, using oxyacetylene torch, reassembles battery, and pours hot seal (tar compound) over cover. Fills cells with acid solution and determines specific gravity of solution, using hydrometer and thermometer. Adds acid or water to obtain specified concentration. Attaches leads from charger to battery posts and starts charger. Reads meters and adjusts rheostat to control flow of current through battery. May repair battery-charging equipment.
GOE: 05.10.03 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

727.381-018 DRY-CELL TESTER (elec. equip.)
Tests dry cells and dry-cell batteries to determine length of life, capacity, shelf-life, effects of temperature on battery output, and other characteristics, using direct current voltmeters, ammeters, and programmed test equipment: Mounts cells or batteries on test racks and connects terminals to testing equipment. Discharges cells or batteries through fixed resistances at specified time intervals. Reads meters and records voltages during discharge intervals. Tests cells and batteries for open-circuit voltage and electrical output at specified intervals for prescribed periods to measure shelf-life. May test new compounds as directed.
GOE: 06.03.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

727.381-022 STORAGE BATTERY INSPECTOR AND TESTER (elec. equip.) alternate titles: battery analyst; quality auditor; test technician
Inspects and tests storage batteries in process of manufacture or before shipment to verify conformity with mechanical, chemical, and electrical specifications, using specified and standardized tests, procedures, and equipment and applying knowledge of battery performance, specifications, manufacture, and construction: Disassembles batteries following specified procedures. Examines battery for defects and measures battery to determine if specifications are met, using such instruments as gauges and scales. Tests specific gravity of battery acid, using hydrometer and thermometer. Places battery in water tank or refrigerator to control temperature and test electrical capacity of battery. Attaches leads to meters and equipment to charge or discharge battery as specified to determine amperage delivered at given rate. Records inspection and test results, compares results with specifications, and writes reports used in correcting manufacturing defects or developing new products. May test and disassemble returned batteries to determine cause of failure.
GOE: 06.01.05 STRENGTH: L GED: R4 M2 L4 SVP: 7 DLU: 77

727.384-010 BATTERY TESTER (elec. equip.) alternate titles: electrical tester, battery
Tests storage batteries, using electric testing instruments: Sets dials on testing instruments according to battery voltage. Places positive and negative wired plugs on posts and intercell-connector terminals of corresponding polarity and observes indicator on instrument that measures resistance capacity in terms of pass or reject. Tests rejected batteries to determine specific defects, using voltmeter. Computes comparative figures and test data to determine deficiencies and attaches slip to battery indicating type of defect. May test battery assemblies on conveyor line. May test batteries used in field equipment and be designated Battery Tester, Field (elec. equip.).
GOE: 06.03.01 STRENGTH: L GED: R3 M3 L2 SVP: 3 DLU: 77

727.484-010 ACID ADJUSTER (elec. equip.) alternate titles: balancer
Adjusts (balances) specific gravity of electrolyte (acid solution) in battery cells or in plate-forming tanks to concentration specified: Ascertains temperature and specific gravity of solutions, using thermometer and hydrometer. Turns valves or lever to drain acid or water into cells or tanks to adjust specific gravity of solutions. Connects batteries to charging line and charges batteries for specified time.
GOE: 06.04.34 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 77

727.587-010 BATTERY CHARGER (elec. equip.)
Charges storage batteries: Groups batteries on tables according to type and specified rate and length of charge. Attaches positive lead wire (jumper) from current source to positive post and negative lead wire to negative post of group. Starts charge and reads ammeter and adjusts rheostat to obtain specified charging rate. Records data indicating location, type, and number of batteries on circuit and rate and length of charge specified. Marks ends of tables with chalk indicating when batteries are to be disconnected and removed. May ascertain specific gravity of acid in batteries during charge, using hydrometer and thermometer and notify ACID ADJUSTER (elec. equip.) to correct variation. May record instrument readings during charging cycle and regulate current.
GOE: 06.04.34 STRENGTH: L GED: R2 M2 L1 SVP: 3 DLU: 77

727.662-010 LEAD BURNER, MACHINE (elec. equip.) alternate titles: group burner, machine
Sets up and operates rotary lead-burning machine to fuse straps to grouped plates to form storage battery elements: Adjusts machine fixtures and torch, according to size of grouped plates, using handtools. Observes pressure gauge, ignites torch, turns gas and air valves to set flame of specified size and color, and starts machine. Visually inspects fused elements for lead runs, and defective plates and separators. Places specified number of elements in battery box in prescribed position, using shims when necessary. Directs workers engaged in machine stacking of plates (grouping), loading groups into machine, and fitting straps to lugs prior to fusing. Inspects materials prior to grouping for specified size and type. Directs or performs adjustment of feeding mechanisms and electric counter on stacking machine, using handtools. May operate two-station lead-burning machines.
GOE: 06.02.19 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

727.664-010 BATTERY ASSEMBLER, DRY CELL (elec. equip.)
Performs any combination of following duties to assemble batteries for commercial use in products, such as photographic equipment, flashlights, and pagers: Fills electrolyte or mercury dispensing devices to specified levels. Pours partial battery assembly parts into respective conveyor line bowl feeders, places spools of metal strips and paper on holding brackets, or positions battery subassemblies in conveyor holding attachments. Observes automatic equipment that cuts blotter and cathode inserts, places inserts in subassembly, joins top and bottom subassembly of batteries, dispenses specified amounts of electrolyte or mercury, and spot welds metal strip to each battery; or tamps pellets into bottom sections of battery subassembly. Positions inserts, such as poly ring and anode ring, in subassembly before or after designated steps of assembly process. Notifies supervisor or setup personnel, or signals coworkers, to stop conveyor when malfunctions occur. Gathers batteries with metal strips attached, and places specified number of batteries in concave work aid that facilitates positioning metal strips over side of batteries in stack prior to spot welding. Positions each battery of stack under spot welder and depresses pedal to spot weld strips to successive batteries to join stacks of batteries. Spot welds battery top to joined batteries. Inserts battery stacks into battery sleeves with crimped tops, positions battery sleeves in crimping machine, and presses button to crimp bottom of sleeves to secure stacks in sleeves. Positions batteries in test equipment to determine whether batteries meet standard for acceptability. Tends equipment that automatically cuts out blotter and cathode battery inserts and places inserts in partial battery assemblies. Packs batteries meeting company standards for shipment.
GOE: 06.04.23 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 88

727.684-010 BATTERY ASSEMBLER (elec. equip.)
Assembles cells and other components in container (battery case) to make complete storage battery: Inserts cells into container according to prescribed polarity arrangement. Installs covers on cells [CELL COVERER (elec. equip.) 727.687-042] and fits intercell connectors on posts. Burns (fuses) connectors to post. Pours compound over cells to fill cracks and seal battery in case [SEALER (elec. equip.) 727.684-030]. May invert special-type cover onto jig, position cells in cover, ladle molten lead into cover to form posts and connectors and fuse parts to cells, pour plastic seal into grooves, and press container into cover to assemble battery.
GOE: 06.02.23 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

727.684-014 BATTERY ASSEMBLER, PLASTIC (elec. equip.)
Performs any combination of following tasks to prepare and assemble components of plastic-cased batteries: Places state-of-charge indicator in case in prescribed channel position and attaches glass mat to rear surface of ball channel, using adhesive. Applies liquid-level lines to case according to drawing, using marking devices. Inserts bushings in post openings in cover to provide

leak-proof junction between post and cover. Places filler-plugs and washers in cover and attaches baffle plate to cell vent to reduce acid spray during charging. Inserts (interleaves) separators of specified size between plates of elements and applies liner to exposed edges and outside plates to insulate surfaces and serve as reservoir for electrolyte. Fits baffle plate onto top of element and between connecting straps to protect tops of separators and reduce acid spray during charging. Inserts cells in single or multicell containers according to specified polarity arrangement. Tests each cell electrically by determining resistance of cell to flow of applied current of specified voltage, using meter. Lubricates inner surface of bushings in cover. Applies cement to top edge of container and positions cover. Places clamps on cover to apply pressure until cement sets. Removes clamps. Fuses wire or cast terminals to posts, using torch. Inspects battery for defects. Applies air pressure to battery submerged in water to detect leaks. Dates, codes, and labels case, using marking and labeling devices. Inspects finished batteries for appearance and packages and seals batteries in cartons.
GOE: 06.04.23 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 77

727.684-018 CELL REPAIRER (elec. equip.) alternate titles: battery tester and repairer

Repairs multiple-cell dry batteries: Inspects batteries for defects, such as dented cans, damaged carbon rods and terminals, and defective sealing. Repairs or replaces defective parts, using handtools. Tests cells and batteries for capacity, using voltmeter. Cuts wires to remove faulty cells, using hand shears. Connects replacement cell to batteries, using soldering iron.
GOE: 06.04.34 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

727.684-022 LEAD BURNER (elec. equip.)

Burns (fuses) together lead and lead-alloy connections and builds up storage-battery parts, using oxyacetylene torch and lead bar: Ignites torch, observes color of flame, and turns handwheel or valve to regulate flow of gas and air to obtain flame of specified temperature. Moves flame over contact points of parts to puddle (melt) metal and fuse parts, melting lead bar and adding metal when required. Seals fusion points of parts, such as straps and lugs, posts and links, intercell connecting bar, and sleeves; wires or strips connecting plates and lead forming tanks; and bars connecting dry-charge elements. Guides torch and bar to add metal and build up parts, such as battery posts, to prescribed level, using template to ensure specified height. Fills cavities or corrects malformation in lead parts. May install and remove post builders or burning dams used to position molten lead. May install assembled units and posts in mold, heat mold with torch, and brush liquid soap on mold to prevent sticking.
GOE: 06.04.31 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

727.684-026 PLATE ASSEMBLER, SMALL BATTERY (elec. equip.) alternate titles: bench assembler, battery

Assembles plates in series for small batteries: Positions plates vertically between teeth of rack and pushes rack under electrode of welding machine. Places terminal assembly (a short wire welded to screw terminal) on plate edge. Depresses pedal to lower electrode and weld terminal wire to plate, repeating operation until all plates are fitted with terminals. Interleaves positive and negative plates in assembly rack and fuses wire across tops of grouped plates. Cuts wire to separate positive and negative units from series of plates, using knife. Aligns units in jig so grouped plates are parallel.
GOE: 06.02.23 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

727.684-030 SEALER (elec. equip.) alternate titles: flamer-sealer

Seals storage battery cells in containers (battery box) to form airtight and watertight battery: Loads thermostatically controlled kettle (preheater) with chunks of compound. Ignites burners and adjusts temperature controls to heat and melt compound. Opens valve to drain compound into pot and empties compound into tank (sealing machine). Holds hose attached to tank and presses lever to control flow of compound over cells. Starts conveyor to move batteries through flamer (fixed and preset gas torches) or manipulates gas torch to melt and level off compound to produce seal. Scrapes excess compound from container, using putty knife and cloth. May clip posts, using handtool. May stamp numbers on battery, using marking dies. May install covers on cells [CELL COVERER (elec. equip.) 727.687-042]. May melt compound in hand-manipulated container and pour compound over cells. May use heated dipper equipped with trigger mechanism to deposit sealing compound over cells.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

727.685-010 PLATE SLITTER-AND-INSPECTOR (elec. equip.)

Tends machine that slits panels of storage-battery plates to specified widths, and inspects slit plates for defects in casting or pasting, such as cracked frames (grids), broken lugs, holes, and incomplete or uneven pasting: Adjusts slot in feeding mechanism (plate transfer) to thickness of plate, positions saw used to trim lugs on plate to specified length, and positions cutting rollers according to widths specified for plates. Starts conveyor and slitter. Examines plates and segregates defective plates. Cleans edges of lugs, using handtools and stacks plates on truck. Records date, type of plate, and inspector's name on ticket and attaches ticket to load.
GOE: 06.04.24 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 77

727.687-010 ACID DUMPER (elec. equip.) alternate titles: acid changer; forming acid dumper

Starts conveyors and pushes incoming storage batteries onto conveyor leading to machine which inverts batteries over receiving tank to drain used forming acid or manually unloads batteries from forming trucks, inverts batteries, and places batteries on rack to drain. Places drained batteries on conveyor leading to refilling station or on truck. May strip connectors and dummy vents from battery before draining, replace them after draining, and refill battery with acid, using vacuum filling machine [ACID FILLER (elec. equip.)]. May ascertain specific gravity of acid in battery, using thermometer and hydrometer and add acid or water to obtain specified concentration.
GOE: 06.04.40 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

727.687-014 ACID FILLER (elec. equip.)

Fills storage battery cells with sulfuric acid solutions of specified concentration preparatory to forming and charging: Arranges batteries in groups on tables or trucks according to specified acid concentration. Holds spouts of hoses on gravity flow or siphon-type fillers over battery vents. Adjusts valves manually or pushes pedal to control flow of acid to cells. Fits rubber gaskets on multiple filler head of vacuum filling machine to set level of fill. Positions filler head on battery vents and adjusts controls to start vacuum action and fill cells. May mix acid and water and adjust solution to prescribed specific gravity. May bring acid in insufficiently filled batteries to specified level and be designated Acid Leveler (elec. equip.).
GOE: 06.04.36 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

727.687-018 ALUMINUM-CONTAINER TESTER (elec. equip.) alternate titles: battery-container tester, aluminum

Tests efficiency of enamel insulation of finished aluminum battery containers, using electrical testing apparatus and chemical solutions: Places lid on metal fixture wired to instrument panel to test coating on lid. Dips instrument terminal in chemical solution and rubs terminal over surface of lid, observing sparks that indicate insufficient insulation. Outlines areas that emit sparks with crayon to guide workers in applying additional enamel coating. Fills container with chemical solution to test interior insulation. Dips tip of rubber-covered rod, connected to ohmmeter, in solution and observes instrument dial to determine if insulation is effective within specified tolerance. Marks acceptance symbol on satisfactory containers. Moves testing rod around interior of container until panel light indicates defect in container. Pours solution out of container to level of defective area (light goes out when level of solution is below defect). Moves tip of wired bar over surface of container until sparks occur indicating location of defect. Marks and segregates defective containers.
GOE: 06.03.02 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

727.687-022 ASSEMBLER, DRY CELL AND BATTERY (elec. equip.)

Performs any combination of following tasks to assemble dry cells and dry batteries: Removes cans (cell containers) from cartons and racks cans in trays. Drops washer into bottom of cans. Pulls lever to drain measured amount of liquid paste into can. Places paper liner (spider) over open end of can. Drops core into can, forcing spider to line can and wrap core. Observes conveyor-fed electrical-test-and-reject mechanism that contacts and tests finished cells and removes defective cells from conveyor. Inserts cells in partitioned containers to make battery. Positions perforated metal plate (cover) on carbon rods of cells in battery to straighten and center rods. Places battery on conveyor leading to next station, where worker removes and returns cover. Bends wires on cells preparatory to soldering of wires to cells in adjacent row. Drains or pours hot asphalt into battery-container, using dispensing device or ladle. Places battery in container and presses it into asphalt. Places finished batteries in cartons. May be designated according to task performed as Core Dropper (elec. equip.); Wire Bender (elec. equip.).
GOE: 06.04.23 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

727.687-026 BATTERY CHARGER, CONVEYOR LINE (elec. equip.)

Performs any combination of following tasks to charge storage batteries: Sets acid-filled batteries apart from batteries requiring acid and routes batteries requiring acid to designated areas. Places charging plugs (filler-vent caps) loosely over cells of acid-filled batteries to prevent escape of battery acid during charging process. Clears jams on conveyors leading to and from acid-dumping machine. Reads charging record cards and chalk marks on charging tables to determine batteries ready to be removed. Disconnects charged batteries from electric circuit and slides batteries from table onto conveyor. May carry boxes of plugs to designated areas. May be known as Charging-Plug Placer (elec. equip.).
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

727.687-030 BATTERY STACKER (elec. equip.) alternate titles: battery loader

Loads batteries from conveyor or handtruck to two-level (double decker) trucks, according to specified polarity arrangement, preparatory to further processing, such as forming or charging. Clamps or pushes connectors or links onto posts. May perform other tasks, such as wiping excess sealing compound from battery, clipping posts, using handtool, inspecting batteries for defective covers or posts, and rejecting defective batteries.
GOE: 06.04.40 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

727.687-034 BATTERY-CONTAINER-FINISHING HAND (elec. equip.) alternate titles: container finisher

Sprays, dips, or liquid-treats battery containers and terminal boxes and loads containers and boxes into drying ovens: Rubs surfaces of products, using sandpaper to smooth surfaces preparatory to painting. Arranges items on drying racks after painting and pushes racks into oven, or hooks parts on conveyor which carries parts through drying tunnel. Turns temperature dials as specified according to products being dried. May insert rubber liners through acid vents in containers and glue liners in place. May move materials between processing

stations. May position bolts in slots of jig preparatory to spray painting. May glue labels on containers. May file paint from rims of containers.
GOE: 06.04.33 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

727.687-038 BATTERY-PARTS ASSEMBLER (elec. equip.) alternate titles: cell assembly, booker; cell assembly, pinner

Performs any combination of following tasks to complete assembly of storage batteries, according to specification: Threads positive and negative battery plates onto separate connecting bolts, inserts washers between each plate to assemble grouped plates, and attaches nuts to ends of bolts of grouped plates to secure plates, using hydraulic hand wrench. Joins grouped plates and positions joined plates in battery base, or inserts element (cell) in single-cell container or inserts number of cells in multiple-cell containers, according to specified order of polarity. Wraps insulating material around cell or inserts wooden shims in container to secure tight fit. Inserts plastic separating rods (or pins) on plates, following notched guides on each plate. Positions batteries or cell containers in jig and attaches, inserts, or positions battery parts, such as gaskets, washers, battery posts, and battery lids, according to color-coded assembly procedures. Applies glue to edge of lids and positions batteries in vises for specified time to seal batteries. Adds compound to fill cavities to secure tight seal and improve appearance, using hand torch. Tests sealed units for air leaks, using air pressure testing device. Attaches terminal cables, using handtools. Removes excess metal around posts, using handtools. Dips posts in soda solution or brushes paint or molten wax on posts and connectors to prevent acid corrosion. May be designated according to part assembled as Battery-Vent-Plug Inserter (elec. equip.); Element Setter (elec. equip.); Separator Inserter (elec. equip.).
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 88

727.687-042 CELL COVERER (elec. equip.)

Fits covers on storage battery cells preparatory to sealing: Burns soda and acid deposits from battery posts, using gas torch. Lubricates bushings. Fits and presses cover of specified size onto cell. May place gasket over threaded posts and screw down locknuts, using wrench. May tap down covers over posts, using mallet. May clip posts, using handtools.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

727.687-046 CELL TUBER, HAND (elec. equip.)

Inserts finished dry cells in paper tubes and attaches cover to complete assembly of dry cell batteries: Places cell in tube and positions cover over cell. Positions tubed cell in hand-crimping press and pulls lever to crimp top of tube over cover. Inspects cell to detect faulty crimping and places cell in tray.
GOE: 06.04.23 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

727.687-050 ELECTRIC-CONTAINER TESTER (elec. equip.) alternate titles: dielectric-testing-machine operator

Tests aircraft storage battery containers for defects, using dielectric testing device: Places storage battery container on table and connects cables from testing device to battery. Starts device that transmits high voltage electric current through battery. Observes dial on testing device that indicates if container has any defects, such as cracks or holes. Stops device, disconnects cables, and places tested battery aside for further processing. Marks defective battery, using chalk.
GOE: 06.03.02 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

727.687-054 FINAL INSPECTOR (elec. equip.) alternate titles: polarity tester

Tests polarity connections on finished storage batteries and inspects final assembly for defects: Positions metal prongs of testing unit over terminals of intercell connecting straps and observes bulb on testing unit that lights when cell arrangement is correct. Examines assembly for defects, such as omission of symbols on battery posts, uneven sealing, and cracked covers.
GOE: 06.03.02 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 77

727.687-058 FORMING-PROCESS-LINE WORKER (elec. equip.)

Performs any combination of following tasks pertaining to forming (treating) storage battery plates: Positions plates or elements in forming tank. Breaks forming lugs from formed plates and pulls lead wires from lugs, using pliers. Collects wires and lugs for salvage. Cleans lugs on positive plates, using brush. Washes formed plates to remove forming acid in running water bath. Stacks washed plates on drying machine. Stacks batteries in specified polarity arrangement on forming trucks. Attaches connectors preparatory to forming. Slides positive and negative plates into slots of partitions that prevent buckling during forming process. Ascertains voltage of batteries, using voltmeter, and adjusts rheostat to regulate current. Reads meter to detect deviations in discharge rate from prescribed range. Removes connectors from posts and plates from forming tanks. Dumps forming acid from batteries. Refills treated batteries with finishing acid. Pumps used forming acid to reclaiming tanks and cleans reclaiming tanks, using brushes, scrapers, and water hose. May be designated according to task performed as Battery Plate Remover (elec. equip.); Lug-Breaker-And-Wire-Puller (elec. equip.); Plate-Put-In Worker (elec. equip.); Plate Washer (elec. equip.); Tank Cleaner (elec. equip.).
GOE: 06.04.24 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

727.687-062 INSPECTOR (elec. equip.)

Inspects finished or in-process dry cell or storage batteries for defects, such as dents, scratches, short electrodes, or missing parts: Examines batteries to detect defects and places defective batteries in box. May test batteries, using voltmeters and ammeters. May replace damaged parts.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

727.687-066 INSPECTOR, CONTAINER FINISHING (elec. equip.) alternate titles: battery-container inspector

Inspects battery containers to determine if finishing and dimensional specifications are met: Examines battery containers for surface defects, such as cracks and damaged terminal posts. Verifies dimensional specifications of battery containers, using templates or other measuring devices. Places covers over cell partitions of battery containers to determine if spacing requirements are met.
GOE: 06.03.02 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 77

727.687-070 LEAD-BURNER HELPER (elec. equip.)

Assists LEAD BURNER (elec. equip.) in preparing storage battery parts for fusing (lead burning): Positions specified number of positive and negative plates in burning rack to ready equipment for fusing lugs to connecting straps. Places intercell connectors on assembled batteries. Places post builders (templates) over posts to aid LEAD BURNER (elec. equip.) in adding lead to build up posts to specified levels. Removes post builders from posts after burning, using tongs. Places positive and negative post builders in separate containers. Selects burning racks according to size of plates grouped. May stamp polarity symbols on posts, using hand marking dies. May haul plates from storage to burning area, using handtruck. Performs other duties as described under HELPER (any industry) Master Title. May be known according to task performed as Intercell-Connector Placer (elec. equip.); Post-Form Remover (elec. equip.); Rack Loader (elec. equip.).
GOE: 06.04.23 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 77

727.687-074 MOLDED-PARTS INSPECTOR (elec. equip.) alternate titles: molded-grid-and-parts inspector

Inspects molded storage battery parts, such as grids, straps, vent plugs, washers, and gaskets for conformance to specifications: Examines parts for defects, such as cracks, airholes, or other surface defects. Measures parts to determine dimensional accuracy, using gauges, such as micrometers and vernier scales. Rejects faulty parts and prepares inspection reports.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

727.687-078 SPARK TESTER (elec. equip.)

Tests encased storage batteries for air-tightness, using electric spark tester: Places frame of tester over battery container and presses plug terminal of testing apparatus to posts of battery. Moves frame of tester over surface of container to detect leaks indicated by bright sparks emitted at contact points. Examines assemblies for defects, such as uneven sealing, misplaced intercell connectors, and covers. Attaches slip to rejected batteries indicating type of defect. May stamp polarity symbols on posts, using hammer and dies.
GOE: 06.03.02 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 77

727.687-082 WAFER-LINE WORKER (elec. equip.) alternate titles: wafer-cell-battery assembler

Performs any combination of following tasks to assemble wafer-type dry cell batteries: Removes stack of cells from machine and inspects and counts cells. Positions stack in handpress and pulls lever to compress stack to form battery. Wraps battery in rubberized wrapping and places wrapped battery on hot iron to seal. Marks positive terminal, using pencil, and places battery in tray. Tests capacity of battery, using voltmeter. Closes and seals ends on hot iron. Touches ends of cell to device to coat ends with hot asphalt. Manually presses carbon end plates on asphalt. Presses copper lead to end plate, using hot iron. Applies strip of tape around battery to hold lead in position. Stamps code on battery, using hand stamp. Rubs cover with emery paper to remove wax from terminal covers and appplies silver wax to terminals, using hot iron. Inserts battery, pads, and bottom in can. Crimps can over bottom, using hand-crimping press.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

728 OCCUPATIONS IN FABRICATION OF ELECTRICAL WIRE AND CABLE

This group includes occupations concerned with fabricating insulated, shielded (armored), or waxed electrical conductors made from purchased wire.

728.684-010 WIRE HARNESS ASSEMBLER (elec. equip.; electron. comp.; office machines) alternate titles: cable maker; harness maker; wirer

Routes and ties wires to form wire harness (cable) used in electrical and electronic equipment or systems: Reads instructions, such as work orders, diagrams, and wire lists to determine materials needed and sequence of assembly. Selects wires of specified color, marking, or length, and loops wires between guide pegs on harness board, following color-coded lines or sequential numbers on board or diagram. Wraps and ties wires together at designated points to form harness, manually or using tie-wrap gun. May apply sealing liquid to secure knots in ties, using brush. May attach ends of wires to components, plugs, or terminal strip, using soldering iron or crimping device. May insert cable in plastic tubing or inject plastic sealant around terminals to protect cable from dust and moisture. May test wiring continuity, using continuity tester. May mark identifying data on completed harness.
GOE: 06.02.32 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 88

728.684-014 ELECTRICAL-LINE SPLICER (petrol. & gas) alternate titles: cable splicer

Splices conductor cables used to lower electrical testing or surveying instruments into oil or gas wells or boreholes, using handtools: Unwraps armor

strands (protective covering) from end of cable. Strips insulation from stranded conductor cable, using stripping pliers. Cuts ends of conductor cable, using pliers. Clamps cable ends together in vise to form butt joint. Solders joint, using silver solder and iron. Wraps joint with insulating tape to form smooth insulation of same diameter as original cable. Wraps armor strands over joint. Trims ends of armor strands, using cutters, to form smooth butt joints and solders joints, using silver solder and iron. May test conductor cables, using equipment, such as voltmeters and capacity and resistance bridges.
GOE: 05.10.03 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

728.684-018 SPARK TESTER (elec. equip.; nonfer. metal) alternate titles: sparker and patcher

Tests electric wire and cable to locate defects in insulation, using spark tester, and repairs insulation, using portable vulcanizer. Threads wire through spark tester and onto takeup spool. Locates defect indicated by dark spot on insulation. Removes defective insulation with knife and wraps uncured rubber tape around cable to form patch. Clamps electric curing block around patch and turns switch on for specified period. Smooths cured patch, using power grinder. May braze wire lengths together to form continuous cable, using gas torch.
GOE: 06.02.02 STRENGTH: L GED: R2 M2 L2 SVP: 4 DLU: 77

728.684-022 WIREWORKER (elec. equip.; electron. comp.) alternate titles: wire-preparation worker

Performs any combination of following tasks involved in cutting, stripping, forming, and soldering wires or wire leads of components used in electrical and electronic units, such as communication equipment, ignition systems, electrical appliances, test equipment, or other electrical or electronic systems: Cuts wire to specified lengths, using wire cutters and ruler or measuring jig. Strips insulation from wire ends, using stripping tool. Twists wire ends and dips ends into pot of solder to prevent fraying. Solders wires to specified connectors and terminals, using soldering iron, or crimps connectors and terminals to wire ends, using handtools. Wraps numbered or colored identification tape around wire. Rolls wires of identical number or color together and attaches tag to roll. Inserts wires into plastic insulation tubing. Bends, cuts, and crimps component leads to prepare component for mounting onto printed circuit board or other assembly, using handtools. Inserts wires in automatic numbering or color-coding machine to imprint part numbers or color codes. Dips wire or component leads into paraffin solution to insulate wire and leads. Applies protective coatings onto wires, using brush. Tests wire and cable assemblies and repairs defective assemblies. May use automated equipment or bench-mounted devices to cut, strip, bend, or crimp wire. May be designated by type of wire worked as Component Lead Former (electron. comp.).
GOE: 05.05.04 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 86

728.685-010 WIRE PREPARATION MACHINE TENDER (any industry)

Tends machines that automatically cut, strip, and mark identifying stripes or other information on wire used in electrical installations or assemblies: Places reel of specified wire onto play-out spindle of machine and threads wire through feed rolls. Adjusts machine controls to regulate factors, such as wire thickness, pressure, heat, and cutting and stripping length. Starts machine and observes operation to detect machine malfunction. Places boxes under ejection spout or manually removes and bundles or boxes cut, stripped, and marked wire. Examines wire for conformance to specifications and removes defective pieces. Observes automatic counter or counts finished pieces, and records data on tags or boxes. May install drive adjustment and tension or adjustment rolls in machine. May install ram and dies that bend finished pieces of wire to specified angles. May replace dull or broken cutting or stripping blades. May tend machine that automatically bends wire to specified angles. May tend machine that crimps and attaches connectors and terminals to wire ends. May tend numerical control wire preparation machine and be designated Numerical-Control-Wire-Preparation-Machine Tender (aircraft mfg.).
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 88

729 OCCUPATIONS IN ASSEMBLY AND REPAIR OF ELECTRICAL EQUIPMENT, N.E.C.

This group includes occupations, not elsewhere classified, concerned with assembling, fabricating, or repairing electrical and electronic equipment.

729.130-010 SUPERVISOR, ELECTRICAL ASSEMBLY (elec. equip.)

Supervises and coordinates activities of workers engaged in assembly, inspecting, and testing of electrical equipment such as motors, generators, voltage regulators, capacitors, and switches, applying knowledge of assembly techniques, machine setup, and testing procedures: Interprets blueprints, specifications, and job orders and assigns work stations to workers. Demonstrates machine setup and operation, and procedures of assembly, wiring, and soldering techniques, using handtools and soldering equipment. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.01.07 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

729.131-010 INSPECTOR, CHIEF (elec. equip.)

Supervises and coordinates activities of workers engaged in inspecting and grading quality of graphite electrodes during each step in manufacturing process. Maintains production records, such as grade and quality of electrodes manufactured and types of defects detected in electrodes during inspection. Determines inspection procedures according to plant production schedules and type and use of inspection instruments to be used. Examines defective electrodes for possible salvage. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

729.131-014 RELAY-SHOP SUPERVISOR (utilities) alternate titles: chief, relay tester; lead-relay tester

Supervises and coordinates activities of RELAY TESTERS (utilities) engaged in testing, adjusting, and repairing relays, meters, capacitors, and other parts of electric power-distributing equipment: Schedules periodic tests of all operating equipment. Directs workers in installation of equipment. Prepares diagrams and drawings of new installations. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.10 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

729.281-010 AUDIO-VIDEO REPAIRER (any industry) alternate titles: audiovisual-aids technician

Installs and repairs audio-video equipment, such as tape recorders, public address systems, slide and motion picture projectors, and record players, using handtools, soldering iron, and special testing equipment. Inspects equipment for defects and repairs or replaces parts. Returns equipment to shop for more complicated repairs.
GOE: 05.05.10 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

729.281-014 ELECTRIC-METER REPAIRER (utilities) alternate titles: meter repairer

Inspects, adjusts, and repairs electric meters used to record electric current consumption: Disassembles defective meters, using handtools. Examines parts of meter for wear and detects warped or bent parts, using straightedge. Soaks electric parts in chemical solutions to clean parts. Removes dirt from other parts, using brushes, sandpaper, and soap and water. Reassembles meter, using new or repaired parts. Turns setscrews or makes other adjustments required to bring meter accuracy within prescribed limits. May test meters for accuracy [ELECTRIC-METER TESTER (utilities)] or for correctness of assembly and dielectric strength, using testing apparatus. May repair demand register mechanism of demand meters. May repair such electric components as instrument transformers and relays. May install meters.
GOE: 05.05.10 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 77

729.281-018 ELECTRIC-METER-REPAIRER APPRENTICE (utilities) alternate titles: meter-repairer apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.10 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 77

729.281-022 ELECTRIC-TOOL REPAIRER (any industry) alternate titles: power-tool repairer

Repairs electrical handtools and bench tools, such as drills, saws, grinders, and sanders, using lathe, circuit testers, handtools, and power tools: Tests motors, switches, and wiring for grounds, shorts, and loose connections, using electrical circuit testers. Turns motor commutators, using bench lathe. Repairs or replaces defective electrical parts, using handtools, power tools, and soldering and welding equipment. Inspects parts, such as mechanical gears, bearings, and bushings, for wear and damage, and repairs or replaces parts.
GOE: 05.10.03 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

729.281-026 ELECTRICAL-INSTRUMENT REPAIRER (any industry) alternate titles: instrument maker; instrument repairer

Repairs, calibrates, and tests instruments, such as voltmeters, ammeters, resistance bridges, galvanometers, temperature bridges, and temperature controlling and recording gauges and instruments, using jewelers' tools, electricians' tools, handtools, and measuring instruments: Tests instruments for resistance, voltage, and other characteristics, using potentiometer, voltage divider, and other testing devices. Disassembles instruments, using handtools, and examines parts for defects. Measures, cuts, and fits glass for meters and instruments, using glass cutter. Repairs or replaces defective parts of instruments, using handtools, soldering equipment, grinders, calipers, micrometers, and dividers. Reassembles instruments, following circuit diagrams and using jewelers' tools. Tests new and repaired instruments, using test board. May operate lathe and drill press to make replacement parts. May plan, construct, and assemble test panels for experimental and production testing. May keep records on repair and calibration of instruments. May rebuild induction cores for electric furnaces. May install, repair, and adjust electronically controlled dynamometers and be known as Dynamometer Repairer (elec. equip.).
GOE: 05.05.10 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

729.281-030 ELECTROMEDICAL-EQUIPMENT REPAIRER (any industry) alternate titles: electromedical service engineer

Tests and repairs electromedical equipment, such as electrocardiographs, electroencephalographs, sterilizers, operating room lamps and tables, and diathermy machines, following schematic diagrams and using handtools and test meters: Tests electrical circuits and components to locate shorts, faulty connections, and defective parts, using test meters. Solders loose connections and replaces defective parts, such as tubes, transformers, resistors, condensers, and switches, using handtools and soldering iron. Disassembles equipment and repairs or replaces faulty mechanical parts, such as control lever mechanisms and water impellers. Adjusts and repairs stylus, graph, and other recording mechanisms. May replace x-ray tubes. May be designated according to type of machine or equipment repaired as Diathermy-Equipment Repairer (any industry); Electrocardiograph Repairer (any industry).

GOE: 05.05.11 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

729.281-034 INSIDE-METER TESTER (utilities) alternate titles: electric-meter tester, shop; inside tester

Tests electric meters to detect cause of malfunctions and inaccuracy, and repairs meters: Connects meter to test panel mounting standard meter and determines recording accuracy [ELECTRIC-METER TESTER (utilities)]. Changes connections to test panel and observes whether parts, such as coils and magnet, function according to standard. Adjusts test panel controls and observes dials to determine if meter's electrical readings are correct and turns setscrews to correct deviations. Determines if meter gears mesh properly by tactile examination and tightens or loosens screws to make adjustments. Adjusts timing mechanism on demand meters. Makes minor repairs, such as replacing wornout screws, jewels, and registers, and routes meters needing major overhaul to ELECTRIC-METER REPAIRER (utilities). May test accuracy of meters, using stroboscope to compare tested meter disk revolutions to those of standard. May test relays [RELAY TESTER (utilities)]. May install and maintain test boards used to test function and accuracy of meters.
GOE: 05.05.10 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

729.281-038 RELAY TESTER (utilities) alternate titles: network-relay tester; relay-shop tester

Tests, cleans, repairs, and adjusts relays used to protect and control functions of equipment, such as circuit breakers, transformers, and automatic switches in generating stations, substations, and distribution facilities: Connects relay to test board and adjusts test board controls to simulate operating conditions. Observes ammeters, voltmeters, and related test board recording and indicating instruments to determine if relay performs all functions correctly, according to specifications of manufacturer and relay history card. Analyzes reactions of relay to tests to identify cause of malfunction. Tightens bolts, springs, and electrical connections, and adjusts screws to correct malfunction. Adjusts electrical, thermal, and timing elements to calibrate relay, according to installation specifications. Dismantles, cleans, or replaces worn or defective relays, using handtools and brush or feather. Records test results, repairs, adjustments, and related data on relay history card. May periodically inspect and test relays at functioning points. May test and repair related equipment, such as telemetering and supervisory-control devices.
GOE: 05.05.05 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

729.281-042 WIRER (office machines)

Installs, adjusts, and repairs wiring and cables in punched card office machines and adding machines according to wiring diagrams, blueprints, and engineering specifications, using handtools, soldering iron, and plugging gun: Reads wiring diagrams, blueprints, wire routing and standards sheets, and engineering specifications to determine lengths, types, routing, and colors of wiring and cables to be installed in machines, such as collators, adding machines, reproducing punches, card reader punches, and interpreters. Selects specified wires and cables, routes according to instructions, and fastens connections by bolting, screwing, soldering, or plugging, using wrenches, screwdrivers, soldering iron, and plugging gun (pneumatic gun that forces plug ends of wires into jacks). Inspects previously wired units, such as plugboards, fuse holders, keyboards, and indicator lights, for conformance to specifications, using test devices, such as voltmeters and ohmmeters.
GOE: 06.02.32 STRENGTH: L GED: R3 M3 L2 SVP: 6 DLU: 77

729.281-046 X-RAY-EQUIPMENT TESTER (any industry) alternate titles: x-ray consultant; x-ray equipment servicer; x-ray service engineer

Tests x-ray machines and accessory equipment to locate defects, using voltmeter and laboratory testing instruments: Compares readings on x-ray control meter and timer with measurements taken with standard instruments during machine operation to verify or adjust meter and timer calibration. Tests performance of transformer and measures voltages, using voltmeter, and compares results with standard graphs. May plan layouts of x-ray departments and install equipment.
GOE: 06.01.05 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

729.360-010 PROBE TEST EQUIPMENT TECHNICIAN, SEMICONDUCTOR WAFERS (electron. comp.)

Sets up and maintains wafer probe and test equipment that test electrical properties of circuits on semiconductor wafers, following setup manual specifications: Reads process sheet and setup manual to determine test program required and setup specifications. Inserts test probe card in wafer probe equipment. Inserts floppy disk or magnetic tape into slot on test equipment and pushes buttons on test equipment or types commands on keyboard to enter test program. Places sample wafer from specified wafer lot on wafer probe equipment chuck, using vacuum wand or tweezers. Observes wafer through microscope attached to wafer probe equipment and turns knobs on equipment to align and position wafer circuit under probes on probe card, according to setup manual specifications. Activates test equipment to make trial run to ensure correct equipment setup and informs equipment operator that setup is completed. Removes and sharpens worn probes, using handtools and burnishing blade. Replaces defective probes or probe cards and solders joints on replacement probes, using soldering iron. Tests electrical continuity of cable connecting wafer probe and test equipment, using ohmeter. Replaces defective connector cables. Removes, cleans, and refills reservoir of inker on wafer probe equipment that marks defective circuits with ink spot.

GOE: 06.01.02 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 86

729.361-010 INSPECTOR, ELECTROMECHANICAL (inst. & app.)

Inspects and tests components, housings, and finished assemblies of electromechanical instruments and equipment, such as oceanographic instruments, navigational systems, medical diagnostic equipment, and measuring, indicating, and controlling instruments, for conformance to specifications, using magnifying devices, test equipment, and precision measuring instruments: Reviews work orders, blueprints, or other specifications and confers with supervisor, engineer, and other personnel to determine product dimensions and specifications. Examines electrical, structural, and mechanical components and housings for defects in assembly, soldering, bonding, and finish. Measures dimensions and verifies locations of parts, holes, grooves, and other points, using precision measuring instruments, such as calipers, micrometers, gauges, dial indicators, and optical comparators. Tests electrical components and finished devices for electrical functioning, using electrical test equipment, such as oscilloscope, multimeter, voltmeter, and computerized test equipment. Tests functional characteristics, such as freedom of movement, leaks, and torque, and tests performance of device under simulated operating conditions, using specialized test equipment. Maintains records of inspection and test results and presents results to other staff for corrective action. May inspect and calibrate precision measuring instruments used to measure electromechanical instruments and equipment, using calibrating equipment. May inspect and test purchased parts and materials and be designated Receiving Inspector (inst. & app.).
GOE: 06.01.05 STRENGTH: M GED: R4 M3 L4 SVP: 7 DLU: 90

729.381-010 ELECTRICAL-EQUIPMENT TESTER (aircraft mfg.) alternate titles: inspector, precision electrical assembly; tester, electrical accessories

Tests and adjusts electrical equipment and accessories prior to installation in aircraft to ensure conformance to specifications, using precision measuring instruments and testing equipment. Examines electrical equipment and accessories, such as batteries, bells, chimes, solenoids, booster coils, circuit breakers, electric actuators, and starter control valves, for defects. Connects electrical equipment and accessories to testing equipment, such as voltmeter, ammeter, oscilloscope, and torque indicator, and tests for voltages under varying loads, output and input of power at various operating temperatures, amount of current used at different voltages, electrical leakages, short circuits, open circuits, and electric motor torques. Compares test performance results with prescribed values, and adjusts moving parts as indicated by tests, using handtools and measuring instruments. Stamps or attaches tags to approved equipment. Records results of tests. May test effects of vibration on equipment and accessories, using vibration testing equipment. May design, lay out, and construct special testing jigs. May measure parts of electromechanical assemblies for conformance to specifications, using micrometers, calipers, and gauges. May test and adjust electronic equipment.
GOE: 06.01.05 STRENGTH: L GED: R3 M3 L3 SVP: 6 DLU: 88

729.381-014 PIN-GAME-MACHINE INSPECTOR (svc. ind. mach.)

Inspects and repairs pinball and games machines: Plays machine and observes mechanism in operation to detect defects. Disassembles defective machines, using handtools. Adjusts or replaces defective parts, following electrical schematic diagrams. May return machine to department where defect occurred.
GOE: 05.10.03 STRENGTH: L GED: R4 M2 L3 SVP: 5 DLU: 77

729.381-018 STREET-LIGHT REPAIRER (utilities)

Tests, adjusts, and repairs mercury-vapor, fluorescent, electric-arc, or incandescent street lights and traffic signals in shop: Disassembles lamp, using handtools. Tests and examines components to determine need for repair or replacement, using electrical testing devices, such as test lamps, voltmeter, and wattmeter. Repairs or replaces broken connections, defective coils, cracked insulators, and other electrical components. Connects repaired lamp to test circuit and regulates such adjustable components as shunt coils until lamp meets operating specifications, according to electrical gauge readings, using screwdriver. Winds replacement coils on bench lathe and bakes freshly insulated coils in oven. Installs repaired lamp in outside casing or canopy.
GOE: 05.05.05 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 77

729.381-022 WIRER, CABLE (comm. equip.; elec. equip.)

Installs cables and solders wires to connect electrical instruments mounted on control apparatus, such as panelboards and telephone crossbar frames, according to diagrams and blueprints: Pulls assembled crossbar frame or unit to work area, using monorail chain hoist or handtruck. Ties preformed wiring cable to brackets. Positions arms of cable (groups of wires tied off from trunk of cable) and spreads wires to facilitate wiring. May strip insulation from ends of wires with pliers to prepare for connections. Connects color-coded wires to terminals, using soldering iron or pneumatic wire-wrapping tool. Examines and feels wires to detect loose connections. Writes and ties tickets to wires or terminals in apparatus to identify surplus or missing wires. May secure parts, such as diodes and resistors to specified locations on equipment, using soldering iron or screwdriver. Tapes insulating sleeves over auxiliary lead wires of cable. Pulls or carries wired apparatus to storage area. May be designated according to equipment wired as Crossbar-Frame Wirer (elec. equip.); Crossbar-Unit Wirer (elec. equip.); Switchboard Assembler (comm. equip.).
GOE: 05.10.03 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

729.384-010 ASSEMBLER, ELECTRICAL ACCESSORIES II (elec. equip.)

Assembles electrical instruments, such as ammeters, galvanometers, and voltmeters, performing any combination of following duties: Winds fine wire

around *coil forms* on winding machine. Joins coils, plates, hairsprings, and other parts, connects and solders wires, using handtools, tweezers, and soldering iron. Inserts and tightens setscrews to secure components to housing. Cleans lens and glass faceplate and cements parts in place. Tests assembled units, using potentiometer and similar equipment to ensure that meters perform according to specifications. May be designated according to type of meter being assembled as Galvanometer Assembler (elec. equip.).
GOE: 06.02.23 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

729.384-014 FARE-REGISTER REPAIRER (motor trans.)
Repairs and adjusts electromechanical fare recording boxes used in buses and streetcars: Disassembles unit to locate defects. Tests electrical circuit, using ammeters, ohmmeters, and volimeters. Inspects mechanical components and repairs or replaces defective or worn parts, using handtools and soldering iron. Cleans, oils, adjusts, and reassembles recording mechanism.
GOE: 05.10.03 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

729.384-018 SALVAGE REPAIRER II (utilities)
Reconditions salvaged parts of equipment used in electric-power system and rebuilds equipment, such as air circuit breakers and lightning arrestors: Removes bolts and screws to disassemble salvaged materials, using handtools, and discards parts beyond repair. Dips parts in acid, lye, or soap solution to clean parts, and polishes parts, using buffing wheel. Solders, wraps, and coats lightning rod arrestor wires to connect and insulate wires during repair, using soldering iron, tape, and varnish. Bolts porcelain insulators to wood parts to assemble hot stools (insulated stools on which line workers stand). Replaces broken porcelain insulating parts to rebuild air-circuit breakers and other protective devices, using cement.
GOE: 05.10.03 STRENGTH: M GED: R3 M1 L2 SVP: 5 DLU: 77

729.384-022 WINDING INSPECTOR (house. appl.)
Performs any combination of following tasks to inspect appliance motors and parts, such as armatures and field assemblies: Examines parts, such as commutators, laminations, windings, and shafts for centering of commutator slots, depth of mica undercutting, loose copper and mica chips, positioning and winding of armature coils, and excess varnish or paint. Gauges parts, such as shafts, laminations, commutator bars, for specified length and diameters, using micrometers, fixed and snap gauges, rule, and dial indicator. Places armatures in bearings of bench fixture, rotates armatures manually, and observes dial indicator for eccentricity. Taps offcenter shafts with mallet to straighten shafts. Repairs defects, such as damaged threads and rough commutators, and cleans copper chips from slots, using threading dies, end reamers, knives, picks, brushes, and sandpaper. Routes repairs, such as offcenter commutator slots and shallow undercutting. Stamps date code on acceptable armatures, using rubber stamp. Writes transfer tickets and inspection reports to include quantity and classification of rejected and accepted armatures. May be designated according to part inspected as Brush-Holder Inspector (house. appl.); Commutator Inspector (house. appl.); Shaft Inspector (house. appl.).
GOE: 06.03.01 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 77

729.384-026 ELECTRICAL ASSEMBLER (aircraft mfg.) alternate titles: assembler, radio and electrical; assembler, wire group; bench assembler, electrical
Routes, wires, assembles, and installs electrical and electronic components in aircraft and missile units, such as main junction and terminal boxes, main control switch panels, and instrument and radio panels, according to specifications, using jig boards, handtools, and equipment: Reads work orders, blueprints, and specifications to determine established assembly methods. Cuts wire to specified lengths, using wire cutters. Cuts plastic sleeves and slips sleeves over wire ends to insulate connections. Crimps terminal eyelets and lugs to wire ends, using hand or machine crimping device. Routes, combs, twists, wraps, ties, and attaches wire to terminal points, according to jig board layout, using soldering gun and handtools. Connects wiring to accessories, such as relays, circuit breakers, plugs, condensors, switches, and solenoids, and installs accessory assemblies in electrical or electronic units, using soldering gun and handtools. Conducts functional and continuity tests of electrical assemblies, components, wire harness, and plugs, using ohmmeter, test lights, and other electrical testing instruments. Pots or encapsulates electrical and electronic details [ENCAPSULATOR (elec. equip.; electron. comp.) 726.687-022]. May attach eyelets, terminals, and mounting studs to etched circuit boards.
GOE: 06.02.23 STRENGTH: L GED: R3 M2 L3 SVP: 3 DLU: 87

729.387-010 DEICER INSPECTOR, ELECTRIC (rubber goods) alternate titles: electric deicer inspector; ice-guard inspector
Inspects electrical airplane deicers for defects and conformance to blueprints: Examines deicers for such defects as cracks, blisters, and separation of rubber plies (layers). Verifes dimensions of deicers and assembly of deicer parts, using rule, snap gauge, and magnifying glass. Weighs deicers to determine conformance to weight tolerance. Examines heat element of deicers under fluoroscope to verify wire spacing and detect broken and loose connections. Marks defective deicers and records inspection results. May clamp deicers to testing device to verify electrical resistance.
GOE: 06.03.01 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

729.387-014 DEICER TESTER (rubber goods) alternate titles: final inspector and tester; ice-guard tester
Tests performance of electric airplane deicers: Connects deicer to controlled electric circuit or battery to test for electrical shorts and faulty insulation. Turns control switch to expose deicer to specified voltage, and observes surface of deicer to detect melting or smoking rubber. May submerge activated deicer in water to detect bubbles or electrical flash that indicate defective area. Dusts deicer with zinc stearate and exposes deicer to specified voltage to test heating performance. Verifies dimensions of deicer, using rule and snap gauge. Marks and sorts defective deicers for scrap or repair. Records test data. May examine rubber plies (layers) of deicer for defects, such as cracks, blisters, and ply separations.
GOE: 06.03.01 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

729.387-018 FINISHING INSPECTOR (elec. equip.) alternate titles: final inspector
Inspects brushes, electrodes, nipples, and other graphite products after machining or prior to shipment to verify conformance to specifications: Examines products for defects, such as breaks, burns, cracks, and pits. Measures dimensions of product for conformance to specifications, using calipers, gauges, micrometers, rules, or other inspection tools. Determines cause of defects and whether parts are salvageable or scrap. Records inspection data.
GOE: 06.03.01 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

729.387-022 INSPECTOR (house. appl.)
Inspects and tests electrical household appliances, such as ranges, water heaters, and food mixers for appearance and mechanical and electrical characteristics, using testing devices and handtools: Examines metal, glass, and enamel surfaces for scratches, dents, and color matching. Observes alignment of doors, panels, and control dials with adjacent parts. Opens doors and sliding compartments to inspect movement along guides and operation of catches. Taps panels, housing, frame, or frame supports, using fiber hammer, to eliminate binding or align bearings with armature shaft. Connects unit with power source and testing devices, such as wattmeter, voltmeter, and potentiometer. Runs unit through operating cycles, observes meters, and compares readings against standards to determine electrical characteristics. Observes mechanical operation of parts, such as nozzles, blowers, pulleys, and transmission. Records information on inspection ticket. May wrap wire racks, pans, glass, and burner irons in paper and install fiber packing. May specialize in inspection of appearance and mechanical operation and be designated Appliance Inspector (house. appl.). May specialize in electrical testing and be designated Appliance Tester (house. appl.).
GOE: 06.03.01 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

729.387-026 INSULATOR TESTER (utilities)
Tests dielectric strength of porcelain insulators, using testing apparatus: Fastens one hooked end of insulator to metal rod of testing set and connects other hook to grounded wire. Turns dial on test set to specified voltage. Presses button to produce voltage and observes meters on test set to verify dielectric strength of insulator. Discards defective insulators.
GOE: 06.03.01 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

729.664-010 TEST-DEPARTMENT HELPER (comm. equip.; elec. equip.)
Positions electrical equipment, such as motors, generators, transformers, telephone apparatus, and electrical controls in test area and connects to test equipment preparatory to final testing: Builds up timbers and steel beams on test floor to form base for testing platform. Directs OVERHEAD CRANE OPERATOR (any industry) 921.663-010 or uses jib crane to lift electrical unit to test bench or platform and secures unit, using bolts. Connects equipment to dynamometer or test load, using belt or couplings and adapters. Hooks up electric connections from power supply to unit, using plug, clamp, and screw-type connectors. Observes meters and reports readings to tester.
GOE: 05.12.16 STRENGTH: H GED: R2 M2 L2 SVP: 3 DLU: 77

729.682-010 OPERATOR, CAVITY PUMP (elec. equip.)
Operates pump to inject or extract fluids into or from electrical component cavities to improve component electrical characteristics: Mounts electrical components, such as switches or transformers in holding device. Turns controls or pushes buttons to activate equipment such as welders, cooling systems, heater coils, ammeters, or vacuum and injection pumps. Inserts coupling device into component, reads pressure gauge and turns pump controls to extract or inject fluids such as air, oil, or inert gases at specified pressures and turns off pump. Heats component casing while extracting coupler to seal component, using heating devices such as coil, oven or welder. May connect testing device such as coil or ammeter to component leads and compare reading with specifications, or immerse unit in liquids to determine if unit leaks.
GOE: 06.02.18 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 77

729.684-010 BATTERY-CHARGER TESTER (elec. equip.)
Tests electric battery chargers, using portable testing unit: Clamps battery charger cables to appropriate tester terminals. Pushes control buttons to supply battery charger with specific amount of current that registers on charger meters and compares meter reading with tester meter to determine that meter is registering accurately. Increases current flowing from tester to charger to heat battery charger coil until grease and dirt are burned out. Turns off switches and removes battery charger cables from tester, approving satisfactory battery chargers and returning defective battery chargers for adjustments.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

729.684-014 CAPACITOR ASSEMBLER (elec. equip.)
Assembles capacitors for electric transmission equipment, using handtools and soldering equipment: Solders banded porcelain bushing to cover, terminal and tube to top of bushing, and tins areas of bushing holes in top cover, using

stationary or hand gas-heating equipment. Covers bushings with protective cap to prepare covers for sandblasting, buffing, and degreasing. Folds, creases, and pounds insulation to fit over top of wound foil and tissue, using rawhide hammer. Hammers drive screws to fasten nameplate to capacitor. Places cover on capacitor and tightens seal-off screw to hold cover during assembly, using screwdriver. Twists goose-neck filler pipe to capacitor tank and removes pipe after impregnation. Inserts brass plug and seals plug with solder, using gas torch. May bolt capacitors to frames and connect capacitors in banks, using bare copper or insulated conductor. May repair capacitors and be designated Capacitor Repairer (elec. equip.).
GOE: 06.02.23 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

729.684-018 DIAL MARKER (elec. equip.)
Draws scale markings by hand on dials of electric meters. Measures and marks specified number of equal distances between calibrations, designated by pinpoints, on dial with dividers or by judging distances. Draws scale according to markings with special pens and black or white ink to contrast with dial. Stamps outline of numbers on scale, using rubber stamp, and fills in outlines with ink. Marks danger points on scale in red ink.
GOE: 01.06.03 STRENGTH: S GED: R2 M2 L2 SVP: 2 DLU: 77

729.684-022 ELECTRIC-SIGN ASSEMBLER (fabrication, nec)
Assembles electric signs, mounts tubing, and connects electrical equipment to sign box: Fastens back of sign to precut metal frame to form sign box, using screws and screwdriver. Fits precut glass, plexiglass, or plastic pane into bottom channel of metal frame. Crimps frame channel to secure pane, using pliers. Attaches tubing support brackets to sign box with self-tapping screws, using screwdriver. Screws or clamps glass elevation posts to brackets. Binds neon sign scroll to posts with wire. Connects wires between tubing electrodes and secondary-winding terminals of transformer. Attaches animation mechanism to back of sign, and connects part to be animated. May assemble fiberboard or cardboard cutout parts for animated window display signs.
GOE: 06.02.22 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 77

729.684-026 ELECTRICAL-CONTROL ASSEMBLER (comm. equip.; elec. equip.)
Assembles protection, communication, and control devices, such as switches, relays, rheostats, transmitters, and switchboards, as laid out in drawings and wiring diagrams: Assembles in predetermined order, contact fingers, shafts, springs, gears, coils, terminals, and push buttons, using handtools, hand arbor press, and assembly fixtures. Fastens units in specified locations in switchbox or case. Cuts, strips, and mounts wires to connect electrical units, using soldering iron, staking machine, and plugging devices. Connects lead wires to buzzer, ohmmeter, or resistance tester to test connections for resistance, shorts, and grounds. May adjust contacts, springs, and shafts to meet specifications. May be designated according to unit assembled as Relay Assembler (elec. equip.); Rheostat Assembler (elec. equip.); Speaking-Unit Assembler (comm. equip.; elec. equip.); Switchbox Assembler (comm. equip.; elec. equip.) II; Telephone-Diaphragm Assembler (comm. equip.; elec. equip.); or according to type of equipment assembled as Assembler, Communications Equipment (comm. equip.; elec. equip.). May assemble strip of switches, of telephone switchboard type, and be designated Jack-Strip Assembler (comm. equip.; elec. equip.).
GOE: 06.02.23 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

729.684-030 MOLD OPERATOR (elec. equip.) alternate titles: assembler-insulator
Pours liquid or powdered insulating material into mold to form insulation for electric motor, generator, and switchgear mechanisms: Weighs specified amounts of plaster, cement, metallic, or plastic powders, dumps ingredients into mixing machine, and starts machine. Positions assemblies, such as contact arms, collector rings, rotor shaft coils, and core assemblies, into mold cavity or molding jig, using spacer blocks and pilot pins. Pours mixture into mold and allows mixture to set in hydraulic press or harden in furnace. Removes assembly from mold or jig and scrapes hardened insulation with knife and rasp to trim to specified size. Cuts, bends, shapes, and bolts together pieces of metal to adapt or improvise assembly fixtures to hold parts in mold. May touch leads to meter and observe dial readings to test assembly for electrical continuity. May be designated according to type of material used as Plaster-Of-Paris Molder (elec. equip.) or product insulated as Transformer Molder (elec. equip.).
GOE: 06.02.32 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

729.684-034 MOTOR-VEHICLE-LIGHT ASSEMBLER (light. fix.) alternate titles: automobile-light assembler
Assembles bulbs, lenses, socket insulators, springs, and other components to lamp shell to make lights for motor vehicles: Positions and clamps lamp shell in jig on assembly bench or table. Bolts, screws, or crimps specified components to lamp shell, using handtools. Inspects parts for defects, such as cracks or dents, and rejects defective ones. May be designated according to light assembled as Automobile-Headlight Assembler (light. fix.); Automobile-Taillight Assembler (light. fix.); Truck-Head Light Assembler (light. fix.).
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

729.684-038 REPAIRER, SWITCHGEAR (comm. equip.; elec. equip.)
Repairs defects in electrical apparatus, such as relays and crossbar switches, used in protection, communication, and control devices: Verifies defects, such as burred screws, damaged coils, bent contacts, incorrect stampings, and misassembled parts indicated by inspection ticket. Disassembles apparatus to replace or relocate parts. Bends parts of apparatus, such as contacts and springs, using handtools to correct alignment, straightness, clearance, and tension defects, and verifies corrections, using gauges. Corrects wrong or illegible stampings, using inked hand stamp. May use equipment to test repaired apparatus for electrical characteristics, such as continuity, resistance, and grounds. May repair wiring defects, such as loose connections and misconnected wires, using soldering iron or wire-wrapping gun. May be designated according to apparatus repaired as Crossbar-Switch Repairer (comm. equip.; elec. equip.); Relay Repairer (elec. equip.); Telephone-Switch Repairer (comm. equip.; elec. equip.).
GOE: 05.10.03 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

729.684-042 SAFETY-LAMP KEEPER (mine & quarry) alternate titles: battery charger
Repairs and issues electric lamps and safety lamps used underground by miners: Cleans lamps and batteries, using rags and steel wool. Inspects lamps and replaces defective or worn parts, such as cables, bulbs, wicks, and batteries. Tests batteries to determine strength, using testing device. Inserts batteries into electric charger to restore charge. Fills battery cells with chemicals and distilled water, and fills safety lamp reservoirs with fuel. Keeps record of lamps issued to mine personnel.
GOE: 05.09.01 STRENGTH: L GED: R3 M2 L1 SVP: 4 DLU: 77

729.684-046 SPARK-PLUG ASSEMBLER (elec. equip.)
Assembles components to make spark plugs: Selects base and model according to type of plug to be assembled. Dips end of central electrode in cement and inserts electrode into porcelain insulator. Screws caps over threaded ends of electrodes to form posts for wire connections. Places metal gasket over outer end of porcelain insulator and inserts assembly into metal base (shell). Crimps metal base around insulator, using machine.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

729.684-050 STREET-LIGHT-REPAIRER HELPER (utilities)
Performs any combination of following tasks concerned with maintenance and repair of street lighting equipment in repair shop: Dismantles outside case and lamp preparatory to testing and inspection of electrical components by STREET-LIGHT REPAIRER (utilities). Examines components for defects, such as broken connections, cracks, or excessive wear, and replaces defective parts. Cleans lamp cases, reflectors, switches, transformers, and porcelain bases, using brush and solvent. Paints cases, reflectors, and lamp components subject to corrosion, and reassembles lamp and case as directed. Solders or brazes terminals or connectors, using soldering iron or torch. Assists in testing repaired equipment. May stamp metal tags to identify equipment, using embossing machine. May salvage metal from worn out or defective parts.
GOE: 05.12.16 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 77

729.684-054 SUBASSEMBLER (elec. equip.)
Performs any of following tasks to assemble electrical equipment and parts, such as armature cores, coils, electric motors, and switches: Tapes lead wires to coils to facilitate soldering. Solders coil and lead wires, using soldering iron. Trims leads and positions parts in specified relationship to each other, using hands and handtools. Bolts, screws, clips, cements, and fastens parts together, using hands, handtools, or portable powered tools. May remove burrs from parts prior to assembly, using file or electric grinder.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

729.684-058 TESTER, ELECTRICAL CONTINUITY (elec. equip.; house. appl.; light. fix.)
Tests electrical units, such as lamps, coils, armatures, and commutators to determine shorts, grounds, or efficiency of unit, using test lamp, meter, or growler: Clamps test wires to electrical unit, screws unit into socket, or inserts lead wires into mercury tube to make contact with testing device. Turns dials to set controls of test equipment and observes meter or test lamp which indicates acceptability of unit. Places armature in growler and manually rotates armature under steel strip. Listens for growling sound and watches for attraction of steel strip to armature surface indicating short circuit. May inspect unit and remove excess solder, mica, or copper chips, using buffing machine, pick, or brush. May demagnetize coils, using demagnetizing equipment. May test carbon pellets with attached shunt wires to determine current flow through pellets, during production of carbon brushes. May be designated according to unit tested as Armature Tester (elec. equip.) II; Carbon Brushes Tester (elec. equip.); Coil Tester (elec. equip.); Commutator Tester (elec. equip.); Electric-Switch Tester (elec. equip.); Light-Bulb Tester (elec. equip.); Resistor Tester (elec. equip.).
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 88

729.684-062 WIRER, SUBASSEMBLIES (office machines)
Installs color-coded wires and cables in subassemblies, such as fuse panels, control key assemblies, and relay panels, for punched-card office machines according to wiring diagrams and blueprints by any combination of following tasks: Fastens eyelet or spade types of wire lugs to bolt or screw terminals, using wrenches and screwdrivers. Inserts plug ends of wires and cables into jacks, using pliers or special insertion tools. Attaches wire ends to terminal posts, using pneumatic wire-wrapping gun. May test wiring continuity and connections, using ohmmeter, test lights, or other testing devices.
GOE: 06.02.23 STRENGTH: L GED: R3 M2 L1 SVP: 4 DLU: 77

729.684-066 LAMINATION ASSEMBLER (elec. equip.; electron. comp.) alternate titles: stacking assembler
Stacks, aligns, and secures metal laminations and insulating separators, to assemble laminated cores for electrical parts, such as commutators, coils, arma-

tures, and stators, according to specifications, using either of following methods: (1) Places core laminations and separators into holding device of machine. Starts machine that automatically measures and stacks specified quantity of laminations for each core and inserts separators between laminations. Unloads laminations from machine, and secures laminations using tape or other material. (2) Stacks specified quantity of laminations in holding fixture. Squeezes stack, manually, or presses laminations together in vise or press to reduce kinks or bulges. Measures stack, using rule, and adds or removes laminations and separators to obtain specified dimensions. Aligns edges of laminations, using hammer, and secures laminations, using rubber wrapping material. May place stack of lamination cores into machine that automatically welds laminations into individual cores. May be designated according to method used or type of core assembled as Lamination Stacker, Hand (elec. equip.; electron. comp.); Lamination Stacker, Machine (elec. equip.; electron. comp.); Transformer-Core Assembler (elec. equip.).
GOE: 06.02.23 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 81

729.687-010 ASSEMBLER, ELECTRICAL ACCESSORIES I (elec. equip.; light. fix.) alternate titles: assembler; contact assembler; switchboard contact assembler

Assembles mechanical parts of electrical equipment, such as light sockets, switches, terminal boards, and plugging devices: Fits together parts, such as socket bases, shafts, contact fingers, and springs, in specified sequence, using fixtures, screwdrivers, and air nut runners. Tests actions of moving parts and listens for unusual sounds to detect defective parts or faulty operation. Verifies completed assembly against pictorial drawings. May be designated according to type of equipment assembled as Circuit Breaker Assembler (elec. equip.); Contact-Finger Assembler (elec. equip.); Plug Assembler (elec. equip.); Pull-Socket Assembler (elec. equip.); Push-Button-Switch Assembler (elec. equip.); Terminal-Block Assembler (elec. equip.); Tumbler-Switch Assembler (elec. equip.).
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 88

729.687-014 ELECTRODE CLEANER (elec. equip.)

Scrapes surface of graphitized electrodes to loosen particles of coke or encrusted insulating mixture, using scraping tool. Wipes loose material from electrode, using steel wool, and places electrodes into cart for inspection.
GOE: 06.04.39 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

729.687-018 LAMINATION SPINNER (elec. equip.) alternate titles: lamination inspector; rotor-lamination inspector; spinner, iron

Spins core laminations on fixture shaft to align slots and wedge grooves: Slides stacks of laminations onto fixture shaft mounted on bench or floor. Spins or rotates laminations manually until key center-hole slots and wedge grooves are aligned. Inserts fixed gauge into peripheral slots to verify alignment and size of slots. Examines circumference of laminations to detect burrs and bent edges. Slides or lifts laminations from fixture shaft. Discards defective laminations and trucks approved laminations to storage. May file burrs from lamination slots.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

729.687-022 MICA-WASHER GLUER (mine & quarry)

Builds up (glues) mica washers for use as electrical insulators: Dumps washers into tumbler equipped with series of upright spindles onto which washers fall as tumbler spins. Removes spindles filled with washers, dips spindles into binding solution, and places spindles coated with binding solution into drying oven or ignites coated washers with match to dry washers. Removes spindles from dried washers and splits washers into specified thickness, using knife.
GOE: 06.04.33 STRENGTH: M GED: R2 M2 L2 SVP: 2 DLU: 77

729.687-026 PLATE STACKER, HAND (elec. equip.) alternate titles: grouper; stacker

Groups (interleaves) specified number of positive and negative plates and separators, and places stack on conveyor leading to burning (welding) station. Moves materials about work area, using handtruck.
GOE: 06.04.40 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

729.687-030 SALVAGER (utilities)

Dismantles and cleans electric equipment, such as insulators, fuses, wires, wire clamps, and conduit fittings to salvage serviceable materials: Removes rust and deposits of hardened material, using scrapers, wire brush, and abrasive paper. Dips parts in solvents to remove foreign matter. Paints components exposed to weather. Unloads materials from trucks and conveys materials about shop and warehouse, using handtruck. May drive forklift truck.
GOE: 05.12.18 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

73 OCCUPATIONS IN FABRICATION AND REPAIR OF PRODUCTS MADE FROM ASSORTED MATERIALS

This division includes occupations concerned with shaping, fitting, trimming, assembling, joining, finishing, and repairing products made from combinations of such materials as metal, wood, plastics, rubber, fabric, and paper.

730 OCCUPATIONS IN FABRICATION AND REPAIR OF MUSICAL INSTRUMENTS AND PARTS

This group includes occupations concerned with fabricating and repairing wind, string, and percussion musical instruments, including pianos and electric or electronic organs. Includes tuning.

730.131-010 SUPERVISOR (musical inst.)

Supervises and coordinates activities of workers engaged in manufacturing musical instruments. Trains new workers. May inspect material at various stages in production to ensure compliance with company standards. May verify accuracy and completeness of records, such as time and production cards. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

730.281-010 ACCORDION MAKER (musical inst.)

Lays out and constructs accordions, applying knowledge of accordion construction, using handtools and operating variety of wood and metalworking machines: Studies sketch of accordion or customer's specifications to plan work. Measures and marks woodstock to lay out wood parts. Operates woodworking machines, such as saw and sander, and uses carpenter handtools to cut, shape, and finish wood parts of instrument. Measures, cuts, and pleats cardboard to form bellows. Covers bellows with sateen and cloth. Glues leather and places metal guards on corners of bellows. Applies celluloid to accordion parts, such as keys and box ends. Assembles wood and metal parts with screws, nails, or glue, using handtools. Examines fit and finish of instrument and plays notes and chords to inspect completed instrument. May tune accordion reeds and glue reeds in reed blocks [ACCORDION TUNER (any industry)]. May fabricate metal parts, using shop machines and handtools. May repair used instruments [ACCORDION REPAIRER (any industry)]. May be designated according to part made as Bass-Mechanism Maker (musical inst.); Bellows Maker (musical inst.); Box Maker (musical inst.); or by operation performed as Finisher, Accordion (musical inst.).
GOE: 05.05.12 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

730.281-014 ACCORDION REPAIRER (any industry)

Repairs and tunes accordions and concertinas, using handtools: Disassembles instrument and parts, such as base and treble mechanisms, bellows, reed blocks, and manuals (keyboards), using handtools. Moves parts, observing their action to detect defects. Files, realigns, and adjusts parts, using handtools. Recovers bellows with sateen and cloth. Glues leather on corners of bellows. Operates woodworking machines and uses handtools to make wood replacement parts. Repairs cracks in celluloid. Solders or removes and replaces defective metal parts. Reassembles instrument and plays notes and chords to determine accuracy of repair. May tune accordion or concertina reeds [ACCORDION TUNER (any industry)]. May repair electronic accordions, using electronic testing equipment, to determine defects and to verify repairs.
GOE: 05.05.12 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

730.281-018 ELECTRIC-ORGAN INSPECTOR AND REPAIRER (musical inst.)

Inspects and repairs electric and electronic organs. Plays organ to determine nature of malfunction. Studies circuit diagrams and performs standard tests to locate mechanical, electrical, or electronic difficulties. Replaces defective components and wiring and adjusts mechanical parts, using soldering equipment and handtools. Aligns, adjusts, and calibrates equipment according to specifications, following circuit diagrams and using alignment tools, handtools, and test equipment.
GOE: 05.05.12 STRENGTH: L GED: R4 M3 L4 SVP: 6 DLU: 77

730.281-022 FRETTED-INSTRUMENT MAKER, HAND (musical inst.)

Constructs fretted musical instruments, such as banjos, guitars, and mandolins, by hand, applying knowledge of wood properties and instrument design and construction. May construct bowed instruments [VIOLIN MAKER, HAND (musical inst.)]. May repair bowed instruments [VIOLIN REPAIRER (any industry)]. May repair fretted instruments [FRETTED-INSTRUMENT REPAIRER (any industry)]. May be designated according to instrument made as Guitar Maker, Hand (musical inst.).
GOE: 05.05.12 STRENGTH: L GED: R4 M3 L4 SVP: 8 DLU: 77

730.281-026 FRETTED-INSTRUMENT REPAIRER (any industry)

Repairs fretted musical instruments, such as banjos, guitars, mandolins, and ukuleles, using handtools: Inspects and plays instrument to determine defects. Disassembles instrument, using handtools. Removes, replaces, and dresses (levels) frets, using handtools. Fits wood and metal replacement parts. Reassembles and strings instrument. Adjusts truss rod and bridge to position neck and strings. Plays notes and chords and adjusts string tension to tune instrument. Replaces skin or plastic heads of banjos. Tests and replaces tubes, replaces defective parts, and solders new parts and loose connections on amplifiers, reverberation units, and pickups of electrically amplified instruments. May repair wood bodies or carve wood replacement parts. May be designated according to instrument repaired as Guitar Repairer (any industry).
GOE: 05.05.12 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

730.281-030 HARP MAKER (musical inst.)

Shapes and fits harp components to assemble new and repair damaged harps, using handtools and machine tools: Selects wood which will produce desired tonal quality and measures and marks it to lay out design of components. Shapes wood and metal into various parts, using drill press and handtools. Glues wood parts together. Fits metal and wood parts together to form completed harp. Knots each string between soundboard and tuning pin, and turns tuning pin with key to adjust string pitch [HARP REGULATOR (musical inst.)]. Sketches ornamental wood carvings onto graph paper, from customer's description, and orders them made, or carves them himself. May repair damaged harps only and be designated Harp Repairer (any industry).

GOE: 05.05.12 STRENGTH: H GED: R4 M4 L3 SVP: 8 DLU: 77

730.281-034 HARPSICHORD MAKER (musical inst.)

Lays out, machines, fits, assembles, and finishes wood, metal, and plastic parts to build harpsichords, applying knowledge of material properties and harpsichord construction. Measures and marks wood, metal, and plastic to lay out instrument components, applying knowledge of instrument design or following sketch or drawings. Operates woodworking machines and uses handtools to form wooden case parts. Sands and scrapes wood parts and applies varnish, stain, or oil to finish surfaces. Fits and assembles parts, using handtools, to assemble harpsichord case. Files cast metal soundboard to fit soundboard into case, using handtools. Operates drill press to drill holes for tuning pins, following template or drawing that locates holes. Bends metal bridges to specified contour, using vise and handtools, and installs bridges on soundboard. Bends nonmetal bridges to specified contour, using steam and clamps, or saws curve-shaped bridges, using bandsaw, and installs bridges on soundboards. Inserts tuning pins and strings instrument, using various gauge wires. Operates shop machines and uses handtools to cut and shape wood, plastic, and leather to form parts of keyboards and actions. Sets pieces of veneer into surface of wood sides of harpsichord to decorate instrument, using glue. Fits and assembles keyboard and action parts and installs them. Carves, shapes, and tapers plectrum (plucking device), using knive. Tunes instrument to specified pitch, using tuning fork, tuning wrench, and handtools. Visually and tactually examines completed instrument and corrects defects. Repairs used instruments. May apply decorative trim, such as stripes, decals, or gilt to finished instrument [DECORATOR (furniture; toy-sport equip.) 749.684-014]. May design and prepare working drawings to build harpsichords.
GOE: 05.05.12 STRENGTH: H GED: R4 M3 L3 SVP: 6 DLU: 77

730.281-038 PIANO TECHNICIAN (any industry)

Repairs, refinishes, and tunes pianos, using specialized tools and gauges: Tests components, such as keyboard, pedals, and action assembly, using special tools and gauges. Levels keys by inserting paper shims. Detaches action mechanism and replaces faulty, worn, or broken parts, such as hammers, shanks, and joint connections. Aligns hammers and turns screws to adjust striking action of keys [PIANO REGULATOR-INSPECTOR (musical inst.)]. Replaces broken or missing strings [PIANO STRINGER (musical inst.)]. Tunes strings, using tuning hammer and fork [PIANO TUNER (any industry)]. Examines wooden parts for splits, warps, and other defects. Repairs, replaces, resurfaces, and refinishes wooden parts.
GOE: 05.05.12 STRENGTH: M GED: R3 M2 L2 SVP: 7 DLU: 77

730.281-042 PIPE-ORGAN BUILDER (musical inst.)

Lays out, constructs, and assembles electrically controlled pipe organs, using handtools and machines, and following blueprints. Plans layout of organ, following blueprints and sketches of installation site and customer specifications. Operates woodworking machines and uses handtools to cut, shape, fit, and assemble wood components, such as console, wind chest, and wooden pipes. Assembles and installs electrical parts in organ components and solders connecting wires to leads. Examines and tests components prior to transportation to installation site. Fits and assembles component parts of organ in allocated space at installation site [PIPE-ORGAN INSTALLER (musical inst.)]. May voice organ pipes [ORGAN-PIPE VOICER (musical inst.)].
GOE: 05.05.12 STRENGTH: H GED: R4 M3 L3 SVP: 8 DLU: 77

730.281-046 VIOLIN MAKER, HAND (musical inst.)

Constructs bowed musical instruments, such as violins, cellos, and violas, using handtools: Selects wood according to type, grain, and seasoning. Lays out parts to be cut, using templates. Saws, carves, and shapes instrument parts, using handtools. Glues parts together, using jigs, forms, and clamps. Finishes surface with stain and varnish. Strings instrument. Plays instrument to evaluate tonal quality. Relocates bridge and sounding post, or shaves wood from bottom of instrument to improve tone. May repair bowed instruments [VIOLIN REPAIRER (any industry)]. May construct fretted instruments [FRETTED-INSTRUMENT MAKER, HAND (musical inst.)]. May repair fretted instruments [FRETTED-INSTRUMENT REPAIRER (any industry)]. May rebuild and restore bowed instruments and be designated Violin Restorer (musical inst.).
GOE: 05.05.12 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

730.281-050 VIOLIN REPAIRER (any industry)

Adjusts and repairs bowed musical instruments, such as cellos, violas, and violins, using handtools: Inspects and plays instrument to determine defects. Disassembles instrument, using handtools. Removes cracked or broken sections, using heated knife and handtools. Glues cracked part, places it in plaster cast, and clamps cast in handpress. Cuts out broken sections, carves replacement parts, and fits replacements to original shape and dimensions of instrument. Reassembles body of instrument, using glue and clamps. Planes and replaces fingerboard, and fits and replaces pegs. Varnishes, rubs, and buffs instruments to protect and decorate them. Strings instrument and fits bridge and soundpost to obtain specified string tension and height. May repair bows. May be designated according to instrument repaired as Bass-Viol Repairer (any industry). When repairing bows, may be known as Bow Repairer (any industry).
GOE: 05.05.12 STRENGTH: L GED: R4 M2 L2 SVP: 7 DLU: 77

730.281-054 WIND-INSTRUMENT REPAIRER (any industry)

Repairs, cleans, and alters brasswind and woodwind musical instruments: Inspects instrument, moves mechanical parts, or plays scale to determine defects. Unscrews and removes rod pins, keys, pistons, and other parts. Removes soldered parts, using gas torch. Reshapes parts, using handtools. Removes dents, using mallet or burnishing tool. Fills cracks in wood instruments, using either of following methods. (1) Inserts pinning wire into crack and covers wire with filler. (2) Operates lathe to cut groove around cracks, applies filler, and clamps retaining band into groove, using hand-operated press. Solders patches over cracks in brass instruments, using silver solder, and files patched area to contour of instrument. Resolders parts, using silver or soft solder. Operates lathe to cut off end of metal tubing, or solders attachments onto tubing to improve instrument's tone or intonation. Washes metal in lacquer-stripping solution and cyanide solution to remove lacquer coating and tarnish. Removes burrs from instrument valves, using scraping tool. Laps valves and pistons so they move freely. Heats key cups to melt shellac and removes pads. Polishes instruments, using rag and polishing compound, buffing wheel, or burnishing tool. Glues new pads and cork pieces on key cups, using hot shellac. Bends and cuts replacement springs and screws them into place. May be designated according to type of instrument repaired as Brasswind-Instrument Repairer (any industry); Woodwind-Instrument Repairer (any industry).
GOE: 05.05.12 STRENGTH: M GED: R4 M2 L2 SVP: 7 DLU: 77

730.281-058 BOW MAKER (musical inst.)

Constructs bows for stringed instruments, using handtools and power tools: Selects specified wood to shape bow, utilizing knowledge of bow styles. Cuts and shapes bow blank from wood, using bandsaw, plane, file, and knife. Positions blank over alcohol flame and bends blank to obtain desired curve of bow. Cuts, glues, and solders ornamental material, such as ebony, ivory, tortoise shell, and silver, to form parts of bow, such as frog and ferrule, using bandsaw, torch, and caliper. Drills or chisels mortise in lead of bow or frog to insert bow hair, using lathe, chisel, and hammer. Ties knot in end of bow hair, combs hair to straighten strands, using brush, and inserts hair into mortise, through ferrule, and into frog of bow. Secures bow hair in place with wooden wedge. Smooths and stains bow to achieve desired appearance, using sandpaper, stain, and rags. Adjusts weight, balance, and stiffness of bow by adding or removing decorative material, using handtools. Replaces bow hair [BOW REHAIRER (any industry) 730.684-022] and repairs bows.
GOE: 05.05.12 STRENGTH: L GED: R3 M2 L3 SVP: 6 DLU: 86

730.361-010 PIANO TUNER (any industry) alternate titles: tonal regulator; tuner

Tunes pianos in private and public establishments, using tuning fork and tuning hammer. Removes board from front of piano to expose strings. Places strips of felt or rubber between strings nearest to string to be tested to mute them. Strikes middle C and compares pitch with that of standard tuning fork. Turns string pin with tuning hammer to adjust tension on string until pitch of string and tuning fork correspond. Tunes remaining notes (strings) by comparing them with middle C and each other. May make initial adjustment of piano strings in factory [CHIP TUNER (musical inst.)].
GOE: 05.05.12 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

730.361-014 PIPE-ORGAN TUNER AND REPAIRER (any industry)

Tunes and services pipe organs: Directs helper to depress organ console key and strikes tuning fork to sound A above Middle C. Adjusts pitch of organ A pipes to conform with pitch of tuning fork and adjusts pitch of other pipes with references to pitch of other pipes with reference to pitch of tuned pipes by any combination of following methods: (1) Raises or lowers tuning slides and stoppers of metal and wooden pipes. (2) Rolls or unrolls curled strips of metal across tuning holes of metal pipes. (3) Pinches or spreads metal lips that protrude from mouths of metal pipes. Flares or closes metal pipes, using cone-shaped tool. Cleans pipes, using vacuum cleaner, and repairs or replaces worn parts of pipes, console, bellows, and blower, using handtools and power tools, such as pliers and electric sander. May assemble and install new pipe organs in buildings, such as churches and theatres [PIPE-ORGAN INSTALLER (musical inst.)].
GOE: 05.05.12 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

730.367-010 FINAL INSPECTOR (musical inst.)

Inspects finished musical instruments to ascertain conformance to standards for fit, finish, and tone. Fingers moving parts, such as keys and pedals, to inspect operation. Examines fit of parts at joints. Examines finish of instruments for scratches and defective plating or buffing. Corrects defects or notes defects and returns instrument to production department for correction. Plays notes and chords to test tone aurally or uses electronic tuning device. May adjust instrument to obtain specified tone. May be designated by family of instrument or instrument inspected.
GOE: 06.03.01 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

730.381-010 ACCORDION TUNER (any industry)

Tunes accordions by aurally comparing pitch of reeds with master reeds and filing reeds to obtain standard pitch. Places set of reeds to be tuned in slots in tuning table. Depresses pedal to operate bellows and presses key to blow or draw air through reed to be tuned and master reed. Files reed being tuned until pitch corresponds to master. Replaces defective leather valves. Measures and mixes glue. Places tuned reeds in reed blocks and secures them with glue. Verifies pitch of master reeds by comparing with pitch of vibrating tuning bar or fork. Files reeds until pitch corresponds to pitch of tuning bar or fork. May disassemble and reassemble used instruments to tune reeds.
GOE: 05.05.12 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

730.381-014 BELL MAKER (musical inst.)

Lays out pattern and shapes sheet metal into brass-wind instrument bells and bell necks, using templates, machine tools, handtools, and blueprints: Traces

pattern of bell onto metal, using scribe and template or blueprint. Cuts out bell blank, using hand or power shears. Hammers blank over bell-shaped mandrel, and butts seam, using notching tool. Brazes seam, using torch. Smooths seam, using hammer or file. Operates draw bench or arbor press equipped with expandable lead plug to shape and smooth bell and bell neck over mandrel. Operates spinning lathe to spin bell head and to form bead at tip of bell head [BELL SPINNER (musical inst.)]. Anneals previously shaped bell necks, using hand torch to soften metal for further bending. Removes scratches from bell, using abrasive-coated cloth. May be designated by instrument as Bell Maker, Sousaphones (musical inst.).
GOE: 05.05.12 STRENGTH: M GED: R3 M1 L2 SVP: 7 DLU: 77

730.381-018 BRASS-WIND-INSTRUMENT MAKER (musical inst.) alternate titles: assembler; band-instrument maker

Fabricates or alters brass-wind instrument parts, and assembles parts into completed instruments, ascertaining fabrication and assembly procedures from standard or customer's specifications: Reads specifications and makes calculations to determine procedures for fabricating and assembling instrument. Sets up and operates drawbench, bandsaw, and lathe to draw, cut, and machine instrument tubing. Bends tubing around forming blocks by hand. Measures tubing, using rule, to locate position of holes to be drilled for pistons and valve casings. Operates drill press, honing machine, and lapping machine to drill, hone, and lap metal components. Solders piston and valve components, using silver and soft solder. Hammers bell neck around bell-shaped mandrel, and brazes seams with oxyacetylene torch. Operates spinning lathe to shape bell head around mandrel. Assembles parts, such as braces, slides, valves, pistons, and bell head to form completed instrument, using handtools, measuring devices, and soldering iron. Plates assembled instrument with nickel, copper, or silver [PLATER (electroplating)]. May repair brass-wind instruments. May be designated according to instrument or part made as Saxophone Assembler (musical inst.); Valve Maker (musical inst.) I.
GOE: 05.05.12 STRENGTH: M GED: R4 M4 L4 SVP: 7 DLU: 77

730.381-022 ELECTRIC-ORGAN ASSEMBLER AND CHECKER (musical inst.)

Assembles electronic organ components: Wires, solders, and installs components, such as amplifier switches, keys, and pedals. Performs standard tests to ensure conformance to standards.
GOE: 06.02.23 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

730.381-026 HARP REGULATOR (musical inst.)

Completes assembly of harps and tunes them: Screws action to neck, using handtools. Inserts tuning pins in neck. Knots each string between soundboard and tuning pin. Adjusts tuning pins and regulating disks to tune instrument, using handtools and electronic tuning device.
GOE: 06.02.23 STRENGTH: M GED: R3 M2 L1 SVP: 6 DLU: 77

730.381-030 HARP-ACTION ASSEMBLER (musical inst.)

Fits, assembles, and inspects harp actions to obtain specified tolerances and operation: Reams metal parts, using machine tools and handtools. Rivets components to assemble action lines, using riveting machine. Inspects action line with level and micrometer to maintain specified tolerance and moves parts to inspect operation. Assembles action lines between action plates and assembles other metal parts onto plates to complete assembly. Inspects and oils completed action.
GOE: 05.05.12 STRENGTH: M GED: R4 M2 L2 SVP: 6 DLU: 77

730.381-034 METAL-REED TUNER (any industry)

Tunes metal reeds of musical instruments to standard pitch: Dismantles instrument and removes reed blocks, using handtools. Positions reed block over orifice in testing stand and actuates hand-or foot-operated bellows to sound reed. Strikes tuning bar and compares pitch of reed with that of bar to ascertain that reed is sharp or flat. Removes reed block from testing stand, inserts steel plate between reed and block to support reed, and files reed until it matches pitch of tuning bar. Tunes remaining reeds in their chromatic relationship to tuning bar. May lubricate and make repairs and adjustments to other parts of instrument.
GOE: 05.05.12 STRENGTH: L GED: R3 M2 L2 SVP: 7 DLU: 77

730.381-038 ORGAN-PIPE VOICER (musical inst.) alternate titles: voicer

Adjusts metal and wood organ pipes to obtain specified timber and strength of sound: Inserts unvoiced pipes in rack of tuning table and starts electric blower. Depresses key to blow air through unvoiced pipe and voiced master pipe. Listens to difference in tone and determines needed adjustments. Raises or lowers lips of metal flue pipes to regulate airflow over lips, and notches languet (inner tongue), using handtools. Files and raises or lowers reeds in reed pipes. Scrapes and sands lips in wooden pipes and raises or lowers them to regulate airflow. Enlarges or decreases opening in toe hole (hole at base of pipe), using handtools, to regulate loudness of sound. Tunes organ pipes [PIPE-ORGAN TUNER AND REPAIRER (any industry)]. May do final tuning and voicing of pipes in newly installed organs and be designated Organ-Pipe Finisher (musical inst.).
GOE: 05.05.12 STRENGTH: M GED: R4 M2 L2 SVP: 7 DLU: 77

730.381-042 PERCUSSION-INSTRUMENT REPAIRER (any industry)

Repairs percussion instruments, such as drums, cymbals, and xylophones: Removes drum tension rod screws and rods by hand or using drum key. Lifts rim hoop from drum shell and cuts drumhead from hoop. Cuts new drumhead from animal skin, using scissors. Soaks skin in water until it becomes pliable. Stretches skin over rim hoop and tucks it around and under hoop, using hand tucking tool. Reclamps rim hoop onto drum shell to allow drumhead to dry and become taut. Cuts out section around break in drum shells, and cuts new piece to fit, using power saw and handtools. Glues and clamps new piece in place. Removes dents in tympani, using steel-hitting block. Operates drill press or hand power drill to drill hole at inside end of crack in cymbal, gong, or similar instruments to prevent advance of crack, and cuts out section around crack, using shears or grinding wheel. Repairs bass drum and tympani foot mechanisms, and replaces percussion instrument hardware, such as tension rods and rim hoops, and xylophone and marimba bars and wheels as needed, using handtools. Performs other duties, such as sanding, painting, and cleaning drum shells, and regluing simulated pearl onto shells. May solder or weld frames of mallet instruments and metal drum parts. May lay out and shape laminated wood, and apply decorative trim to fabricate drum shells, using handtools, machine tools, blueprints, and shop drawings, and be designated Drum-Shell Maker (musical inst.).
GOE: 05.05.12 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

730.381-046 PIPE-ORGAN INSTALLER (musical inst.) alternate titles: organ installer

Assembles and installs components of electrically or mechanically controlled pipe organs, using handtools and following blueprints: Installs and wires components, such as air chests, console, blowers, and airducts, using handtools. Mounts pipes above air chest in predetermined pattern. Secures pipes in wooden racks and fastens racks to chest, using dowels and screws. May tune, maintain, and repair organs [PIPE-ORGAN TUNER AND REPAIRER (any industry)]. May voice pipes [ORGAN-PIPE VOICER (musical inst.)].
GOE: 05.05.12 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

730.381-050 PLAYER-PIANO TECHNICIAN (musical inst.)

Installs, tests, and adjusts electronic mechanisms on pianos to convert pianos to self-playing, using handtools and electronic testing equipment and following blueprints: Drills holes in support blocks with portable drill and installs blocks under keyboard at specified angle with whip assembly, consisting of hammers that strike cords to produce musical sounds. Attaches track for mounting music roll and sliding carriage onto key bed of piano, using handtools, and positions electronic control box into carriage. Installs vacuum pump and unit, required to transmit action from music roll through controls to solenoids, using screws and handtools. Places bar containing electrical solenoids on attached support bars, aligning solenoids with whip assembly to ensure engagement of solenoids, whip assembly, and piano hammers. Wires, solders, and installs wiring to piano case and attaches vacuum hose to pump and controls. Places music roll on carrier, starts mechanism, turns controls, and determines if player mechanism functions as required. Makes adjustments or repairs to correct defects, using handtools and electronic testing equipment.
GOE: 05.05.12 STRENGTH: H GED: R3 M3 L3 SVP: 4 DLU: 77

730.381-054 TROMBONE-SLIDE ASSEMBLER (musical inst.)

Assembles, solders, and laps trombone slides: Solders slide components, such as tubing sections, braces, and water valves, using gas torch and soft solder, following pattern to form inner and outer sections. Ascertains whether slides are parallel and straight, using gauges. Inserts plugs into slides, and squeezes or separates them to align them. Pushes outer slide over motor-driven shaft coated with abrasive to smooth inner surface. Brushes lubricant on inner slide surfaces and laps inner and outer slides together by hand. May cut tubes, using rotary power saw. May repair trombone slides.
GOE: 06.01.04 STRENGTH: L GED: R3 M2 L2 SVP: 7 DLU: 77

730.381-058 TUNER, PERCUSSION (musical inst.)

Tunes wood and fiberglass bars used in marimbas and xylophones, metal bars used in bell-lyras and vibraharps, and metal rods used in electronic carillons and tuning forks, using machines and handtools: Strikes bar with mallet and compares tone with tuned block or stroboscope. When tuning wood and fiberglass bars, removes wood and fiberglass with bandsaw and smooths bar with sanding machine or by hand until specified tone is obtained. When tuning metal bars and rods, removes metal with machine grinder and with hand files and scrapers to obtain specified tone. May assemble bars onto instruments. May be designated according to tuning operation performed as Harmonic Tuner (musical inst.); Octave Tuner (musical inst.).
GOE: 05.05.12 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

730.384-010 ASSEMBLER, PIANO (musical inst.)

Performs any combination of following tasks to assemble and install components in piano cases or benches: Positions parts in specified relationship to each other preparatory to assembly or installation. Joins parts and bolts, nails, screws, or glues parts to assemble or install parts, using handtools and portable power tools. Planes, sands, and files or adds shims and bushings to obtain specified fit and movement of parts. Machines parts to specifications prior to assembly, using machines, such as circular saw, or single-spindle-drill press. May verify alignment of parts, using ruler and gauge.
GOE: 06.02.22 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

730.681-010 PIANO REGULATOR-INSPECTOR (musical inst.) alternate titles: adjuster, piano action

Performs any combination of following tasks to inspect and regulate piano internal actions: Examines piano action components after installation for completeness and operation, and removes, repairs, or replaces defective or broken

parts, using handtools, glue, nails, and power tools, such as saw, sander, and drill. Verifies alignment of parts, using ruler and gauges. Scrapes, files, bends or adds shims and bushings to adjust operation of alignment of parts as specified. Depresses piano keys to verify operation of piano actions and makes adjustments to obtain specified performance. May mix glue. May assemble parts on to complete assembly prior to regulating. May specialize in inspecting and regulating particular type piano actions, such as spinet, upright, or grand.
GOE: 06.01.04 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

730.681-014 PISTON MAKER (musical inst.)

Finishes brasswind instrument pistons and assembles piston parts, using handtools: Inserts crooks (curved tubes) through precut holes in piston blank and cuts them to length, using sheet metal snippers or table saw. Places piston blank over mandrel or die and pushes steel balls or works ball-ended handtool through crooks to expand crooks to limits of holes into which they are inserted. Presses in piston bottom and head, using small hand press. Solders bottom plate onto piston, and removes excess solder, using scraping tool. Rough trims crooks, after soldering, using table saw. Operates turning lathe to face and bevel piston ends, and to shape and smooth external surface of piston. Operates drill press to tap threads into piston. Solders crooks to piston blank, using silver solder and gas torch. Grinds piston to final size, using special piston grinder and gauge. Inspects finished pistons for defects, such as holes and dents.
GOE: 06.01.04 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

730.681-018 VALVE MAKER II (musical inst.)

Fabricates valves for brass musical instruments, using handtools and machine tools and performing any combination of following tasks: Cuts connecting tubes to specified length, using table saw. Drills connecting tube holes in valve, taps internal and external threads in valve and ballisters, and cuts recess in top of valve or ballisters, using drill press. Fits ballisters onto valve and solders them into place with soft solder. Inserts connecting tubes and braces between valves, and wires (ties) them into place, using pliers. Aligns valves, tubes, and braces, using gauge and hammer. Solders tubes and braces to valves with silver solder. Cuts connecting tubes from interior of piston and bores piston, using honing machine with changeable bits. Hones interior of valve and exterior of piston, using *lapping* machine. Cleans excess solder from joints and deburrs inside of valve, using file, scraping tool, and sandpaper. Depresses piston into valve to ascertain that corresponding valve and piston holes match, and solders piston head to piston when holes are matched. Numbers matched valves and pistons to facilitate final assembly.
GOE: 06.02.24 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

730.682-010 SOCKET PULLER (musical inst.) alternate titles: body maker

Operates machine to draw, face (trim), and roll edges of tone holes of musical instruments, such as flutes and saxophones. Bolts mandrel for particular instrument to machine. Brushes compound on drawing buttons and places them in holes in mandrel. Places instrument body on mandrel with tone holes centered over drawing buttons and clamps it in place. Places bushing over revolving shaft head to form drawing die for each sized tone hole and drawing button. Moves controls to lower revolving shaft and screw it into button. Starts drawing machine that raises shaft and drawing button to draw out tone hole. Repeats operation for each tone hole. Changes mandrel and attaches tools to trim and roll back top edge of tone holes.
GOE: 06.02.02 STRENGTH: M GED: R3 M1 L1 SVP: 4 DLU: 77

730.684-010 ASSEMBLER, MUSICAL INSTRUMENTS (musical inst.)

Performs any combination of following tasks to assemble and fasten together parts to form subassemblies or complete musical instruments, such as drums, keyed brass, woodwind, or stringed instruments according to specified instructions or diagrams: Drills, taps, or reams holes to prepare parts for assembly, using drill press or bench-mounted drill. Bends tubing and laps parts by hand to form or join parts. Applies abrasive solvents to sliding joints to cause parts to move freely. Fits or faces parts, using hand file or *bench grinder* to trim parts to fit. Aligns metal brass-wind parts, such as valves, knobs, keys, and bars by sight, by placing them in jigs and clamping them on instrument, or by positioning parts, using rulers or gauges. Screws, clips, solders, and glues parts, such as drum hardware, corks, violin necks, wooden bridges, and metal snares, using handtools, portable powered tools, or hand torches. Removes excess solder, using scraping tool. Winds and bends spring wire around valve keys by hand to install valves on brass-wind instruments. Inserts steel bars and squeezes or separates bars to adjust tube spacing on brass-wind instruments. Cleans inside of tubes of brass-wind instruments with swab and cleaning solvent. Installs electric pick-ups in electrically amplified instruments, using screwdriver and soldering gun. May polish or buff exterior of instruments, using rotating buffing wheel. May cut tubing, using power saw. May inspect instruments for defects and reject instruments not meeting specifications. May be designated according to instrument assembled as Final Assembler, Brass-Wind Instruments (musical inst.); Mounter, Brass-Wind Instruments (musical inst.); Stringed-Instrument Assembler (musical inst.); or by part assembled as Bridge Fitter (musical inst.); Knobber (musical inst.); Neck Fitter (musical inst.). May be designated: Mounter, Clarinets (musical inst.); Mounter, Flutes And Piccolos (musical inst.); Mounter, Keyed Instruments (musical inst.); Mounter, Saxophones (musical inst.); Mounter, Sousaphones (musical inst.); Mounter, Trombones (musical inst.); Mounter, Trumpets And Cornets (musical inst.).
GOE: 06.02.23 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

730.684-014 BELL-NECK HAMMERER (musical inst.) alternate titles: folder-and-notcher

Forms and shapes bell necks for brass musical instruments: Bends neck blank down middle by hand. Aligns blank on mandrel, using forming device. Rolls bent blank around mandrel to form seam, using wooden mallet and iron bar. Secures seam for brazing, using notching tool. Smooths brazed seam, using file. Places neck on mandrel and hammers neck to shape it and remove dents, using metal hammer and wooden mallet.
GOE: 06.04.24 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

730.684-018 BELLY BUILDER (musical inst.)

Performs any combination of following tasks to fit and assemble wood soundboard, cast metal plate, and wood bridges to wood frame to fabricate back panel of piano: Glues supporting ribs and bridges to soundboard and glues soundboard to frame, using electronic gluing machine, gluing machine, or gluing press. Screws back panel to frame to reinforce gluing, using screws and screwdriver. Notches ribs and back frame to specifications, using chamfering machine. Clamps metal back plate to back panel, using air-clamp table, and measures and marks location for plate, using ruler, calipers, template, or gauge. Shapes bridges to specified height, using template, gauge, plane, and sandpaper. Presses pedal to release air-clamp and removes metal plate. Marks with punch and drills holes in back panel to attach metal plate, using drill press. Locates, marks, and drills bridge pin holes, using template, punch, hammer, and portable drill. Notches treble bridge with shaper machine or handtools. Hammers bridge pins into holes. Repositions metal back plate on back panel and secures plate to panel with bolts and screws. Verifies alignment of plate with back and bridges, using gauges. Inserts shims or removes wood from frame to adjust level of plate to obtain specified alignment. Hammers wood bushings into tuning pin holes in plate. Hammers tuning pins into bushings. May drill holes in bushings, using drill press. May varnish soundboard and ribs. May grind metal plate bearing bar to specified size, using portable grinder.
GOE: 06.02.32 STRENGTH: H GED: R3 M3 L3 SVP: 3 DLU: 77

730.684-022 BOW REHAIRER (any industry)

Replaces bow hair of stringed instrument bows, using handtools: Disassembles bow and removes spent hair, using handtools. Examines and cleans bow parts. Hand-carves replacement wedges and plugs. Selects new hairs of similar color and binds one end with yarn and resin. Secures bound end in one end of bow and secures it with wedges. Combs hair and binds loose ends with yarn and resin. Secures end in bow with wedges.
GOE: 05.05.12 STRENGTH: S GED: R3 M1 L1 SVP: 6 DLU: 77

730.684-026 CHIP TUNER (musical inst.) alternate titles: chipper

Adjusts piano strings to attain specified pitch, in first tuning of partially finished pianos: Rubs strings with wood block to remove irregularities, such as kinks. Plucks specified C or A string with pick and adjusts tuning pin with tuning wrench until pitch of string and tuning fork or bar are in unison. Plucks remaining string and adjusts to specified pitch by aurally comparing with previously tuned strings.
GOE: 06.02.32 STRENGTH: M GED: R3 M2 L3 SVP: 3 DLU: 77

730.684-030 CONSOLE ASSEMBLER (musical inst.)

Assembles and connects organ components, such as speakers, pedal assembly, switch assembly, and amplifiers on mockup. Makes mechanical adjustments to units. Removes units from mockup and installs in organ case.
GOE: 06.02.23 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

730.684-034 FRETTED-INSTRUMENT INSPECTOR (musical inst.)

Inspects stringed instruments, such as banjos and guitars, for tone, finish, and mechanical action. Tightens strings of instrument by hand. Plucks and adjusts strings to test tonal quality and intonation. Examines instrument for flaws in construction and finish. Adjusts alignment of parts, using handtools. Files and sands rough areas and applies lacquer over areas with brush. Buffs lacquered areas, using power-buffing wheel.
GOE: 06.01.04 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

730.684-038 INSPECTOR, WOODWIND INSTRUMENTS (musical inst.)

Inspects woodwind musical instruments, such as clarinets, saxophones, or flutes, for defective finish and mechanical action, and makes repairs, using handtools and testing devices: Tests soldered joints for strength and keys for spring tension, using testing devices. Solders loose parts and adjusts spring tension, using soldering iron and handtools. Examines instrument for defects in finish, and touches up defects, using buffing wheel. Inserts instrument into device that closes all keys and admits compressed air. Observes manometer to ascertain presence of air leakage. Presses pads with finger to locate leakage and adjusts pad, using handtools. Marks other defects for correction.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

730.684-042 KEYBOARD-ACTION ASSEMBLER (musical inst.)

Assembles and adjusts action of electronic organs: Uncrates keyboards and removes keys from keyboard. Sends keyboard to cabinet shop for shaping. Replaces keys in keyboard and locks board in rotor rack. Adjusts travel (up and down action) of keys and spaces with spacing tool. Regulates tension of key springs. Inserts key action screws into slotted ends of keys and levels key ends. Places keyboard end plates in each end of jig and locks plates in place. Removes keyboard from rotor rack and places keyboard in jig between end plates. Drills holes through keyboard and end plates and inserts screws. Removes keyboard from jig and attaches key action mounting brackets to end plates. At-

taches contact plates to underside of keys, using screwdriver. Solders connecting wire across all contact blocks, using soldering iron. Mounts subassembly under keys, using screwdriver. Adjusts level of key ends so key will activate key action.
GOE: 06.02.23 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

730.684-046 MANUAL WINDER (musical inst.)
Performs any combination of following tasks to assemble components for electronic organs: Inserts tension rod in manual to ease tension on resistance wires welded to contacts. Inserts contacts through actuators and locks actuators in place. Forms loops on ends of wires, using machine; and attaches loop ends to specified terminals. Winds excess wire into trough for tone control. Removes tension rod and ties assembly into place, using thread. Inserts rows of contacts in manual and wires preset stops for change of organ tone. Inserts contact separators in manual. Cleans bus bars, using chamois and alcohol, and inserts bars in manual to form junctions for electrical circuits. Straightens and replaces contacts, and rewires components to correct defective manuals. Inserts holder and wiring comb. Fastens assembly, using screwdriver.
GOE: 06.02.23 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

730.684-050 MUSICAL-STRING MAKER (musical inst.)
Performs any combination of following tasks to fabricate gut strings for musical instruments: Removes sheep intestine from barrel and places it in cleaning solution. Feeds intestines through stripping machine or runs hands or scraper over intestine to remove mucus. Splits intestine into four pieces and splices pieces together to make uniform lengths. Feels strands to select those of uniform size for various strings. Attaches loops to strands and stretches strands over posts. Twists specified number of strands together to form strings. Fumigates, dyes, and bleaches strings. Verifies gauge of string, using micrometer.
GOE: 06.02.32 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

730.684-054 PIANO STRINGER (musical inst.)
Threads wires through tuning pins to string pianos, using handtools: Selects specified wire, following chart for particular model, and threads wire through hole in tuning pin, around hitch pin (pin at base of cast plate used to hold string), and through another tuning pin. Cuts wire with cutters and draws it taut, using handtools. Aligns and spaces strings, using handtools. Attaches metal pressure bar, using screws and handtools to stabilize string pressure. May pluck string with pick and adjust tuning pin with tool to bring note to specified range. May insert and hammer tuning pins into previously drilled holes in back panel.
GOE: 06.04.24 STRENGTH: M GED: R2 M1 L2 SVP: 4 DLU: 77

730.684-058 PREASSEMBLER AND INSPECTOR (musical inst.)
Laps pistons and slides of brass musical instruments to ensure that joints slide freely: Screws piston onto shaft attached to handle, and brushes pumice compound onto piston. Inserts piston into matched valve, and laps it until it moves freely. Moves sliding joints to detect binding action. Applies abrasive compounds to slides, and files and laps them until they move freely. Inspects soldered joints for excess solder and rejects unacceptable joints.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

730.684-062 RACKER, OCTAVE BOARD (musical inst.)
Assembles octave rack for electronic organ, according to blueprint or diagram: Clamps rack in jig table. Places octave boards in designated rack sections and staples edges to rack, using stapling gun. Solders wires between boards to connect octave board circuits, using electric soldering iron. Positions wire cable on rack and octave boards, according to blueprint or diagram, and solders cable ends to solder buttons on boards. Attaches hinges to rack, using screwdriver.
GOE: 06.02.23 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

730.684-066 SANDER-AND-BUFFER (musical inst.)
Sands unlacquered wooden sections of guitars, using sandpaper and portable-power sander. Repairs cracks in wood, using knife and putty. Stains instrument, using brush, pad or spray gun. Rubs stained surface with cloth or felt pad to remove excess stain and evenly distribute stain. Scrapes away shading from binding to top, back, rim, and neck of instruments, using steel scraper tools and sands instrument smooth, using sandpaper. Hand-buffs lacquered sections of guitar, using cheesecloth and buffing compound.
GOE: 06.04.25 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

730.684-070 SEAM HAMMERER (musical inst.)
Smooths brazed seam of copper, nickel, silver, or brass musical instruments, using power roller or hammer: Files seam, using metal file. Places instrument on anvil or mandrel with seam uppermost. Starts hammer and moves instrument piece across anvil to expose seam to hammer, or positions workpiece under wheel of rolling machine and activates wheel to compress seam to specified thickness.
GOE: 06.02.24 STRENGTH: L GED: R3 M1 L1 SVP: 3 DLU: 77

730.684-074 SHEET-METAL-PATTERN CUTTER (musical inst.)
Lays out and cuts sheet metal for brass-wind instrument bells and bell necks, using templates and power tools or handtools: Positions templates on sheet metal to obtain minimum of waste. Marks cutting and forming lines on sheet metal with scriber, following outlines of templates. Cuts metal, following guidelines, using hand shears or power shears.
GOE: 06.02.24 STRENGTH: L GED: R2 M2 L1 SVP: 3 DLU: 77

730.684-078 SLIDING-JOINT MAKER (musical inst.)
Cuts tubing, solders tubes together, and fits into brass wind instrument sliding joints: Sets length gauge of table saw, and cuts tubes to length. Secures tubes in chuck of turning lathe, and works handtools against tube ends to bevel, burr, and ream tubes. Solders tubes, braces, and attachments together and assembles joints, using mallet.
GOE: 06.02.24 STRENGTH: S GED: R3 M2 L2 SVP: 3 DLU: 77

730.684-082 STOPBOARD ASSEMBLER (musical inst.)
Assembles electronic organ stopboards, attaching components, such as stop tabs, brackets, switches, and lights: Drills holes, using electric drill. Attaches holding brackets with screws. Inserts holding screws, stop tabs, and spring clips. Levels stop tabs, using measuring tool. Drills holes and installs stack switch. Attaches bank of indicator lights. Tests lights with battery tester. Installs music rack lighting panel. Attaches face board to exposed ends of stopboard sections, using screwdriver.
GOE: 06.02.23 STRENGTH: L GED: R3 M3 L3 SVP: 4 DLU: 77

730.684-086 TESTER (musical inst.)
Tests pitch of reed and brass instruments by sounding note and observing effect on stroboscope: Sets dial on stroboscope to note to be tested. Plays note on musical instrument into microphone connected to stroboscope. Observes whether revolving lights on stroboscope appear to stand still, indicating correctness of pitch, or move slowly to right or left, indicating sharp or flat. Pushes or pulls tuning slide or pulls out mouthpiece to adjust instrument until exact pitch is obtained. Rejects defective instruments. Tests accuracy of stroboscope by striking standard pitch chime and noting indicator.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

730.684-090 TONE CABINET ASSEMBLER (musical inst.) alternate titles: pedal assembler
Assembles pedal board and keyboard-coupler assemblies, and mounts speakers and parts to tone cabinets of electronic organs, following detailed drawings, and using handtools: Cements felt strips to wood frames of chassis. Lays out and drills holes in frame, using ruler, pencil, and hand drill. Mounts metal guide bars in holes and secures them to frame with wood screws. Scribes line for mounting felt to note-mounting channel, using straightedge. Cements felt strips on channel. Fastens pedals to mounting channel, inserts and crimps pedal tension springs on pedal frames, and adjusts tension of springs. Cements felt strips to channel tips. Cuts speaker and speaker adapter portholes in panel of tone cabinet. Installs front and top speakers and solders connecting wires to speakers. Mounts grille cloth over speakers. Cuts hole in rear panel of cabinet for receptacle of connector cable and connects cable wires to speakers. Mounts insulation in speaker enclosures. Assembles keyboard kit and attaches mounts to brackets of keyboard assembly. Cements felt to keynote channels. Clamps keyboard assembly to coupler assembly and attaches assemblies to chassis frame.
GOE: 06.02.23 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 77

730.684-094 TONE REGULATOR (musical inst.)
Compresses or loosens felt on piano hammers to brighten or soften tone of piano strings: Depresses piano key and listens to piano tone. Sands defective hammers with sanding paddle or brushes lacquer on hammer to harden felt and increase tonal brilliance. Jabs felt hammer with needles to soften hammers and increase tonal mellowness. Removes excess felt from hammer, using file. Inspects and adjusts string spacing and striking point of hammers, using wrench and burner. Files burrs from tuning pins.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

730.685-010 LOOPER (musical inst.) alternate titles: ball-ender
Tends machine that twists loop around fitting at end of wire musical-instrument strings: Positions cylindrical fitting (brass cylinder with hollow center) onto post on horizontal shaft of looper machine. Inserts wire-string into securing hole in machine table. Draws loose end of wire-string around fitting on shaft and back across machine table. Pulls bar over wire-string on machine table to hold wire-string secure. Depresses treadle, causing wire-looped cylinder to revolve, twisting loop, and fastening fitting to end of wire-string. Stops machine and removes looped fitting from machine. Places wire-string in holder for collection. May test loop strength, using applied tension. May verify gauges of wire with micrometer.
GOE: 06.04.24 STRENGTH: S GED: R2 M1 L2 SVP: 3 DLU: 77

730.685-014 MOUTHPIECE MAKER (musical inst.)
Tends shop machines that form and shape mouthpieces for woodwind instruments: Screws mouthpiece into boring machine that follows template to automatically form base of piece. Positions mouthpiece in chuck of automatic turning lathe and shapes outside of mouthpiece. Feeds mouthpiece in sloping machine to cut slope to specified dimensions. Presses tip of mouthpiece against abrasive wheel to grind to specified curvature. Places mouthpiece in fixture of chambering (shaping) machine to shape inside opening. Cuts and attaches cork around forward part of mouthpiece to ensure fit of mouthpiece into instrument, using knife and glue. Verifies dimensions, using micrometers and gauges. Operates power buffing wheel to buff mouthpiece.
GOE: 06.04.09 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

730.686-010 CUTTER, WOODWIND REEDS (musical inst.)
Feeds machines that saw and abrade cane (cultivated bamboo) into woodwind instrument reeds: Places stalk of cane against length guide on table of bandsawing machine that cuts cane to length. Sorts cut pieces by diameter. Splits pieces into strips, using hand-operated splitting device. Places strips into blanking-machine that cuts excess material from strips to form reed blanks.

Places blanks on conveyor belt that feeds against rotating sanding disk. Inserts blank into holding device of cutting machine that tapers one end of reed blank. Removes tapered reeds and sorts, using gauge.
GOE: 06.04.25 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

731 OCCUPATIONS IN FABRICATION AND REPAIR OF GAMES AND TOYS

This group includes occupations concerned with fabricating and repairing BB guns, trains, toy musical instruments, models, poker chips, dolls, chess and checker sets, and children's vehicles. Occupations concerned with fabricating such textile products as doll clothing and children's costumes are included in Division 78.

731.131-010 SUPERVISOR, TOY ASSEMBLY (toy-sport equip.)
Supervises and coordinates activities of workers engaged in assembly, cleaning, and painting of metal, plastic, and wooden toys: Assembles toys to aid in meeting schedule or to determine cause of production delays. Directs workers in assembly methods by demonstrating assembly tasks. Trains workers in operation and maintenance of equipment used in assembly and painting of toys on production line. Schedules conveyor line changes according to production requirements. Inspects toys for finish and operation. Maintains production and personnel records. Performs other duties as described under SUPERVISOR (any industry) Master Title. May supervise workers engaged in constructing prototype toys and be designated Supervisor, Model Making (toy-sport equip.).
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

731.280-010 MODEL MAKER (toy-sport equip.)
Constructs mechanically functioning prototypes of toys from blueprints, using metalworking, woodworking, and plastic-forming machines and handtools. Studies blueprint design and selects stock material, such as aluminum, wood, styrene, and fiberglass, according to design specifications. Lays out design of parts on stock, following blueprints and using measuring and drawing instruments. Designs and casts molds from resin for use in injection-molding and plastic-forming machines. Sets up and operates machines, such as injection-molding machine, vacuum plastic-forming machine, drill press, lathe, jointer, milling machine, and sanding machine, to cut, shape, and sand model parts. Assembles and fastens parts together, using handtools, glue, bolts, nails, and clamps.
GOE: 01.06.02 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 77

731.381-010 DICE MAKER (toy-sport equip.)
Fabricates dice from precut nitric-celloid cubes according to specifications: Places nitric-celloid cubes in electrically heated metal box to remove volatile solvents. Operates milling machine to shape cubes to specified tolerance, according to dimensions specified on work order. Measures cubes with vernier caliper. Operates drill press to drill spots in cubes. Paints spots on cubes, using implement. Finishes dice to tolerance of 0.001 inch, using buffing wheel or draws dice over various grades of sandpaper to achieve dull finish.
GOE: 06.02.24 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

731.587-010 FINISHER, HAND (toy-sport equip.)
Dresses and decorates toys or dolls with ready-made clothes, ribbons, and ornaments, such as bells and collars: Glues precut facial features and hats on toy. Directs air from blower over toys to remove dust and lint. Records production. May dress dolls with unfinished garments and sew them onto doll. May glue heads of toys onto bodies.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

731.684-010 COIN-MACHINE ASSEMBLER (svc. ind. mach.) alternate titles: switchpanel mounter
Mounts and connects switch panels to control boxes of electric pinball machines. Attaches switch panels to control boxes, using screws and screwdriver, and solders switch panel wires to electric plugs of control boxes, using soldering iron.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

731.684-014 DOLL REPAIRER (any industry)
Repairs damaged dolls: Examines doll to determine extent of damage and repairs needed. Disassembles doll to remove damaged parts. Repairs or replaces parts and reassembles doll. Repaints dolls, retouches lips, and cheeks, using paint and brush. Replaces eyelashes and hair, using glue. May package or otherwise prepare repaired doll for shipment or storage.
GOE: 05.10.04 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

731.684-018 TOY ASSEMBLER (retail trade)
Assembles knocked-down toys for delivery to customers, using handtools and manufacturer's diagram or instructions.
GOE: 05.12.15 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

731.684-022 TOY-ELECTRIC-TRAIN REPAIRER (retail trade)
Repairs toy electric trains in retail toy store, using pliers, screwdrivers, and soldering iron: Removes defective parts and replaces with new ones. Adjusts coils and moving parts. Does touchup painting as required.
GOE: 05.10.03 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

731.685-010 ROOTER OPERATOR (fabrication, nec) alternate titles: doll-wig maker, rooted hair; hair-rooting-machine operator
Tends machine that roots (stitches) prescribed quantity of hair onto doll head: Places one or more cones of precurled synthetic hair at rear of machine. Pulls single strand of hair from cone, threads needle, and positions doll head on machine post. Depresses pedal to activate needle and maneuvers head under needle in prescribed manner until machine stops at end of rooting cycle. Releases pedal to activate device that cuts hair from cone at specified length. Places completed head in containers for removal to finishing department. May tend machine that curls hair as it is being sewn onto doll heads.
GOE: 06.04.09 STRENGTH: S GED: R2 M1 L2 SVP: 3 DLU: 77

731.685-014 STUFFER (toy-sport equip.) alternate titles: blower; toy stuffer
Tends machine that blows filler into stuffed-toy shells: Inserts precut supporting wire into shell. Places shell opening over stuffing machine nozzle. Depresses pedal to blow cotton or chopped foam rubber filler into shell to impart shape to toy. Places stuffed toy in tote box. Records production. May stuff toys by hand.
GOE: 06.04.34 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

731.685-018 TIRE SETTER (toy-sport equip.)
Tends machine that attaches rubber tires or semipneumatic tires to wheels of children's vehicles, such as tricycles or bicycles, using either of following methods: (1) Starts machine and positions rubber tire material against machine fence in line with threading hole. Depresses pedal causing machine to thread wire through tire and cut wire to specified length. Inserts protruding ends of wire in slots and holes of machine forming loop with tire. Positions vehicle wheel inside loop formed by tire and depresses pedal to activate machine and draw wire, twist wheel, trim wire, and secure wire on wheel. Slides wheel onto shaft between rollers of machine with wire twist up and depresses pedal causing rollers to push ends of tire over wire-twist to complete tire. (2) Places tire in jaws of machine and starts machine to stretch tire. Positions wheel inside stretched tire on machine, holds wheel, and depresses pedal to release tire onto wheel rim. May install sprocket, dust cap, and secure sprocket with snap ring on bicycle wheel, using metal cone.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

731.687-010 ASSEMBLER (svc. ind. mach.)
Assembles ball-propelling units of pinball games, using handtools: Screws cap on rod with pliers and slips spring on rod. Inserts end of rod through hole in housing and attaches pull knob, using screwdriver. Pulls knob to test spring tension of assembly.
GOE: 06.04.23 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

731.687-014 FINISHER (fabrication, nec)
Sets doll hair into specified style by combing, brushing, and cutting: Places doll head on holder and combs and brushes hair in prescribed manner to smooth and untangle hair, using wire brush and petroleum jelly. Cuts hair to desired length, using scissors. Sets hair into specified style and secures in place, using rubber bands. Wipes doll face to remove smudges, using damp cloth. Places plastic bag over finished head and tucks edges under base to prevent damage to hair and face.
GOE: 06.04.34 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

731.687-018 HACKLER, DOLL WIGS (toy-sport equip.)
Grasps and pulls synthetic hair through teeth or bristles of hackle to remove tangles and soften fibers preparatory to making doll wigs. May arrange and finish doll wigs, using comb, and be designated Wig Comber (toy-sport equip.).
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

731.687-022 INSPECTOR, TOYS (toy-sport equip.)
Inspects subassembly or finished metal, plastic, and wooden toys for conformance to specifications: Examines toys at end of assembly line for items, such as paint scratches or nicks, inclusion of accessories, operation of moving parts, and decal application. Removes defective toys from line or performs repairs, such as touching up paint, tightening screws, or bending fastening tabs. Cleans toys with damp sponge and transfers them to packing section. Weighs specified quantities to fill orders for toys. May test operation of toys, using testing equipment.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

731.687-026 MOLD FILLER, PLASTIC DOLLS (toy-sport equip.)
Fills molds with plastic compound to cast doll heads, arms, and legs: Inspects molds and covers for cleanliness and cleans them as required with solvent and rags. Ignites hand-operated gun and inserts nozzle into fill plug of mold. Presses trigger of gun which automatically discharges premeasured amount of plastic compound into mold. Places cover on mold and bolts it in place, using pneumatic wrench. Pushes mold onto conveyor. May strip mold after curing.
GOE: 06.04.32 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

731.687-030 PUZZLE ASSEMBLER (toy-sport equip.)
Fits together pieces of jigsaw puzzles to form completed unit: Removes puzzle forms and paint trays from conveyor and stacks them according to color code. Removes puzzle parts from trays and fits part into form. Places assembled puzzle on conveyor.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

731.687-034 TOY ASSEMBLER (toy-sport equip.)
Assembles parts of various materials, such as plastic, wood, metal, or fabric to mass produce toys, performing any combination of following tasks: Selects parts specified and positions parts in designated relationship to each other, using hands, tweezers, or pliers. Assembles and fastens parts of toys together,

using clips, glue, jig, screws, dowels, nails, handtools, and portable powered tools. Inspects toys for specified color and operation of parts. May tend previously set up machines, such as drill press, reamer, welding machine, nailing machine, flanging press, and punch press to drill, cut, weld, trim, fit, or insert toy parts on assembly line. May be designated according to item assembled or material used as Assembler, Toy Voices (toy-sport equip.); Doll-Eye-Setter (toy-sport equip.); Stuffed-Toy Joiner (toy-sport equip.); Toy Assembler, Plastic (toy-sport equip.); Toy Assembler, Wood (toy-sport equip.); Wheel Assembler, Baby Carriage (toy-sport equip.).
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

731.687-038 WIRE CUTTER (svc. ind. mach.)
Cuts copper wire to specified length, using hand shears, for use in manufacture of pinball machines.
GOE: 06.04.24 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

732 OCCUPATIONS IN FABRICATION AND REPAIR OF SPORTING GOODS

This group includes occupations concerned with fabricating and repairing golf and tennis goods, gymnasium and playground equipment, basketballs, fishing gear, decoys, roller skates and ice skates, body-protection equipment, and bowling balls. Occupations concerned with fabricating and repairing athletic and sports apparel are included in Division 78. Occupations concerned with fabricating and repairing small arms are included in Group 736, and occupations concerned with fabricating ammunition are included in Group 737.

732.130-010 SUPERVISOR (toy-sport equip.)
Supervises and coordinates activities of workers engaged in fabricating, assembling, or repairing sporting goods, such as athletic balls, billiard tables, bowling balls, bows and arrows, golf clubs, and under-water equipment: Directs workers in operation of machines and assembly techniques. Tours work area to ascertain progress of scheduled work and observes workers to verify conformity with prescribed work procedures, safety regulations, productivity, and standards of work quality. Occasionally examines assembled products to determine if products meet company specifications. Reports defective machinery and equipment to designated personnel to obtain repairs required. May assemble items to aid in meeting production schedule or determine cause of production delays. Performs other duties described under SUPERVISOR (any industry) Master Title. May be designated according to activity supervised as Assembly Supervisor (toy-sport equip.); Fabrication Supervisor (toy-sport equip.); Repair Supervisor (toy-sport equip.).
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 78

732.281-010 CUSTOM SKI MAKER (toy-sport equip.)
Fabricates customized skis, using knowledge of materials and techniques of production: Examines designs and confers with engineering personnel to determine production specifications. Computes deviations from standard specifications required to produce customized skis. Collects parts required and fabricates cams and core form needed to make skis, using planing machine. Turns knobs to adjust temperature of mold press to specified setting. Positions parts, such as heel pad, toe-edge, and shims in female die of mold. Wraps fiberglass around polyurethane foam core, pours epoxy resin over core, and positions core in female die of heated mold press for shaping. Removes ski from die, scrapes edge with putty knife to remove resin flash, and mounts ski in rack to stabilize camber and torsion. Visually inspects finish applied to skis by other production workers to ensure compliance with specifications. Verifies configuration of skis in repose and under stress, using micrometer, rulers, and weight-distribution measurement graph. Records information on materials used and techniques applied to fabricate skis.
GOE: 05.10.01 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 77

732.364-014 SKI-BINDING FITTER-AND-REPAIRER (toy-sport equip.)
Fits and attaches bindings to skis, according to customer needs and ski and boot specifications, and repairs ski bindings and skis, using power tools and handtools: Records customer statistics, such as height, weight, skiing experience, and skiing habits to maintain reference file. Reviews customer data and ski manufacturer specifications to determine method of locating and attaching binding to skis. Measures length of ski-running surface with ruler to locate center of skis. Places skis in clamps, positions drilling-jig on skis, and drills holes, using electric hand drill and utilizing knowledge of composition of skis. Screws bindings to skis, using screwdriver, and secures boots in bindings to ensure required flexibility. Replaces defective bindings, cements separated layers of laminated skis, using epoxy resin and clamps, and sharpens ski edges, using file, to repair skis. Occasionally sells skis when sales staff are busy.
GOE: 06.02.24 STRENGTH: L GED: R4 M3 L3 SVP: 5 DLU: 86

732.381-010 BOW MAKER, CUSTOM (toy-sport equip.)
Selects, laminates, shapes, and finishes woods, plastics, and metals to make archery bows: Selects materials from stock according to customer's specifications, and preshapes parts, using handtools and power tools. Applies specified adhesives between parts. Assembles parts and places assembled bows in glue press to cure. Heats bows in steam box until pliable and clamps bows on form to shape curves and recurves. Trims and smooths bows, using handtools and sandpaper. Stains, paints, and varnishes bows according to specifications. May apply decals to bows. May rework or repair damaged bow and be designated Bow Repairer, Custom (toy-sport equip.). May make arrows, using die cutter to cut feathers used on arrows.
GOE: 01.06.02 STRENGTH: L GED: R4 M2 L2 SVP: 7 DLU: 77

732.381-014 BOWLING-BALL GRADER AND MARKER (toy-sport equip.) alternate titles: grade and center marker
Lays out axis through light and heavy centers of bowling balls and gauges and grades balls according to size, color, and quality: Floats bowling ball in mercury pool and locates and marks center of light side, using plumb bob and grease pencil. Places ball in jig and locates center of heavy side, using center gauge. Examines ball for defects and color quality, measures size with ring gauge, and marks data to be engraved under trademark, using grease pencil. Places rejected balls aside for reworking.
GOE: 06.01.05 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

732.381-018 GOLF-CLUB HEAD FORMER (toy-sport equip.) alternate titles: club former
Adjusts loft and lie (angle made by club face to neck) on golf club irons to specified angle, using hammer. Reads work order to determine number and model of club being formed. Reads chart specifying angle of loft and lie for club and measures angles, using bench-size protractor or gauges. Places forging on lead block and hammers neck or head to open or close angles to achieve specified angle dimensions. Inserts shaft and verifies conformance of angles with standards, using gauge.
GOE: 06.02.24 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

732.381-022 GOLF-CLUB REPAIRER (toy-sport equip.)
Repairs worn or damaged golf clubs or customized golf clubs according to customer specifications, using handtools: Dismantles golf clubs and replaces worn or damaged parts or parts specified by customer, such as head, shaft, sole plates, and composition inlays in faces of woods, using screws, rivets, epoxies, files, sandpaper, drills, hammers, heating torch, and vise. Wraps shanks of clubs with cord or cements on plastic sleeves to prevent shanks from splitting. Removes old grips. Attaches new grips by applying listing materials to build up handle area and by wrapping leather strip over listing materials, or brushes on adhesive and slips molded rubber grips onto shaft. Reweights clubs by adding or subtracting lead or brass weights to achieve *swing weight* specified. Sands and files faces of woods or hammers heads of irons to change loft or lie of clubs or to open or close faces of clubs. Stains, shellacs, or oils wooden heads and shafts and polishes steel heads on buffing wheel to finish clubs. Cleans and polishes chrome-plated metal golf club heads, using buffing machine and sand-blasting equipment. May make clubs to customer specifications, using ready-made shafts and club heads and be designated Golf-Club Maker (toy-sport equip.); or according to operation performed as Assembler, Golf-Wood Head (toy-sport equip.); Golf-Club Finisher (toy-sport equip.).
GOE: 05.10.01 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

732.384-010 ASSEMBLER, BILLIARD-TABLE (toy-sport equip.)
Assembles new billiard or pool tables, performing any combination of following tasks: Cuts, trims, and installs pool table parts, such as cushions, cloth covering, pockets, and tabletops, using cement, tacks, scissors, hammer, and portable bandsaw. Assembles and installs rails and legs, using handtools. Installs specified pool table accessories, such as coin meter assembly and ball return gullies, using handtools and power tools. May assemble billiard sticks and glue tips on ends, using brush and glue. May repair billiard tables, using handtools and power tools and be designated Billiard-Table Repairer (retail trade; toy-sport equip.); or may be designated according to component assembled as Cushion Former (toy-sport equip.); Cushion Installer (toy-sport equip.); Frame Assembler (toy-sport equip.); Leg Assembler (toy-sport equip.); Pocket Assembler (toy-sport equip.); Rail Assembler (toy-sport equip.); Trim Mounter (toy-sport equip.).
GOE: 05.10.01 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

732.384-014 INSPECTOR AND ADJUSTER, GOLF CLUB HEAD (toy-sport equip.) alternate titles: loft and lie inspector and adjuster
Inspects golf club irons to verify conformance with specifications and adjusts angles, using rubber mallet: Measures angle of loft and lie, using gauges. Adjusts neck or head to achieve specified angle dimensions.
GOE: 06.03.02 STRENGTH: L GED: R3 M3 L3 SVP: 4 DLU: 77

732.487-010 BOWLING-BALL WEIGHER AND PACKER (toy-sport equip.)
Weighs bowling balls, computes weight differential between light and heavy sides, records data on box, and packs balls for sales, storage, or shipment: Places ball (heavy side out) on pan of straight-beam-balance scale and reads and records weight. Reverses position of ball on scale pan, reads and records weight, and computes differential between light and heavy sides. Reweighs ball with heavy side down to ascertain true weight. Records data on packing box, using pen or grease pencil. Packs ball in box and seals box with glue or gummed tape.
GOE: 06.04.38 STRENGTH: L GED: R2 M2 L1 SVP: 4 DLU: 77

732.567-010 INSPECTOR, GOLF BALL (toy-sport equip.)
Inspects and tests golf ball centers and wound cores for conformance to standards and records results: Squeezes liquid centers through wringer to observe cover leaks. Examines wound cores to see that ball is round and that thread condition meets specifications. Passes ball through go-not-go gauges to verify size. Places wound cores on fixture of compression tester, presses pedal to drop ram, and observes gauges to obtain compression reading. Sorts balls

according to compression registered on gauge. Reports compression test results and other quality factors.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

732.584-010 BOWLING-BALL ENGRAVER (toy-sport equip.)
Engraves brand name, serial number, and other identification data on plastic bowling balls, using pantograph-routing machine: Inserts cutting bit in router head and secures bit with wrench. Selects and clamps specified pattern (letters or design) under tracing stylus of pantograph-routing machine. Centers bowling ball in jig and clamps ball into position under router head. Starts machine and lowers tracing stylus to beginning point on pattern. Pulls lever, lowering cutting bit onto surface of bowling ball, and guides tracing stylus over pattern, causing router to cut identification data on ball. Examines ball to detect irregular or incomplete engraving and places defective balls aside for rework.
GOE: 06.04.24 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

732.584-014 FINISHER (toy-sport equip.)
Shapes and smooths archery bows and tennis racket frames to final contours of phototype designs prior to application of finish coating, using scrapers, files, and emery paper: Clamps bow or frame in padded vise and files off excess wood or fiberglass to give finish shape to item. Scrapes flat surfaces to remove file marks. Shapes tip nocks of bows with circular file. Smooths surfaces to final finish, using vibratory sander and emery paper. Marks item with identification for inspector's reference and records number and type of item finished.
GOE: 06.04.25 STRENGTH: L GED: R2 M1 L2 SVP: 4 DLU: 77

732.587-010 GOLF-BALL TRIMMER (toy-sport equip.)
Shaves *flash* from molded golf balls, using trimming machine: Positions golf ball in locating cup. Depresses pedal to move golf ball against driver cup. Presses degrooving knife against rotating golf ball to shave flash. Releases pedal to drop golf ball in chute. May remove flash from golf balls, using machine that sands flash from surface of ball. Keeps production records.
GOE: 06.04.34 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

732.587-014 GOLF-CLUB WEIGHER (toy-sport equip.) alternate titles: golf-club matcher
Weighs golf clubs on scale to obtain *swing weight* for matching irons and sorts clubs according to swing weight: Positions club in holding fixture of scale with grip in holder and head extending over and beyond fulcrum point. Reads pointer on scale indicating swing weight. Wraps heads of weighed clubs in cellophane bag and tapes bag to shaft with colored tape designating swing weight of club. Places weighed and wrapped clubs in tote box with work order.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

732.684-010 ARROWSMITH (toy-sport equip.)
Paints decorations and glues nock, head, and feathers on shaft of archery arrows: Applies glue to ends of arrow and places nock on one end and hunting or target head on other end. Positions arrow in rotating cresting (decorating) machine and paints bands of specified color on rotating arrow shaft, using brush. Clamps arrow into fletching (feathering) jig of rotating fletching table leaving edge of quill exposed. Applies glue to exposed edge and positions edge on arrow shaft. Repeats gluing operation until specified number of feathers are glued to arrow. May mix paints according to color chart. May be designated according to duties performed as Crester (toy-sport equip.); Fletcher (toy-sport equip.).
GOE: 06.04.34 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 77

732.684-014 ASSEMBLER (toy-sport equip.)
Assembles water sports equipment, such as diving boards, under-water equipment, and water skis, using handtools and power tools: Positions parts in sequence of assembly following work orders, guides, holes, or edges. Screws precut parts together, using handtools, or glues parts together, using glue and clamps. Reams threads on tanks, using die cutting tool. May bore holes for attachment of accessories, using portable drill. May examine completed items for functioning and conformance to specifications. May be designated according to article assembled as Air-Tank Assembler (toy-sport equip.); Diving-Board Assembler (toy-sport equip.); Water-Ski Assembler (toy-sport equip.).
GOE: 06.04.23 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

732.684-018 ASSEMBLER, LIQUID CENTER (toy-sport equip.)
Molds golf ball center covers and encases liquid centers in molded covers: Fills pans with specified amounts of water and chemicals and packs dry ice around pans. Places liquid centers for golf balls in series of pans of chemical solutions to freeze liquid, remove gelatin cover, and clean surface. Centers rubber disks on mold, closes cover, and inserts mold in press. Pulls lever to close press and mold disks into semispheres. Removes mold, places semispheres in upper and lower cavities of molding press, places frozen centers on semispheres, and pulls lever to close mold. Opens mold after prescribed time and removes centers encased in rubber. Pulls *flash* from around centers and places them in dry ice preparatory to vulcanizing.
GOE: 06.04.32 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

732.684-022 ASSEMBLER, PING-PONG TABLE (toy-sport equip.)
Assembles parts, such as table-top sections, trim, hinges, and legs, to produce ping-pong tables: Positions table-top sections in jig and applies glue along table edge, using glue and brush. Places wooden trim strips over glue and attaches strips to table edge, using staple gun or power screwdriver. Fastens parts, such as hinges, legs, leg braces, and locks, using power screwdriver.
GOE: 06.04.22 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

732.684-026 BALL ASSEMBLER (toy-sport equip.)
Assembles balls from rubber, rubber impregnated fabrics, and leather, on wax-ball lasts (forms), using handtools: Places wax-ball last in holding fixture and brushes on cement. Presses and smooths rubber impregnated fabric panels on last in specified pattern to cover ball last, leaving space for door opening flap for wax removal. Repeats operation, cementing on specified number of plies to form basketball carcass. Inserts bladder into carcass through door opening and inflates to specified pressure. Aligns flaps of door to matching edges of carcass, brushes on cement, and presses flaps down to close door. Brushes cement on molded carcass or receives cemented carcass. Inspects wet adhesive for dried lumps and missed spaces. Aligns precut leather or rubber panels between raised ribs of molded carcass. Presses and smooths panels onto carcass to complete assembly of basketball. Cuts off air valve nipple flush with ball, using scissors or knife. Paints stripes along false seams, using brush and ink. Waxes balls, using paste wax and damp cloth. Buffs ball surface, using power buffer. Affixes decals to balls and labels balls, using stencil and spray gun. May fabricate and repair rubber or plastic ball bladders. May repair returned, worn, or damaged basketballs by putting in new carcasses or repanelling old carcasses. May specialize in one phase of assembly and be designated Carcass Assembler (toy-sport equip.); Door Closer (toy-sport equip.); Leather Coverer (toy-sport equip.); or according to type of ball as Basketball Assembler (toy-sport equip.); Soccer Ball Assembler (toy-sport equip.); Volleyball Assembler (toy-sport equip.).
GOE: 06.04.23 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

732.684-030 BASEBALL INSPECTOR AND REPAIRER (toy-sport equip.)
Inspects and grades baseballs or softballs and repairs defects, using handtools: Examines ball for defects, such as crooked, uneven or raised stitches, lumps, and irregular shapes. Straightens crooked stitches by pulling or prying them into place with awl. Places balls with raised stitches into bench press and clamps top of press to flatten stitches. Pushes curved awl through seams to press and smooth lumps under cover of ball. Weighs softballs on scale. Grades baseballs according to model and quality, and grades softballs according to model, quality, and weight. Rejects nonrepairable and misshapened balls.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

732.684-034 BASEBALL SEWER, HAND (toy-sport equip.) alternate titles: hand stitcher
Sews leather covers on baseballs and softballs: Places glue-dipped ball in buck frame and stretches both leather covers over ball. Pulls perforated edges of covers together with pliers and tacks covers into place with brads or staples. Sews covers onto ball with harness needle, using waxed linen thread.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

732.684-038 BOW MAKER, PRODUCTION (toy-sport equip.)
Fabricates and shapes laminated archery bows: Selects dies according to type bow to be produced and bolts dies to bow press. Applies epoxy resin to precut wood and fiberglass parts for laminating. Aligns parts, following reference marks, and clamps parts to press. Cures bows for specified time to form contour of bow, using bow press. Cuts string nocks in bow tips and bevels bow edge, using abrasive wheels and sanders. Shapes and finishes contour of bow, using belt sanders. Examines bow for twist and adjusts string position to compensate for deficiencies noted. Buffs bow to smooth finish, using power buffer. Measures force required to pull bow string to full draw, using scale and pulley device, to determine if bow meets specifications. May apply decorative or identifying decal to bow. May varnish and stain bow to protect surface. May assemble crossbows and be designated Crossbow Maker (toy-sport equip.). May repair defects in bows damaged in production or returned to factory for repair.
GOE: 06.02.32 STRENGTH: L GED: R3 M3 L2 SVP: 5 DLU: 78

732.684-042 BOW-STRING MAKER (toy-sport equip.)
Makes strings for archery bows: Loops string around posts of jig and ties ends together, waxing ends by hand. Holds end of string and spins hand-winding jig to form loops on both ends. Attaches string to post and winds strands to complete bow string. Winds extra wrapping around string to give protection at point where notch of arrow fits onto string. May wind string, using automatic bow-string making device.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

732.684-046 CELLULOID TRIMMER (toy-sport equip.)
Attaches celluloid band to golf club shaft to anchor ends of leather grip: Bevels grip with knife to taper it to shaft. Slides celluloid band onto tapered part of grip and shrinks celluloid to size, using electric heating jig. Applies cement to tapered grip and cements band in place over end of grip. Sands celluloid band, trims it to length with knife, and cleans grip with cleaning fluid.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

732.684-050 FEATHER STITCHER (toy-sport equip.) alternate titles: stitcher, hand
Sews feathers of shuttlecocks together by hand: Places shuttlecock in holding device and sews several rows of stitching in feathers above base of shuttlecock, using curved needle. May be designated according to row of stitching worked on as Bottom Stitcher (toy-sport equip.); Middle Stitcher (toy-sport equip.); Top Stitcher (toy-sport equip.).
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

732.684-054 FISH-STRINGER ASSEMBLER (toy-sport equip.)
Joins parts, such as chain, catches, and swivel, to assemble fish stringer: Positions and holds stringer chain against premeasured marks on worktable to

measure chain. Opens link and separates measured length of chain from stock length, using prying device. Positions swivel over end of link, and presses ends of link together to close link and secure swivel to chain, using bending device. Attaches stringer catches to chain, using clip snaps or pliers. Places completed stringer in box, and seals box, using gummed tape.
GOE: 06.04.23 STRENGTH: L GED: R2 M2 L1 SVP: 2 DLU: 77

732.684-058 FISHING-LURE ASSEMBLER (toy-sport equip.)
Cuts out fishing lure parts from metal strips, and assembles lures, using machines and handtools: Secures specified dies in machine, using wrench. Threads roll of blank metal through machine. Depresses pedal to start machine and cut out parts, such as bodies, spinners, or spoons, from metal strip. Coats surface of lures, such as plugs or popping bugs with paint, using spray gun. Bores holes in cutout parts, using drill press or hand drill. Joins lures and attachments, such as hooks, skirts, or swivel according to model or work ticket specifications, using cement, pliers, or screwdriver.
GOE: 06.02.24 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

732.684-062 FISHING-REEL ASSEMBLER (toy-sport equip.) alternate titles: reel assembler
Assembles fishing reels, performing any combination of following tasks: Positions parts, such as washers, levers, springs, line spool, and retaining rings, in slots, holes, or over pins provided on frame of fishing reel. Inserts drive shaft through line spool and frame bearing. Positions side plate assembly containing gears and crankshaft on frame, aligns screw holes, and screws assembly to frame, using powered screwdriver. Places crank on crankshaft and tightens nut with wrench to fasten crank to shaft. Screws parts, such as control knobs and case covers, to frame. Tests and adjusts reel for unrestricted, positive movement of parts by performing such tasks as rotating reel crank, pulling fishline off spool, and turning adjustment screws or knobs located on reel. May disassemble reel, realign parts, and remove burrs to rework defective reels, using handtools. May operate arbor and kick presses to perform such tasks as forcing bushings into reel frames, riveting parts to subassemblies, and pressing or staking gears on shafts.
GOE: 06.04.23 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

732.684-066 FISHING-ROD ASSEMBLER (toy-sport equip.) alternate titles: fishing-rod trimmer
Assembles fishing rods from rod blanks, line guides, ferrules, handles, and reel seats: Heats rod cement over alcohol lamp and drip-melts it into ferrules, rod tip, and reel seat and handle socket. Presses ferrules, rod tip, and other parts onto rod blank while cement is hot and fluid. Aligns and spaces line guides on rod, and secures, using rod-winding-thread. Winds additional bands of rod-winding-thread at ends of rod tip and ferrules to strengthen and decorate rod. May apply varnish, lacquer, or shellac to rod and windings. May repair rods and replace tips, line guides, ferrules, and windings. May assemble kits of fishing rod parts.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

732.684-070 FISHING-ROD MARKER (toy-sport equip.)
Marks layout on fishing rods, according to specified marking pattern, to indicate where guides are to be attached or decorative striping or winding applied: Reads work order to ascertain specified pattern board and fastens pattern board to workbench. Lays rod against pattern and marks layout on rod corresponding to markings on pattern. May suspend rods on two parallel bars, allowing rods to roll to their natural center of gravity, and mark this position to indicate area for attachment of side guides.
GOE: 06.02.31 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

732.684-074 FLY TIER (toy-sport equip.) alternate titles: artificial-fly tier; bait tier; fly winder
Makes artificial fish flies and lures, using feathers, fur, thread, and fishhooks, according to prototype design: Clamps fishhook in vise and wraps thread around shank or hook. Pulls feathers or fur of specified color or type from quill or pelt, positions on hook, and wraps in place with thread. Repeats operation to simulate wings, legs, and tail of insect. Wraps thread or colored wire around shank of hook in continuous spirals to form body of insect. Ties and cuts off thread. May brush dope on windings to waterproof and hold them in place.
GOE: 06.04.23 STRENGTH: S GED: R2 M1 L2 SVP: 4 DLU: 77

732.684-078 GOLF-CLUB ASSEMBLER (toy-sport equip.)
Assembles golf clubs, using one of following methods: (1) Verifies wood golf club parts against job order specifications. Cuts shaft of club to specified length, using bench mounted circular abrasive saw. Slides trim ring over tip of shaft to embellish shaft-head joint. Squeezes glue into hole of golf club head neck and inserts club shaft into hole. Positions club assembly in holding fixture of drill press and drills hole through neck of wood head and shaft with drill. Inserts steel pin into hole to strengthen connection of head to shaft. Removes club from holding fixture and stacks aside for further processing. (2) Reads job order to determine specifications, such as shaft-head alignment and swingweight of iron golf clubs. Slides ferrule (plastic collar) over tip of club shaft to embellish shaft-head joint. Inserts club shaft into socket in head of club. Positions club assembly on swingweight scale and reads scale to determine swingweight of club. Removes club head from shaft and pours lead powder into socket of club head to adjust swingweight to specification. Squeezes glue onto tip of club shaft, inserts shaft into iron club head, and aligns shaft with head in specified manner. Stacks club aside for further processing.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

732.684-082 GRIP WRAPPER (toy-sport equip.) alternate titles: gripper
Wraps leather strips around or slips rubber tubes on articles, such as golf clubs, tennis rackets, and archery bows to form grips or handles, using one of following methods: (1) Positions workpiece in machine that rotates article. Brushes or smears adhesive on area to be wrapped. Staples, tacks, or otherwise fastens end of leather strip to starting position of grip. Starts machine and feeds leather strip onto rotating workpiece to wrap handle area, taking care to align edges of strip against one another without overlap or open spaces. Trims excess leather at end of grip with knife and fastens with tape or sleeve. (2) Places workpiece in vise. Wraps two-way tape around area to be gripped. Aligns and slides rubber tube onto workpiece to fully cover grip area. May wind nylon cord around neck of wood golf club head, using turning machine, and be designated Wood-Club-Neck Whipper (toy-sport equip.).
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

732.684-086 GUIDE WINDER (toy-sport equip.)
Attaches line guides or applies decorative trim to fishing rods according to oral or written specifications: Obtains specified thread and guides and feeds thread through dispenser or places spool on thread holder. Clamps rod in holding fixture or rotating device. Depresses pedal to rotate rod or to rotate thread dispenser around rod, or turns rod manually. Winds thread around rod in continuous wraps for specified distance, controlling wrap spacing by moving rod or thread as each wrap is completed. Positions guide on rod, holds or tapes leg to secure guide, and continues wrapping until guide leg is wound to rod as specified. Trims loose ends with razor or knife. May apply cement to hold loose ends.
GOE: 06.04.34 STRENGTH: S GED: R2 M2 L2 SVP: 3 DLU: 77

732.684-090 PELOTA MAKER (toy-sport equip.)
Sews together layers of cotton, rubber, and goat skin to make pelotas (ball used in jai alai) of specified size and weight. Removes scratched or damaged layers and sews on new ones.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

732.684-094 RACKET STRINGER (toy-sport equip.)
Strings tennis and badminton rackets with synthetic fiber or animal gut strings: Clamps racket in stand and threads warp (main strings) through holes in bow. Clamps ends of strings in jaws of tensioner arms, depresses pedal to tighten strings to prescribed tension, and locks strings in place by wedging awl in hole with string until next set of holes are strung, or string is tied. Threads weave (cross strings) through holes in bow, weaves them through main strings, applies tension, and secures them similarly to main strings. May wrap bow at intervals with bands of colored thread to strengthen and decorate it. May varnish wooden parts of racket. May replace leather or plastic grips on racket handle.
GOE: 06.02.32 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

732.684-098 ROLLER-SKATE ASSEMBLER (toy-sport equip.)
Assembles parts of roller skates: Fits rubber cushions into brackets, and rivets brackets to frame, using air rivet gun. Inserts axle through hole in frame, and mounts wheels on axle. Places nut and washer on threaded end of axle, and tightens nut, with wrench. Rivets leather strap to frame, using air rivet gun. May insert ball bearings into retaining cups of wheels.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

732.684-102 ROLLER-SKATE REPAIRER (any industry)
Repairs roller skates by disassembling skates, and cleaning and replacing bearings, wheels, and other worn parts, using handtools and power tools. May repair attached shoes and leather straps.
GOE: 05.12.15 STRENGTH: L GED: R2 M2 L1 SVP: 4 DLU: 77

732.684-106 SHAPER, BASEBALL GLOVE (toy-sport equip.) alternate titles: steamer and shaper
Forms pocket, opens fingers, and smooths seams to shape baseball gloves, using heated forms, mallets, and hammers: Pulls glove over heated hand-shaped form to open and stretch finger linings. Pounds fingers and palm of glove with rubber mallet and ball-shaped hammer to smooth seams and bulges, and form glove pocket. Removes glove from form, inserts hand into glove, and strikes glove pocket with fist while examining glove visually and tactually to ensure comfortable fit.
GOE: 06.04.27 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

732.684-110 SKI BASE TRIMMER (toy-sport equip.)
Joins polyethylene-plastic base-strips and steel edges to fabricate ski base-layer, using handtools and work aids: Selects specified base-strips and steel edges for joining. Tapes logo (manufacturer's symbol) in position on toe area of base-strip and inserts strip into roller that presses logo into position on base-strip. Applies adhesive onto steel edge and base-strip, using glue bottle and adhesive dispenser. Positions steel edge in jig and inserts base strip into steel edge. Trims base-strip to conform to bend of steel edge and cuts strip to conform to heel-plate of steel edge, using hand plane, knife, and template. Inserts heel-patch between base-strip and heel-plate, and presses assembly into specified position to fabricate base-layer, using special handtool designed to apply rubbing pressure on plastic strip. Examines assembly to determine if assembly falls within specified fabrication tolerances and discards base-layers failing to meet tolerances. Carries accepted base-layers to designated press molds for further processing.
GOE: 06.04.34 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

732.684-114 SKI MOLDER (toy-sport equip.)
Fabricates sock (inner-construction, ski-component) and aligns sock with other ski parts in die press that molds components into partially fabricated ski: Places fiberglass lay-up (mat of specified size) on worktable, pours epoxy resin over lay-up, and spreads resin with paddle to facilitate saturation. Positions ski core on lay-up, places foot-pad on top of core, and pours resin over core and foot-pad. Folds lay-up around core and foot-pad to form sock, cuts sock to contour of ski toe (front) with scissors and template, and aligns sock assembly in specified manner within mold press. Places ski base layer in press with sock assembly in specified alignment and activates press to shape and mold layers.
GOE: 06.02.32 STRENGTH: L GED: R3 M1 L2 SVP: 3 DLU: 77

732.684-118 SKI REPAIRER, PRODUCTION (toy-sport equip.)
Repairs defects in skis damaged in production or defective in material, using handtools and power tools: Examines designated defects and markings on ski to determine type repair required. Selects specified fiberglass mat patch and positions patch over defect. Pours epoxy resin on patch to cause patch to adhere to ski. Places patched area into heated mold press to shape and dry patch. Removes ski from mold press and trims patched area with knife. Drills holes and trims damaged area to provide access to defect for skis having defects in plastic base layer, using portable drill and knife. Aligns polyethylene-plastic sliver with defect in base layer and rubs soldering iron over sliver to melt plastic into defect. Smooths repaired ski to remove excess patching, using belt sander. May repair and refinish user-damaged skis in ski manufacturer's service shop.
GOE: 06.02.24 STRENGTH: L GED: R2 M1 L1 SVP: 5 DLU: 77

732.684-122 SPORTS-EQUIPMENT REPAIRER (any industry)
Repairs and replaces sporting and athletic equipment, such as fishing tackle, tennis rackets, or archery equipment: Restrings tennis rackets with animal gut or synthetic string. Replaces defective parts of fishing tackle, such as reels and rods. Replaces metal points on arrow shafts. Refinishes surfaces of sporting and athletic equipment with lacquer or paint. May carve wooden parts for sporting and athletic equipment, using handtools and powered woodworking tools. May make new gun stocks and pistol grips. May reglue and rewind bamboo sections of fly rods. May rewind shafts of bows and arrows. May be designated according to type of sporting or athletic equipment repaired as Archery-Equipment Repairer (any industry); Fishing-Tackle Repairer (any industry); Football-Pad Repairer (any industry); Tennis-Racket Repairer (any industry).
GOE: 05.10.04 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

732.684-126 SURFBOARD MAKER (toy-sport equip.)
Shapes and finishes planks of plastic foam, reinforced with wood, to form surfboards, using hand plane, electric hand plane, and electric sander: Verifies shape and dimensions with fiberboard template. Coats with resin and covers with fiberglass. Applies coat of resin and finishes with sandpaper and polishing compounds to achieve desired luster. May attach skeg to rear of board, using fiberglass to obtain required conformity. May repair damaged surfboards by inserting polyurethane foam in damaged area and laminating over the repaired area with fiberglass.
GOE: 06.04.24 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 77

732.684-130 INSPECTOR (toy-sport equip.) alternate titles: process inspector
Examines finished items, such as golf clubs, golf balls, bowling balls, baseball gloves, baseballs, skis, bows, fishing rods, or lures, for conformance of assembly, surface, finish, markings, weight, or structural formation to specified standards: Visually and tactually examines workpiece for plating or coating defects or mars, scratches, pits, or tears in surface. Inspects markings for location, readability, and form. Inspects product for completeness and accuracy of assembly, warp, and holes, and makes repairs, using handtools, filler, and wax. Inspects overall product to determine if structural formation meets specifications. Marks defects and routes workpiece to station for repair, salvage, or scrap. Prepares report or otherwise keeps record of defects. May confer with workers regarding quality of work. May weigh product, such as bowling balls, to determine conformity to weight specifications. May package product.
GOE: 06.03.01 STRENGTH: L GED: R3 M2 L3 SVP: 3 DLU: 78

732.685-010 BASE-FILLER OPERATOR (toy-sport equip.)
Tends machine that stuffs baseball base covers with materials to form baseball bases: Dumps filler material in machine hopper or positions material between jaws of machine. Positions cover to receive filler and activates machine to force material into cover. Removes stuffed base from machine and examines base to ensure base meets company specifications. May operate sewing machine to close open end of base.
GOE: 06.04.36 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

732.685-014 FEATHER SAWYER (toy-sport equip.) alternate titles: cutter
Tends machine that cuts and trims feathers for archery arrows: Starts cutting machine. Positions feathers on wheel of machine so that cutting blade cuts through center of quill and trims edges. Sorts and grades feathers. Dumps residue in discard box.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

732.685-018 FIXING-MACHINE OPERATOR (toy-sport equip.) alternate titles: shuttlecock assembler
Tends machine that inserts (presses) feathers in cork bases of badminton shuttlecocks: Positions cork base of shuttlecock in chuck of machine. Places feathers in punching tool of machine. Depresses pedal to press feathers into predrilled holes of cork base. Repeats operation until all holes in cork are filled with feathers. Packs assembled shuttlecocks in cardboard tubes.
GOE: 06.04.20 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

732.685-022 GUIDE-BASE WINDER, MACHINE (toy-sport equip.) alternate titles: guide winder
Tends bench machine that winds thread around specified areas of fishing rod blanks to form base for line guides: Clamps rod end in chuck and adjusts rod supporting fixtures by loosening setscrews and moving fixtures until rod is level. Feeds thread through playout device and needle eye. Turns setscrew to adjust tension on playout device to specified pressure. Slides playout devices along track until needles are adjacent to markings on rod, indicating where base winds start, and tightens setscrew. Pulls length of thread through needle and clamps or tapes end to rod. Depresses lever causing rod to rotate and playout devices to traverse along track as thread is wound around rod. Stops machine and cuts thread as each area is wound to specified length. Cements thread end to rod. Inspects rods to verify that they are wound to specification. Adjusts setup of machine to correct faulty winding.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

732.685-026 MACHINE SNELLER (toy-sport equip.)
Tends machine that attaches snells (leaders) to fishhooks: Threads snell from spool through guides to machine chuck. Starts machine and inserts hook between chuck jaws. Depresses pedal to actuate chuck that spins and wraps snell around hook shank, and cuts snell to predetermined length. Removes snelled hook from machine, threads snell through eye of hook, and ties overhand loop knot in end to facilitate attaching to fishing line. May attach snelled hooks to display cards. May tie second hook above first to make special baiting hookup.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

732.685-030 SINKER WINDER (toy-sport equip.)
Tends machine that automatically twists sinker pin and clinches pin to lead slug to fabricate sinkers for fish lines: Places lead slug and sinker pin in position on machine and inserts sinker pin into predrilled hole in lead slug to form assembly unit. Presses switch to engage winding element of machine and start die rotating. Places assembly unit with pin shank down into machine die that automatically twists and clinches assembly to produce sinkers for fish lines.
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

732.685-034 STUFFING-MACHINE OPERATOR (toy-sport equip.)
Tends machine that injects stuffing into protective athletic equipment, such as baseball chest protectors, catcher's mask linings, and boxing gloves: Pushes length of workpiece over pipe of stuffing machine. Depresses pedal to start machine that forces stuffing material into workpiece. Pulls workpiece off pipe as article is stuffed. Fills hopper of stuffing machine when empty.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

732.685-038 TRIMMING-MACHINE OPERATOR (toy-sport equip.) alternate titles: trimmer, machine
Tends machine that trims ragged leather edges from shuttlecock bases: Positions base in trimming machine. Depresses pedal to actuate cutting tool that trims and smooths edge of leather-covered cork base.
GOE: 06.04.05 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

732.686-010 HAY SORTER (toy-sport equip.)
Removes foreign matter from hay, packs it in trough, and pushes it toward machine that bundles and ties it into disk form for use as archery target. Removes target from machine.
GOE: 06.04.34 STRENGTH: M GED: R1 M1 L1 SVP: 1 DLU: 77

732.687-010 ADHESIVE PRIMER (toy-sport equip.)
Applies adhesive to edge strips of partially fabricated ski to prepare ski for attachment of top layer, using roller and adhesive: Examines ski for defects, such as holes and bumps. Rubs bumps with abrasive cloth to smooth surface. Marks holes on skis with chalk and stacks marked skis aside for rework. Applies adhesive to edge strips, using roller and places skis in wheeled rack for movement to next processing station.
GOE: 06.04.33 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

732.687-014 ASSEMBLER, FISHING FLOATS (toy-sport equip.)
Assembles and packs transparent plastic-bubble fishing floats by inserting filling tube through end holes of molded float halves and snapping halves together. Places assembled units into plastic bags and closes bags, using stapler.
GOE: 06.04.23 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

732.687-018 BASE FILLER (toy-sport equip.)
Stuffs canvas bags with excelsior or felt pads to form baseball base: Turns bag to place sewn edges inside and smooth seams outside. Stuffs bags with excelsior or felt pads by hand. Places bag on pressing machine and pulls lever to lower head that compresses stuffing to prescribed thickness. Inserts anchor straps through loops sewn on bag. May fill football dummies, medicine balls, and punching bags with materials, such as cotton, felt, cattle hair, and rubberized hair. May mold and assemble plastic base covers, using plastic, mold, and curing oven. May assemble and seal vinyl covered bases, using electric sealing iron.
GOE: 06.04.23 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

732.687-022 CASTING-PLUG ASSEMBLER (toy-sport equip.)
Attaches gang hooks to wooden casting plugs used for fishing, using screwdriver: Inserts screw through eye of gang hook and into previously drilled hole in body of plug. Tightens screw with screwdriver.

GOE: 06.04.24 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

732.687-030 GOLF CLUB WEIGHTER (toy-sport equip.) alternate titles: weighter

Weights wooden golf club head to achieve specified *swing weight*: Screws stop on pendine drill or inserts drill bit of specified length and width. Clamps club head into vise and drills hole in head. Pours molten lead from ladle into hole or places threaded cylindrical metal weights in drilled hole, and inserts wood screw to hold metal weights. May reweight finished clubs, by adding or subtracting weight as specified.
GOE: 06.04.24 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

732.687-034 LURE MAKER (toy-sport equip.)

Performs any combination of following tasks in manufacture of sports equipment: Glues layers of feather, hair, or fabric and cuts layers to size to form feathered imitation fur lures. Holds feathers against brushing wheel or hot wire to brush or fuse loose feathers. Rubs and smooths sports equipment to improve appearance or utility, using filler, solvent, wax, or abrasive, and rags. Positions items of sports equipment in racks for painting. Melts lead in pan and pours lead into molds to form such items as fish baits and lead sinkers. Assembles golf ball covers and cores preparatory to molding. Cuts golf club shaft to specified length, using power saw. Cleans material, work aids, and equipment to expedite fabrication of sports equipment, using solvent, rags, and handtools. Cuts, trims, and glues parts into specified position on sports equipment, using glue, knife, and scissors. Transports and positions material at molds, machines, or worktables, using cart. Digs core of sports equipment or rubs glue or stain on item to facilitate further processing. Sprays sand with airhose onto diving boards to provide nonslip tread. May examine molded items, such as clay trapshooting targets, for chips and cracks, and discard defective targets.
GOE: 06.04.24 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

732.687-038 LACER (toy-sport equip.) alternate titles: hand lacer

Laces baseballs, pitching bags, or baseball gloves and mitts, using lacing needle and awl. Pushes end of fabric, plastic, or leather lace through eyelets in article with awl or lacing needle. Pulls lace through eyelet. Repeats operation until lace and cuts lace after article is laced as specified.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

732.687-050 LEADER TIER (toy-sport equip.) alternate titles: leader assembler

Fabricates fishing leaders from cable wire and synthetic fiber line: Attaches snaps, swivels, and other accessories to precut lengths of plastic- or nylon-coated cable wire, and secures ends of cable with plastic or nylon sleeves and adhesives. Forms loop in ends of precut lengths of stainless steel wire and wraps with nylon coated wire to secure them. Ties loop knots in centers and ends of precut lengths of line to facilitate attachment of weights or hooks. May coil completed leaders and attach them to display cards or insert them in plastic envelopes. May test breaking strength of leader material, using tensiometer. May attach precut length of line to fishhook in manner to facilitate attachment to line or lure and be designated Sneller. Hand (toy-sport equip.).
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

732.687-042 LINING INSERTER (toy-sport equip.) alternate titles: baseball-glove stuffer; inserter, lining stuffer

Inserts padded leather lining into baseball gloves: Places lining on form and pulls glove over lining. Pushes thumb lining into glove, using bench post.
GOE: 06.04.24 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

732.687-046 MOLD CLEANER (toy-sport equip.)

Heats metallic bowling ball mold parts on electric plate and scrapes and buffs ball to remove residue, using scraper and power-driven rotary wire brush. May spray mold components with parting material to prevent corrosion and to prepare them for assembly.
GOE: 06.04.24 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

732.687-050 MOLD STRIPPER (toy-sport equip.) alternate titles: breaker

Separates and removes molds from cured plastic bowling balls and grinds off sprue and ridges preparatory to truing and finishing balls: Removes thumb screws or clamps from molds and pries molds from balls. Screws core support rods out of balls, with wrench. Grinds sprues and seam ridges from balls, using powered grind wheel. May fill core supporting bolt holes with plastic to form heavy side of ball.
GOE: 06.04.24 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

732.687-054 MOLDER, INFLATED BALL (toy-sport equip.) alternate titles: press operator, carcass

Shapes completed footballs, volleyballs, and soccer balls, or vulcanizes plied ball carcasses, such as basketball carcasses, using internal pressure molding process: Places bag or carcass in bottom half of heated molding press and inserts inflating stem in valve plug of workpiece. Closes and locks mold. Inflates workpiece to operating air pressure, removes inflating stem, and turns dial on timeclock to control heating cycle. Inserts deflating stem through hole in mold and into valve of ball or carcass after specified time and deflates workpiece to regulation playing pressure. Opens press, pulls out stem, and removes ball or carcass. May repair rejected balls for remolding. May mold plastic material to form bladderless inflatable balls, using heated curing ovens and molds.
GOE: 06.04.32 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

732.687-058 MOLDER, WAX BALL (toy-sport equip.) alternate titles: press operator, wax ball

Casts wax-ball tasks (forms) used in assembly of basketball carcasses: Places heated half mold on scale of mold and inserts mold into water-cooled centrifuge that rotates mold and solidifies wax into hollow ball. Removes mold after specified time, unscrews top, and pulls out wax ball. Breaks off flash with fingers.
GOE: 06.04.32 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

732.687-062 PAINTER AND GRADER, CORK (toy-sport equip.)

Paints tops of leather-covered corks used as base for badminton shuttlecocks, using handbrush. Examines corks and grades them according to quality.
GOE: 06.04.33 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

732.687-066 REVERSER (toy-sport equip.) alternate titles: turner

Reverses partially assembled footballs, volleyballs, soccer balls, punching bags, or ball gloves that are inside-out to bring edges of sewn seams inside and leather or plastic cover outside: Places specified areas of inside-out article on turning post and pulls part of article over post. Repositions article on post and repeats operation until article is completely reversed.
GOE: 06.04.34 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

732.687-070 SOFTBALL CORE MOLDER (toy-sport equip.) alternate titles: molder

Forms softball cores, using heated presses: Weighs loose wad of kapoc, rags, or paper on scale and stuffs specified amount into heated press. Turns wheel to close press and mold softball core. Removes molded core from press after specified period and wraps with cord to hold core together until wound. May shape and cure vinyl dipped softballs, using rolling machine and heated molding press.
GOE: 06.04.32 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

732.687-074 SPIN-TABLE OPERATOR (toy-sport equip.)

Polishes surface of bowling balls, using abrasives and ball-spinning device: Places preground ball in holder of spin table and depresses pedal to spin ball. Presses abrasives against spinning ball to abrade surface. Splashes water on ball to reduce friction. Applies polishing compound to ball with rag. Lifts and turns ball in holder of spin table to effect polishing of surface. Wipes moisture from ball and places it in rack.
GOE: 06.04.24 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

732.687-078 TARGET TRIMMER (toy-sport equip.)

Trims excess straw from surface of wrapped and tied archery targets with powered trimmer: Places target on flat surface, lowers powered trimmer into position, and guides it over target to remove loose and excess straw. Turns target over and trims other side. Trims edges with hand shears. Reinforces target center with hemp rope and sews rope handle to target with needle and thread.
GOE: 06.04.34 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

732.687-082 WAX-BALL KNOCK-OUT WORKER (toy-sport equip.)

Crushes and removes wax-ball lasts (forms) from basketball carcasses, using club, scraping tool, and airhose: Strikes carcass with bat to break wax ball. Shakes pieces out through opening in carcass. Scrapes wax particles from carcass and removes particles and dust with airhose.
GOE: 06.04.39 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

732.687-086 WEIGHER (toy-sport equip.) alternate titles: balancer; weight tester

Weighs and adjusts weight of shuttlecocks: Places shuttlecock (purposely made underweight) on balance scale and reads weight on meter. Positions lead disks on center of cork base of shuttlecock with tweezers until specified weight is indicated by meter (weight must be standard to ensure uniform speed of shuttlecock in flight). Presses lead disks into drilled cork with hand punch.
GOE: 06.04.34 STRENGTH: L GED: R2 M2 L1 SVP: 2 DLU: 77

733 OCCUPATIONS IN FABRICATION AND REPAIR OF PENS, PENCILS, AND OFFICE AND ARTISTS' MATERIALS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with fabricating and repairing such products as pen points, mechanical pencils, refill cartridges, and related products and such office and artists' materials as lead pencils, carbon and stencil paper, inked ribbons, airbrushes, palettes, artists' colors and waxes, and rubber and metal hand stamps, dies, and seals.

733.130-010 SUPERVISOR, PLATING AND POINT ASSEMBLY (pen & pencil)

Supervises and coordinates activities of workers engaged in plating and assembling components of ballpoint pens: Reviews production schedule to ascertain number and type of ballpoint pen parts to be plated. Sets up machines and equipment to prepare for plating operations. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

733.131-010 SUPERVISOR, RUBBER STAMPS AND DIES (pen & pencil)

Supervises and coordinates activities of workers engaged in fabrication of rubber box die and rubber-faced hand stamps: Interprets customers order and supervises workers engaged in typesetting, heating and pressing plastic used to form matrix, pressing and vulcanizing rubber in matrix to form dies, and trimming and cementing dies for hand stamps to wooden mount. Inspects finished dies for conformity with orders. Adjusts temperature and pressure of vulcanizing press which produces box dies of specified height. May engrave signature

in rubber for use as hand stamps [ENGRAVER, RUBBER (pen & pencil)]. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M4 L3 SVP: 7 DLU: 77

733.137-010 SUPERVISOR, ASSEMBLY (pen & pencil)
Supervises and coordinates activities of workers engaged in assembling and printing information on ballpoint pens, fiber tip pens or mechanical pencil parts. Maintains time and production records. May train new workers. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

733.137-014 SUPERVISOR, FINISHING DEPARTMENT (pen & pencil)
Supervises and coordinates activities of workers engaged in tipping, end-trimming, and stamping and packing wooden pencils and assembly of wood-cased ballpoint pens: Notifies setup worker of needed adjustments on tipping, trimming, stamping and packaging machines, according to size, shape and type of pencil to be processed. Inspects samples of processed pencils for defects, such as loose metal tips, broken eraser plugs, and splintered ends. Examines pencils to verify stamped information and type of tip on pencil against production specifications. Examines pen refills to verify conformance to specifications. Requisitions supplies, such as sandpaper, cardboard containers, and stamping foil. May adjust assembly machines, using handtools. May train new workers. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

733.137-018 SUPERVISOR, INSPECTION (pen & pencil)
Supervises and coordinates activities of workers engaged in inspecting, packing and shipping of ballpoint pens or mechanical pencils. Performs other duties as described under SUPERVISOR (any industry) Master Title. May supervise workers engaged in inspecting material used in manufacture of pens and pencils.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

733.281-010 BALLPOINT PEN CARTRIDGE TESTER (pen & pencil)
Tests ballpoint pen cartridges to determine conformity to company specifications: Selects and weighs cartridges to determine conformance to weight specifications. Inserts cartridges into holding devices on testing machine, starts machine that moves paper, and counts circular marks made by cartridges. Examines defective cartridges under microscope to determine cause of malfunction and photographs ballpoint to obtain visible evidence of malfunction, using camera.
GOE: 06.03.01 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

733.364-010 QUALITY-CONTROL TECHNICIAN, INKED RIBBONS (pen & pencil)
Inspects and tests office machine ribbons to ensure adherence to order specifications and company quality standards, using testing equipment: Inspects production line operations, such as aligning ribbon on spool, joining ribbon ends, placing ribbon in cartridge, and packing ribbon for shipment to ensure quality standards are met. Inserts sample of inked ribbon and paper in typewriter, types several symbols on paper, and places paper on reflectance testing machine to obtain ink impregnation reading. Weighs ribbon sample to verify ink impregnation level, using scale. Tests and measures tensile strength and thickness of ribbon sample, using tension testing machine and measuring instrument. Records test results to maintain inspection log and notifies workers when ribbon fails to meet specifications. Completes final inspection form to release product for shipment.
GOE: 06.03.02 STRENGTH: L GED: R3 M3 L3 SVP: 5 DLU: 86

733.381-010 ENGRAVER, RUBBER (pen & pencil) alternate titles: engraver, signature
Engraves outline of signature impressed on rubber and cuts away excess rubber. Applies varnish to surface of rubber blank to clean and fill surface. Removes excess varnish with cloth wiper. Presses facsimile of signature onto rubber to transfer signature from paper. Removes paper and coats rubber with powder. Cuts outline of impression in rubber and cuts excess rubber away from impression, using knife and graver. Applies cement to back of stamp and to wood mount and presses stamp on mount manually.
GOE: 05.10.05 STRENGTH: L GED: R4 M3 L2 SVP: 7 DLU: 77

733.381-014 RUBBER-STAMP MAKER (pen & pencil) alternate titles: stamp maker
Molds stamp dies, assembles parts to fabricate rubber handstamps and composes type: Places type in chase. Proofreads copy or type in chase. Places chase and molding compound in press to form mold for rubber die, positions uncured rubber on top of mold, and places mold and rubber in vulcanizer to form rubber die. Joins parts, such as mounts, dies, and handles, to assemble handstamps [STAMP MOUNTER (pen & pencil)].
GOE: 06.01.04 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

733.384-010 REPAIRER, PENS AND PENCILS (pen & pencil) alternate titles: salvage clerk
Repairs and adjusts defective ballpoint pens and mechanical pencils in pen and pencil manufacturing plant: Examines pens or pencils to determine needed repairs or adjustments, or follows specifications on repair tags. Disassembles pens and pencils, using handtools, such as pliers and screwdrivers. Replaces defective parts, such as ink cartridges and screw mechanisms, and assembles parts of pens or pencils by hand or using machines that press and clinch interlocking parts together.
GOE: 06.02.32 STRENGTH: L GED: R3 M2 L3 SVP: 3 DLU: 77

733.684-010 PAINT-BRUSH MAKER (fabrication, nec) alternate titles: brush maker; rubber-stamp assembler
Fills metal ferrules with hog bristle, horsehair, vegetable fiber, or nylon, using either of following methods: (1) Twists material into tuft and dips base of tuft into cement. Ties string around base of tuft, redips tuft in cement, and inserts tuft in hole of brush head. (2) Weighs out specified amount of bristles, using balance scale and inserts base end of bristles into ferrule. Separates bristles with metal blade, and inserts wooden or aluminum plug (wedge) into bristles to press them against sides of ferrule to form brush head. Immerses flag end of brush head in flaxseed gum to hold filling material in brush shape during vulcanizing process. Measures length of bristles, using gauge. May cut bristles to varying lengths to taper tip of brush head, using metal form and scissors. May make wire drawn brushes [BRUSH FILLER, HAND (fabrication, nec) 739.687-046].
GOE: 06.04.34 STRENGTH: L GED: R2 M2 L2 SVP: 4 DLU: 77

733.684-014 PEN-AND-PENCIL REPAIRER (any industry)
Repairs and replaces parts of fountain pens and mechanical pencils, using electric buffer, handtools, and magnifying lens: Repairs or replaces ink sacs, plungers, barrels, and other parts, using handtools. Places pen points on straightening block and rubs them with mandrel to straighten points. Twists and turns points with pliers under magnifying lens to align points. Washes pens and pencils in cleaning solution. Removes engraving and polishes pens and pencils, using elect. buffer. May operate pantograph engraving machine or stamping machine to inscribe names on pens and pencils. May operate bench lathes to cut out parts for pens and pencils. May sell pens and pencils. May requisition replacement parts for pens and pencils.
GOE: 05.12.15 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

733.684-018 STAMP MOUNTER (pen & pencil)
Joins parts, such as mounts, dies, and handles, to assemble rubber handstamps: Measures and marks wood mount and cuts woodstock for stamp mounts, using circular table saw. Positions and holds wooden mount on table, under bit of boring machine and pulls lever or depresses pedal to lower bit into mount, drilling hole for stamp handle. Hammers stamp handle into hole in mount. Cuts out and trims rubber die (type) from multistamp molded sheet, using scissors. Brushes cement onto back of rubber die and bottom of mount and positions and presses die onto mount. Applies ink to stamp die and stamps die onto paper, forming identification label. Inserts label between plastic facing and top or side of stamp mount.
GOE: 06.04.34 STRENGTH: L GED: R2 M2 L1 SVP: 2 DLU: 77

733.685-010 ASSEMBLER (pen & pencil)
Tends automatic pen and pencil assembly machines: Aligns workpiece in specified position against fixtures or under ram of machine. Depresses lever or pedal or turns handwheel to activate ram that bends or presses components together. Screws threaded barrels and caps together by hand to form completed pens or pencils. Places clips in holding devices of machine that prints trademark or clips. Inspects finished workpiece with magnifying glass. May be designated according to component assembled as Cartridge Assembler (pen & pencil); Nib Assembler (pen & pencil).
GOE: 06.04.20 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 77

733.685-014 FILLING-MACHINE OPERATOR (pen & pencil)
Tends machine that pumps ink into tubes (reservoirs) to permeate marking pen fillers or fills ballpoint refills, using any of following methods: (1) Places fillers in tubes and inserts nozzle of filler machine into tube and pushes button to start machine that pumps specified amount of ink into tubes. (2) Inserts cotton filler into cartridge tube by hand. Places tube into holding device of inking machine. Depresses pedal to start filling mechanism. (3) Fills hopper of machine with refill components for ballpoint pen. Starts machine that automatically fills tube with ink, joins ballpoint to inked tube, and crimps tube to seal ink in tube.
GOE: 06.04.36 STRENGTH: M GED: R2 M2 L2 SVP: 2 DLU: 77

733.685-018 GROOVING-MACHINE OPERATOR (pen & pencil) alternate titles: bench-boring-machine operator
Tends machine that cuts internal threads in pen or mechanical pencil barrels: Positions and aligns pen or pencil barrel in holding device of machine. Inserts threading tap into spindle of machine and turns lever to secure tap. Presses switch to start machine. Moves lever or depresses pedal that advances pen or pencil barrel onto rotating tap that cuts internal threads in barrel.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

733.685-022 RIBBON WINDER (pen & pencil) alternate titles: spooler; typewriter-ribbon winder
Tends machine that winds typewriter ribbons onto spools: Sets yardage indicator on machine according to ribbon length specified on work order to control number of revolutions. Places ribbon supply reel on mandrel and draws ribbon around rollers and through ribbon guide to prepare ribbon for winding. Adjusts ribbon guide, according to width of ribbon. Places empty spool on spindle and attaches end of ribbon from supply reel to spool. Turns knob to zero dial of footage counter and depresses pedal to wind ribbon onto spool or turns reel that winds ribbon onto spool. Observes dial of footage counter and stops ma-

chine at specified point. Examines ribbon during winding to detect defects in fabric, inking, and winding. Removes completed spool from spindle and attaches hooks or eyelets onto ends of ribbons to facilitate attaching to empty spool on typewriter. Attaches fasteners over end of ribbon to prevent unwinding.
GOE: 06.04.09 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

733.685-026 SMOOTHER (pen & pencil) alternate titles: pen-point smoother

Tends machine that smooths rough edges from pen point tips: Places pen points into molds on hinged holding device and closes device to hold pen points stationary during smoothing process. Sprinkles polishing rouge on felt wheel and starts machine. Inserts tongue of holding device into groove on machine bed and moves holding device back and forth in groove as pen point tips work against rotating felt wheel or guides holding device against rotating wheel by hand to smooth surface of pen point tips. Feels tips of pen points with fingers to detect rough areas.
GOE: 06.04.24 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

733.685-030 TIP BANDER (pen & pencil) alternate titles: tip-banding-machine operator

Tends machine that applies decorative or identifying band of paint to metal tips of pencils: Dumps tips into machine hopper and pours paint into reservoir of machine. Starts machine that feeds tips against paint roller. Turns valve to regulate stream of air that blows tip from conveyor into tray. Places tray in storage rack.
GOE: 06.04.21 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

733.685-034 TIPPING-MACHINE OPERATOR (pen & pencil) alternate titles: tipper

Tends machine that fastens metal caps and erasers to ends of wooden pencils or rounds pencil ends: Places pencils, ferrules (metal ring or caps), and erasers in separate hoppers and starts machine that installs and fastens ferrule to pencil, inserts eraser in ferrule, and imprints specified data on pencil. Removes tipped pencils from machine and examines pencils for defects, such as broken erasers or loose ferrules. Ties accepted pencils into designated size bundles.
GOE: 06.04.20 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 77

733.687-010 ASSEMBLER, MARKING DEVICES (pen & pencil) alternate titles: marker assembler

Performs any combination of following duties to assemble stencil marking and ink applying devices: Selects parts according to specifications. Aligns parts following guides, such as contours, edges, slots, or fastening devices. Joins parts manually or using handtools, such as wrenches and power screwdrivers, or positions parts on holding device of machine bed under ram, and moves lever to lower ram, joining parts. Performs other tasks, such as cleaning parts, using air gun; fitting ink chambers; and positioning marker in holder of air pressure device that tests marker for leaks in ink valve and chamber. May be designated according to part assembled as Fountain-Brush Assembler (pen & pencil); Fountain-Roller Assembler (pen & pencil); Pen Assembler (pen & pencil).
GOE: 06.04.23 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 77

733.687-014 ASSEMBLER, MECHANICAL PENCILS AND BALL-POINT PENS (pen & pencil) alternate titles: air-hammer operator; bench-assembler operator; small kick-press operator; small press operator; tip tightener

Assembles parts of ballpoint pens and mechanical pencils: Selects pen or pencil parts according to color or work-ticket specifications. Places parts together, guided by edges, holes, and slots, and fastens devices, such as clips or prongs on parts. Joins parts, using any of following methods: (1) Positions parts in holding device under ram of press and depresses pedal that lowers ram, forcing interlocking parts together. (2) Positions parts in holding device of machine that clinches prongs or clips, joining parts. (3) Fits interlocking parts together, or screws threaded parts together by hand. Fills mechanical pencils with specified quantity of lead. May use pneumatic or screw clamps and other work aids that hold parts during assembly. May glue plastic miniature display tops to plunger mechanism on mechanical pencils, using plastic solvent and brush. May assemble parts of desk-pen sets [DESK-PEN-SET ASSEMBLER (pen & pencil) 733.687-034].
GOE: 06.04.23 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 77

733.687-018 BANDER (pen & pencil)

Fastens metal bands onto pen barrels: Slips band into groove on barrel. May insert and squeeze part in hand squeezer or crimping tool to tighten band in place.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

733.687-022 CHALK CUTTER (pen & pencil)

Loads lengths of extruded chalk into die, locks die in place, and runs hand cutter through holes in die to cut chalk to specified lengths. Opens die, places cut chalk in trays for drying, and disposes of excess chalk.
GOE: 06.04.34 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

733.687-026 CLAMPER (pen & pencil) alternate titles: hydraulic-press operator

Clamps stacks of cemented wooden pencil slats to hold them while cement dries: Places clamp between jaws of press and positions cemented slats in clamp. Depresses pedal to close jaws of press and press slats together. Turns bolts to tighten clamp, using wrench. Depresses pedal to open press and places clamped slats on washer conveyor to remove excess cement from slats. May clamp stacks of cemented pencil slats, using hand clamps.
GOE: 06.04.25 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

733.687-030 DATER ASSEMBLER (pen & pencil)

Assembles parts of dater or number handstamps performing any combination of following tasks: Selects parts according to specifications. Applies cement and joins ends of rubber letter or number bands. Positions bands around metal bar and fits bar onto end of stamp frame. Positions band and turner wheels and washers inside circular bands and inserts rivet pin through stamp frame and band wheels, securing parts of stamp. Nails wood handle to frame. May use jig to hold and stretch rubberbands while assembling stamp parts. May be designated according to task performed as Cementer (pen & pencil).
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

733.687-034 DESK-PEN-SET ASSEMBLER (pen & pencil) alternate titles: bench-assembler operator

Joins parts, such as swivel, penholder, and base to assemble desk-pen set. Selects parts, according to work ticket specifications. Screws threaded parts together, using portable power screwdriver, or positions parts on bed and under ram of machine and presses switch to lower ram, joining interlocking parts. Glues felt onto bottom of base.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

733.687-038 DIPPER (pen & pencil)

Immerses bundles of wooden pencil slats into vat to coat them with wax solution. Loads slats in cage of hoist and pulls handle to lower cage into solution. Raises cage, removes slats, and stacks them on handtruck. May apply paint to coat or decorate wooden pencils by dipping or using screw-type ram dipper.
GOE: 06.04.33 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

733.687-042 INSPECTOR (pen & pencil) alternate titles: nib adjuster

Inspects fountain pens for defects: Examines nib under magnifying glass and inserts feeler gauge between fountain pen points to determine whether spacing between points conforms to specifications. Opens and closes pen points to adjust spacing between points, using handtools. Writes with fountain pen to determine legibility and ease of writing. Places rejected pens aside for rework. Places inspected pens in carton.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

733.687-046 INSPECTOR, BALL POINTS (nonfer. metal)

Inspects metal alloy pen ball points for defects: Picks up ball point with tweezer and places it under microscopic lens to examine for holes or other flaws. Measures approximately every 400th point with micrometer to determine if specifications are met and removes rejects. May test ballpoint pens and refills for conformity to specifications, using centrifuge, magnifying glass, and microscope.
GOE: 06.03.02 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

733.687-050 INSPECTOR, FINAL ASSEMBLY (pen & pencil)

Inspects ballpoint pens or mechanical pencils for defects, such as scratched or cracked barrels and faulty mechanisms: Compares color, style, and printed information on pen or pencil with written specifications. Depresses plunger of ballpoint pens to test retracting action of cartridge (refill). Discards defective items and returns repairable items for rework. May write with ballpoint pens to test inking mechanism. May remove substandard printing, using rag and solvent.
GOE: 06.03.02 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

733.687-054 INSPECTOR, RUBBER-STAMP DIE (pen & pencil)

Examines rubber handstamp dies (type) for defects: Examines stamp dies under magnifying glass for defects in molded rubber, such as loose or incomplete letters or designs. Compares stamp die to customer specifications to verify characters or designs.
GOE: 06.03.02 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

733.687-058 NIB INSPECTOR (pen & pencil)

Inspects fountain pen nibs to ensure that smoothness, contour, and dimensions conform to specifications, using magnifying glass and dial and fixed gauges: Examines nibs with magnifying glass and by feeling with fingertips to detect surface defects, such as scratches, pits, and cracks. Verifies dimensions of nibs, using preset measuring instruments, such as dial indicators, calipers, and micrometers. Tags rejected nibs to indicate types of defects.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

733.687-062 PENCIL INSPECTOR (pen & pencil) alternate titles: pencil sorter

Examines wooden pencil slats, wood-cased ball point pens, or painted wooden pencils for defects, such as dents, misplaced lead, scratches, or split ends. Trims slivers from around ferrules of wooden pencils, using knife. Sorts and marks defective pencils. May maintain production records.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

733.687-066 STAMP-PAD FINISHER (pen & pencil)

Places inking pads for stenciling rollers or handstamps in metal cases. May apply cement to pad or case to secure parts.
GOE: 06.04.23 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

733.687-070 STAMP-PAD MAKER (pen & pencil)

Fabricates rubber stamp pads: Places precut pieces of muslin, felt, and rubberized backing in sequence in fixture on assembly table. Applies glue to ex-

tended edges of muslin and folds edges around backing. Places pad in inking device and pulls lever to lower pad into reservoir which impregnates it with ink under pressure. May place inked pad into metal case and cover case with lid.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

733.687-074 STENCIL INSPECTOR (pen & pencil)
Inspects duplicating stencils for defects prior to mounting on backing sheets: Holds stencil over fluoroscope to determine presence of defects, such as holes, tears, and imperfect surface. Discards defective stencil. Places layer of paper between stencils to protect them. May measure stencil for conformance to size.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

733.687-078 WASHER (pen & pencil)
Washes excess glue from clamped wooden pencil slats, using water and sponge. Turns valve to start flow of water onto slats and rubs all sides of clamped slats with sponge. Places washed slats in handcart and pushes loaded cart to kiln for further processing.
GOE: 06.04.39 STRENGTH: H GED: R1 M1 L1 SVP: 1 DLU: 77

734 OCCUPATIONS IN FABRICATION AND REPAIR OF NOTIONS

This group includes occupations concerned with fabricating such items as pens, needles, plumes, brushes, artificial flowers, buttons, and zippers. Includes curling and dyeing feathers. Occupations concerned with fabricating ornamental buttons from precious metals are included in Group 700.

734.131-010 SUPERVISOR II (button & notion)
Supervises and coordinates activities of workers engaged in making plastic artificial articles, such as flowers, foliage, and butterflies: Reads work orders to ascertain articles scheduled, material requirements, and to plan work sequences. Assigns specific duties to workers and gives work direction for performing duties. Inspects articles at various stages of production to ensure conformance with customer and company specifications. Records daily production. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.04.01 STRENGTH: L GED: R4 M2 L3 SVP: 5 DLU: 77

734.384-010 BUTTON-CUTTING-MACHINE OPERATOR (button & notion) alternate titles: button cutter; shaper
Cuts button blanks from shells: Holds shell against machine fixture by hand or using tongs. Moves lever or depresses pedal to advance tubular saw into shell and cut out button blank. Determines location for cuts according to size, shape, and condition of individual shell in order to obtain maximum number of blanks. Replaces dulled saws, using wrenches. May reset and sharpen saws, using hand files.
GOE: 06.02.30 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

734.481-010 WIRE-FRAME MAKER (button & notion)
Bends wires into frames used for forming plastic flowers, leaves, and butterflies, using jig and soldering iron: Bends wire around jig following specified instructions, using fingers and pick. Cuts wire after frame is formed, using wire cutters. Solders together wires that overlap to strengthen frame, using flux and soldering iron. Builds up button of solder in center of petals when framing flowers. Presses lever that removes frame from jig. Examines frame to ensure shape meets specifications. Cuts excess wire from frame, using wire cutters. Records daily production figures.
GOE: 06.04.24 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

734.584-010 NEEDLE GRINDER (button & notion)
Grinds industrial knitting and sewing needles to sharpen points, using grinding wheels: Activates stone and wire-brush wheels and alternately presses needle against each rotating wheel to sharpen point. Applies emery to wire-brush wheel as needed to facilitate grinding process. Visually and tactually examines needle to ensure conformance to specifications. Records production.
GOE: 06.04.24 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

734.684-010 FEATHER SHAPER (button & notion)
Trims, cuts, bones, straightens, and curls feathers for use in decorations for displays and garments, using handtools, such as knives and scissors: Draws feather between knife and thumb to curl feather or cuts portion from quill, using knife, to make feather soft and wavy or applies steam to make feather smooth and straight. Trims feather to specified shape, using scissors. May wire, glue, paste, or sew feathers to form specified design. May be designated according to work performed as Brancher (button & notion); Curler (button & notion); Cutter (button & notion); Feather Boner (button & notion); Feather Trimmer (button & notion).
GOE: 06.04.34 STRENGTH: S GED: R2 M1 L2 SVP: 2 DLU: 77

734.684-014 FEATHER-DUSTER WINDER (tex. prod., nec)
Fabricates feather dusters, using scissors, shears, and winding machine: Clamps wooden handle in chuck of winding machine. Pulls wire from reel and attaches wire to grooved end of handle. Starts machine to rotate handle and inserts quills under wire as it winds around handle. Stops machine and cuts wire, using shears. Tacks paper cuff around wire and wraps end of wire around tack. Trims feathers to specified length, using scissors.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

734.684-018 INSPECTOR-REPAIRER (button & notion)
Examines frames or plastic articles during various stages of manufacture and reworks article to meet specifications: Inspects frames for unsoldered wires and solders contact points, using soldering iron. Examines formed articles for holes in plastic or deformations and brushes liquid epoxy or plastic to repair defect. Inspects decorated articles for missed paint areas or defective decoration and paints areas needing rework, using artist's brush. Discards articles that cannot be reworked. Occasionally bends finished article into specified shape and seals article in plastic bag, using heated iron.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

734.684-022 SLIDE-FASTENER REPAIRER (button & notion) alternate titles: zipper repairer
Repairs and adjusts defective slide fasteners (zipper chains): Examines rejected fasteners for type of defect and extent of repair required. Pries excess or broken scoops (teeth) and damaged slides from chain, using metal pin. Separates prongs of replacement scoops with pin, and secures scoops to tape, using hand pliers. Cuts chain to specified length, using hand cutting tool. Inserts and secures bottom stop to tape ends of chain, using pinchers, to hold tapes together and provide stop for slide. Positions slide on chain and crimps sides of slides over scoops to mesh links and to provide even sliding action, using crimping tool. Tests zipper by drawing slide over scoops.
GOE: 06.04.24 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 77

734.684-026 WIRE-FRAME DIPPER (button & notion)
Immerses preshaped wire frames in liquid plastic to form articles, such as flowers and foliage, prior to decorating, using either of following methods: (1) Slides metal tube over wire stem of frame to prevent coating of stem. Immerses frame in plastic solution, slides tube down to base of petals, and observes frame to ensure that plastic has covered area within frame. Secures stem on holder above container to allow excess plastic to drip into container. Removes article from holder, removes tube, and places article on drying rack. (2) Dips wire frame in plastic solution and removes article after area within frame is filled. Bends holding wire and hangs filled frame on hook of conveyor to dry. Mixes plastic solutions according to formula. Records daily production.
GOE: 06.04.33 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

734.685-010 STAMPER (button & notion)
Tends handpress that imprints design on wooden buttons: Positions and fastens die in handpress. Places button in holder under die and pulls lever to lower die that imprints design on button.
GOE: 06.04.25 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

734.685-014 BUTTON MAKER AND INSTALLER (tex. prod., nec)
Tends button machine that assembles cutouts and inserts buttons into pillow and cushion shells prior to stuffing: Positions specified metal button dies in machine, according to work order, and flips switch to activate machine. Turns knob to set counter that tallies number of buttons assembled. Places button covers and metal button parts in specified sequence in dies and depresses pedal to activate automatic assembly cycle of machine. Picks up buttons from machine discharge bin and cuts away excess covering material, using scissors. Inserts one end of button ties into openings on back of buttons, places opposite end of ties into inserting tool, and pushes tool through precut holes in pillow or cushion shells. Removes ties from tool and inserts ties into openings of other buttons on opposite side of shells. Places assembled items in storage area. Periodically cuts additional button covers from specified fabrics, using handpress.
GOE: 06.04.09 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 86

734.687-010 ACETONE-BUTTON PASTER (button & notion)
Brushes or drops acetone cement on backs of buttons to attach metal shanks of buttons and presses shank into softened plastic.
GOE: 06.04.23 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

734.687-014 ASSEMBLER (tex. prod., nec) alternate titles: table worker
Assembles fabric badges from such materials as metal bars, ribbon, and metal buttons, using any of following methods: (1) Slides hanger on back of metal bar through hemmed edge of ribbon. (2) Brushes cement onto back of metal or plastic bar and presses edge of ribbon onto bar. (3) Positions ribbon over back of metal button and presses circular wire pin against ribbon and under back edge of button. (4) Brushes cement onto buckram backing of rosette and presses edge of ribbon onto rosette. (5) Pushes pin on back of metal button through center of rosette and bends prongs of pin back to hold rosette in place. May trim and clean fabric badge, using scissors and cleaning cloth. May cement labels onto back of badges, using brush and cement.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

734.687-018 ASSEMBLER (button & notion)
Inserts paper label in back of celluloid or metal advertising buttons and forces shaped stickpin under rim.
GOE: 06.04.23 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

734.687-022 BOBBIN DISKER (glass mfg.) alternate titles: disk setter
Inserts specified disk into recess at head of bobbin, using fingers, or positions disk on top of stationary metal rod and slides bobbin over rod and disk to identify type or size of fiberglass yarn to be wound on bobbin.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

734.687-026 BUCKLE INSPECTOR (button & notion)
Examines finished metal buckles and clasps for defects, such as bent or broken parts, dents, scratches, and plating or lacquering imperfections. Sets aside

defective buckles for rew[illegible]. Places protective plastic tip over buckle prong. Wraps specified number of buckles in tissue paper preparatory to packaging. May count and weigh sample lot, using scale, to ascertain weight per gross, in order that items may be packaged by weight rather than by actual count.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

734.687-030 BUCKLE SORTER (button & notion)
Sorts metal buckles and parts according to size and kind, and removes bent or broken ones. Dumps container of buckles on bench and separates them into piles or containers. Removes pieces of tumbling-barrel shot jammed in buckles, using metal pick.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

734.687-034 BUCKLE-WIRE INSERTER (button & notion)
Pushes reinforcing wire through tubular material for use in making buckle frames. Cuts off material to match length of reinforcing wire, using scissors.
GOE: 06.04.23 STRENGTH: S GED: R1 M1 L1 SVP: 1 DLU: 77

734.687-038 BUTTON GRADER (button & notion)
Examines completed pearl buttons and sorts them according to grade: Observes buttons on conveyor belt or worktable, and sorts into containers according to shade and purity of color, and degree of iridescence. Discards buttons with defects, such as spots, chips, cracks, or toolmarks. May examine completed plastic buttons for defects.
GOE: 06.03.02 STRENGTH: S GED: R2 M1 L2 SVP: 4 DLU: 77

734.687-042 BUTTON RECLAIMER (knitting)
Examines buttons for defects, such as chips and cracks, and separates defective buttons from acceptable ones.
GOE: 06.03.02 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

734.687-046 BUTTON-AND-BUCKLE MAKER (any industry) alternate titles: buckle-and-button maker; covered button maker
Covers buttons and buckles with fabric, leather, or other material, using pedal-operated press: Cuts covering from layers of material, using die-cutting machine. Places button or buckle in press with covering over it. Depresses pedal to lower plunger and clamp covering and metal parts together. Releases pedal and removes covered article.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 80

734.687-050 COVERED-BUCKLE ASSEMBLER (button & notion) alternate titles: buckle assembler; buckle coverer; buckle gluer
Brushes glue over surface of metal buckle frames and presses precut leather or fabric over frame. Trims excess material with shears.
GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 3 DLU: 77

734.687-054 GRINDER, HAND (button & notion)
Inserts button blanks in slot of grinding machine and pulls grinder against button to grind flat surfaces.
GOE: 06.04.34 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

734.687-058 HOT-STONE SETTER (button & notion)
Sets rhinestones in plastic buttons by heating rhinestones on hot metal plate and inserting them in indentations in buttons. Presses stones into buttons with tweezers or metal guard fitted over finger.
GOE: 06.04.23 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

734.687-062 INSPECTOR, SLIDE FASTENERS (button & notion)
Inspects samples of slide-fastener (zipper) chains and scoops (links) for defects and conformance to chart specifications for height, width, and spacing of scoops, using micrometers: Measures dimensions of chain and spacing of scoops, using micrometers and ruler, and counts number of scoops per length of chain. Examines chain and scoops for such defects as smashed, cracked, burred, or missing scoops, or for uneven spacing, using optical glasses or eye loupe. Opens and closes zipper to determine ease of sliding and smooth action of slider. Tallies defects found according to type, and prepares report. May examine finish of lacquered chains.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

734.687-066 QUILL-BUNCHER-AND-SORTER (tex. prod., nec)
Separates quills into specified groupings, such as skirts (short), wing, pointer, tail, and white quills, preparatory to processing into feather dusters. Bunches specified number of each kind of quill and secures them with clamps. Discards broken quills.
GOE: 06.03.02 STRENGTH: S GED: R2 M1 L2 SVP: 3 DLU: 77

734.687-070 SHELL-GRADER (button & notion) alternate titles: shell sorter
Grades pearl shells used in making pearl buttons: Examines shells and grades them according to size, thickness, curvature, color, and imperfections. Sorts shells into grading bins. Places graded shells in containers of water to soften them for cutting operations. May transport cases of shells from storage, using handtruck.
GOE: 06.03.02 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

734.687-074 SLIDE-FASTENER-CHAIN ASSEMBLER (button & notion) alternate titles: assembler, slide fastener stringers; puller; zipper joiner
Joins together stringers (sides) of slide fasteners, using slider jig: Aligns links of stringer with links of other stringer and inserts ends of stringers in slider jig. Pulls ends of stringers through jig to interlock links. Examines fastener for defects, such as crooked, broken, flattened, or misaligned links. Cuts out defective section, using scissors, and splices sections, using adhesive tape or hand stapler. May sew sections together to prevent raveling, using serging sewing machine. May tend machine rollers that pull stringers through jig.
GOE: 06.04.23 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

734.687-078 SLIDER ASSEMBLER (button & notion; garment) alternate titles: slider attacher; zipper-slide attacher
Attaches slides onto garment zipper: Clamps slide in holding device on worktable and threads bottom links of zipper chains through slide. Grasps bottom of zipper and pulls chains through slide, meshing links to close zipper. Removes slide from holding device and positions garment on machine bed with zipper bottom against guide. Depresses pedal that lowers machine head to fasten metal clamp or staple around bottom of chains. May depress pedal that closes rollers on chains and pulls them through slide automatically.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

734.687-082 SORTER (button & notion)
Examines pearl or plastic button blanks on moving conveyor and discards those with defects, such as wormholes, loose spots, uneven backs, cracks, or chips. May examine unpolished plastic buttons for tool marks, off-center thread holes, and unfinished shape.
GOE: 06.03.02 STRENGTH: S GED: R2 M1 L2 SVP: 3 DLU: 77

734.687-086 SPLITTER, HAND (button & notion)
Splits pearl button blanks into two or more blanks, using hand knife and mallet. Holds blank edge-up on bench or block. Positions knife blade along top edge of blank, steadies blade and blank with thumb and fingers of one hand, and taps blade with mallet to split blank.
GOE: 06.04.34 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

734.687-090 STICKER (button & notion) alternate titles: leaf sticker
Glues paper-covered wire to artificial flowers to stiffen and strengthen them. May emboss simulated veins on leaves.
GOE: 06.04.23 STRENGTH: S GED: R1 M1 L1 SVP: 1 DLU: 77

734.687-094 ZIPPER TRIMMER, HAND (button & notion) alternate titles: zipper measurer
Measures slide fastener chains and cuts excess scoops (links) from chains to shorten chains to specified length: Measures chain against bench mounted ruler to determine number of scoops to remove. Cuts each scoop from tape, using pincers. Rubs scoops against edge of bench to remove them from tape. Cuts tape between chains to form individual zipper, using scissors. Examines zippers for broken or missing scoops and discards defective zippers. May count and record number of zippers produced.
GOE: 06.04.24 STRENGTH: S GED: R2 M2 L2 SVP: 2 DLU: 77

735 OCCUPATIONS IN FABRICATION AND REPAIR OF JEWELRY, N.E.C.

This group includes occupations, not elsewhere classified, concerned with fabricating and repairing jewelry.

735.381-010 BENCH HAND (jewelry-silver.) alternate titles: bench worker
Cuts out, files, and solders parts for jewelry articles, such as bracelets, brooches, emblems, and rings, performing any combination of following tasks: Cuts out parts, using power saw or handsaw. Shapes, trims, and smooths parts, using files. Joins parts together, using solder and torch. May bend ring settings and brooch clasps, using pliers. May assemble finished parts of jewelry articles.
GOE: 06.01.04 STRENGTH: L GED: R3 M2 L1 SVP: 6 DLU: 77

735.381-014 PEARL RESTORER (jewelry-silver.) alternate titles: pearl peeler
Peels, shapes, smooths, and polishes genuine pearls to remove surface defects and attain uniform color, using knife, grinding stone, and abrasives: Peels outer layers to remove damaged areas and obtain natural, uniform color, using knife. Selects abrasive and grinding stone to produce smooth finish, utilizing knowledge of natural pearl structure, abrasives, and grinding operations. Shapes, smooths, and polishes pearls, using abrasives and grinding stone. Cleans surface of pearls, applying rag and oil mixture.
GOE: 05.05.14 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

735.381-018 SAMPLE MAKER II (jewelry-silver.)
Reproduces original designs of jewelry articles in wax, prepares design specifications, and computes production costs: Molds original designs in wax, using modeling tools. Writes design specifications, such as metal content and weight and type of alloy. Computes cost of labor and material to determine production costs of jewelry articles. May form metal samples from wax molds [MODEL MAKER (jewelry-silver.) II].
GOE: 05.03.02 STRENGTH: S GED: R4 M2 L2 SVP: 6 DLU: 77

735.587-010 COLORING CHECKER (jewelry-silver.)
Records plating instructions for jewelry articles and inspects plated articles for quantity and quality: Receives jewelry articles with order card and transcribes plating instructions onto order sheet. Routes order and plating instructions to STRINGER (jewelry-silver.). Verifies quantity of articles and inspects plated articles for uniformity of surface and unplated areas. May keep records, such as rate cards, pricelists, or daily production reports.

GOE: 06.03.02 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

735.681-010 BRACELET AND BROOCH MAKER (jewelry-silver.) alternate titles: brooch-and-bracelet maker

Assembles jewelry parts to form decorative articles, such as bracelets and brooches: Joins parts and attaches decorations, using gas torch, soldering iron, pick, and tweezers. Sets stones and forms settings, using pliers, gas torch, or soldering iron.
GOE: 06.02.23 STRENGTH: L GED: R3 M2 L1 SVP: 7 DLU: 77

735.684-010 BEAD STRINGER (jewelry-silver.)

Strings bead necklaces on wire or thread: Counts number of beads in necklace. Cleans beads in soap and water or other cleaning solution. Sorts beads according to size, color, or original pattern. Guides needle through hole in beads and strings them into necklace of graduated or uniform sized beads. Ties knot in thread or bends wire and attaches fastener. May be designated according to type of beads strung as Pearl Stringer (jewelry-silver.). May restring bead necklaces on wire or thread.
GOE: 06.04.34 STRENGTH: S GED: R2 M1 L2 SVP: 3 DLU: 77

735.684-014 STONER (jewelry-silver.)

Smooths enameled surface of jewelry articles, using abrasive stone: Fastens jewelry article in wooden chuck (jeweler's block). Rubs moist abrasive stone across article to remove excess enamel and produce smooth surface. Brushes or washes article to remove loose particles. May remove excess enamel, using buffing machine.
GOE: 06.04.24 STRENGTH: S GED: R2 M1 L2 SVP: 4 DLU: 77

735.684-018 TROPHY ASSEMBLER (jewelry-silver.)

Assembles trophies to customer's specifications, using drill press and handtools: Selects parts, such as base, tubing, metal plates, figures, and hardware from stock. Drills holes in base or plaque, using electric drill or drill press. Glues felt to bottom of base, or screws in metal feet. Staples or tapes metal plate to base. Bolts parts together, using screwdriver and socket wrench. Touches up scratch marks with scratch remover and polishes assembled trophy. May attach marble or onyx decoration to formed column with adhesive tape. May wrap trophy in tissue paper preparatory to shipping.
GOE: 06.02.24 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

735.687-010 DIPPER (jewelry-silver.) alternate titles: etcher, enameling: washer-off

Immerses enameled jewelry, jewelry findings, and other articles in acid and water baths to clean them. Dries cleaned articles by placing them in sieve and exposing them to steam or hot air, placing them in oven, by rolling them in heated sawdust, or by placing them in centrifugal drier.
GOE: 06.04.39 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

735.687-014 LINKER (jewelry-silver.) alternate titles: linker-up; plier worker

Attaches links, trimmings, and findings to bracelets, necklaces, and pendant chains, using pointed pliers: Grips link with pliers, or positions link in slot of linking ring (screwhead soldered on ring). Twists link joint open with pliers. Slides finding, link, or trimming into open link and clinches link joint to close it. May refer to sketch to verify order of assembly. May cut chains or ribbons into specified lengths, using cutter. May attach glass beads to findings by threading end pin (piece of wire with head) through bead and opening in finding, and twisting or looping pin to hold bead in place. May hook metal links together and be designated Link Assembler (jewelry-silver.); or repair broken jewelry chains previously soldered, using handtools and gas torch, and be designated Chain Mender (jewelry-silver.).
GOE: 06.04.23 STRENGTH: S GED: R2 M1 L2 SVP: 3 DLU: 77

735.687-018 PAINTER (jewelry-silver.)

Brushes protective covering onto specified sections of jewelry articles to protect sections during electroplating, sandblasting, and polishing operations: Brushes or dabs lacquer or molten wax onto jewelry to prevent damage to coated areas during electroplating or sandblasting. Brushes shellac on sandblasted areas to protect areas during polishing. May correct plating defects, using paint and brush.
GOE: 06.04.33 STRENGTH: S GED: R2 M1 L2 SVP: 2 DLU: 77

735.687-022 PIN-OR-CLIP FASTENER (jewelry-silver.) alternate titles: finding fastener

Fastens pins and clips to jewelry items, such as brooches and earrings: Positions jewelry item between jaws of machine. Selects pin or clip and fits end of pin or clip into holes of jewelry item. Depresses pedal to close jaws and squeeze joints together. Inspects jewelry for defects and rejects defective pieces. May mount jewelry on cards [CARDER (any industry)].
GOE: 06.04.23 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

735.687-026 RACKER (jewelry-silver.)

Arranges pieces of jewelry in rows on wire screens, or fastens pieces to racks with clamps or fabricated hooks, preparatory to plating, degreasing, and enameling. May brush particles of foreign matter from pieces of jewelry preparatory to painting. May place painted jewelry in trays for inspection.
GOE: 06.04.34 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

735.687-030 SORTER (jewelry-silver.)

Sorts jewelry articles, such as pins, emblems, rings, and casting patterns for control and inventory purposes: Separates items by type, size, and style. Counts and records total items in each separate grouping. Requests additional articles from production department when such items are needed to complete specified inventory levels. May maintain inprocess record controls of patterns during casting and processing of gold jewelry.
GOE: 06.03.02 STRENGTH: S GED: R2 M2 L2 SVP: 3 DLU: 77

735.687-034 STONE SETTER (jewelry-silver.)

Sets ornamental stones, such as pearls, rhinestones, and colored glass in metal or plastic jewelry articles by one of following methods: (1) Brushes paste or applies cement across settings or depressions in article or deposits glue in settings with pick. Places stone in each setting, using tweezers or other pickup tools. (2) Places stone in setting and presses prongs around stone with handtool. (3)Bores hole in setting, using hand drill. Inserts rivet in hole and hammers rivet ends flat. Positions stone in setting and presses rivet around stone with handtools. May paint decorations on article. May be designated according to method of setting stones as Pronger (jewelry-silver.); Stone Gluer (jewelry-silver.); or according to type of stone set as Pearl Hand (jewelry-silver.); Rhinestone Setter (jewelry-silver.).
GOE: 06.04.30 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

735.687-038 SWEDGER (jewelry-silver.)

Assembles costume jewelry, using foot press: Inserts prongs (rivets) of one finding into corresponding holes of another, and shapes findings with pliers to obtain fit. Positions findings under swedging (riveting) tool in press. Depresses pedal or moves lever to lower swedging tool that spreads and flattens prongs to combine findings.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

735.687-042 WIRE DRAWER (jewelry-silver.) alternate titles: roller

Forms wire of specified shape and diameter, preparatory to further processing in fabrication of jewelry articles, using either of following methods: (1) Draws bar of metal through successively smaller holes in hardened steel plate. (2) Feeds bar of metal into mill and turns crank to actuate rollers that compress metal in groove to produce round or square wire.
GOE: 06.04.24 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

736 OCCUPATIONS IN FABRICATION AND REPAIR OF ORDNANCE AND ACCESSORIES

This group includes occupations concerned with inspecting, fitting, assembling, and repairing small arms, repeating weapons, and related ordnance.

736.131-010 AUTOMOTIVE-TIRE-TESTING SUPERVISOR (ordnance)

Supervises and coordinates activities of workers engaged in testing durability of standard and bulletproof tires and inner tubes, caterpillar tracks, and bulletproof gas tanks for military vehicles, performing duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

736.131-014 FIREARMS-ASSEMBLY SUPERVISOR (ordnance)

Supervises and coordinates activities of workers engaged in assembling and packing firearms. May set up machines for tool tryout or prototype job to solve setup problem. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.04.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

736.131-018 INSPECTION SUPERVISOR I (ordnance)

Supervises and coordinates activities of workers engaged in inspecting firearms. Trains new workers. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

736.281-010 GUN EXAMINER (ordnance)

Examines small arms returned by customers for repair to determine causes of malfunctioning. Reads correspondence to ascertain request or complaint. Disassembles gun, using handtools. Examines components, and measures dimensions and clearances, using gauges, to detect malfunction. Test-fires guns to evaluate performance of loading, firing, ejection mechanisms, and accuracy of bore and sights. Prepares list of parts and repair operations required to restore function of weapon. Determines whether customer or company is responsible for malfunction and records information for subsequent billing. May replace worn or broken parts and be designated Gun Examiner And Repairer (ordnance).
GOE: 06.01.05 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

736.367-010 AUTOMOTIVE-TIRE TESTER (ordnance)

Tests pneumatic tires and tubes, bulletproof gasoline tanks, caterpillar tracks, and similar equipment to determine that they meet minimum specifications for use on military vehicles: Mounts ordinary pneumatic or bulletproof tires and tubes on tire-testing machines or on appropriate vehicles. Inflates tires to prescribed pressure and manipulates controls to operate machines and simulate driving conditions, or drives vehicles, observing indicators and noting tire conditions. Directs other workers in firing specified number of bullets into tires at specified places and in taking photographs of test results. Fills and weighs bulletproof gasoline tanks and directs other workers in firing bullets through tanks. Weighs pierced tanks to determine extent of gasoline loss. Mounts military tank tracks on special testing machines and manipulates controls to test tracks under induced conditions. Observes results and notes instrument read-

ings. Prepares reports indicating results of wear or bullet holes on material tested. Interprets test results, using charts and tables.
GOE: 06.03.01 STRENGTH: M GED: R4 M3 L4 SVP: 7 DLU: 77

736.381-010 ASSEMBLER I (ordnance) alternate titles: final assembler
Assembles and adjusts small arms parts to specifications and tests moving parts to detect malfunctions: Verifies dimensions of parts, using gauges. Screws, pins, and bolts parts together to assemble weapon, using handtools and power tools. Tests action of weapon to detect malfunctions. Disassembles weapon and files, scrapes, and reams parts to fit, using emery cloth, hand files, reamers, and bench grinder. May test-fire weapon, using dummy ammunition.
GOE: 06.02.23 STRENGTH: L GED: R3 M3 L2 SVP: 5 DLU: 77

736.381-014 FITTER, VENTILATED RIB (ordnance) alternate titles: rib matcher and fitter
Mounts and aligns ventilated (elevated) ribs to shotgun barrels to facilitate aiming: Selects and positions ribs to dovetailed posts on top of gun barrel. Mounts rib to barrel by dovetailing each rib slot and barrel post along barrel. Locks barrel in vise and measures height of rib at breech end, using pin gauge, to determine amount rear end post must be reduced to lower rib to specified height. Hammers and files post and squeezes rib slot, using handtools and fixtures, to fit rib to post at specified height. Files and fits each rib slot to each post along barrel to align and level rib. Stamps identifying data on rib and barrel, using punches and hammer. Operates bench drill press to drill holes in barrel for retaining pins and sighting beads.
GOE: 06.02.24 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

736.381-018 PROCESS INSPECTOR (ordnance)
Inspects rocket motors, cases, and fuel mixtures for conformance with specifications and verifies standard work procedures and process conditions involved in loading rocket-motor cases with fuel: Weighs and records weights of fuel mixtures and ingredients on inspection reports. Observes fuel mixing, case preparation, and lining activities for conformity to specified procedures and records variations on inspection report. Observes and records weight of lined cases. Examines linings for voids, pockmarks, and other defects. Observes charts, meters, and gauges on casting-control console to verify conformity of process conditions to specifications and records readings. Correlates gauge readings to estimate flow of fuel pumped (cast) into motor case. Observes meters and charts on curing-control panel to verify specified process conditions in curing oven. Examines cured rocket motors for defects, such as voids in propellant, presence of foreign bodies, and paint defects on motor case.
GOE: 06.01.05 STRENGTH: L GED: R3 M2 L3 SVP: 6 DLU: 77

736.384-010 PROOF INSPECTOR (ordnance) alternate titles: proof tester; shooter
Fires small arms weapons to test loading, firing, and ejection mechanisms: Places gun in fixture of proof-shoot box, and loads it with ammunition. Fires gun specified number of times manually and by remote control to test its shock resistance and function of loading, firing, and extraction mechanisms. Examines gun and spent cartridges for indications of mechanical defects. Measures chamber and bore for conformance to specifications, using gauge. Records firing malfunctioning on tag, and routes gun to repair shop. May keep daily inspection records.
GOE: 06.03.01 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

736.387-010 INSPECTOR, ASSEMBLY (ordnance)
Inspects and tests small arm units during subassembly and assembly stages to ensure that mechanical action, finish, and assembly conform to specifications: Tests firearms for specified cocking and trigger action, using gauges. Examines wood and metal parts of weapons to detect flaws in finish. Pushes gauge through bore of gun to verify straightness of barrel. Measures dimensions and clearances of components to verify conformance with specifications, using gauges. Tests tightness of screws, bolts, and pins, using handtools. Records on tags firearms rejected and reasons. May be designated according to processing stage as Final Inspector (ordnance).
GOE: 06.03.01 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

736.387-014 PROOF-TECHNICIAN HELPER (ordnance) alternate titles: laboratory-mechanic helper
Tests and inspects small arms, artillery weapons, ammunition, and bombs for safety and quality control: Obtains sample ammunition from production lot for ballistic testing. Sets up targets on ranges. Fires weapons to determine mechanical function, accuracy, and velocity under variable conditions. Records number of defective pieces and sends them to laboratory for analysis. Cleans and maintains weapons used in testing.
GOE: 06.03.01 STRENGTH: H GED: R3 M2 L3 SVP: 4 DLU: 77

736.481-010 SIGHT MOUNTER (ordnance)
Attaches and adjusts telescopic and other special sights to shotguns and rifles: Locates and marks position for mounting holes, using scales and dividers. Operates drill press to drill and tap mounting holes and screws sights on barrel. Positions gun in holding fixture. Sights through bore and moves fixture to align gun with target. Turns setscrews on sight mount to align telescopic sight with fixed target. Routes gun for test firing.
GOE: 06.02.24 STRENGTH: L GED: R3 M3 L2 SVP: 5 DLU: 77

736.587-010 BARREL LOADER AND CLEANER (ordnance)
Loads automatic pistols and revolvers with cartridges for test firing and cleans and oils tested guns: Fills magazine or cylinder of weapon with specified type of ammunition. Unscrews retaining pin to remove cylinder or pulls magazine from test-fired guns and removes empty shells and live ammunition. Cleans cylinders and barrel with wire brush and swabs gun with oil. Stamps test mark on frame, using hammer and punch. Records number of firearms tested.
GOE: 06.04.34 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

736.684-010 ALIGNER, BARREL AND RECEIVER (ordnance)
Assembles and aligns rifle barrels and receivers, using handtools and power tools, using either of following methods: Mounts barrel in vise and screws receiver onto barrel, using wrench. (1) Positions assembled barrel and receiver in concentricity gauge and marks areas on barrel where metal must be removed or raised to bring barrel and receiver into alignment. Remounts barrel in vise, removes receiver, and scrapes metal from barrel shoulder, or peens receiver chamber, using hammer and peening tool to raise metal to form shim. Mounts sighting bars at each end of barrel, sights between bars, and twists receiver to align bars. (2) Positions assembled barrel and receiver in alignment gauge. Tightens receiver and barrel to adjust alignment according to dial gauge reading, using pneumatic gauge. May screw barrel into receiver to specified pressure, using torque wrench.
GOE: 06.02.23 STRENGTH: M GED: R3 M2 L1 SVP: 3 DLU: 77

736.684-014 ASSEMBLER II (ordnance) alternate titles: subassembler
Assembles small arms subassemblies, such as cartridge clips, triggers, ejectors, and bolts, using handtools and power tools: Drills, reams, countersinks, and polishes parts, using power tools. Screws, pins, bolts, and rivets parts to form subassembly. Straightens warped parts, using bench and handtools. Examines subassemblies for nicks, burrs, and machine marks, and verifies accuracy of assembly, using gauges. Smooths parts to remove defects and improve fit, using emery cloth and hand file.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

736.684-018 BARREL FINISHER (ordnance)
Smooths and polishes outside surfaces of shotgun barrels preparatory to bluing, using files, striker tools, and emery cloth: Positions and secures barrel in vise. Files off excess metal and surface blemishes, such as toolmarks, ripples, pits, and flat spots. Examines and feels surface of barrel to determine smoothness. Rubs barrel to obtain satin finish, using various grades of emery cloth. May secure barrel in filing jig and file with striker tool to taper breech end, using surface as guide. May remove excess solder from joints.
GOE: 06.04.24 STRENGTH: M GED: R2 M1 L2 SVP: 4 DLU: 77

736.684-022 BARREL REPAIRER (ordnance)
Repairs scratched or dented steel shotgun barrels, using handtools: Examines damaged barrel to determine salvageability. Positions and secures barrel in bench vise. Draws (stretches) metal from adjoining barrel surface to fill nicks, dents, and scratches by tapping edges with peening hammers. Smooths repaired area and removes blemishes, using handtools and emery cloth. Removes worn inscriptions, such as serial numbers and trademarks, using peening hammers, files, and scrapers. Replaces inscriptions, using punch dies and mallet [MARKER (ordnance)].
GOE: 05.10.01 STRENGTH: M GED: R2 M1 L1 SVP: 5 DLU: 77

736.684-026 BARREL STRAIGHTENER I (ordnance)
Straightens small arms barrels to remove bends and crooks, using either line or ring method: (1) Positions barrel in straightening press, sighting it toward frosted glass plate across which is drawn black horizontal line. Sights through barrel, noting two line-shadows cast longitudinally along interior by reflected light from frosted glass. Tightens jaws of press to bend barrel at points where shadows are not straight to straighten barrel (line method). (2) Positions barrel on special fixture. Sights through barrel toward light, noting position of three ring-shadows cast inside bore by light passing through ring scribed on smoked glass at far end of barrel (eccentric rings denote bend in barrel). Removes crooked barrel from fixture and strikes it with soft metal mallet against babbitt block to remove bend indicated by position of rings (ring method).
GOE: 06.02.24 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

736.684-030 FRONT-SIGHT ATTACHER (ordnance)
Attaches front sights to shotgun and rifle barrels: Secures barrel in vise and screws threaded shank of sight into hole near muzzle. Shears off excess shank extending into bore, using hammer and chisel. Files sheared end of shank with file until edge is smooth with inside of gun barrel. Feels sheared joint and sights through bore or inserts plug gauge into bore to verify smoothness. May drill and tap hole in barrel to accommodate front sight, using drill press and tap.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

736.684-034 GAS-CHECK-PAD MAKER (ordnance)
Makes gas-check pads of plastic and wire screening to be used in breechblocks of bag-loading cannons: Mixes specified quantity of ingredients, such as vaseline, powdered asbestos, and graphite in agitator to form puttylike substance. Presses specified amount of mixture between dies in hydrostatic press to form disk. Shapes brass wire screening into similar shape, using snips and soldering iron. Embeds wire in disk, using hydrostatic press. Coats pad with graphite paint and stencils identifying data on pad. Wraps pad in wax paper.
GOE: 06.02.32 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

736.684-038 SOLDERER, BARREL RIBS (ordnance)
Mounts and solders ribs to shotgun barrels to form double barrels and for use as aiming sight: Brushes flux onto shotgun barrels to prepare surface for

soldering. Files and fits dovetail butts of barrels together and hammers pin through holes in barrels to lock them together. Inserts spacers between barrels and mounts barrels in fixture. Aligns rib between barrels and drives wedges between rib and barrels to secure rib. Heats assembly in gas-fired oven to specified temperature for soldering. Melts and flows solder along adjoining edges of rib and barrels, using gas torch. Positions and secures barrels and sighting ribs in aligning fixture and solders ribs to barrels. Drills vent and bead holes in barrels, using bench drill. Places soldered barrels in wire basket and moves barrels through acid bath tanks and rinse water, using overhead hoist, to remove excess solder and flux.
GOE: 06.04.31 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

736.684-042 TARGETEER (ordnance) alternate titles: aligner; sighter

Fires small arms weapons at fixed targets to test accuracy of sights and mechanical functions of weapons. Positions target at specified distance. Mounts weapon on tripod, or mechanical rest. Aims weapon and fires series of shots at target. Examines target to determine shot pattern and accuracy of sight. Adjusts sights to attain specified accuracy, using handtools. Examines indentations on cartridge face to detect defective striking of firing pin. Records firing deficiencies on target or tag, and routes gun to repair shop.
GOE: 06.03.02 STRENGTH: L GED: R3 M1 L1 SVP: 3 DLU: 77

736.687-010 GREASER (ordnance) alternate titles: cleaner-greaser; oiler and packer, gun parts

Greases small arms and artillery pieces to prevent corrosion during shipment or storage. Coats parts with grease, using swabs and brushes, or dips parts into grease pot. May dismantle units, such as breech or firing mechanism to facilitate application of grease.
GOE: 05.12.08 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

736.687-014 INSPECTOR, BARREL (ordnance)

Tests shotgun and rifle barrel forging for straightness prior to machining. Places barrel on roller supports of test device. Positions stem of dial indicator against barrel. Rotates barrel and notes deflection of indicator needle. Rejects barrels which deflect needle beyond specified limits.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

736.687-018 INSPECTOR, LIVE AMMUNITION (ordnance)

Examines magazines and chambers of guns after final test firing to ensure removal of live ammunition. Records number and disposition of guns passing through department.
GOE: 06.03.02 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

737 OCCUPATIONS IN FABRICATION OF AMMUNITION, FIREWORKS, EXPLOSIVES, AND RELATED PRODUCTS

This group includes occupations concerned with assembling, loading, and inspecting small arms and artillery ammunition, bombs, mines, grenades, chemical warfare projectiles, flares, explosive charges, and related products. Occupations concerned with processing explosive chemicals are included in Division 55.

737.131-010 SUPERVISOR, FIREWORKS ASSEMBLY (chemical)

Supervises and coordinates activities of workers engaged in mixing powders and assembling parts to produce fireworks. Ignites fireworks and observes resultant sound and color to verify use of specified proportions and mixtures of powders. Prepares reports and discusses test results with production manager. May train new workers and set up machines and equipment to meet production requirements. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to type of product manufactured or function supervised as Floatlight-Loading Supervisor (chemical); Incendiaries Supervisor (chemical); Pyrotechnic-Loading Supervisor (chemical).
GOE: 06.02.01 STRENGTH: M GED: R4 M2 L3 SVP: 7 DLU: 77

737.132-010 PRIMER SUPERVISOR (ordnance)

Supervises and coordinates activities of workers engaged in shaping, charging, fouling, and assembly of cartridge primers. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 77

737.134-010 INSPECTION SUPERVISOR II (ordnance)

Supervises and coordinates activities of workers engaged in making final inspections of small-arms ammunition and artillery shells and cases. Determines from blueprints type and size of gauges or inspection instruments to be used. Examines rejected parts to ascertain whether they may be salvaged or scrapped. Consults with various department heads concerning the correction of defects attributed to malfunction of machines and equipment during manufacturing processes. Recommends improvements to companies supplying raw materials when tests indicate that their products have been the cause of defects. May train newly assigned workers. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M2 L3 SVP: 8 DLU: 77

737.137-010 INSPECTOR, CHIEF (ordnance)

Supervises and coordinates activities of personnel engaged in inspecting ammunition and ammunition components. Keeps records of storage and processing. Assigns subordinates to routine inspection of stores or processes. Studies inspection reports and directs action to remedy unsafe conditions and to dispose of unserviceable materials. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

737.137-014 POWDER-AND-PRIMER-CANNING LEADER (ordnance) alternate titles: primer-and-powder-canning leader

Supervises and coordinates activities of workers engaged in drying, canning, and storing cartridge primers and propellant powder for small-arms ammunition. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

737.137-018 SUPERVISOR (ordnance)

Supervises and coordinates activities of workers engaged in manufacture, loading, assembly, drying, or storage of ammunition. Performs other duties as described under SUPERVISOR (any industry) Master Title. May inspect material or products to ensure compliance with manufacturing standards. May be designated according to activity supervised as Supervisor, Ammunition-Loading (ordnance); Supervisor, Powder-And-Primer-Canning (ordnance); Supervisor, Propellant-Charge-Loading (ordnance); Supervisor, Pyrotechnic-Loading (ordnance).
GOE: 06.02.01 STRENGTH: L GED: R4 M4 L3 SVP: 8 DLU: 77

737.137-022 SUPERVISOR, BELT-AND-LINK ASSEMBLY (ordnance) alternate titles: belt-and-link-shop supervisor

Supervises and coordinates activities of workers engaged in loading belts, chains, and clips with small-arms ammunition for automatic and semiautomatic weapons. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

737.364-010 PROCESS CHECKER (ordnance) alternate titles: inspector, materials and processes

Inspects and tests small arms ammunition to verify conformance with variety of qualitative specifications. Collects quantity of cartridges or shotgun shells as they emerge from loading and assembling machines. Tests crimping of case around bullet, using bench device that registers force required to withdraw bullet from case. Cuts open shotgun shells to verify correct placement of wads, shot, and powder. Weighs powder from several individual shells on balance scale and computes average weight. Weighs shot pellet load from individual shell on shadowgraph scale and counts number of pellets in load, using pellet-counting device, and computes number of pellets per ounce; estimates average pellet size, using graduated device. Reports patterns in ammunition defects that indicate loading or assembly machine malfunctions or maladjustments to machine adjuster or supervisor. Records test results in tabular, graphic, or narrative form for quality control purposes.
GOE: 06.03.01 STRENGTH: L GED: R3 M3 L2 SVP: 3 DLU: 77

737.367-010 INSPECTOR III (ordnance)

Inspects ammunition, ammunition components, loading plants, and magazine areas to detect unsafe or unserviceable items and to enforce safety regulations. Inspects cartridges and other metallic items for corrosion or physical defects. Visually examines explosive components for deterioration, freedom of movement of parts, clearances between parts, and dimensions of specified parts, using measuring devices. Inspects physical condition of plant buildings and magazines for adequate safety equipment. Observes methods of storing and handling ammunition and actions of plant personnel for compliance with safety regulations. Inspects incoming and outgoing shipments for proper loading, bracing, and marking. Prepares reports on findings. May observe loading process for quality of production and observance of safety regulations. May supervise personnel engaged in salvage or destruction of unserviceable ammunition and explosives.
GOE: 06.03.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

737.381-010 ASSEMBLER, IGNITER (ordnance)

Assembles, tests, and packages rocket engine ignition charges, following written instructions and wiring diagrams. Sifts and weighs out specified quantities of propellant powder and pours it into container. Seals container with solder or adhesive to form igniter. Assembles main charge and igniter to form ignition cap. Stamps or marks identification on cap, using crayon. Attaches wires to terminal pins of ignition cap according to wiring diagram, using pliers, soldering iron, and screwdriver. Tests wiring for continuity, using continuity checker. Tests ignition cap for air leaks, using vacuum pump. Places tested caps on shipping tray, or seals them in moistureproof bag.
GOE: 06.02.25 STRENGTH: L GED: R3 M3 L3 SVP: 6 DLU: 77

737.387-010 DROP TESTER (ordnance)

Tests cartridge primers for sensitivity to impact by dropping weight onto sample primers from measured heights. Secures primer or primed cartridge case in test fixture and positions firing pin over primer. Raises steel ball in electromagnetic holder to specified height on calibrated column. Presses switch to cut power from electromagnet which drops ball onto firing pin in test fixture to detonate primer. Tests groups of primers from same production sample at several specified drop-heights, and records percentage of fires and misfires at each height. May plot test results on graph to develop primer sensitivity curve, or apply standardized statistical formulas to estimate sensitivity characteristics of entire production lot of primers.

GOE: 06.03.01 STRENGTH: L GED: R3 M3 L2 SVP: 3 DLU: 77

737.387-014 INSPECTOR I (ordnance)

Inspects interior and exterior of bomb and artillery shell components for defects: Visually examines components to detect defective material and work quality, such as cracks or incorrect size. Verifies accuracy of critical dimensions, using direct-reading electric limit gauge. Pressure-tests welded joints to ensure airtightness, using compressed air and soap solution. Tests strength of fitted and welded joints, using special hydraulic equipment.
GOE: 06.03.01 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

737.387-018 PRESSURE-TEST OPERATOR (ordnance)

Measures propellant force of powder charge by firing small arms cartridges and shotshells in pressure-testing device: Selects test barrel according to type and caliber of cartridge to be fired. Secures breech end of barrel in fixture containing breech-block, hammer, and firing pin, using handtools and gauges. Inserts *gas check* and steel piston into vent in barrel wall. Positions lead or copper slug of standard length on piston and tightens yoke-mounted setscrew which acts as anvil to secure it. Fires cartridge and measures compressed slug for reduction in length, using micrometer. Converts reduction in slug length to pressure expressed in pounds-per-square inch, using conversion chart. Computes average pressure for specified number of cartridges. May perform velocity tests on projectiles.
GOE: 06.03.01 STRENGTH: L GED: R3 M3 L2 SVP: 4 DLU: 77

737.487-010 PROPELLANT-CHARGE LOADER (ordnance)

Measures quantities of explosives and loads them into propellant charge bags: Measures approximate quantity of powder, using volumetric weighing machine. Weighs charge on scale. Verifies weight on second scale. Empties charge into charge bag. Sews opening together at top of bag, using sewing machine.
GOE: 06.04.34 STRENGTH: M GED: R2 M2 L2 SVP: 2 DLU: 77

737.587-010 BANDOLEER STRAIGHTENER-STAMPER (ordnance)

Prepares fabric bandoleer belts for packing with clips of small arms cartridges: Cuts open bundles of bandoleer belts, unfolds, straightens, examines stitching for imperfections, and counts them into lots of specified quantity. Stamps each belt with order and caliber data. Records number of belts counted and issued to BANDOLEER PACKERS (ordnance).
GOE: 06.04.37 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

737.587-014 FIREWORKS ASSEMBLER (chemical) alternate titles: pyrotechnic assembler

Performs any combination of following duties in assembling pyrotechnics (fireworks) and signal flares: Weighs specified quantities of powder or scoops powder into premeasured scooping device, and loads them into cans, cones, tubes, or other casings, or fills containers to predetermined level. Applies sealing compound to container from bulb syringe to seal in powder, or places cap or lid on container and secures them by crimping with machine or handtool. Drills or punches holes in caps or lids for insertion or attachment of fuse or wick. Attaches igniter ring atop open end of signal flares. Attaches and secures components of assemblies, using handtools. Inspects items at various stages of completion for inaccuracies in assembly and for obvious flaws. Packs specified number of flares or finished fireworks in cartons for storage or shipment. Stencils identifying information, such as type of firework, date of manufacture, and lot number, on assembled item or carton. May assemble cartons from flattened state, seal packed cartons, and attach shipping label onto carton.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

737.587-018 PRIMER BOXER (ordnance)

Fills linen boxes with charged primers for inspection or storage: Pours water into catch pan. Places sieve tray of primers over catch pan so excess primer mixture will fall through sieve into water as primers are moved about. Scoops primers from sieve, and pours them into box to specified height. Marks lot ticket and places it in box. Empties and scrubs catch pan.
GOE: 06.04.38 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

737.684-010 ASSEMBLER, MECHANICAL ORDNANCE (ordnance)

Assembles solid, liquid, or gas-powered mechanical and electromechanical torpedo engines according to drawings and specifications, using torque wrench and handtools: Reads instructions or drawings to plan assembly sequence. Positions basic workpiece on workbench or clamps workpiece in floor fixture. Lays out parts and subassembly elements required to assemble engine. Fits parts together and bolts or screws parts to basic workpiece in specified locations, using torque wrench and handtools. Colors each fitting after torque is applied, using felt tip pen. Verifies dimensions and clearances of parts to ensure conformance to written specifications, using preset gauges. Confirms operation of assembled unit, using air and water pressure test equipment. Requests inspector approval of assembled unit before proceeding to next assembly stage. Fits together subassemblies, such as fuel pumps and gear trains, according to drawings or instructions, using handtools, and bolts subassemblies to specified positions on unit.
GOE: 06.02.22 STRENGTH: M GED: R3 M3 L3 SVP: 3 DLU: 77

737.684-014 BOMB LOADER (ordnance)

Performs any combination of following tasks to load, assemble, and pack aerial bombs: Tends machine that loads and compresses thermite and explosive charges into steel noses of bombs. Assembles bombs by joining together component parts and sections, using handtools, cement, riveting machines, and jigs. Spray-paints and tapes nose of bombs to seal perforations. Stamps identification numbers on bombs, using stamping machines. Binds cluster of bombs together with steel bands preparatory to packing to prevent accidental discharge. Packs clusters of bombs into moistureproof steel boxes, using chain hoist. Seals container lids with putty and packs loaded containers into wooden shipping crates, closing crates with hammer and nails. May be designated according to type of bomb loaded as Thermite-Bomb Loader (ordnance).
GOE: 06.02.22 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 77

737.684-018 FIREWORKS MAKER (chemical)

Makes bombs, fountains, colored lights, and set pieces for use as fireworks, following blueprints or pictures: Weighs, mixes, and sifts powder ingredients, according to formula, to produce various color and noise effects. Ignites portion of mixed ingredients to determine whether color meets specifications. Rams and pounds powder into casings or tubes, using wooden rods and mallet. Inspects fireworks for faulty wrapping or other defects and tests for sound by firing samples. Assembles and fastens together fireworks to form figures and scenes, using wire, cardboard, and handtools. May use previously prepared chemicals [MIXER (chemical) II].
GOE: 06.02.32 STRENGTH: M GED: R3 M1 L2 SVP: 6 DLU: 77

737.684-022 FUSE ASSEMBLER (ordnance)

Loads and assembles component parts of time and nose fuses, performing any combination of following tasks: Assembles essential portions of fuses, bolting and crimping parts together with press. Drills charge holes, using drill press. Loads parts with explosive charges, forcing them in place with semiautomatic hydraulic and pneumatic presses. Joins together various subassemblies with housing structure and screws or crimps them in place. Sets delay-action screw in place in time fuses and glues small disks of onionskin around screw to hold it firmly in place. Shellacks unprotected surfaces with brush.
GOE: 06.02.23 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

737.684-026 INSPECTOR, SALVAGE (ordnance) alternate titles: cartridge gauger; salvage-machine operator

Salvages rejected loaded cartridges, performing any combination of following tasks: Measures and weighs cartridges, using fixed and adjustable gauges and direct-reading shadowgraph scale, or feeds cartridges into gauge-and-weigh machine [GAUGE-AND-WEIGH-MACHINE OPERATOR (ordnance)] to verify rejection. Feeds cartridges into dial plate on automatic power press that straightens sides and deepens shoulders of cases or punches out defective primers. Positions cartridge in lathe chuck and moves lever to feed cutting tool to cut head diameter and cannelure to specified size. Inserts cartridge into fixture of machine that draws bullet from cartridge case. Dumps powder from cartridge and drops emptied case into chute.
GOE: 06.04.34 STRENGTH: L GED: R2 M2 L1 SVP: 2 DLU: 77

737.684-030 POWDER WORKER, TNT (ordnance)

Screens, melts, and pours TNT into projectile cases: Pours TNT powder into hopper of screening machine which reduces lumps by agitation. Pours powder into revolving steam-heated kettle and adjusts controls to permit steam to flow in pipes around kettle, heating and melting TNT. Empties melted explosive into buckets through valves. Tests temperature of TNT with thermometer and cools it to prescribed temperature, using power-operated paddle. Pours molten TNT into shell and bomb cases. Breaks off crystallized TNT scrap and returns it to melting pot. Drills threaded holes in charge into which boosters are loaded. Loads shells and bombs with TNT powder, pouring explosive into cases by hand and pressing powder down with hydraulic press.
GOE: 06.02.32 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

737.684-034 PRODUCTION ASSEMBLER (ordnance)

Performs any combination of following duties to assemble ordnance and related devices, such as fuses, detonators, flares, ammunition, primers, and projectile boosters: Weighs powder and chemicals, according to formula and places ingredients in mixer. Starts mixer and mixes powder with chemicals, and pours specified amount of mixture into cavity of ordnance device. Places ordnance unit under microscope, positions components to be connected according to diagram, and solders or welds parts together. Positions parts of device to be assembled in prescribed order and fastens parts together, using screws, bolts, and handtools.
GOE: 06.04.23 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

737.684-038 SHELL ASSEMBLER (ordnance)

Assembles component parts of artillery shells for shipment to loading arsenal: Lifts shells onto bench. Screws fuse plugs into base of shells, and adapters (reducing bushings pierced and threaded in center to receive fuses) into nose, using hand and pneumatic wrenches. Smears petroleum jelly onto unlacquered shell surfaces. Screws plugs into nosefuse holes. Cleans and reams threads. May lacquer shells and metal parts by brushing, spraying, or dipping.
GOE: 06.04.23 STRENGTH: M GED: R2 M1 L2 SVP: 5 DLU: 77

737.685-010 GAUGE-AND-WEIGH-MACHINE OPERATOR (ordnance)

Tends machine that gauges and weighs cartridges and examines cartridges for defects: Scoops handful of cartridges from bin and arranges them with heads in one direction. Rolls cartridges from hand to hand and examines them for such defects as dents, scratches, and missing or inverted primers. Places acceptable cartridges on inclined chute for gravity feeding into gauging and weighing mechanisms. Starts machine and observes operation to detect jamming. Removes misaligned cartridges from gravity chute, using special hook tool. Moves

lever to eject jammed cartridges. Notifies GAUGE-AND-WEIGH-MACHINE ADJUSTER (ordnance) of machine malfunction. May examine cartridges carried past work station in nests of rotating conveyor table and press button to drop out defective cartridges. May tend machine that gauges but does not weigh cartridges and be designated Gauging-Machine Operator (ordnance).
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

737.685-014 SHAKER-PLATE OPERATOR (ordnance) alternate titles: loading-unit plate filler; plate filler

Tends machine that positions small arms cartridges or components in specially holed plates and inspects parts for conformance to standards. Places plate on shaker bed and scoops parts from hopper onto plate. Starts machine and spreads parts over oscillating plate by hand or with stick to fill depressions. Stops machine and shakes plate to invert parts not upended. Examines cartridges and components for defects, such as dents, burrs, scratches, and reversed or missing parts, using magnifying glass for minute parts. Removes defective parts, using tweezers, pick, or wax-tipped stick. Inverts parts, using transfer plate, to examine both ends. May record quantity of rejections according to type of defect. May shake parts through gauging screens to verify conformance to specified dimensions.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

737.685-018 WAX POURER (chemical)

Tends equipment that melts and pours paraffin into cardboard tubes in manufacture of signal flares. Scans invoice to determine number of flares required. Climbs ladder and dumps paraffin blocks into vat and activates heating element to melt paraffin. Observes temperature gauge to determine when melting point is reached and looks into vat to verify liquid condition of paraffin. Turns valve to allow gravity-fed liquid paraffin to flow into pressure vat. Adjusts pressure vat controls to prescribed setting and flips switch to activate heating element. Places flare tube in rack with open end up and examines closed end for openings. Squeezes sealant into tubes to seal defective closed ends. Positions racked tubes under spout and depresses treadle to fill tubes with specified amount of paraffin. Advances each row of tubes under spout until all tubes are filled with paraffin. Carries racked tubes to next work station. Scrapes paraffin residue from worktable, using scraper. Maintains production records.
GOE: 06.04.19 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

737.687-010 ASSEMBLER (ordnance)

Performs any combination of following duties to assemble fittings on fragmentation bombs: Wipes nose-adapter threads with cloth and solvent. Dries adapter, using airhose. Coats interior threads of adapters with thin layer of grease. Brushes nose-plug threads with fast-drying paint, and screws plug into adapter. Screws adapter into nose section of bomb. Attaches components of fin-stabilizer unit to bomb, using pliers and wire.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

737.687-014 BAG LOADER (ordnance)

Loads ammunition charge bags with previously weighed quantities of powder. Receives cup containing powder from CHECK WEIGHER (ordnance). Inserts funnel into bag opening. Pours charge into bag through funnel, shaking bag to settle powder.
GOE: 06.04.36 STRENGTH: M GED: R1 M1 L1 SVP: 1 DLU: 77

737.687-018 BLASTING-CAP ASSEMBLER (ordnance) alternate titles: electric-blasting-cap assembler

Performs any combination of following duties to assemble blasting caps: Dips lengths of wire into insulating compound and wraps them with cloth tape. Cuts wires in cutting machine. Inserts wires, having short piece of platinum wire soldered to one end, into fiber plug. Seals plug with fiber disk.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

737.687-022 BOOSTER ASSEMBLER (ordnance)

Assembles elements of explosive shell boosters, performing any combination of following duties: Places cushion disks in bottoms of booster cups. Stamps cooper washers with identifying data and glues onionskin disks over holes. Puts together parts of releasing mechanism (rotors) and assembles them with stamped washers and housings (body pieces) to complete boosters. Gauges overall length of completed units, using snap gauges.
GOE: 06.04.23 STRENGTH: L GED: R2 M2 L1 SVP: 2 DLU: 77

737.687-026 CHECK WEIGHER (ordnance)

Weighs each cup containing powder charge again after weighing by SHADOWGRAPH-SCALE OPERATOR (ordnance) to ascertain its adherence to specifications. Returns cups of inexact weight to original SHADOWGRAPH-SCALE OPERATOR (ordnance) to be check-weighed for third time. Passes satisfactory charges on to BAG LOADER (ordnance).
GOE: 06.03.02 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

737.687-030 CORE LOADER (ordnance)

Loads dumbbell-shaped ammunition charge bags (cores) with black powder. Fills hopper of air-powered filling machine with black powder. Blows powder into one end of bag by inserting machine feedpipe through hole in handle of bag and moving controls to blow powder into end. Removes bag from pipe and reinserts pipe into bag so that pipe faces unfilled end of bag. Moves controls to fill empty end of bag with powder. Stops up hole in handle with clamp.
GOE: 06.04.36 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

737.687-034 DEMOLITION SPECIALIST (ordnance)

Disposes of explosive wastes and rejected powder-charged products in accordance with established safety regulations: Collects explosive wastes, rejected ordnance devices, and products saturated with explosive materials from production areas in containers. Sorts material by type and places material in rubber containers. Pours water or other counteracting agents into containers to neutralize material and places material in open area until disposal. Stores rejected products in bunkers. Loads truck with waste, transports, and positions waste in specified manner for disposal. Sets fire to waste products and materials and ensures complete destruction of all items.
GOE: 05.12.03 STRENGTH: H GED: R2 M1 L1 SVP: 4 DLU: 77

737.687-038 DETONATOR ASSEMBLER (ordnance)

Loads and assembles component parts of shell detonators, performing any combination of following duties: Loads detonator cup with explosives, such as black powder and tetryl, using power press. Inserts loaded cup in detonator holder and screws holder into detonator head. Assembles head with activating mechanisms that start explosion of shell when it strikes. Gauges completed detonator for length.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

737.687-042 EXPLOSIVE OPERATOR I (ordnance)

Unloads, cleans, and reloads defective assemblies and component parts of high-explosive shells and bombs. Removes fuses with wrench, working behind protective barriers. Washes out explosive charges with water, destroying or salvaging explosive. Removes paint and grease from shells and bombs, using chemicals and shot-blast machine. Disassembles shells and bombs for inspection. Makes minor alterations in shape and size, using engine lathe. Assembles and paints components. Reloads bombs and shells with high explosives. EXPLOSIVE OPERATOR (ordnance) II.
GOE: 06.04.34 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

737.687-046 EXPLOSIVE OPERATOR II (ordnance)

Performs any combination of following tasks, which require a working knowledge of open explosives, concerned with manufacturing, assembling, and loading of fuses, detonators, primers, boosters, shells, and bags: Weighs, blends, and pours explosives into containers, compressing powder into pellets, screwing together threaded parts of shells, and checking dimensions of ammunition. May be designated according to type of explosive manufactured as Explosive Operator, Bomb (ordnance); Explosive Operator, Fuse (ordnance); Explosive Operator, Grenade (ordnance).
GOE: 06.04.34 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 77

737.687-050 IGNITER CAPPER (ordnance)

Ties protective cotton cap over igniter end of propellant charge. Ties tag containing identifying data to charge.
GOE: 06.04.34 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

737.687-054 INSPECTOR II (ordnance)

Examines shell and bomb explosive assemblies, such as time fuses, nose fuses, delay-action detonators, and relays, to determine their conformity to specifications: Inspects time fuses and nose fuses, observing packing of charge for firmness, tests action of plunger and restraining spring for freedom of movement, examines wiring for defective soldered connections, and examines shaping of metal. Tests interrupter action in revolving chuck. Gauges boosters for body length and lockpin length. Inspects detonators, relays, and primers, using magnifying glass to examine loading. Observes wet primers for evenness of charge. Reads data stamped on assemblies or on tag attached to assemblies to ensure that data is legible and complete.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

737.687-058 INSPECTOR, BULLET SLUGS (ordnance)

Examines bullet slugs or cores for defects to ensure conformance to specifications: Rolls slugs or cores by hand across bench, scoops slugs or cores onto moving belt for inspection as they pass by, or aligns them on grooved inspection plate by pushing plate into pile of slugs or cores and shaking plate to remove excess. Examines slugs or cores for defects, such as pits, burrs, and fins. Picks out defective slugs or cores with fingers or wax-tipped stick and drops them into scrapbox.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

737.687-062 INSPECTOR, FIREWORKS (chemical)

Inspects and tests assembled and partially assembled pyrotechnics (fireworks): Examines parts for defects, such as nicks, cracks, or holes. Screws standard test piece on threaded parts to determine acceptable fit and alignment. Verifies component dimensions for conformance to specifications, using fixed gauge. Segregates defective assemblies for reconstruction, salvage, or further analysis. May be designated according to part inspected as Firing-Pin Gauger (chemical); Pellet-Post Inspector (chemical).
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

737.687-066 INSPECTOR, SHELLS (ordnance)

Inspects cartridge cases and bullet jackets for defects, such as burrs, dents, discolorations, and scratches, as they pass along conveyor or are held in frames. Removes defective cases and jackets by hand. May measure samples to verify specified dimensions, using fixed gauges. May inspect bullet jackets and cores at various stages of manufacture to ensure compliance with production specifications.
GOE: 06.03.02 STRENGTH: L GED: R2 M2 L1 SVP: 2 DLU: 77

737.687-070 LABORER, AMMUNITION ASSEMBLY I (ordnance)

Assembles component parts of tracer shells, signals, flares, and other pyrotechnics, performing any combination of following tasks: Loads relays (devices

for transferring ignition sequence to various charges in shell) with black powder pellets. Tends press that pushes powder charge tightly into relay. Assembles and loads mine fuses with red phosphorous and black powder. Installs relays in shells and screws them in place. Loads shells with tracer powder, tamps pellets with automatic press, and seals chamber with celluloid disk. May cut and sew silk to assist in making of signal flare parachutes.
GOE: 06.04.23 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

737.687-074 LABORER, AMMUNITION ASSEMBLY II (ordnance)
Assembles and packs complete rounds of ammunition (projectile and cartridge), performing any combination of following tasks: Greases threads on fuses and starts them into threaded fuse sockets. Screws fuses into place, using screw press. Places primers in cartridge cases and stamps them in place, using press. Weighs and inserts propellants into cartridge cases. Brushes band of adhesive compound around base of projectile to seal cartridge. Gauges completed shells, using simple acceptance jigs. Stamps shell data on cartridge, using rubber stamp or stamping machine. Packs completed rounds in cardboard tubes. Stamps shell data on tubes, dips tubes in molten paraffin, and packs tubes in crates. Screws pierced and threaded plugs into bases of aerial bombs. Screws rod-supporting fin assembly into threaded hole in plug. Slips metal sleeves about bombs and packs them in metal containers, attaching tags with identification data to containers.
GOE: 06.04.34 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

737.687-078 LACQUER-PIN-PRESS OPERATOR (ordnance)
Deposits drop of lacquer inside cartridge primer cup to seal in anvil and foil paper and to waterproof primer charge, using hand powered bench device (lacquer-pin press): Pulls lever to lower pin plate of press to dip tips of pins into tray of lacquer. Positions plate containing assembled primer cups in fixture beneath lacquer-tipped pins. Pulls lever to lower pin plate and deposit lacquer in primers. Places primer-filled plate in hot air oven to dry lacquer. Empties lacquer from tray into waste can at prescribed intervals and refills tray from supply can.
GOE: 06.04.33 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

737.687-082 MANUAL-PLATE FILLER (ordnance)
Positions parts for small arms ammunition in specially holed plates or frames for inspection, assembly, or further processing: Scoops parts onto plate or frame, spreads them over surface, and shakes frame manually to arrange parts in holes or indentations, open ends up. Positions with fingers parts that are not seated during shaking.
GOE: 06.04.24 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

737.687-086 MERCURY-CRACKING TESTER (ordnance)
Examines completed cartridge case for cracks: Cleans cases by dipping them in solution of nitric acid and rinsing them in water. Dips cases into mercurous nitrate solution. Heats chemically treated cases over flame and examines cases for discolorations, indicative of cracks. Discards defective cases.
GOE: 06.03.02 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

737.687-090 MIXER II (chemical)
Weighs and mixes chemicals according to formula for use as explosive ingredients in pyrotechnics (fireworks): Examines chemicals to ensure that color and texture conform to specifications. Weighs prescribed quantities of chemicals. Rubs powdered chemicals through screens to obtain specified fineness. Mixes screened powders to obtain uniform blend. May dump powdered chemicals onto stone table, blend them with linseed oil, using roller, and mix blended material with additional chemicals by machine. May tend tumbling machine to obtain finer powders. May cure and dry mixture. May be designated according to type of powder mixed as Floatlight-Powder Mixer (chemical); Incendiary-Powder Mixer (chemical); Photoflash-Powder Mixer (chemical); Pyrotechnic Mixer (chemical); Starter-Cup-Powder Mixer (chemical).
GOE: 06.04.34 STRENGTH: H GED: R2 M2 L2 SVP: 2 DLU: 77

737.687-094 PACKER-FUSER (chemical)
Assembles and packs pyrotechnic devices: Packs designated number of sparklers of specified color in carton, discarding defective sparklers. Perforates other pyrotechnic devices, such as firecrackers and display cones, with awl or knife to permit insertion of wick. Dips wick in glue and inserts wick in hole. Wraps device in paper and packs device for storage or shipment.
GOE: 06.04.38 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

737.687-098 PRIMER ASSEMBLER (ordnance)
Loads and assembles component parts of wet and dry bomb and shell primers, performing any combination of following tasks: Loads primer cups with explosives, using power presses to seat explosive. Loads other primer parts with explosives. Assembles primer cups with rings and washers and rolls assembly on cloth soaked with gluelike explosive compound. Inserts primer in holder and presses it in place so that compound sticks. Crimps primer in place with press.
GOE: 06.04.23 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

737.687-102 PRIMER CHARGER (ordnance) alternate titles: cup filler
Fills small arms ammunition primer cups with dry or wet priming mixture, using one of following methods: (1) Positions specially holed plate filled with primer cups in fixture beneath charging plate. Dumps dry powder on charging plate and rubs it into holes, using rubber spreading tool. Pushes levers to retract retaining plate between charging plate and cup plate, to start pneumatic vibrator that shakes powder into primer cups. (2) Dumps wet mixture onto charging plate, kneads it into holes and scrape off excess with rubber blade. Superimposes powder-filled plate over cup-filled plate and punches mixture into primer cups, using knock out fixture. May operate varnish pin-press [LACQUER-PIN-PRESS OPERATOR (ordnance)] and foiling-tamping press [FOILING-MACHINE OPERATOR (ordnance)].
GOE: 06.04.34 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

737.687-106 PRIMER INSPECTOR (ordnance)
Examines cartridge primers for defects, such as lack of powder or improperly inserted anvil. Removes faulty primers with tweezers or wax-tipped stick. May fill specially holed boards with primers, using shaker machine [SHAKER-PLATE OPERATOR (ordnance)], or pour primers into boxes for transfer to subsequent operations. May use magnifying glass to examine primers.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

737.687-110 PROPELLANT-CHARGE-ZONE ASSEMBLER (ordnance)
Assembles and ties together charge bags loaded with explosives: Lifts bags from barrels and positions them on bench. Joins and secures four tying straps over top of assembly. Slips circumference gauge over completed charge zone to determine that size of charge is within prescribed limits.
GOE: 06.04.23 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

737.687-114 SALVAGER I (ordnance)
Inspects machinegun ammunition links for machining defects: Visually inspects links for dents, burrs, and other obvious defects. Checks links with fixed gauges and dial indicator gauges for accuracy of dimensions. Places acceptable links in container and defective links in another for salvage.
GOE: 06.03.02 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

737.687-118 SALVAGER II (ordnance)
Inspects, tests, and reclaims discarded parts of explosive shells, such as fuses, boosters, and detonators in manufacturing plant, using micrometers, measuring instruments, and knowledge of blueprints to determine salvage value of materials.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

737.687-122 SCREW-EYE ASSEMBLER (ordnance)
Screws metal eyes into threaded holes inside bottom of artillery cartridge cases to form anchor, to which ammunition bags are tied and held within case.
GOE: 06.04.23 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

737.687-126 SHADOWGRAPH-SCALE OPERATOR (ordnance)
Weighs powder charges on scale, which uses shadow of a needle as indicator: Receives container, holding powder charge and weighs container. Adds or removes quantities of powder to secure exact quantity of charge.
GOE: 06.03.02 STRENGTH: S GED: R2 M1 L2 SVP: 2 DLU: 77

737.687-130 SHELLACKER (ordnance)
Brushes shellac over foil that will be stamped into small disks and used to seal powder in cartridge primer cups. Prepares solution by dissolving shellac in solvent and straining mixture. Hangs coated strips on rack to dry. May cut foil into strips.
GOE: 06.04.33 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

737.687-134 TAPPER, HAND (ordnance)
Places empty artillery cartridge cases on table and cuts threads in two previously drilled holes on inside surface for insertion of screw eyes by SCREW-EYE ASSEMBLER (ordnance), using handtap.
GOE: 06.04.24 STRENGTH: M GED: R1 M1 L1 SVP: 1 DLU: 77

737.687-138 VARNISHING-UNIT OPERATOR (ordnance)
Varnishes or lacquers heads and mouths of cartridge cases to make waterproof seal between heads and primers and between cartridge mouths and bullets: Positions varnishing plate over plate of cartridge cases and inverts to transfer cases to varnishing plate. Positions plate of cases in fixture of manually powdered varnishing device. Moves levers to dip upper and lower blocks of pins into reservoirs of varnish and then onto primers and into mouths of cases. Wipes excess varnish from cases with cloth and examines them for completeness of coverage. Sets plate of cases on air blower screen to dry.
GOE: 06.04.33 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

739 OCCUPATIONS IN FABRICATION AND REPAIR OF PRODUCTS MADE FROM ASSORTED MATERIALS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with fabricating and repairing products from assorted materials.

739.130-010 SUPERVISOR, BIT AND SHANK DEPARTMENT (fabrication, nec)
Supervises and coordinates activities of workers engaged in sawing, shaping, and fitting bits and shanks of smoking pipes: Informs workers engaged in sawing operations of changes in style and number of stummels to saw for each style. Determines from production schedule quantity and style of bits to be bent, and number of each style bit needed. Inspects stummels and bits at each work station to ensure conformance to company standards. Sets up machines. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

739.131-010 SUPERVISOR I (fabrication, nec)
Supervises and coordinates activities of workers engaged in cutting, sewing, tacking, and tipping umbrellas: Observes machine operations to detect mal-

functioning equipment. Repairs or adjusts equipment, using handtools. May train new employees. May cut patterns from cardboard, according to sketches or customer's specifications. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 77

739.131-014 SUPERVISOR II (fabrication, nec)
Supervises and coordinates activities of workers engaged in fabricating, finishing, sanding, painting, and decorating plastic and papier mache mannequins and display structures. Inspects work at various stages of production to ensure conformance to plant standards. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 01.06.02 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 77

739.132-010 SUPERVISOR, CORNCOB PIPE MANUFACTURING (fabrication, nec)
Supervises and coordinates activities of workers engaged in making corncob pipes: Trains workers in operation of machines used to cut, shape, bore, and smooth corncob pipe bowls. Directs maintenance workers in repair of machinery. Records personnel and production data. May supervise workers packing and shipping pipes. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R3 M2 L3 SVP: 6 DLU: 78

739.134-010 SUPERVISOR, ASSEMBLY ROOM (fabrication, nec)
Supervises and coordinates activities of workers engaged in assembling caskets: Inspects caskets for fit of assembled parts and overall appearance to determine conformance to company standards. Trains workers in assembly of caskets. May mix glue with water or steam. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.04.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

739.134-014 SUPERVISOR, DISPLAY FABRICATION (fabrication, nec)
Supervises and coordinates activities of workers engaged in fabricating smoking pipe displays: Studies sketches to determine patterns necessary for fabrication or to devise procedure to be used in absence of patterns. Verifies setup of woodworking machines, using tape ruler and information from sketch or pattern. Supervises work of DISPLAY FABRICATOR (fabrication, nec) 860.684-022. Constructs model displays, using handtools, sketch, and woodworking machines, such as bandsaw and variety saw. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.04.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 86

739.137-010 ASSEMBLY SUPERVISOR (any industry)
Supervises and coordinates activities of workers engaged in assembling parts or assemblies into units, such as carburetors, refrigerators, vacuum cleaners, electric motors, or vending machines, applying knowledge of assembly process, tools, equipment, products, and production methods. Reports machine and equipment malfunctions to maintenance personnel. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 77

739.137-014 SUPERVISOR, LAMP SHADES (fabrication, nec)
Supervises and coordinates activities of workers engaged in cutting silk, parchment, and fiberglass from lampshade patterns, attaching shades to metal frames, applying trimmings to shades, and wrapping and packing completed lampshades. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M2 L2 SVP: 7 DLU: 77

739.137-018 SUPERVISOR, PIPE MANUFACTURE (fabrication, nec)
Supervises and coordinates activities of workers engaged in patching, sanding, staining, or polishing smoking pipes: Interprets job requirements and schedules processing to meet requirements. Routes defective pipes to designated workers for repair. Specifies formulas to be mixed and used to patch, stain, varnish, and lacquer pipes. Observes pipes at various stages of patching, sanding, or finishing to ensure conformance to standards. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to activity supervised as Supervisor, Dyeing And Finishing Department (fabrication, nec); Supervisor, Patching Department (fabrication, nec); Supervisor, Sanding Department (fabrication, nec).
GOE: 06.04.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 78

739.137-022 SUPERVISOR, WALL MIRROR DEPARTMENT (glass products)
Supervises and coordinates activities of workers engaged in assembly, inspection, and packing wall and furniture mirrors: Orders specified size, type, and quantity of mirror, frames, backs, hardware, and packing cartons required to meet production schedules. Patrols work area and examines items on production line to ensure conformity to specifications. Trains new workers in job duties. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R3 M3 L3 SVP: 5 DLU: 77

739.261-010 EXHIBIT BUILDER (museums) alternate titles: exhibition specialist; exhibit technician; museum craft worker; experimental-display builder; model maker
Constructs and installs museum exhibit structures, electric wiring, and fixtures of materials, such as wood, plywood, and fiberglass, using handtools and power tools: Studies sketches or scale drawings for temporary or permanent display or exhibit structures, such as framework, fixtures, booths, or cabinets to determine type, amount, and cost of material needed. Confers with exhibit planning and art personnel to discuss structural feasibility of plans and to suggest alternate methods of displaying objects in exhibit. Cuts, assembles, and fastens parts to construct framework, panels, shelves, and other exhibit components of specified materials, using handtools and power tools. Sprays or brushes paint, enamel, varnish, or other finish on structures, or creates special effects by applying finish with cloth, sponge, or fingers to prepare structure for addition of fittings. Mounts fittings and fixtures, such as shelves, panelboards, and shadowboxes to framework, using handtools or adhesives. Installs electrical wiring, fixtures, apparatus, audiovisual components, or control equipment in framework, according to design specifications. Installs or affixes murals, photographs, mounted legend materials, and graphics in framework or on fixtures. Assembles, installs, or arranges structures in exhibit galleries working with maintenance and installation personnel. Tests electrical, electronic, and mechanical components of exhibit structure to verify operation. May maintain inventory of building materials, tools, and equipment, and order supplies as needed for construction of exhibit fixtures. May assign duties to and supervise work of carpentry, electrical, and other craftworkers engaged in constructing and installing exhibit components. May assist in placement of display accessories and collection objects or specimens. May be designated according to specialty as Exhibit Carpenter (museums); Exhibit Electrician (museums); or job location as Planetarium Sky Show Technician (museums); Science Center Display Builder (museums).
GOE: 01.06.02 STRENGTH: M GED: R4 M4 L4 SVP: 7 DLU: 86

739.281-010 PACKAGING TECHNICIAN (paper goods)
Lays out, fabricates, assembles, and tests samples of corrugated paperboard and plastic containers: Sketches design details or makes scale drawings of containers used for shipping, protecting, or displaying items, indicating construction dimensions, using drawing instruments and shipping requirements. Lays out dimensions of container on paperboard, cuts along specified lines with knife or saw and assembles sample container, using adhesive or staples. Lays out dimensions of production templates for cartons and cuts out templates, using power tools. Cuts out specified plastic parts, using handtools and power tools. Tests ability of container to withstand shipping requirements, using strain, strength, and stress test equipment. Records results of tests.
GOE: 06.01.04 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

739.281-014 ULTRASONIC TESTER (any industry)
Conducts ultrasonic tests on fabricated metallic and nonmetallic parts and products to identify discontinuities: Reviews work orders, test procedure sheets, and product acceptance criteria to determine test specifications. Attaches specified crystal probe transducer to ultrasound test device and moves switch to actuate device. Calibrates and adjusts ultrasonic test equipment to required standards and settings, applying knowledge of ultrasonic testing procedures. Sprays couplant (light oil which acts as medium) or other liquid over part to be tested, moves transducer over part to be tested, and observes CRT (cathode ray tube) screen to detect patterns of discontinuity, such as cracks, inclusions, bonding defects, or porosity. Marks defective areas of part or product and prepares report of test findings. May set up and operate computerized inspection equipment.
GOE: 05.07.01 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 90

739.361-010 DISPLAY MAKER (fabrication, nec)
Designs, fabricates, assembles, or installs displays, exhibits, and models of point-of-sale displays: Designs displays or exhibits from pictures or sketches or according to verbal instructions from customer. Lays out, cuts, shapes, and finishes wood, plastic, plexiglass, sheet metal, and hardboard parts of displays, using woodworking machines, metal machines, and handtools, according to drawings or blueprints. Cuts glass to specified shape with glasscutter. Assembles parts with nails, screws, bolts and glue, using handtools. Confers with designer, customer, or salesperson regarding refinements, additions, and adjustments. May disassemble display to make working drawings for production run and to produce estimates for accounting and sales departments. Reassembles display and sends it to prospective customer. May wire display for illumination, audio, or video. May travel and set up display on designated site. May specialize in making diorama models and be designated Diorama Model-Maker (fabrication, nec).
GOE: 01.06.02 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

739.381-010 CANVAS WORKER (ship-boat mfg.; tex. prod., nec)
Lays out canvas, plastic, rubber, and other materials and fabricates and assembles material into sails, awnings, tents, and tarpaulins: Lays out full scale drawings on sail loft floor, according to blueprints or sketches, using chalk. Cuts pattern from paper according to full scale drawing. Marks outline on material with crayon. Cuts material with shears or power cutter. Sews sections of material together on power sewing machine. Installs grommets, metal fittings, and fasteners by machine. When hand-sewing grommets, measures and marks off grommet holes on material, punches holes, using mallet, punch, and hardwood block, and sews galvanized iron ring to edge of hole, using sailmaker's palm and sail twine. Splices, inserts, and hems manila or wire rope in edges to relieve strain or sews rope at points where sail is attached to boom or mast. Secures rope or cable to finished article. Wraps and sews parts of rope or wire that are subject to chafing. Installs and adjusts completed product on shipboard. Examines completed sails for conformance to specifications. May make awning

frames [AWNING-FRAME MAKER (tex. prod., nec)]. May be designated according to type of product made as Awning Maker (tex. prod., nec); Sailmaker (ship-boat mfg.; tex. prod., nec); Tentmaker (tex. prod., nec).
GOE: 06.01.04 STRENGTH: M GED: R4 M3 L2 SVP: 7 DLU: 77

739.381-014 CANVAS-WORKER APPRENTICE (ship-boat mfg.; tex. prod., nec) alternate titles: sail, tent, and awning-maker apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 06.01.04 STRENGTH: M GED: R4 M3 L2 SVP: 7 DLU: 77

739.381-018 DIE MAKER (paper goods) alternate titles: steel-rule die maker

Constructs dies from plywood and steel rule, for use in paper cutting and scoring machines, using blueprints, handtools, and machine tools: Lays out and draws die design on plywood sheet, according to blueprint specifications, using such drafting tools as compasses, scribes, calipers, pencils, and rulers. Saws pieces (blocks) from sheet, using table, band, and jigsaws. Sands and polishes blocks to specified dimensions and smoothness, using belt sander. Measures and cuts steel rule to specified length, using tape measure, power hacksaw, and shears. Bends pieces of steel rule to form tab cutting knives and grinds edge to specified sharpness on grinding wheel. Places chase on assembly table, positions wooden blocks in chase, and inserts knives and scoring rules between blocks according to blueprints. Turns bolts on chase to fasten blocks and knives in place, using wrench. May fasten blocks and knives in chase with quoins and mallet.
GOE: 05.05.06 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

739.381-022 DIE-MAKER APPRENTICE (paper goods) alternate titles: steel-rule-die-maker apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.06 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

739.381-026 EXPERIMENTAL ASSEMBLER (any industry)

Assembles, inspects, tests, and adjusts variety of optical, electrical, and mechanical devices on pilot run basis to improve assembly methods and to discover and correct deficiencies in materials, specifications, and equipment prior to production runs: Reads and interprets blueprints, diagrams, schematics, and narrative instructions to determine required parts and tools and lays out workbench to provide assembly arrangement. Assembles up to 100 units or components of optical, electrical, or mechanical devices, such as slide projectors, plastic tape dispensers, duplicating machines, and ribbon-bow-making machines, using power tools and handtools. Inspects, tests, and adjusts assembled devices for specified functioning, using light meter, ammeter, voltmeter, stopwatch, rulers, feeler gauges, spring tension tester, torque tester, and depth micrometer.
GOE: 05.05.11 STRENGTH: M GED: R4 M4 L4 SVP: 6 DLU: 77

739.381-030 FABRICATOR, SHOWER DOORS AND PANELS (struct. metal)

Fabricates hinged shower doors, sliding doors, and stationary panels, using power tools and handtools: Cuts aluminum channel rail stock to specifications, using rail saw. Drills and punches assembly holes. Rivets piano hinge to rail. Polishes rails, using buffing machine. Measures and cuts glass panels. Fits rubber molding around edge of glass panels and assembles rails on panels. Inserts metal screws to secure rails to panels. Positions, drills, and attaches fixtures, such as towel rod, door catch, and handles.
GOE: 06.02.22 STRENGTH: M GED: R3 M3 L2 SVP: 5 DLU: 77

739.381-034 FIGURE REFINISHER AND REPAIRER (retail trade)

Repairs and refinishes mannequins used to display wearing apparel on sales floor or in store window: Fills cracks and chips with putty and sandpapers surface. Mixes paint to match flesh color on mannequin and applies paint with brush or spray gun. Retouches features with paint, using airbrush. Glues on wigs and eyelashes. Keeps inventory records of mannequin arms, wigs, and display fixtures.
GOE: 01.06.02 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

739.381-038 INSET CUTTER (fabrication, nec)

Lays out and cuts decorative insets for hard-surface floor covering: Lays out design and makes pattern from blueprint, using drafting tools. Selects material according to type and color specified on pattern. Lays out materials according to pattern colors, exercising care to obtain maximum utilization of material. Transfers design section to material by tracing over pattern and carbon paper. Aligns two or more layers of material, to be cut simultaneously, using straightedge and T-square. Cuts or gouges out design section, using gouging tools or guides electrical cutting machine over pattern lines. Places specified tile material on heated warming table and directs rays of portable heater onto area being cut to soften material and prevent cracking. Cuts specified design sections from brass or aluminum for insertion in inset. Assembles sections to form complete design and fastens parts together with masking tape. Fills in gouged lines of hand-carved designs with oil, aluminum, or bronze paint to enhance appearance of finished product.
GOE: 01.06.02 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

739.381-042 MANNEQUIN WIG MAKER (fabrication, nec)

Makes wigs for mannequin out of synthetic hair according to style specifications: Places layer of cellophane over head model. Molds sheet of wet buckram over cellophane to form wig foundation. Selects strands of hair and combs, cuts, and blends them according to specified length and color. Folds ends of strands and glues short side of fold to foundation. Pins tape over glued section, to secure hair in position, on foundation. Combs, curls, and fastens hair in place to style wig according to specifications, using tape, pins, comb, and curling rods. Dries hair under electric drier and sprays wig with lacquer to set hair style.
GOE: 06.01.04 STRENGTH: S GED: R3 M2 L2 SVP: 6 DLU: 77

739.381-046 MANNEQUIN-MOLD MAKER (fabrication, nec) alternate titles: mold maker

Builds plaster or plastic molds of display models: Lays model on bench, packs clay around model to centerline of figure, and greases exposed part of model. Prepares plaster of paris and smears it on upper part of figure, shaping it to form base of mold. Applies reinforcing strips of hemp fiber over mold body and covers hemp with layer of plaster. Applies successive layers of liquid plastic, glass fiber mesh cloth, and liquid resin around model. Removes supporting clay from figure, turns mold over, and applies plaster of paris and hemp fiber or plastic, cloth, and resin to remainder of figure to complete mold.
GOE: 06.01.04 STRENGTH: M GED: R4 M2 L2 SVP: 7 DLU: 77

739.381-050 SOUVENIR AND NOVELTY MAKER (metal prod., nec) alternate titles: souvenir assembler

Fabricates souvenirs and novelty items from materials, such as sea shells, pine needles, driftwood, wooden stock, cloth scraps, skins, and parts of animals: Studies samples, patterns, or drawings to become familiar with items to be made and materials needed to fabricate souvenir or novelty items; or employs artistic ability and creative talent to design items. Constructs items by one of following methods: (1) Molds or builds forms of plaster of paris or wood, using handtools. Examines animal skins and cuts skin to fit form, using knife and scissors. Attaches skin to form with tacks and glue. Attaches items, such as lighters, ash trays, and light fixtures, using adhesives and handtools. Combs and brushes fur to improve appearance. (2) Assembles cleaned, sanded, and waxed driftwood in artistic display and attaches driftwood to wooden base with glue or screws. (3) Arranges pine needles into specified patterns to fabricate baskets, coasters, and utility mats and stitches needles in place with raffia. (4) Constructs rag dolls following pattern, sewing parts together, stuffing doll with filler material, embroidering features on doll face, and placing designated clothing on doll. (5) Builds items, such as sailboats, fish, and animals from woodstock, using handtools and power tools. Cuts out shape of item with coping, hand, or jigsaw and completes item by carving and sanding wood. Buffs, polishes, paints, or varnishes item to produce desired finish. (6) Cleans, cuts, or grinds sea shells and coral with handtools and power tools to prepare coral and shells for use as souvenir or novelty items. Arranges items on display board, in glass jars, or into novelty items, such as figurines, lamps, or paperweights, using jewelry findings, pipe cleaners, glue, wire, plaster of paris, and handtools. May keep records pertaining to cost of supplies and income from sales.
GOE: 01.06.02 STRENGTH: L GED: R3 M3 L3 SVP: 5 DLU: 77

739.381-054 SURVIVAL-EQUIPMENT REPAIRER (government ser.)

Inspects, maintains, and repairs aircraft and marine survival equipment, or flight safety equipment, such as life rafts, inflatable jackets, marker buoys, flare cases, helmets, and pressure suits, using handtools.
GOE: 05.10.01 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

739.381-058 WIG MAKER (fabrication, nec)

Lays out, sews, and fastens together materials and hair strands to make wigs and transformations: Draws or pins wig pattern on model of customer's head. Places sections of gauze, lace, net, ribbon, and springs over pattern and sews sections together to form wig foundation [FOUNDATION MAKER (fabrication, nec)]. Hooks strands of hair into foundation holes, using ventilating needle (similar to crochet needle), blends shades of hair to give natural appearance, and ties ends of strands to foundation [VENTILATOR (fabrication, nec)]. Weaves hair to form speciality hairpieces, such as braids, switches, and chignons. Arranges woven hair in specified position and sews hair together to form hairpiece. May repair wigs. May supervise or train other workers.
GOE: 05.05.15 STRENGTH: S GED: R3 M2 L3 SVP: 7 DLU: 77

739.384-010 DIAMOND MOUNTER (machine tools)

Positions and mounts industrial diamonds in tools used for dressing and *truing* grinding wheels and for machining metal, according to type and size of tool by one of following methods: (1) Places tools shank in press and moves controls to force diamond into shank. Applies solder and flux around diamond and places tool into electric induction furnace for specified time to bond diamond to shank. (2) Inserts wire through hole in diamond and twists wire around pin on tool shank. Positions mold around diamond and shank and pours molten metal into mold to cast tool containing diamond. (3) Presses powdered metal into mold around diamond on tool shank and places in sintering furnace for specified time to fabricate tool containing diamond. (4) Aligns and clamps diamond in tool shank. Cleans joints of diamond and shank, using wire brush and cleaning solution. Bonds shank and diamond together, using brazing alloy and acetylene hand torch.
GOE: 06.02.32 STRENGTH: L GED: R3 M3 L3 SVP: 4 DLU: 77

739.384-014 FOUNDATION MAKER (fabrication, nec) alternate titles: blocker and sewer

Lays out and sews together materials, such as ribbon, net, and gauze, to make foundations for wigs and transformations: Draws and cuts pattern of hair-

piece according to customer's head measurements. Shapes and pins pattern to head model. Draws lines on pattern to indicate position of foundation. Stretches and pins wet gauze over foundation area. Cuts ribbon and pins it to model to form skeleton structure of foundation. Fits and sews elastic and springs to foundation to ensure snug fit. Fits and sews net and lace to gauze and springs to form front and back portions of foundations.
GOE: 06.02.27 STRENGTH: L GED: R3 M2 L1 SVP: 5 DLU: 77

739.384-018 HAIR PREPARER (fabrication, nec) alternate titles: hair blender

Bleaches, dyes, and blends human hair used in making hair pieces: Soaks hair in soap and water to remove foreign matter and separates hair into strands. Mixes and blends ingredients to make bleaches and dyes according to formula. Dips strands into bleaching and dyeing solutions to obtain desired color. Hangs bleached and dyed strands on lines to air dry. Arranges and combs strands to blend them to specified hue and grade. May wash and soak hair in acid and soda solutions to thin hair and burn roots, preparatory to making theatrical hair pieces.
GOE: 06.02.32 STRENGTH: L GED: R3 M1 L1 SVP: 7 DLU: 77

739.384-022 VENTILATOR (fabrication, nec)

Fastens human hair to foundation material to make wigs: Arranges specified strands of hair between cards equipped with rows of wire teeth. Pulls several strands through teeth of card, cuts ends even, and forms loops in ends. Hooks strands in holes of foundation (on head model) with ventilating needle (similar to fine crochet needle) and knots them to fasten hair securely. Cuts off uneven ends protruding beyond knots and repeats operations until wig is completed according to sample or instructions. Combs out hair when wig is finished. May be designated according to area of wig worked on as First Front Ventilator (fabrication, nec); Part Maker (fabrication, nec).
GOE: 06.02.32 STRENGTH: S GED: R3 M1 L1 SVP: 5 DLU: 77

739.387-010 CASKET INSPECTOR (fabrication, nec)

Examines assembled caskets visually and tactually to determine their conformance to specifications: Inspects casket lining for irregularities, such as faulty design, discoloration of material, unconcealed tacks, and bulges in padding. Opens and closes top panel to determine presence of obstructions. Blows out inside and outside of casket to remove dust, using compressed air gun. Inspects casket exterior for defects, such as torn covering, nicks, spots, incompleteness, misalignment, and imperfect finish. Keeps rejection records, noting such factors as number of units inspected, number of units rejected, and reason for rejection. Removes spots from lining and cover with solvent. Identifies types of defects and returns caskets to workers for correction. May touch up scratches, using felt tip pen, and steam wrinkles from casket lining, using portable steamer.
GOE: 06.03.01 STRENGTH: L GED: R3 M1 L1 SVP: 5 DLU: 77

739.387-014 HAIR-SAMPLE MATCHER (fabrication, nec) alternate titles: hair blender; hair mixer

Selects strands of human hair and blends them to match customer's hair preparatory to making hair piece: Selects strands from stock according to texture, shape, type, color, and composition of customer's natural hair. Arranges and combs strands to match variations in natural hair caused by graying, bleaching, or dyeing. Weighs and ties hair with string.
GOE: 05.05.15 STRENGTH: S GED: R3 M2 L1 SVP: 5 DLU: 77

739.484-010 CHRONOGRAPH OPERATOR (ordnance) alternate titles: ballistics tester

Measures velocity of projectiles fired from various types and sizes of weapons to determine performance of weapon or ammunition, using chronograph: Loads and aims weapon and fires projectile through electron-beam screens that activate chronograph. Converts chronograph reading of elapsed time to velocity in feet-per-second, using reference charts. Records data on inspection forms and calculates average velocity of projectiles tested.
GOE: 06.03.01 STRENGTH: L GED: R3 M3 L3 SVP: 3 DLU: 77

739.484-014 FIRE-EQUIPMENT INSPECTOR (any industry)

Inspects, tests, and repairs conduits and fire-fighting equipment to secure property against fires: Turns valves to force water through lines to test them for leaks, breaks, and stoppage. Replaces and repairs defective sections of hoses and pipelines, using handtools. Inserts wire rod in hose of fire extinguishers to remove stoppages. Tests and cleans fire extinguishers and recharges them with solvents, sulfuric acid, carbon tetrachloride and chemicals [FIRE-EXTINGUISHER REPAIRER (any industry)]. Maintains inventory of equipment and fills out inspection tags and reports. Reports unsatisfactory conditions to FIRE MARSHAL (any industry). May repair gas masks. May service and drive firetruck. May test for presence of gases, using gas scope or explosive meter.
GOE: 05.07.01 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 77

739.484-018 SMOKING-PIPE REPAIRER (any industry)

Repairs pipes and cigar and cigarette holders according to customer's specifications, using lathe: Fits rubber or plastic mouthpiece blank in lathe chuck. Guides tools against revolving blank to drill and ream airhole and to turn end of blank to fit pipe or holder. Carves blank with scraper or presses blank against grinding and buffing wheel to shape mouthpiece according to customer's specifications. Heats pipe stem over flame to bend stem to specified angle. Cuts threads on stem and pipe shank, using tap and die. Repairs broken or cracked shanks with cement, metal bands, or screws.
GOE: 05.10.01 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

739.587-010 INSPECTION CLERK (fabrication, nec) alternate titles: roll-up helper

Records pattern and color defects and quality of hard-surface floor covering as directed by INSPECTOR (fabrication, nec) II and labels finished goods: Records yardage and defects on inspection record sheet. Cuts out defective sections of floor covering, using knife. Records shade and yardage on ticket for each piece of material cut from roll. Adjusts controols that actuate and position grade indicator to mark section of material specified by INSPECTOR (fabrication, nec) II. Affixes label to remnant roll of floor covering to indicate such information as number of pieces in roll and yardage of each piece. Attaches labels to packaged floor covering.
GOE: 06.04.37 STRENGTH: H GED: R3 M3 L2 SVP: 4 DLU: 77

739.664-010 CANDLEMAKER (fabrication, nec)

Forms candles according to one of following methods: (1) Strings wicks through notches or rings of dipping frame, according to length of candle to be formed. Dips wicks manually or with aid of motorized mechanism into vat of molten wax mixture to build up candles to specified circumference. Cuts or trims candles to specified sizes, using knife or hand die. Grades candles according to type, color, and size. (2) Inserts wick through center of molds and attaches ends to racks. Pours molten wax mixture into molds, using container or opens valves to admit wax into molds. Adjusts steam and coolant valves to maintain prescribed thermometer reading in mold. Turns handcrank of ejection mechanism to release candles from molds into rack after specified time. Scrapes remaining wax from molds, using handtools. May record production data, such as name, color, and quantity of candles. May add color ingredients to molten wax, according to specifications.
GOE: 06.04.32 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

739.667-010 SPOT PICKER, MOLDED GOODS (fabrication, nec) alternate titles: spot picker

Inspects and patches designs on linoleum and related floor coverings: Examines floor covering to detect pattern defects as floor covering passes over repair table. Removes spots of misplaced color, using tweezers. Builds up low spots, covers empty spaces, and corrects lines in designs on floor covering, by patting and rubbing in matching color mix, using fingers or spatula. Removes excessive color, using scraper. Usually works as member of team.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

739.684-010 ARTIFICIAL-CANDY MAKER (fabrication, nec) alternate titles: novelty-candy maker

Carves, molds, or assembles imitation candy made from wood, plaster of paris, or styrofoam for use as display items: Shapes material to resemble candy by sculpturing in wood or by casting plaster in molds prepared by other workers. Paints pieces to resemble candy coloring, using spray gun. Applies decorations with glue, according to design.
GOE: 06.02.32 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

739.684-014 ARTIFICIAL-FLOWER MAKER (button & notion) alternate titles: flower arranger; foliage arranger

Cuts out and assembles materials, such as fabric, wood, and paper, performing any combination of following tasks to make artificial foliage, such as flowers, wreaths, and trees: Cuts out flower parts, such as leaves and petals from paper, fabric, or plastic, using handtools, such as scissors, knives, hammers, and dies. Stamps out flower parts with hand-operated or power-driven machine. Places roll of material on spindle of machine that automatically forms artificial-flower stems. Prints veining on artificial leaves, using stamps and handpress. Dips flowers into specified dye and squeezes out excess dye, using hands. Fastens twigs and buds to steel wire to form branches by hand or using twisting machine. Wires or glues flower parts to stem or branch. Fastens artificial flowers and foliage to wreath stand and inserts cones and grass decorations to form artificial wreath. May wrap stems with green and brown paper to effect natural appearance. May be designated according to product produced as Wreath And Garland Maker, Hand (button & notion); or shape artificial flower petals from fabric, using tweezers, heated metal ball, and wooden form, and be designated Petal Shaper, Hand (button & notion).
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

739.684-018 BROOMMAKER (fabrication, nec) alternate titles: winder

Fabricates brooms from broomcorn fibers, using one of following methods: (1) Inserts and clamps broom handle in winder (rotating vise). Threads end of wire from reel through hole in handle and nails, ties, or staples wire to handle. Places layers of fiber onto handle and depresses pedal to rotate handle to wrap wire around fiber. Spreads fibers around under wire as winder turns. Trims excess fiber around each layer, using knife. Hooks leather strap around body of broom to secure it while winding subsequent layers. Pounds fibers to pack and shape broom shoulders, using mallet. Wraps and fastens wire around neck of broom handle with stapler. Weighs brooms on scales to verify conformance to standard. (2) Gathers cut and graded broomcorn into bundle according to size required for broom. Inserts broom handle into plastic cone and staples cone to broom handle, using stapling machine. Dips base of broomcorn bundle in pot of hot tar, inserts base into cone, flattens cone and broomcorn into fan-flare shape, using vise. Staples cone to broomcorn, using stapling machine, and stacks brooms for further processing. May pull broom through stemmer (comb-like device) to remove coarse or short fibers.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

739.684-022 BRUSH MATERIAL PREPARER (fabrication, nec)

Prepares hog bristles and other brush-filling materials, such as horsehair, cotton, and vegetable fibers for use in brushes: Aligns bristles, to ensure that flagged ends are together, and discards defective bristles. Ties bundle of bristles to prevent bending and places it in rack. Uses hoist to lower rack of bundles into vat of boiling water to remove natural curl of bristle. Removes rack after specified time and places it on dolly or in oven to dry. Places bundle of bristles in carton and labels carton according to length, origin, grade, and color of contents or spreads bristles in rows on tray for mixing and blending operations. Prepares other brush filling materials by straightening, combing, cutting, and sizing them according to type of material and intended use. Holds bundle of material against grinding wheel to flag ends, to trim butt ends, and to polish material. Selects filling material according to formula and lays it on workbench in prescribed manner prior to processing by mixing machine. May pack material in carton. May place bristles in sterilizer to kill germs. May dye bristles specified color, using dyeing vat. May shape, soften, and clean bristles, using machines that cut, split, and grind bristles.
GOE: 06.02.32 STRENGTH: M GED: R2 M1 L1 SVP: 5 DLU: 77

739.684-026 BUFFER (fabrication, nec) alternate titles: polisher; tripoler

Polishes parts of assembled smoking pipes: Secures buffing wheel on machine arbor, using wrench. Dips part into polishing compound or applies compound with fingers. Starts machine and guides part against rotating wheel, causing pressure to impart luster and seal pores of briar. May be designated according to part of pipe polished as Bit Tripoler (fabrication, nec); or according to compound used as Lacquer Polisher (fabrication, nec); Shellac Polisher (fabrication, nec).
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 78

739.684-030 BUFFING-AND-POLISHING-WHEEL REPAIRER (any industry) alternate titles: buff-wheel fabricator; disk recoater; polishing-wheel repairer

Repairs cloth buffing and polishing wheels, using handtools, standard charts, sewing table, and arbor press: Clamps worn wheel in steam cleaning machine to remove abrasives and bonding materials. Dismantles cleaned wheels, using handtools, and salvages cloth inserts depending upon size and condition. Assembles buffing and polishing wheels according to standard charts, by pressing cloth and spacers on wheel shaft, using arbor press. Mounts assembled wheel in mounting lathe to turn wheel surface to specified shape. Sprays or brushes abrasive bonding material on surface of polishing wheel and places it in oven to dry. Reshapes polishing wheels by recoating with specified abrasive bonding material. May mount completed polishing and buffing wheels on machine.
GOE: 06.04.34 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

739.684-034 CASE FINISHER (leather prod.) alternate titles: case assembler; instrument-case finisher; leather-case finisher

Assembles and finishes suitcases and radio, jewelry, and instrument cases, and lines or covers them with material, such as leather, velvet, or satin, performing any combination of following tasks: Inserts hinge wings into slots in top and bottom sections of case and secures them in grooves, using pinch pliers, or cements, nails, or screws hinges in position. Opens case and verifies lid angle, using tailor gauge. Cuts specified material to size, using pattern and shears, or obtains precut fabric. Brushes glue on area to be covered. Positions material on inner or outer surfaces of case and smooths out wrinkles, using fingers. Trims excess fabric from joints, seams, and edges, using knife. Glues or nails hardwood blocks to case and covers blocks with material. Presses cushion to pad and upper and lower sections of case. Examines case for misalignment of edges, and opens and closes lid to test action of hinges and spring. Holds vacuum nozzle over case and presses pedal to remove dust and lint. Packs cases in shipping carton. May crimp lids to case or crimp bottoms to case frame, using pneumatic-powered crimper. May repair or replace hinges, linings, and springs and be designated Case Repairer (leather prod.).
GOE: 06.04.27 STRENGTH: L GED: R3 M2 L2 SVP: 2 DLU: 80

739.684-038 CLIP-AND-HANGER ATTACHER (glass products)

Attaches clamps, clips, and hangers to precut fiberboard backing for mirrors, using handtools, power-driven tools, and riveting machine: Places backing on table. Marks location of clamps, clips, or hangers, using tape measure, template, and pencil. Drills holes at marked locations with electric hand drill. Attaches clamps, clips, or hangers to backing, using pneumatic screwdriver. Attaches hanger brackets to backing when mirrors are to be attached to furniture, using riveting machine and handtools. Places gummed felt pads over exposed screwheads and rivets to protect mirror finish. Glues hanging instruction labels to back. Stacks completed mirror backs on pallet.
GOE: 06.04.34 STRENGTH: L GED: R2 M2 L2 SVP: 4 DLU: 77

739.684-042 CURTAIN-ROLLER ASSEMBLER (furniture)

Assembles curtain rollers for use in window curtains: Slips and attaches metal spring over shaft. Slides assembly into tube and plugs end with fiber insert. Rivets small lever to ratchet plate to hold wound curtains in place. Drills holes and slots in retaining rods, using drill press.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

739.684-046 DECORATOR (leather prod.) alternate titles: hardware assembler

Attaches metal findings onto leather to decorate articles, such as belts, gloves, and handbags, using either of following methods: (1) Positions template on precut leather article. Punches holes in leather, following markings on template, using hammer and punch. Inserts findings, such as buttons, locks, and ornaments, into holes and clinches findings, using hammer and prying tool. (2) Brushes cement onto fittings, positions fittings on premarked leather article, and presses fittings to leather.
GOE: 06.04.27 STRENGTH: L GED: R2 M2 L1 SVP: 2 DLU: 77

739.684-050 DEICER ASSEMBLER, ELECTRIC (rubber goods)

Assembles precut rubberized fabric, gum-rubber ply stocks, and wiring elements to make electric deicers for airplanes: Determines location for rubber ply (layers) stock and wiring elements on building form, following guidelines on form or using template and blueprints. Positions rubber ply stocks and element in specified sequence on building form, and secures them in place with rubber cement. Solders wire element connections at specified locations. Compresses assembled ply stocks with roller to remove wrinkles and promote adherence. Cuts and cements strips of gum rubber around wires for insulation and reinforcement. Trims excess ply stock from assembled deicer with knife. May verify electrical resistance of deicer by clamping deicer lead wires to testing device. May cover deicer with nylon blanket and tape it to building form (preparatory to curing). May assemble pneumatic deicers and be designated Deicer Assembler, Pneumatic (rubber goods).
GOE: 06.02.22 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

739.684-054 DEICER FINISHER (rubber goods)

Solders thermostats and terminal connections on airplane deicers to complete assembly: Solders thermostats and terminal connections to lead wires of deicer, using electric soldering iron. Measures and cuts gum rubber strips to reinforce lead wires. Buffs rubber ply (layer) around lead wires of deicer, using portable electric buffer. Slips lead boss (molded rubber cover) onto lead wires, and secures lead boss to deicer with gum rubber strips. Presses gum rubber strip together with fingers to induce adherance. Cures gum rubber strips on deicer, using spotcuring press.
GOE: 06.04.34 STRENGTH: L GED: R2 M2 L2 SVP: 4 DLU: 77

739.684-058 DEICER-ELEMENT WINDER, HAND (rubber goods) alternate titles: heating-element builder

Constructs electric heating elements for airplane deicers: Measures and cuts base stock for element from rubberized fabric to fit specified jig. Positions base stock on jig and secures stock with jig bar. Lifts reel of specified wire to letoff rack and clamps end of wire to jig by turning setscrew. Threads wire between poles of jig following specified pattern. Pushes wires down to base of poles, and tightens expansion screw on jig to remove slack from wires, using handtools. Brushes flux on wires to clean them preparatory to soldering. Solders parts, such as *bus bars*, jumper and lead wires, to element to make specified electrical circuit. Examines element to ensure that solder joints are secure. Cements precut sections of rubberized fabric cover stock over wires with rubber cement, and presses them together, using roller. Trims excess base and cover stock from edges of element with knife. May clamp formed element to testing device to verify electrical resistance.
GOE: 06.02.32 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

739.684-046 DECORATOR (leather prod.) alternate titles: hardware assembler

Attaches metal findings onto leather to decorate articles, such as belts, gloves, and handbags, using either of following methods: (1) Positions template on precut leather article. Punches holes in leather, following markings on template, using hammer and punch. Inserts findings, such as buttons, locks, and ornaments, into holes and clinches findings, using hammer and prying tool. (2) Brushes cement onto fittings, positions fittings on premarked leather article, and presses fittings to leather.
GOE: 06.04.27 STRENGTH: L GED: R2 M2 L1 SVP: 2 DLU: 77

739.684-050 DEICER ASSEMBLER, ELECTRIC (rubber goods)

Assembles precut rubberized fabric, gum-rubber ply stocks, and wiring elements to make electric deicers for airplanes: Determines location for rubber ply (layers) stock and wiring elements on building form, following guidelines on form or using template and blueprints. Positions rubber ply stocks and element in specified sequence on building form, and secures them in place with rubber cement. Solders wire element connections at specified locations. Compresses assembled ply stocks with roller to remove wrinkles and promote adherence. Cuts and cements strips of gum rubber around wires for insulation and reinforcement. Trims excess ply stock from assembled deicer with knife. May verify electrical resistance of deicer by clamping deicer lead wires to testing device. May cover deicer with nylon blanket and tape it to building form (preparatory to curing). May assemble pneumatic deicers and be designated Deicer Assembler, Pneumatic (rubber goods).
GOE: 06.02.22 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

739.684-054 DEICER FINISHER (rubber goods)

Solders thermostats and terminal connections on airplane deicers to complete assembly: Solders thermostats and terminal connections to lead wires of deicer, using electric soldering iron. Measures and cuts gum rubber strips to reinforce lead wires. Buffs rubber ply (layer) around lead wires of deicer, using portable electric buffer. Slips lead boss (molded rubber cover) onto lead wires, and secures lead boss to deicer with gum rubber strips. Presses gum rubber strip together with fingers to induce adherence. Cures gum rubber strips on deicer, using spotcuring press.
GOE: 06.04.34 STRENGTH: L GED: R2 M2 L2 SVP: 4 DLU: 77

739.684-058 DEICER-ELEMENT WINDER, HAND (rubber goods) alternate titles: heating-element builder

Constructs electric heating elements for airplane deicers: Measures and cuts base stock for element from rubberized fabric to fit specified jig. Positions base stock on jig and secures stock with jig bar. Lifts reel of specified wire to letoff rack and clamps end of wire to jig by turning setscrew. Threads wire between poles of jig following specified pattern. Pushes wires down to base of poles, and tightens expansion screw on jig to remove slack from wires, using handtools. Brushes flux on wires to clean them preparatory to soldering. Solders parts, such as *bus bars*, jumper and lead wires, to element to make specified electrical circuit. Examines element to ensure that solder joints are secure. Cements precut sections of rubberized fabric cover stock over wires with rubber cement, and presses them together, using roller. Trims excess base and cover stock from edges of element with knife. May clamp formed element to testing device to verify electrical resistance.
GOE: 06.02.32 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

739.684-062 FINISHER, BRUSH (fabrication, nec)

Finishes brushes, performing any combination of following tasks: Holds wooden brush surface against sanding wheel and buffer to sand and polish brush heads and handles. Trims, tapers, and shapes brush-filling material according to prescribed standards by pushing brush over rotary trimmer, feeding it into trimming machine, or holding brush over blades of clipping machine. Removes dust and loose filling material by placing brush in centrifugal cleaning machine, holding it against cleaning brush, or feeding it into combing machine. Dips brush handle in varnish or lacquer or sprays handle with varnish or lacquer and hangs it on rack to dry. Paints identifying stripes on brush handle. Examines brush for conformity to job specifications and defects and makes corrections, such as retouching varnished or lacquered surface and hand-trimming filling material. Repairs cracked handles and bent ferrules. Separates and reroutes brushes that cannot be repaired to corrective work station. May flatten ferrule, using press machine, and nail band or ferrule to brush. May attach handle to brush.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

739.684-066 FOOT-MITER OPERATOR (wood prod., nec) alternate titles: hand-miter operator

Miters and cuts molding stock for picture frames to specified length and angle, using miter knife: Turns screws to adjust feed guides to width of molding and to adjust stop that measures molding for cutting. Turns handwheel to raise or lower miter bars that protect edges from splintering. Inserts molding between guides and depresses foot treadle or pulls hand lever to lower knife that cuts one end of stock at 45 degree angle. Places molding against stop and under second blade that cuts other end to specified length and 45 degree angle. May make several cuts with knife to complete full cut of thick stock.
GOE: 06.04.25 STRENGTH: L GED: R2 M2 L1 SVP: 2 DLU: 77

739.684-070 FORM COVERER (fabrication, nec)

Fits and fastens cloth covering on papier mache bust or mannequin forms: Selects cover according to size of bust of mannequin. Pulls cover over form, smoothing and fitting it manually. Tacks and pastes end of cover to inside of torso openings. Slits cover at arm and neck openings, and pastes cover to edges of openings.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

739.684-074 FRAME REPAIRER (glass products)

Repairs surface defects in plastic mirror frames and mirrors: Examines frame or mirror to detect defects, such as rough edges, cracks, and blisters on frame and scratches on mirror. Unscrews brackets holding mirror within frame, using pneumatic screwdriver, and removes mirror from frame. Clamps frame in vise to hold frame in position for repair. Fills cracks in frame with putty. Sands and touches up defective area, using sandpaper and paint. Trims rough edges from frames with wire cutters. Hand buffs scratched area on mirrors, to remove scratches, using felt block and polishing compound. Reassembles repaired mirrors and stacks nonrepairable items aside.
GOE: 06.04.34 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

739.684-078 FRAMER (glass products; wood prod., nec)

Installs mirrors or pictures in wooden, plastic, or metal frames, performing any combination of following tasks: Assembles frames from precut material and glues, nails, screws, or staples material together, using clamps, handtools, and power tools. Places glass, picture, or mirror into frame. Inserts wooden strips between mirror and frame or covers mirror edge with stripping to secure mirror in position. Positions backing, such as corrugated paper or cardboard, over back of picture or mirror. Staples backing to frame or locates and marks points on backing where hangers are to be placed, using ruler and pencil. Drills holes with portable electric drill and bolts or screws hangers to mirror backing. Places mirror backing in frame and attaches backing to mirror frame, using clips, screws, staples, and handtools. Bolts wings to frame to form border of shadow-box mirrors. May mount picture on mat before framing. May perform all operations of cutting, shaving, and drilling to prepare frame parts from stock molding according to customer or company specifications. May pack mirrors or pictures for shipment.
GOE: 06.04.34 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 77

739.684-082 FURNITURE ASSEMBLER-AND-INSTALLER (retail trade)

Uncrates, assembles, installs, and repairs furniture and office equipment in customers' homes or offices: Uncrates and assembles items, using handtools. Repairs and paints dents and scratches in metal or wood. Cleans, repairs, and replaces safe and file drawers, locks, catches, and slides. May repair or replace damaged vinyl or fabric upholstery material, using handtools, patching, needle, and thread.
GOE: 05.10.01 STRENGTH: H GED: R3 M2 L1 SVP: 4 DLU: 77

739.684-086 HAIR WORKER (fabrication, nec) alternate titles: hackler

Combs, sorts, and prepares human or synthetic hair for making wigs, switches, and hair pieces: Pulls loose strands of hair across teeth of stationary comb to remove tangles. Separates hair strands according to length and ties them in groups. Washes human hair with soap and water and dries it in oven. Throws ends of hair against hackle (steel-bristled brush) and pulls hair through teeth to disentangle and straighten strands; places hair between cardboard sheets with ends protruding. Removes hair roots by brushing ends with brush containing row of needles. May mix various shades of hair to obtain routine blends.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 5 DLU: 77

739.684-090 HANDBAG FRAMER (leather prod.) alternate titles: framer

Attaches hinged metal frames to leather or fabric handbags: Spreads grooves in frame, using automatic opening device or pliers. Brushes cement into grooves. Trims edges and corners of bag fabric, using scissors. Clamps frame in frame-tightening device, and pushes edges and corners of bag into grooves with fingers and punch. Depresses pedal of tightening device to pinch sides of grooves around edges and corners of bag fabric. May record production. May be designated according to type of handbag framed as Coin-Purse Framer (leather prod.); Pocketbook Framer (leather prod.); Purse Framer (leather prod.).
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

739.684-094 LAMP-SHADE ASSEMBLER (fabrication, nec)

Performs any combination of tasks involved in assembly of lampshades and lampshade collars: Applies glue to edges of shade fabric and backs of shade attachments, such as collars, ornaments, and trimmings. Folds glued edges of fabric around wire frame, and presses attachments onto fabric. Secures shade to frame by stringing cord through shade perforations and lacing cord around frame rings. Tapes edges of parchment shades to prevent tearing of parchment. Places pattern over shade skirt, marks points of attachment on skirt, and staples skirt to shade. Rubs various colored paints on inner and outer surfaces of paper and parchment shades to produce antique finish, using rubber sponge. May heat seams in press to set glue.
GOE: 06.04.23 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

739.684-098 LAST IRONER (wood prod., nec) alternate titles: ironer

Fits and nails steel plates to bottoms of wooden or plastic shoe lasts: Straps last to ironing jack (holding device) and positions steel sole and heel plates of specified size on bottom of lasts. Nails steel plates to last bottoms and shapes plates to contour of last, using hammer. Files edges of last bottoms and steel plates to form smooth, flush edges.
GOE: 06.04.27 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

739.684-102 LAST MARKER (wood prod., nec)

Positions paper shoe last pattern of specified size and style on bottom of wood last turning and draws outline around pattern for LAST TRIMMER (wood prod., nec).
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

739.684-106 LAST REMODELER-REPAIRER (boot & shoe; wood prod., nec) alternate titles: remodeler

Remodels and repairs out-of-style, worn, or damaged shoe lasts, performing any combination of following tasks: Saws kerfs into specified areas of last toe, applies glue, and hammers wedges of last material into kerfs to build up toe area. Saws, files, and sands toe of last to specified shape, using handtools and portable sanders. Drills holes in splintered areas of lasts, using electric drill. Brushes glue on wood or fiber pegs and hammers pegs into holes in last. Cuts pegs off at surface of last, using handsaw or powered saw. Verifies shape, using templates and sole patterns. Replaces worn or damaged hardware and trim on last, such as hinge pins, hinges, thimble sleeves, fiber and leather heel trim, or rubber tack holders, using handtools and powered bench tools. Sands varnish from last and dips or sprays last with varnish to refinish. Polishes last, using power buffer. Paints identifying stripes on last according to specified code. May stamp style, size, and width numbers on last.
GOE: 05.10.01 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

739.684-110 LAST REPAIRER (boot & shoe; wood prod., nec)

Repairs shoe lasts: Drills holes in splintered areas of wooden last, using electric drill. Brushes glue on wood or fiber pegs, and hammers pegs into holes in last. Cuts pegs off at surface of last, using handsaw or powered saw. Files repaired area of last with hand file to smooth surface. Patches holes and cracks in defective plastic lasts, and smooths patched or rough areas, using sanding wheel or file and sandpaper. May stamp style, size, and width numbers on last.
GOE: 06.04.25 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

739.684-114 LAST-REPAIRER HELPER (boot & shoe)

Removes and replaces worn cords that join blocks and lasts. Glues on thin patches of leather at designated points to build up lasts. Nails heel plates to lasts that clinch tacks driven through upper and insole during shoe construction. Fills tack holes and grooves around bottom of last with plastic wood, using putty knife.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

739.684-118 MANNEQUIN MOUNTER (fabrication, nec) alternate titles: balancer

Attaches arms, legs, and pedestals to display form bodies: Trims openings with knife to fit socket blocks. Tacks block in opening. Sets arm or leg in place in socket block. Inserts pedestal into cavity of bust form and tacks form to pedestal. Sets form on workbench between aligning bars. Aligns bust form with bars to balance it and nails form to pedestal.
GOE: 06.02.22 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

739.684-122 MANNEQUIN SANDER AND FINISHER (fabrication, nec) alternate titles: paper finisher

Smooths, patches, paints, and corrects contour defects in papier mache and plastic mannequins: Removes waves with metal rasp and smooths surfaces with sandpaper or power sander. Fills holes with plaster. Builds up surface of mannequin, using plaster, paper, burlap, and cement. Brushes plaster over mannequin surface, sandpapers it to smooth finish, and sprays it with flesh-colored lacquer.
GOE: 06.02.32 STRENGTH: L GED: R3 M1 L1 SVP: 3 DLU: 77

739.684-126 MAT CUTTER (wood prod., nec)

Cuts materials to form bordering frames (mats) for pictures: Measures and marks materials, such as matboards, fabrics, or paper according to size and width of picture. Inserts material in holding device and cuts with knife or razor blade to form bordering frame. May cut backing board to size, using knife or saw.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

739.684-130 MOUNTER, SMOKING PIPE (fabrication, nec)

Assembles bits and stummels of smoking pipes by one of following methods: (1) Reams hole in shank, using reamer. Inserts tenon end of bit into hole and aligns mouthpiece with pipe bowl, using hands. May insert filter. (2) Places filter in shank, secures bit in chuck, and starts machine to screw bit into shank. Removes pipe from machine. Tightens bit and aligns mouthpiece with pipe bowl, using wrench.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

739.684-134 NEEDLE-BOARD REPAIRER (tex. prod., nec) alternate titles: needle setter

Repairs needle board by replacing defective needles: Positions needle board on repair rack or bench. Pulls out dull, broken, or bent needles with pliers. Reverses board and inserts new barbed needles into drilled holes and hammers them tight. May prepare new needle boards by inserting needles according to specified pattern.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

739.684-138 OIL-SEAL ASSEMBLER (leather prod.)

Assembles oil seals by placing and positioning specified number of metal, leather, and rubber parts in specified sequence in metal case, using fingers and handtools: Arranges and stacks parts on workbench. Inspects and discards parts having defects, such as scratches and burs. Inserts and aligns parts in metal case, following specified sequence. Records number of oil seals assembled and stacks them in pan. May position springs around periphery of parts, using handtool. May examine oil seal after crimping and closing in press for exterior defects as cuts and nicks.
GOE: 06.04.23 STRENGTH: S GED: R2 M2 L2 SVP: 3 DLU: 77

739.684-142 PAINT-ROLLER COVERMAKER (fabrication, nec)

Performs any combination of following tasks in fabricating paint roller covers: Cuts material to shape for use in making roller covers, following pattern and using handtools. Flattens stitching in lambskin material with hand flattener to produce smooth surface. Combs nap of material, bevels ends, and shaves nap, using beveler or shear machine, to provide uniform size and form to cover. Feeds material into machine that cuts material to specified length. Feeds material into machine that reverses fabric and inserts and glues tube into fabric or glues and inserts core (tube) into lambskin material to fabricate paint roller cover.
GOE: 06.02.32 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

739.684-146 PICTURE FRAMER (retail trade; wood prod., nec) alternate titles: fitter

Frames pictures in custom-made or stock frames: Mounts picture on backing, using glue. Cuts mounted picture to fit frame, using papercutter or power saw. Cuts glass to fit frame, using glass-cutting tool. Cleans glass and places it in upturned frame. Places picture on top of glass. Cuts piece of cardboard to fit frame, and places it on back of picture. Pushes or taps brads into frame or uses stapler to staple picture in place. Glues paper cover to back of frame. Attaches screw eyes and wire to frame, using handtools or staple gun. May frame oil paintings that do not require glass fronts or paper covers. May repair and redecorate old or broken frames.
GOE: 01.06.02 STRENGTH: L GED: R3 M1 L1 SVP: 5 DLU: 77

739.684-150 SCREEN MAKER (paper goods)

Builds printing screens used to reproduce designs on wallpaper: Cuts and assembles wood or metal frames of specified dimensions for printing screens, using saw, miter box, and other handtools, or fits together screen frame from precut and pregrooved parts. Clamps frame to screen stretcher and lifts bolt of specified screening material to letoff rack. Pulls screening material over frame and secures edges of screening on anchor pins of screen stretcher. Turns adjustment wheels on screen stretcher to stretch and straighten screening. Examines and feels screen to determine straightness and tension. Staples or glues screening materials to frame.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

739.684-154 TICKET-CHOPPER ASSEMBLER (furniture)

Assembles prefabricated components of ticket choppers: Fits and aligns parts, such as legs, sides, doors, and chopper, by riveting, screwing, or otherwise fastening parts together. Marks holes to be drilled and bores them, using power drill. Secures parts with rivets, and flattens rivet ends with hammer. Screws chopper and handwheel to partially assembled box. Places glass panes in grooves in front and on top of box. Attaches locks, hinges, and other hardware to completed box, using rivets and hammer.
GOE: 06.04.22 STRENGTH: M GED: R2 M1 L2 SVP: 5 DLU: 77

739.684-158 TIRE MOUNTER (fabrication, nec) alternate titles: tire assembler

Assembles hard rubber tires and wheel rims for articles, such as lawn mowers and baby carriages: Places rubber tire into jaws of spreading device and depresses pedal to close jaws and stretch tire. Positions wheel rim on spindle mandrel at center of tire. Pushes button to open jaws that release tire onto rim and removes wheel from spreading device.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

739.684-162 UMBRELLA TIPPER, HAND (fabrication, nec) alternate titles: framer; tacker

Handsews umbrella covers to frames: Tacks cover to ribs along seams and sews corners to tip of rib. Sews ties to outside of cover to hold umbrella when folded.
GOE: 06.04.27 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

739.684-166 VENETIAN-BLIND ASSEMBLER (furniture; retail trade)

Assembles aluminum, plastic, and nylon parts to form venetian blinds, using handtools and power tools: Installs cord lock, cord drum cradle, worm gear, and braces in position within head (top) portion of venetian blind, using pedal-operated riveter or press and handtools. Attaches tapes and cords. Places required number of slats through loops in tape and threads cord through holes in slats. Trims and fastens end of tape to bottom rail. Places caps on bottom rail to close ends and secure tape in position. Pulls lowering, raising, and tilting cords to detect and adjust functioning defects. Wraps and packs blinds for shipment. May tend power press to form and cut slats, head, and hardware attached within head. May assemble shades with vertical louvers and be designated Vertical-Shade Assembler (furniture).
GOE: 06.04.22 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 77

739.684-170 WEAVER (fabrication, nec) alternate titles: mounter; weft maker

Interlaces hair strands in prescribed sequence, using weaving fixture, and sews weft (woven piece) to mounting cord to make hair pieces, such as switches and braids: Attaches threads of designated color and texture to rods and pegs of weaving fixture. Turns pegs to tighten threads. Cuts strands from tuft of matched hair, using scissors and interweaves root ends around and between threads in prescribed sequence. Pulls strands straight and weaves successive strands to complete weft. Cuts and knots thread ends. Fastens mounting cord of specified color to hub of mounting reel and turns reel handle to wind cord. Hand sews free end of cord to end of weft with matching thread. Turns mounting reel to twist weft seam around cord. Loops end of cord and sews remaining seam to loop, folding seam at intervals to smock (gather) hair.
GOE: 06.02.32 STRENGTH: S GED: R2 M1 L1 SVP: 4 DLU: 77

739.684-174 WOODEN-SHADE HARDWARE INSTALLER (furniture)

Installs draw cord and pulley hardware to complete assembly of wood indoor or porch shades: Places shade on table and measures length and width of shade to verify dimensions. Lays out and drills holes for lock pulley and screw eyes on wooden shade mounting strip, using pencil, ruler, and hand or power drill. Screws lock pulley and screw eye into place and threads draw cord through pulley to screw eye to complete assembly. Packs shade in box for shipment.
GOE: 06.02.22 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 77

739.684-178 WOVEN-WOOD SHADE ASSEMBLER (furniture)

Assembles woven-wood shades, performing any combination of following tasks: Cuts woven-wood material to specified length and width, using scissors or razor blade. Verifies length of shade material with tape measurer, applies glue to bottom slats of shade material, rolls slat over, and clamps slats with hand clamp to allow glue to dry and form hem or valance. Attaches headrail to top of shade material, using handtools, pneumatic stapler, and portable electric drill. Cuts specified design along bottom of shade material or valance and attaches fringe to cut portion, using shears and glue. Installs pulley in headrail, using handtools, cuts cord with knife, and threads cord through shade and pulleys to complete assembly of shade. Pulls cord to cause movement of shade to detect and adjust functioning defects. Examines damaged shades to determine extent of damage and repairs damage, using handtools, tape, glue, and needle.
GOE: 06.02.27 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 77

739.684-182 WREATH AND GARLAND MAKER (fabrication, nec)

Assembles wreaths and garlands, using conifer boughs and artificial decorations: Cuts conifer boughs to length, using pruning shears, and sorts them according to shade of color. Ties boughs to garland cord or circled wreath form with wire, spacing boughs to attain uniform appearance. Attaches specified decorations, such as holly, artificial berries, glass balls, and ribbon.

GOE: 06.04.23 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

739.684-186 PIPE STEM REPAIRER (fabrication, nec)

Repairs or replaces defective pipe stems, using stem mounter, press, grinding wheel, and handtools: Inspects pipes to determine defects. Removes and replaces defective screw-stem assemblies, using screwdriver, glue, press, and stem mounter. Smooths ends of unlevel pipe bowl shank to eliminate cracks between shank and stem, using grinding wheel. Heats defective adjustomatic stems, inserts stems in pipe bowl shank, and twists stems, using pipe stem wrench, to adjust alignment of stem and bowl. Replaces broken push-bit stems, using press machine.
GOE: 06.04.34 STRENGTH: S GED: R2 M1 L1 SVP: 6 DLU: 86

739.684-190 CASKET ASSEMBLER (fabrication, nec) alternate titles: fitter

Assembles wooden caskets from preformed panels and moldings and attaches supplemental hardware: Nails and glues side, end, and bottom sections together to form casket body. Assembles preformed sections of top frame, using hammer, glue, clamping nails, and bar clamps. Locates and marks midpoint of top frame, using ruler and pencil. Glues and nails panelboard and brace block between sides at midpoint for reinforcement. Positions template over top edge of body or measures body with ruler to locate position of hinges and catches, and recesses positions, using hammer and chisel or portable router. Drills holes at specified locations, using portable power drill. Installs hardware, such as corners, handles, hinges, and catches, using hand or power screwdriver. Sands and planes edges between body, top frame, and top panel to form tight joint, using planer or portable sander. Attaches top panel to top frame, using hand or powered screwdriver. Measures, cuts, and attaches ornamental molding or beading to casket body, using saw, hammer, miter box, and ruler. Sets nailheads, using hammer and nail set. Fills cracks and nail holes with wood filler or plaster of paris by hand or with putty knife. Smooths joints and edges, using sandpaper and handtools. May cut or trim wood to specified size for use in assembly of casket, using cutoff saw. May be designated according to part of casket assembled as Body Maker (fabrication, nec); Cap Maker (fabrication, nec); Molding Fitter (fabrication, nec); Panel Fitter (fabrication, nec); Top-Frame Fitter (fabrication, nec); Top-Frame Maker (fabrication, nec).
GOE: 06.02.22 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 78

739.685-010 ASSEMBLER, FINGER BUFFS (tex. prod., nec)

Tends machine that forms finger buffs to lacings to produce fabric buffing wheels: Positions lacings over center guide of circular tray (form) and secures lacing with weight. Inserts *finger buffs* under points of lacing, using marks on tray as guides. Positions tray under ram of pressing machine and depresses pedal to lower ram that forces points of lacing into material. Removes assembled buffing wheel from tray. May tend pressing machine to press parts assembled by other workers, and be designated Lacing Presser (tex. prod., nec). May tend press to insert cardboard, wood, or metal cores in cloth buffing wheels, and be designated Core Inserter (tex. prod., nec).
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

739.685-014 BRUSH MAKER, MACHINE (fabrication, nec)

Tends machine that inserts and secures bristles into ferrule to form paint brush heads: Places bristles on feed belt and stacks ferrules in vertical feeding magazine. Starts machine, observes movement of bristles on belt, and taps bristles on belt with fingers to control level of bristles. Turns wheel to position specified amount of bristles for brush head and to facilitate placement of ferrule around bristles. Notifies supervisor when machine malfunction occurs. Verifies length of bristles in brush head, using gauge. Combs bristles with electric brush to straighten bristles and packs completed brush head in box.
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

739.685-018 BRUSH-HEAD MAKER (fabrication, nec)

Tends machine that glues brush bristles within ferrule to form brush head, using either of following methods: (1) Places specified weights of epoxy glue and acid in tank of pouring machine for mixing. Holds brush under machine spout that dispenses glue into ferrule to cover bristles to designated height and secure bristles in place. Places glued brush head into tray for drying. (2) Inserts brush base, of ferrule and bristles, in holes of machine table that rotates under glue head that dispenses glue into bristles in ferrule. Removes brush head and inserts plastic core into ferrule. Positions brush head in air-operated press that forces core into position within ferrule. Places brush head in drying rack and inserts rack into oven for curing and drying.
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

739.685-022 CLIPPER (fabrication, nec)

Tends rotary or lever-type machine that cuts brooms to specified length and removes rough fiber ends. Sets indicator gauge according to broom length specified, positions broom on turntable, and pushes table to feed edge of broom into rotating circular knife; or moves stop along scale on table to set machine according to length of broom specified, places broom on table against stop, and lowers blade by hand. May examine brooms and remove defective fibers or twine. May attach metal cap to handle tip, using hammer and nails. May sew brooms together at brush end with needle and thread, tie handles with twine, and wrap brooms in paper for shipping.
GOE: 06.04.09 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

739.685-026 MOP MAKER (tex. prod., nec) alternate titles: mop-machine operator

Tends broom-winding machine that attaches mopheads to handles: Places spool of wire or twine on wire holder and threads wire or twine through machine guides. Inserts mop handle into chuck of winding machine and turns handwheel to tighten chuck, securing handle in chuck. Threads wire or twine through hole in handle and ties wire or twine around handle by hand. Positions mop yarn around handle and depresses pedal to start machine that rotates handle and winds wire or twine around yarn strands, securing yarn to handle. Drives nail into handle and twists end of wire around nail, or ties twine with looping device to secure wound twine to handle. Removes mop from machine. May trim ends of yarn to even mophead. May tend machine that cuts yarn into lengths for use as mopheads [CUTTER (tex. prod., nec) 686.685-022]. May tend machine to bore holes in handles.
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 78

739.685-030 PAINT-ROLLER WINDER (fabrication, nec) alternate titles: spiral winder

Tends machine that winds and glues fabric on tubing to make paint rollers: Fills glue spreader reservoir. Turns thermostat control knobs to maintain glue at specified temperature or dips paint roller into glue to apply glue evenly to roller. Mounts tubing on power-driven machine spindles and starts machine to rotate tube. Turns valve to regulate flow of glue and to distribute it evenly over surface of rotating tube. Positions, holds, and feeds precut fabric against glued surface of rotating tube as fabric is spirally wound and glued on tube. Removes wound tube from machine spindles. May glue and trim fabric, using handtools to repair paint roller covers. May glue loose ends to paint roller covers, using gluing machine. May bevel ends of roller cover, using spindle beveling machine.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

739.685-034 SHANK THREADER (fabrication, nec)

Tends machine that cuts threads inside shank of smoking pipes. Places pipe bowl in holding fixture and starts machine threading device. Pushes shank against revolving tool of threading device that cuts threads inside predrilled shank hole. Removes pipe from holding device and examines threaded shank for conformance to standards.
GOE: 06.04.03 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

739.685-038 STACKING-MACHINE OPERATOR II (any industry)

Tends stacking machine that stacks metal or plastic plates or sheets to assemble laminated products, such as rotor cores or storage battery elements, or to form bundles for shipment: Places specified material into one or more feed magazines or holding devices of machine. Starts machine that counts and stacks specified number of pieces for each assembly or bundle. Places stack in basket or in magazine of machine for further processing. May insert spacers between bundles to form continuous stack.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

739.685-042 STEM-PROCESSING-MACHINE OPERATOR (fabrication, nec)

Tends bench machine that automatically fabricates pipestems for corncob pipes. Examines wooden dowels for cracks and chips, and discards defective dowels. Positions dowel in holding device of stem processing machine. Presses button to start machine that automatically shapes dowel to form pipestem, bores airhole in stem, and taps ferrule onto stem. May dip end of pipestem in glue, tap stem into pipe bowl, and apply decal to pipe bowl [ASSEMBLER, CORNCOB PIPES (fabrication, nec)].
GOE: 06.04.03 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

739.685-046 TAPPER, BIT (fabrication, nec)

Tends press that inserts bushing into end of smoking pipe bits which connects bit to shank. Places rubber bit in hot water to expand hole. Places bit and bushing in opening of press and activates automatic mechanism that forces bushing into end of bit. Allows bit to cool and contract around bushing.
GOE: 06.04.34 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

739.685-050 TAPPER, SHANK (fabrication, nec)

Tends machine that screws bushing into shank of smoking pipe for use in connecting stem to shank. Places previously glued bushing on threaded projection of tapping machine and holds threaded end of shank against bushing until they are screwed together. Reverses machine to remove threaded projection from bushing.
GOE: 06.04.20 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

739.685-054 UMBRELLA TIPPER, MACHINE (fabrication, nec)

Tends machine that attaches metal or plastic tips to corners of prestitched umbrella covers: Positions tips in machine fixture and holds corner of cover in position to receive tips. Presses pedal of machine to release tips and secure tips to corners of cover. May sew tips in place with needle and thread [UMBRELLA TIPPER, HAND (fabrication, nec) 739.684-162].
GOE: 06.04.20 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

739.685-058 WREATH MACHINE TENDER (button & notion)

Tends machines that form straw into rope, wraps yarn around straw rope to form floral wreath bases, and winds vinyl around floral wreath bases to cover straw and complete floral wreaths: Mounts spools of yarn on spindles of roping machine and draws yarn through guide. Starts roping machine that moves straw through forming and tying mechanism to form straw rope. Winds straw rope around ring guide specified number of times and starts machine that automatically winds yarn around ring of straw rope to form wreath base. Positions straw wreath base and starts machine that automatically rotates wreath base and winds vinyl around base to cover straw. Examines wreath form to ensure straw is cov-

ered and places completed form on worktable. May be designated according to machine tended as Roping Machine Tender (button & notion); Wreath Wrapper, Machine (button & notion).
GOE: 06.04.09 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

739.687-010 ASSEMBLER-ARRANGER (fabrication, nec) alternate titles: arranger-assembler

Assembles decorative wall plaques by hand: Arranges flowers or other ornamental material, according to prepared design, and glues parts on pasteboard, plastic, or wooden background. Places sheet of glass over design and applies gummed tape around edges to hold glass in place. May assemble decorative arrangement, using twisting machine to fasten arrangement together.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

739.687-014 ASSEMBLER, CORNCOB PIPES (fabrication, nec) alternate titles: bit setter; borer, stem; ferruler; reamer; stem assembler; stem setter

Joins parts, such as bowls and stems, to assemble corncob pipes, performing any combination of following tasks: Dips end of pipestem in glue and taps stem into pipe bowl, using mallet. Hammers metal ferrule onto end of pipestem and holds end of stem over rotating reamer to enlarge hole in stem for insertion of mouthpiece. Positions pipe bowl over flexible airhose and bends hose to release air that blows sawdust from reamed bowl. Inserts paper filter or metal cleaner into mouthpiece of pipe and taps mouthpiece into pipestem, using mallet. May apply decals to pipes. May hold pipe bowl over rotating reamer to cut end of stem that protrudes into bowl or bevel end of pipe stem for insertion into pipe bowl, using cutting blade. May rotate pipe on heated die or against flame to char and color pipe bowl.
GOE: 06.04.23 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 78

739.687-018 ASSEMBLER, FILTERS (glass products)

Assembles fiberglass filters for use in industrial and domestic heating and cooling units: Places layer of precut treated fiberglass between perforated metal sides for reinforcement. Inserts assembly in cardboard frame and folds sides of frame over edges of reinforcements. Secures sides in place, using glue and staples. Seals edges of frame, using gummed tape.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

739.687-022 ASSEMBLER, GARMENT FORM (fabrication, nec)

Joins together prefabricated, linen-covered papier mache garment form sections to hold, fit, or shape garments being manufactured or altered. Inserts pedestal into cavity of assembled form and fastens form to pedestal, using handtools.
GOE: 06.04.23 STRENGTH: L GED: R2 M2 L1 SVP: 2 DLU: 77

739.687-026 ASSEMBLER, FILTERS (auto. mfg.)

Assembles air, fuel, and oil filters for use on internal combustion engines used to power equipment, such as motor vehicles, aircraft, locomotives, and agricultural, construction, industrial, and marine equipment, performing any combination of following tasks: (1) Folds, convolutes, and cures filter paper. Places roll of paper on holder and threads paper through machine. Observes machine for jamming or overcuring. (2) Assembles pack (filter paper), metal tube, and jacket (perforated filter paper) into unit. (3) Dips ends of unit in liquid plastic solution. (4) Places metal, plastic, or cardboard disks on ends of unit. (5) Places unit in machine that automatically fastens sealers on ends.
GOE: 06.04.23 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 78

739.687-030 ASSEMBLER, SMALL PRODUCTS II (any industry)

Performs any combination of following duties to assemble parts of various materials, such as plastic, wood, metal, rubber, or paperboard, to produce small products, such as roller skates, toys, shoe lasts, musical instrument parts, or loudspeakers: Positions parts in specified relationship to each other, using hand, tweezers, or tongs. Bolts, screws, clips, cements, or otherwise fastens parts together by hand, using handtools, portable powered tools, or bench machines. Performs fastening, force fitting, or light cutting operations, using machines such as arbor presses, punch presses, taps, spot-welding or riveters.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 81

739.687-034 BEADER (furniture)

Installs plastic molding strips into slotted edges of metal tabletops, using mallet and bandsaw: Positions center of molding strip over leading edge of tabletop as it moves along conveyor, and pushes tongue of molding into slot along entire edge of tabletop. Pounds molding with mallet to seat molding firmly in slot. Lifts tabletop from conveyor onto worktable, and cuts off overlapping ends of molding, using bandsaw. Pounds trimmed ends of molding into slot to form tight joint. Heats molding strips in hot water tank prior to installation when specified on job order.
GOE: 06.04.24 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

739.687-038 BLOCK INSPECTOR (fabrication, nec)

Observes wooden match blocks passing on conveyor and removes those containing pitch pockets, faulty grain, and knots.
GOE: 06.03.02 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

739.687-042 BROOMCORN GRADER (fabrication, nec) alternate titles: broomcorn sorter

Sorts broomcorn fibers according to specified length and quality to determine fibers to be used as cores, or outer layer: Opens bales of broomcorn stems with wire cutter. Examines and removes stems which are short, off-color, broken, or do not otherwise meet standards. Measures lengths of standard stems or panicles, using grading table scale. Determines grade of stems according to length, color, and fineness of fiber. Bundles and labels graded broomcorn. May remove seeds and straighten fibers [BROOMCORN SEEDER (fabrication, nec)] or cut stalks to length.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

739.687-046 BRUSH FILLER, HAND (fabrication, nec) alternate titles: draw hand

Fills prebored brush heads with hog bristles, horsehair, nylon, vegetable fiber, or other brush-filling materials: Secures brush base in bench fixture. Threads wire through hole in brush head. Loops end of wire around filling material, pulls material through hole in brush head, and ties wire to secure material. Repeats process until holes are filled.
GOE: 06.04.23 STRENGTH: S GED: R2 M2 L2 SVP: 3 DLU: 77

739.687-050 CANDLE CUTTER (fabrication, nec) alternate titles: wick cutter

Cuts wicks, using scissors and knife, to separate candles after wax-dipping process: Places candles, assembled on metal frame, on revolving stand. Rotates stand by hand and cuts wicks at butt end. Removes candles from frame and examines for defects in shape and finish. May grade candles according to size and type. May trim ends, using hand dies.
GOE: 06.04.34 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

739.687-054 CANDLE MOLDER, HAND (fabrication, nec)

Molds candles by hand: Places wick over center of one section of mold, presses mold halves together and fastens with rubberband. Pours wax through opening and places mold in water to harden wax. Separates mold and removes candle. Scrapes excess wax from candle surface, using knife, and examines for surface defects and uniformity of color.
GOE: 06.04.32 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

739.687-058 CLEANER (fabrication, nec) alternate titles: wiper

Wipes smoking pipes with cloth to remove dust, putty, and other foreign matter: Places pipes in box or bin according to style. May clean inside of bit, using pipe cleaner.
GOE: 06.04.39 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

739.687-062 CLEANER, SIGNS (fabrication, nec)

Cleans and polishes electrical and outdoor signs and letters: Washes glass, plastic, and painted signs and letters with cleaning agent and water, cleaning compound, or acid solution and cloth or brush to remove dirt, stains, and other foreign matter. Dries surfaces, using cloth, chamois, or squeegee. Rubs metal signs and letters with cleaning agent to remove dirt and corrosion, and polishes with clean cloth.
GOE: 05.12.18 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

739.687-066 COMPACT ASSEMBLER (jewelry-silver.)

Joins upper and lower halves of vanity compacts: Inserts pins in hinges to join halves, using fingers or tweezers. Attaches spring catch lock by pressing it into place with pinching tool. Fits mirror on inside of cover.
GOE: 06.04.23 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

739.687-070 DIGGER (fabrication, nec)

Digs into bowl and shank of smoking pipe blank with pointed tool to remove rough spots and smooth surface: Examines bowl and shank for imperfections. Digs out rotten briar, or stones and smooths rough spots with a pointed tool, exercising care not to dig too deep into wood. Fills holes with putty to give smooth surface to bowl and shank.
GOE: 06.04.25 STRENGTH: S GED: R2 M1 L2 SVP: 3 DLU: 77

739.687-074 DUST-BRUSH ASSEMBLER (house. appl.)

Installs hollow-centered dust brush in vinyl plastic housing to form vacuum cleaner attachment: Loads plastic housings into tank of warm water to soften plastic material and increase elasticity. Removes warmed housing from water, and places housing in bench fixture. Inserts back of brush in housing, and presses down on brush with fingers to expand heat-softened wall of housing, and force brush into retaining groove. May remove plastic housing from mold while housing is still warm and elastic, and place housing in bench fixture, rather than place housing in warm water to soften.
GOE: 06.04.23 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

739.687-078 DUST-MOP MAKER (tex. prod., nec) alternate titles: dry-mop maker

Inserts triangular shaped metal rod through binding material sewn to yarn strands to form dust mopheads. Ties ends of binding material to secure mophead to rod.
GOE: 06.04.23 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

739.687-082 EXAMINER (fabrication, nec)

Inspects and packs umbrellas preparatory to shipping: Examines covers for pattern matching, tears, and stitching defects. Clips loose threads from umbrella, using scissors. Inspects frames for defects, such as bent ribs and missing tips. Stacks rejected umbrellas for correction. Inserts accepted umbrellas in wrappers and packs them in cartons according to types, sizes, and pattern designs. Records types and quantities of packed umbrellas. May hold opened umbrella over steam nozzle to smooth covering.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

739.687-086 EYE-DROPPER ASSEMBLER (glass products)

Slips rubber bulbs over ends of glass tubes to form eye droppers.

GOE: 06.04.24 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

739.687-090 FILLER (fabrication, nec)

Fills cavities in exterior surface of corncob pipe bowls with plaster of paris. Mixes plaster paste and water. Places cob bowl on revolving spindle. Applies plaster to sides and ends of bowl by hand, filling cavities and smoothing exterior surfaces of bowl. May apply sealer to interior of hickory pipe bowls to seal bowls.
GOE: 06.04.34 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

739.687-094 FIRE-EQUIPMENT-INSPECTOR HELPER (any industry) alternate titles: fire-and-safety helper

Assists FIRE-EQUIPMENT INSPECTOR (any industry) in testing, inspecting, and repairing fire-fighting equipment. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.07.01 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 77

739.687-098 FLOOR WORKER (wood prod., nec)

Removes centers from cork or plastic washers, using screening box. Dumps washers into screening box. Presses washers against wire-mesh bottom or shakes box to remove centers from washers. Dumps washers into cartons for shipping.
GOE: 06.04.34 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

739.687-102 GASKET INSPECTOR (nonmet. min.) alternate titles: picker

Separates precut gaskets from strips of cork, rubber, or composition material and examines gaskets for defects, such as cuts or flaws in material. Sorts gaskets according to type and places gaskets on table for packing.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

739.687-106 INSPECTOR I (fabrication, nec)

Inspects boxed matches to ensure that they meet product specifications. Opens sample cases of matches from each pallet load and inspects boxes for labeling and packing. Examines matches for quality of coating. Ignites several matches to ascertain that they strike and burn efficiently and safely. Routes rejected loads for further inspection, salvage, or disposal. May inspect match strip sections for defects, such as tears, uneveness, incomplete slitting, and compressed heads.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

739.687-110 INSPECTOR III (furniture) alternate titles: checker

Inspects metal furniture and parts for defects. Verifies color of furniture against work ticket specifications. Feels and visually inspects furniture and parts for defective quality and damage, such as unwelded joints, wrinkled or torn upholstery, and dents. Marks defective areas with chalk or crayon, and segregates furniture and parts requiring repair.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

739.687-118 INSPECTOR, WREATH (fabrication, nec)

Inspects holiday decorations made from twigs and boughs, such as wreaths and door charms, for completeness and quality. Examines pieces received from individual workers or on conveyor belt to ascertain that specified greens and decorative items have been combined in required proportions, that each assembly is full and symmetrical, and that binding wires are tight and secure. Trims protruding twigs, boughs, and wire ends with pruning shears or nippers.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

739.687-122 MOP-HANDLE ASSEMBLER (tex. prod., nec) alternate titles: handle maker

Assembles handles for detachable mopheads, performing any of following tasks: Inserts butt end of handle into spring, positions lever between spring and handle, and fastens spring and lever to handle, using automatic stapler. Positions metal head over end of handle and fastens head to handle, using automatic stapler. Pulls wire bail over metal head and inserts end of bail through holes in levers.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

739.687-126 NAILER (tinware)

Fastens wooden bottoms in metal jackets used as protective covering for containers, such as gasoline and oilcans. Fits jackets over cans and inserts circular wooden block into jackets, flush with edge of jackets and against bottoms of cans. Drives nails through lower rim of jackets into wooden bottoms.
GOE: 06.04.23 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

739.687-130 ORNAMENT MAKER, HAND (fabrication, nec)

Cuts, folds, glues, and assembles holiday ornaments and wrappings, such as tinsel balls, artificial holly wreaths and trees, Christmas tree lights, and ribbon, using handtools, such as scissors, pliers, wirecutters, and staplers.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

739.687-134 PAINT-ROLLER ASSEMBLER (fabrication, nec)

Performs any combination of following tasks to assemble paint rollers: Places shaped metal rod in fixture of ram press machine and aligns paint roller handle with end of rod and machine ram. Depresses pedal activating ram that forces handle onto rod. Assembles roller cage (body) to extended metal rod of handle and secures cage to rod with locknut or screw. Places plastic end cap over locknut or screw to cover end of roller, using capping machine or by hand. Examines roller for ease of movement and correct alignment and places roller in container.

GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

739.687-138 PART MAKER (jewelry-silver.)

Forms and lines parts for use in jewelry and instrument cases, performing any combination of following duties: Glues specified fabric on cardboard blanks to make lining base. Inserts cotton pad in lining to form cushion. Places glue-coated fabric on precut metal strip in jig and pulls handle of heating device to fold and seal fabric around strip to form bracelet-type watch holder. Places covered bracelet band on metal cylinder and shapes by hand or in groove of forming device and turns handle to shape band around form. Inserts wire spring in lining pad and positions pad and bracelet on holders in fixture. Pulls feeder that picks up and fits spring into groove on bracelet. Pulls lever of fastening device to press spring in place and fasten bracelet to pad or inserts bracelet into groove by hand. Records number and type of parts made. May be designated according to specific part made as Bracelet-Form Coverer (jewelry-silver.); Bracelet Former (jewelry-silver.); Cushion Maker, Hand (jewelry-silver.); Lining Maker, Hand (jewelry-silver.); Pad Assembler (jewelry-silver.).
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

739.687-142 PATCH DRILLER (fabrication, nec)

Examines briar pipe stummels and removes defects, using drill. Examines and feels pipes to detect cracks, splits, and decayed wood. Guides pipe against rotating drill, varying angle of cut and pressure on pipe, according to type and size of defect. Deposits pipes in boxes according to size of drillings.
GOE: 06.04.25 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

739.687-146 PATCHER (fabrication, nec) alternate titles: inspector; repairer

Examines smoking pipes for cracks, splits, and holes. Fills imperfections with putty, using knife and fingers. May mix putty according to formula. May insert paper filter into pipe stem upon completion of examination and repair of pipe. May be designated according to size of defects patched as Fine Patcher (fabrication, nec); Rough Patcher (fabrication, nec).
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 78

739.687-150 PIPE-SMOKER-MACHINE OPERATOR (fabrication, nec)

Tends machine that breaks in (chars) new pipe bowls. Inserts pipes into suction tubes on machine, fills bowls with tobacco, and lights tobacco, using torch. Turns valve on and off to pull air through pipes in simulated series of puffs. Removes pipes from machine, empties ashes, and wipes bowl with cloth. Inspects interior of charred bowls to verify conformance to company standards. Places processed pipes in box.
GOE: 06.04.18 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

739.687-154 POLISHING-PAD MOUNTER (optical goods) alternate titles: pad maker

Applies pitch and mounts cloth pads on surface of metal *laps I* used for polishing lens surfaces. Heats metal laps over gas flame. Rubs bar of pitch or pours molten pitch on heated lap surface and positions cloth pad on lap. Places cup-shaped holder of same curve as lap over cloth pad and clamps assembly in bench press until pitch sets. May apply pad or remove old pad, using knife.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

739.687-158 POURER (fabrication, nec) alternate titles: candle pourer

Pours molten wax to form candles by either of following methods: (1) Positions metal pins in center of molten wax to form holes for candle wicks and pours specified quantity of wax into molds to form candles. (2) Positions preassembled wicks and metal bases in containers. Pours measured amount of wax into each container to anchor wick assembly. Positions series of funnels (pouring assembly) above glasses and moves lever to fill glasses with wax. Trims wicks to uniform length with scissors. Packs finished candles in cartons.
GOE: 06.04.32 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

739.687-162 PULL-OUT OPERATOR (fabrication, nec)

Pulls out sheets of dried felt-base floor covering from racks in drying oven. Removes one sheet and splices end to next sheet, continuing drawing-out operation until all sheets have been removed.
GOE: 06.04.40 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

739.687-166 SELECTOR (fabrication, nec) alternate titles: stummel selector

Classifies smoking pipe stummels according to quality of briar and length of shank. Examines stummels for defects, such as cracks, splits, and decayed wood. Measures length of shank, using gauge. Classifies stummels according to specifications for each grade and places them in designated boxes. Dips high grade stummels in alcohol to bring out grain of briar and sorts them according to distinctiveness of grain. Discards defective briars. May inspect damaged pipes to determine method of salvage.
GOE: 06.03.02 STRENGTH: L GED: R3 M1 L2 SVP: 3 DLU: 78

739.687-170 SMOKING-PIPE LINER (fabrication, nec)

Coats chambers of pipe bowls with syrup or honey mixture to improve taste of pipes during breaking-in process. Cleans dust and other foreign particles from bowl and shank, using airhose. Dips brush or swab in specified syrup or honey mixture and applies mixture to chamber of pipe bowl to coat and sweeten bowl. Sets bowl aside to dry.
GOE: 06.04.33 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

739.687-174 STAINER (fabrication, nec)

Dips smoking pipe stummels into staining solution and places them on conveyors or in sawdust to dry. Places dry pipes in containers according to style.

GOE: 06.04.33 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

739.687-178 STARCHER (button & notion) alternate titles: sizer

Brushes on or immerses fabric in gelatin to stiffen fabric for use in making artificial flowers. Drapes fabric over poles to dry.
GOE: 06.04.34 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

739.687-182 TABLE WORKER (fabrication, nec) alternate titles: spotter

Examines squares (tiles) of felt-based linoleum material passing along on conveyor and replaces missing and substandard tiles.
GOE: 06.03.02 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

739.687-186 TRAVERSE-ROD ASSEMBLER (furniture)

Assembles traverse curtain rods for shipment: Secures rod in bench fixture and inserts and attaches pull cord, master slides, nylon sliders, and pulleys into rod slot. Slips retaining brackets over ends of rod to complete assembly. Stacks rods in boxes. May cut cord to specified length before insertion into rod slot. May adjust functioning of traverse rod to meet specifications, using handtools. May dismantle defective or damaged traverse rods to salvage parts, using handtools.
GOE: 06.04.23 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

739.687-190 UMBRELLA FINISHER (fabrication, nec)

Mounts puffs, enlarges handle hole, and glues handles on umbrellas. Places leather or cloth puffs over umbrella rod to cover top. Hammers ferrule over end of rod to secure puff in position. Reams socket of handle to enlarge hole, using floor-mounted electric drill. Spreads glue inside hole with brush and inserts handle into rod of umbrella frame. Opens umbrella cover and steams it over nozzle of steamer to remove wrinkles. Examines umbrellas and sets aside defective umbrellas for corrective processing. Inserts completed umbrellas into paper of plastic tubes preparatory to packing.
GOE: 06.04.34 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

739.687-194 VACUUM-BOTTLE ASSEMBLER (glass products)

Assembles vacuum bottles by placing plastic saddle in container bottom, inserting glass bottle in saddle, slipping metal locking ring over bottle, placing plastic stopper in mouth of bottle, and screwing plastic drinking cup onto threaded mouth of bottle.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 1 DLU: 77

739.687-198 VENETIAN-BLIND CLEANER AND REPAIRER (any industry)

Cleans and repairs venetian blinds, using handtools. Dusts and washes blinds, using cloth, vacuum, brush, water and detergent. Hangs blinds on rack to dry. Examines blinds to detect defective or worn parts, such as cord, tape, or slats, and replaces parts, using handtools. May install blinds. May assemble blinds.
GOE: 05.12.18 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

739.687-202 WICK-AND-BASE ASSEMBLER (fabrication, nec) alternate titles: base-and-wick assembler

Fastens candlewicks to metal bases to make candles: Inserts wick through hole in base. Strikes flange of wick hole with metal die to crimp base onto wick. Ties specified number of assemblies together by twisting wicks to hold assemblies together. Places group of assemblies in containers. May tend wick-cutting machine that cuts wicks prior to assembly.
GOE: 06.04.23 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

739.687-206 BRUSH LOADER AND HANDLE ATTACHER (fabrication, nec)

Attaches plastic handles to wire ends of brush heads to assemble household brushes: Positions brush heads in fixtures attached to machine conveyor, following specified procedures. Aligns ends of plastic brush handles with heated wire ends of brush heads on conveyor, pushes hollow end of handles against heated wires, and twists handles to secure brush heads to handles. Occasionally adjusts temperature control of induction welder that heats brush head wire ends to maintain specified setting.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 86

739.687-210 PIPE STEM ALIGNER (fabrication, nec)

Inspects and aligns smoking pipe stems with pipe bowls, using pipe stem wrench, according to specifications.
GOE: 06.04.34 STRENGTH: M GED: R2 M1 L1 SVP: 1 DLU: 86

74 PAINTING, DECORATING, AND RELATED OCCUPATIONS

This division includes occupations concerned with applying decorative or protective materials, such as paint, enamel, varnish, shellac, stain, or oil to articles by brushing, spraying, wiping, or hand-dipping. Includes preparing surface of the article, mixing coating ingredients, handrubbing filled or coated surfaces, and related activities.

740 PAINTERS, BRUSH

This group includes occupations concerned with covering or decorating surfaces, using brushes.

740.221-010 INSTRUCTOR, DECORATING (pottery & porc.)

Instructs workers in painting decorations on plates, bowls, saucers, and other bisque dinnerware: Demonstrates decorating techniques, such as brush stroking, color mixing and blending, and design highlighting to trainees. Explains procedures for adding water or glycerine to obtain prescribed consistency of paint. Evaluates and prepares reports of trainees' progress during various stages of training program. Recommends advancement, transfer, or termination of trainees to management. Consults with management and engineering personnel and recommends new techniques for improving quality of decorating process. May maintain production reports and attendance records.
GOE: 01.06.03 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 77

740.381-010 DECORATOR (glass mfg.; glass products) alternate titles: glass artist; pyroglazer

Paints pictures or designs onto surfaces of glassware, such as tumblers, vases, or bowls, using brush and following pattern or design: Mixes ceramic paints to obtain color specified on pattern. Places glassware onto table or workbench. Sketches outline of picture or design onto glassware. Paints design or picture onto glassware. Compares finished product with pattern. Places painted glassware onto moving conveyor. May rub in dry color on sandblasted areas of glass articles to tint them.
GOE: 01.06.03 STRENGTH: L GED: R4 M2 L3 SVP: 6 DLU: 77

740.381-014 LUSTER APPLICATOR (glass mfg.; glass products) alternate titles: hand decorator

Applies paint to exterior or interior of glassware, such as tumblers, vases, or bowls to tint glass and to apply luster to glassware: Mixes color with oil and water to obtain desired consistency. Centers glassware on balanced wheel and balances glassware on wheel with weights. Turns pivot pole with one hand to rotate wheel and glassware, and holds paint brush to glassware while resting arm on support to steady hand to apply thin layer of paint. Examines glassware for brush strokes. Places painted glassware onto moving conveyor.
GOE: 01.06.03 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

740.381-018 PAINTER (button & notion)

Applies paint to wire-framed, clear-plastic articles, such as flowers, leaves, and butterflies used in artificial artistic arrangements, to impart natural coloring, using brush: Selects specified colors of stain paint and adds paint thinner to each color to attain desired consistency. Applies successive coats of paint to plastic articles, using brush, to attain desired shades and hues necessary to achieve natural lifelike appearance. Removes excess paint, using brush or cotton swab. Hangs articles on rack to dry after each coat of paint. Maintains daily production record.
GOE: 01.06.03 STRENGTH: S GED: R3 M2 L2 SVP: 5 DLU: 77

740.484-010 STRIPER, HAND (any industry)

Paints stripes, letters, or decorative edges on bicycle frames, motorcycle fenders and tanks, utensils, or other stamped products, using handbrushes and enamel or lacquer. Marks area to be stamped, lettered, or decorated, using rule or template. Mixes paint and matches colors according to specifications, or uses prepared paints.
GOE: 01.06.03 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

740.681-010 LINER (pottery & porc.) alternate titles: bander; decorator, hand; gilder; line decorator

Draws line of color or gold around edge or rim of bisque or glost ware, such as cups and plates, with brush: Sets ware on wheel and centers it. Starts wheel revolving. Holds brush against spinning ware, resting arm or hand on support to steady it and make line straight. Draws lines on handles and oval or irregular-shaped ware freehand. May use hand roller to apply decorative color to ware edges. May mix color glazes by hand to obtain specified color shade. May paint bands or lines on exterior and interior of glassware, such as tumblers, vases, and bowls, and be designated Bander, Hand (glass mfg.; glass prod.).
GOE: 01.06.03 STRENGTH: S GED: R3 M1 L1 SVP: 5 DLU: 77

740.684-010 CHARGER I (jewelry-silver.)

Applies decorative colored enamel pastes to jewelry articles by hand, following specifications or sample articles: Places article in holding device and applies paste, using spatula, tweezers, or pick. Removes excess paste, using blotter or special brush to push back surplus enamel that spreads over design.
GOE: 01.06.03 STRENGTH: S GED: R3 M1 L1 SVP: 3 DLU: 77

740.684-014 DECORATOR (pottery & porc.)

Paints decorations on plates, bowls, saucers, and other flat and hollow bisque dinnerware prior to glazing, using brush and following sample or design: Adds water to specified color of paint to obtain desired consistency. Turns ware by hand or using turntable and applies underglaze paint to smooth and raised surfaces, following ware sample or designs stamped or embossed on ware. Rubs ware with sponge, pumice stone, or abrasive cloth to remove excess paint and to achieve desired shaded effect in design. Stamps identification mark on bottom of ware, using rubber stamp. May carve holes in greenware, according to specified pattern to produce features such as bank slots and eyes. May paint glazed ware. May apply decals to glazed ware.
GOE: 01.06.03 STRENGTH: S GED: R3 M1 L1 SVP: 5 DLU: 81

740.684-018 ENAMELER (jewelry-silver.)

Applies decorative enamel to jewelry articles, such as pins, earrings, insignia, and award medals, using handtools and electric oven: Cleans jewelry in baths of acid and water, and scrubs surfaces with brush. Mixes ground colored enamel and distilled water, according to specifications. Applies enamel of various colors to designated areas of jewelry to form specified design, using spatula or pick. Places metal tray containing jewelry in electric oven to melt and fuse

enamel to jewelry. Immerses jewelry in baths of acid and water to remove oxide scale. Rubs enameled surfaces with abrasive stone to smooth and remove excess enamel. Reheats enamel in oven to produce luster.
GOE: 01.06.03 STRENGTH: S GED: R3 M2 L2 SVP: 4 DLU: 77

740.684-022 PAINTER, BRUSH (any industry) alternate titles: painter, hand

Brushes paint, lacquer, rustproofing agent, or other coating onto metal, woodstock, or fabricated items, using brush. Places workpiece on bench, stanchion, or floor. Cleans surfaces, using hand scraper, wire brush, sandpaper, or turpentine. Pours desired amount of thinner into paint. Paints articles, using brush. Cleans brushes and floor, using solvent or soap and water. May transfer items to and from work area, using hoist or handtruck. May be designated according to article painted as Last-Code Striper (wood prod., nec); Painter, Drum (any industry); Painter, Mannequin (fabrication, nec); Pipe Coater (steel & rel.); or according to coating applied as Japanner (any industry); Lacquerer (machine shop); Car Varnisher (railroad equip.).
GOE: 06.04.33 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

740.684-026 TOUCH-UP PAINTER, HAND (any industry) alternate titles: hand painter; retoucher; salvage painter

Paints articles, such as clock or instrument hands and dials, engraved surfaces, glass tubes, and ceramics, to cover or touch up articles, using brush. Inspects workpiece for inspector's markings or defects. Wipes, scrapes, sands, or applies cleaning solution to surface to prepare for retouching. Dips brush into specified paint or protective coating solution and applies it to surface of article specified. Brushes paint over surface and wipes it from unengraved area to paint engraved etchings. May apply coating of material, such as plastic wax or removable paint to mask surfaces for plating, painting, or metalizing. May straighten parts, such as clock dials or hands, using jig or bench press preparatory to painting. May paint original items, such as dials for custom-built instruments, freehand or using stencil or tracing device.
GOE: 06.04.33 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 88

740.687-010 BUTTON SPINDLER (button & notion) alternate titles: spindler

Paints rims or other parts of buttons, using artist's paintbrush and spinning device. Positions button on continuous spinning device and holds brush against part of button to be painted. Presses knee lever to activate knock-out device that automatically removes button from spinning holder.
GOE: 06.04.33 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

740.687-018 PAINTER, EMBOSSED OR IMPRESSED LETTERING (any industry)

Colors identification or model numbers, brand names, or designs embossed or impressed in articles, using brush or roller. Positions workpiece on bench. Cleans area to be painted, using solvent-soaked cloth. Brushes or rolls paint, lacquer, or ink of specified color over embossed or impressed lettering or design. Wipes excess material from surrounding surfaces, leaving embossed or impressed areas coated with coloring material. May be designated according to article decorated as Dice Spotter (toy-sport equip.); Painter, Battery Brand And Vent Plug (elec. equip.).
GOE: 06.04.33 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

740.687-022 PAINTER, PANEL EDGE (furniture) alternate titles: paint and table edger

Applies paint to unfinished edges of plastic panels, using hand roller, prior to assembly of panels into tabletops. Wipes excess paint from top of edges, using rag. Stacks panels on pallet for transporting to assembly line.
GOE: 06.04.33 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

741 PAINTERS, SPRAY

This group includes occupations concerned with covering or decorating surfaces, using spray guns and stencils.

741.684-010 ARTIST, MANNEQUIN COLORING (fabrication, nec) alternate titles: decorator

Applies paint or lacquer to papier mache mannequin to simulate parts of body and articles of clothing. Sets mannequin on revolving table in spraybooth. Masks parts preparatory to spraying, using gummed paper. Selects color according to part to be colored, such as red for lips, blue for eyes, and black for shoes, and sprays figure, using airbrush. May attach eyelashes to eyes of finished display forms. May specialize in one phase of coloring, such as tinting of body or painting of eyes.
GOE: 01.06.03 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

741.684-014 FOAM-GUN OPERATOR (plastic prod.)

Sprays mixture of resins and activators (foam) on reinforced plastic products, such as shower stalls, bathtubs, and automobile body parts, using foam gun. Turns valves to obtain specified mixture, quantity, and force of resin and activator to gun nozzle. Directs spray onto workpiece to insulate, reinforce, or build up thickness of product, according to specifications. Moves sprayed items to curing area, using dolly. Cleans nozzle and spray equipment, using menthol chloride.
GOE: 06.02.24 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 77

741.684-018 PAINTER, AIRBRUSH (any industry)

Coats, decorates, glazes, retouches, or tints articles, such as fishing lures, toys, dolls, pottery, artificial flowers, greeting cards, and household appliances, using airbrush. Stirs or shakes coating liquid and thinner to mix solution to specified consistency. Pours solution into airbrush container, couples airbrush to airhose, and starts compressor or opens valve on compressed-air line. Turns adjusting sleeve on nozzle of airbrush to regulate spray pattern to size of workpiece or area to be sprayed. Presses button on airbrush to spray coating over workpiece, or to spray specified designs and decorations on workpiece, spraying freehand or using stencils, masks, screens, and tape. Cleans airbrush nozzle and hose with solvent. May be designated according to article sprayed as Bait Painter (toy-sport equip.).
GOE: 01.06.03 STRENGTH: L GED: R3 M1 L1 SVP: 5 DLU: 77

741.684-022 PAINTER, MIRROR (glass products) alternate titles: paint sprayer

Sprays heated paint onto silvered surface of glass to protect silver coating. Starts conveyor that moves silvered glass through painting and drying areas. Starts pump that circulates hot water through hose to heat paint and starts heating units of drying ovens. Turns valve to start paint flowing to spray gun and directs spray over surface of glass. Observes heat pump indicator and air pressure gauge to determine that specified temperature and air pressure are maintained. Turns thermostat to regulate temperature of ovens.
GOE: 06.04.33 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

741.684-026 PAINTER, SPRAY I (any industry) alternate titles: spray-gun operator

Sprays surfaces of machines, manufactured products, or working area with protective or decorative material, such as paint, enamel, glaze, *gel-coat*, or lacquer, using spray gun. Cleans grease and dirt from product, using materials, such as lacquer thinner, turpentine, soap, and water. Applies masking tape over parts and areas that are not to be coated [MASKER (any industry) 749.687-018]. Fills cavities and dents with putty to attain smooth surface. Selects and mixes coating liquid to produce desired color, according to specifications, using paddle or mechanical mixer. Pours coating liquid into spray container and connects gun to airhose, using wrenches. Turns sprayer valves and nozzle to regulate width and pressure of spray according to knowledge of painting technique. Pulls trigger and directs spray onto work surface to apply prime or finish coat. Coats areas inaccessible to hand sprayer, using brush. Cleans spraying equipment and brushes with solvent. May heat and spray wax onto products after they are tested. May use acid, wire brush, or steel wool to remove rust from metal. May paint designs on rug surfaces for decorative purposes or for use as guidelines in carving rugs, using spray gun and stencil, and be designated Stenciler (carpet & rug). May be designated according to article sprayed as Hat Sprayer (hat & cap); Painter, Ordnance (ordnance); Sprayer, Railroad Car (r.r. trans.); or according to material used as Gel-Coat Sprayer (ship/boat mfg.; toy-sport equip.); Porcelain-Enamel Sprayer (any industry). May be designated: Ceramic Sprayer (brick & tile; pottery & porc.); Enameler (pottery & porc.); Enamel Sprayer (any industry) I; Glaze Sprayer (auto. mfg.); Lacquer Sprayer (any industry) I; Painter, Insignia (aircraft mfg., auto. mfg.); Panel Finisher (paint & varnish); Primer Sprayer (aircraft mfg., auto. mfg.); Sprayer, Auto Parts (auto. mfg.); Thinner Sprayer (auto. mfg.). May act as lead person in group.
GOE: 05.10.07 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 89

741.684-030 PORCELAIN-ENAMEL REPAIRER (any industry) alternate titles: appliance painter-and-refinisher; slusher

Repairs porcelain enamel finish on commercial and household appliances or fixtures. Inspects marked defects, such as chipped or cracked surfaces to ascertain extent of damage and determine repair procedures. Removes old porcelain or smooths rough spots, using sandpaper, emery stone, and power grinder. Turns spray gun nozzle and valves to set spray pattern and to adjust air pressure. Coats defective area with enamel, using spray gun, to fill holes or other flaws. Cleans spray gun, paintbooths, hoses, and pressure tanks, using solvent, putty knife, and brush. May brush on porcelain. May replace damaged appliance panels or trim, using screwdriver, wrench, or pliers.
GOE: 06.04.35 STRENGTH: H GED: R3 M1 L1 SVP: 2 DLU: 77

741.685-010 SPRAY-PAINTING-MACHINE OPERATOR (any industry) alternate titles: automatic-spray-machine operator

Tends spray-painting machine that automatically applies lettering, diagrams, or designs on products, such as speedometer faces, automobile steering-wheel hubs, and radio or television control knobs. Places workpiece in masking jig and depresses pedal to clamp workpiece against stencil mask. Depresses pedal to spray exposed area of workpiece through mask. Removes product from jig and examines coating for smears, runs, incomplete painting, and similar flaws. Removes and places paint saturated masks in mask-washing machine for cleaning. May record production.
GOE: 06.04.09 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

741.687-010 PAINT-SPRAY INSPECTOR (any industry) alternate titles: finish inspector

Inspects finishes, such as paint, lacquer, or porcelain enamel on items, such as household appliances, automobiles, toys, or bicycles while items move along production line or in inspection bays to ascertain conformance to standards. Examines workpiece for scale, cracks, shade variances, or unpainted areas. Marks workpiece with symbol to indicate defective area and type of repair needed. Records number and type of units rejected and reasons for rejection. May mark other defects, such as loose welds and loose or missing parts. May inspect decals, identification markings or stenciling on workpiece to ensure specified lo-

cation, clarity, and alignment. May record number and types of metal and paint defects, using hand held, programmed data collector.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 86

741.687-014 PAINTER HELPER, SPRAY (any industry) alternate titles: paint-spraying-machine-operator helper; sprayer helper

Assists PAINTER, SPRAY (any industry) I 741.684-026 to spray-paint surfaces of materials or products, performing any combination of following tasks: Loads and moves materials to work area, using handtruck or dolly. Fills containers with prescribed quantities of paint and thinner. Applies masking to articles [MASKER (any industry) 749.687-018]. Installs specified nozzles in spray guns. Replaces screens and filters. Cleans and prepares surface of articles to be painted, using solvent, sandpaper, wire brush, and scraper. Pushes painted articles to and from drying oven, using handtruck. Cleans spray and drying chamber, conveyor, tanks, hoses, and nozzles, using solvent, brushes, and cloths. Racks workpieces on conveyor; and inspects, marks, and transfers finished pieces to stockroom or shipping areas. Positions articles in jigs or erects ladders and scaffolds. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.03 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 81

741.687-018 PAINTER, SPRAY II (any industry) alternate titles: painter, rough

Performs duties as described under PAINTER, SPRAY (any industry) I 741.684-026 where coating of surface or product is required without need for finished appearance. Sprays manufactured articles on assembly line, or travels to work site to spray materials, such as waterproofing, adhesive, foam, or paint, onto surfaces of articles. May be designated according to article sprayed as Coil Sprayer (electron. comp.); Mica-Parts Sprayer (electron. comp.); Painter, Barrel (petrol. refin.); or according to coating applied as Enamel Sprayer (any industry) II; Lacquer Sprayer (any industry) II; Sizing Sprayer (furniture). May be designated: Dag Sprayer (electron. comp.); Doper Operator (tinware); Lipcoat Sprayer (any industry); Painter, Blackwall Tire (rubber tire); Painter, Chassis (auto. mfg.); Painter, Electric Motor (any industry); Silicator (chemical); Special-Lining Applier (any industry); Spray Cementer (leather prod.); Sprayer (boot & shoe); Tile Sprayer (brick & tile); Timber Sprinkler (mine & quarry); Undercoat Sprayer (aircraft mfg.; auto. mfg.); Waterproofer (boot & shoe).
GOE: 06.04.33 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 90

741.687-022 STRIPER, SPRAY GUN (any industry) alternate titles: gun striper; mechanical striper; pencil striper

Paints decorative stripes on manufactured articles, using spray gun and templates: Fills reservoir of spray gun with paint or enamel. Positions straightedge, template, or other guide on article to be striped, and pulls trigger of gun to apply paint or enamel as gun is moved along surface. Touches up stripe, using brush, and wipes excess paint from surface, using cloth and turpentine. May stripe articles against molding or in groove of article without use of guide. May paint decorative stripes or spiral designs on articles such as bisque ware or wheels as they revolve on turntable or mandrel, using spray gun equipped with specified striping nozzle. May be designated according to product or article striped as Pottery Striper (pottery & porc.); Washing-Machine Striper (house. appl.).
GOE: 06.04.33 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

742 STAINING, WAXING, AND RELATED OCCUPATIONS

This group includes occupations concerned with applying liquid or paste materials to produce natural finishes on wood and similar materials.

742.134-010 SUPERVISOR, FINISHING (furniture)

Supervises and coordinates activities of workers engaged in applying finishing coats of liquid mixture of paint, varnish, solvent, and stain to wood furniture surfaces and rubbing and polishing surfaces to desired luster: Reviews work tickets to plan production schedules. Confers with supervisors of other departments to coordinate flow of materials and products. Determines finishing materials required for operations and requisitions materials from supply area. Inspects finish of furniture at various stages to verify conformance to company standards. Trains new workers. May monitor pressure gauges and turn valves to adjust flow of finish material, such as stain, paint, or lacquer, to spray guns. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 79

742.684-010 RUBBER (furniture; wood prod., nec) alternate titles: burnisher; finisher

Rubs previously applied finish coat on furniture or other articles to produce lustrous or dull finish: Applies oil or wax to surface of article. Sprinkles powdered pumice stone on surface. Rubs surface with cloth or steel wool, or guides rubbing tool equipped with felt pad over surface to produce desired finish. Wipes residue from surface of article with cloth. May be designated according to type of finish obtained as Duller (furniture); Satin Finisher (furniture; wood prod., nec). May stain light spots and rub dark spots with sandpaper or steel wool to produce uniform coloring and be designated Brush Shade-Hand (furniture). May rub freshly stained furniture to produce highlights (thin spots in stain) and be designated High-Lighter (furniture).
GOE: 06.04.25 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 79

742.684-014 STAINER (furniture; wood prod., nec)

Stains parts of furniture or mirror and picture frames and other furniture items, using brush, pad, sponge, or spray gun, or by dipping parts or frames into vat of stain by hand. Rubs stained surface with cloth or felt pad to wipe off excess stain and distribute it evenly over surface. May be designated according to method of applying stain as Brush Stainer (furniture).
GOE: 06.04.33 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 78

742.687-010 WIPER (furniture) alternate titles: rubber; wiper-blender

Rubs surfaces of furniture, to which filler, stain, glaze, or washcoat has been applied, to remove surplus filler or finish: Rubs filler into pores of open-grained wood and spreads stain, glaze, or washcoat evenly over wood surfaces, using brush, cloth, or power rubbing tool. Wipes surfaces with cloth to remove excess filler or finish. May apply filler or finish to surfaces. May smooth rough spots on surfaces of furniture prior to application of glaze, using steel wool. May be designated according to coat wiped as Filler Wiper (furniture); Glaze Wiper (furniture); Stain Wiper (furniture); Washcoat Wiper (furniture).
GOE: 06.04.25 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 79

749 PAINTING, DECORATING, AND RELATED OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with hand-dipping, cleaning, masking, and other activities involved in painting and decorating.

749.131-010 SUPERVISOR, DECORATING (pottery & porc.)

Supervises and coordinates activities of workers engaged in decorating ceramic dinnerware: Examines production schedule to determine type of dinnerware to decorate and type of decoration specified. Assigns tasks to workers, such as stamping or painting designs or lines on dinnerware and applying decals or colored underglaze to dinnerware. Confers with other supervisors to coordinate workflow. Requisitions required supplies and equipment. Demonstrates decorating techniques to workers and inspects decorated items to ensure compliance with company specifications and standards. Establishes and maintains worker training programs. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to specific method of decorating as Supervisor, Decaling (pottery & porc.).
GOE: 01.06.03 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

749.131-014 SUPERVISOR, PAINT DEPARTMENT (any industry)

Supervises and coordinates activities of workers engaged in mixing paint, preparing surface of object to be painted, painting object, and drying or baking paint on object. May compute paint mixture formulas. May plan and program sequence of tasks for robots in spray paint booth. May move controls to adjust furnace temperatures, paint supply, hydraulic pressure, or conveyor speeds. May inspect painted surfaces for paint coverage, flow of paint, and color quality. May measure thickness and viscosity of paint applied to objects, using measuring devices. May be required to have experience with particular materials or products painted and application methods. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M4 L3 SVP: 7 DLU: 86

749.134-010 SUPERVISOR, FINISHING (fabrication, nec)

Supervises and coordinates activities of workers engaged in spray painting, sanding, rubbing, and polishing wooden and metal caskets: Inspects casket finish in process and upon completion for smoothness of sanding, uniformity of staining, finish applications, and rubbing and polishing effects, to determine conformance to company standards. Demonstrates techniques to train new employees in finishing caskets. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M2 L3 SVP: 8 DLU: 77

749.137-010 CHEST-PAINTING AND SEALING SUPERVISOR (ordnance) alternate titles: chest-painting leader

Supervises and coordinates activities of workers engaged in painting, striping, and lettering wooden chests for packing small-arms cartridges, and in cutting, forming, soldering, and painting metal liners for chests. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

749.381-010 GILDER (any industry) alternate titles: gold charmer; gold-leaf gilder; metal-leaf gilder; metal-leaf layer

Covers surfaces of items, such as books, furniture, harps, and signs, with metal leaf, such as aluminum, gold, or silver, to decorate them, using brushes, T-shaped handtool, and hands: Brushes sizing (thin glue) on sections of items which are to be covered with leaf (gilded), according to design. Transfers leaf from supply book onto pallet. Rubs camel-hair brush in hair to electrify brush and picks up leaf with brush, or picks up leaf with T-shaped, felt-edged tool, and lays leaf over sizing; or presses sheets or ribbons of leaf onto sizing by hand. Smooths leaf over surface and removes excess, using brush. Rubs leaf with polished burnishing agate, cotton pad, or gloved hand to polish leaf or simulate worn metal finish. May brush or spray protective lacquer coat over gilded surface.
GOE: 01.06.03 STRENGTH: L GED: R3 M1 L1 SVP: 6 DLU: 77

749.587-010 RACKER (toy-sport equip.)

Clamps arrows in rack preparatory to dipping: Aligns arrows in row and slides one end of row into rack slot. Builds successive layers of arrows by sep-

arating rows with dividers until rack is filled. Clamps ends of arrows in rack to hold them securely. Removes dividers and transfers loaded rack to painting department. Keeps records of arrows racked.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

749.684-010 DECAL APPLIER (any industry) alternate titles: decal transferrer; design transferrer; print applier

Applies decal designs to surfaces by moisture process: Cleans surface to be covered, using moist cloth. Submerges decal in water to moisten adhesive and backing paper. Positions decal on surface visually or using template and smooths out air bubbles with roller or edge board. Slides backing paper from decal and wipes off excess adhesive with damp cloth. May cut out decals from sheet with scissors. May varnish over design. When applying decals to chinaware, may be designated Print Decorator (pottery & porc.).
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

749.684-014 DECORATOR (furniture; toy-sport equip.)

Applies decorative designs to furniture or inflatable athletic balls by hand, performing any combination of following duties: Positions specified stencil on item and sprays or brushes paint into stencil opening to apply decorative designs or lettering, using spray gun or brush. Applies decal designs to furniture surfaces by moisture process [DECAL APPLIER (any industry) 749.684-010]. Brushes shellac, paint, or gilt onto surface of furniture to form decorative designs, stripes, or letters. May be designated according to duties performed as Stenciler (furniture) or Striper (furniture).
GOE: 01.06.03 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 87

749.684-018 DECORATOR, LIGHTING FIXTURES (light. fix.) alternate titles: lamp decorator

Decorates lighting fixtures, such as lamp bases and chandeliers with designated designs by squeezing decorating material from plastic tube onto fixture: Mixes decorative material with water to obtain specified consistency. Pours material into plastic tube. Squeezes tube to eject decorating material onto workpiece while moving tube with free arm motion to form specified designs, such as flower petals.
GOE: 01.06.03 STRENGTH: L GED: R3 M1 L2 SVP: 3 DLU: 77

749.684-022 EDGE STAINER II (leather prod.)

Stains edges of leather articles, such as wallets and key cases, using either of following methods: Fills reservoir of spray gun or roller device with color of stain specified on work ticket. (1) Presses button to activate blower that removes spray mist and fumes from spray booth. Positions bundle of leather articles on turntable and pulls lever to lower ram that holds and compresses bundle for staining. Manually rotates turntable and sprays stain on edges of bundled articles, using spray gun. (2) Presses button and turns set screws to activate stain-saturated roller and to regulate amount of stain on roller. Holds and turns edges of leather articles against roller to stain edges. Places stained articles on worktable or revolving turntable to dry. May mix tinting liquids and stains to match color of leather articles. May be designated according to method of staining as Roller Stainer (leather prod.); Spray Stainer (leather prod.).
GOE: 06.04.33 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

749.684-026 FINISHER (wood. container)

Paints assembled wooden containers with primary coat of paint, using brush. Applies finish coat of paint over primary coat when it has dried, using spray equipment.
GOE: 06.04.33 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

749.684-030 FRAME TRIMMER I (wood prod., nec) alternate titles: shader and toner

Paints contrasting color of paint on mirror-or picture-frame molding: Compares color of mixed paint with sample and adds paint to mixture to match sample. Lays strip of molding face up on table. Dips cloth pad, steel wool, or sponge in paint and rubs pad over surface, or applies paint to portions of molding with brush or roller.
GOE: 06.04.33 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

749.684-034 LACQUERER (jewelry-silver.)

Coats surfaces of ornamental figurines and trophies with lacquer to preserve surface gloss: Adds thinner to lacquer to obtain desired viscosity. Verifies viscosity of lacquer in vat, using viscometer. Places metal objects in wire basket and immerses basket in lacquer, using hand-operated hoist, or sprays objects with lacquer, using spray gun.
GOE: 06.02.24 STRENGTH: L GED: R3 M2 L1 SVP: 3 DLU: 77

749.684-038 PAINTER, TOUCH-UP (any industry) alternate titles: final-touch-up painter; finish repairer; spot sprayer

Brushes or sprays paint to cover scratches, chips, or repairs in painted finish of items, such as refrigerator cabinets, washing machines, or automobile bodies: Cleans and prepares surface for painting, using water, solvent, and scraper. Applies thin, even coat of finish material, such as paint or lacquer, to sanded area, using spray gun. Sprays lacquer or thinner material over finish coats to blend in spots and eliminate halo around repair. Paints chipped spots with brush. Compares color of paint supply with color chart and workpiece and remixes it to match standard colors. Maintains spray painting equipment. May mark identifying code on workpiece to indicate destination for further processing.
GOE: 05.10.07 STRENGTH: M GED: R3 M1 L1 SVP: 4 DLU: 77

749.684-042 PUTTY GLAZER (any industry)

Applies coating of putty, mastic, or similar material to imperfections in manufactured articles, preparatory to application of paint or other final coating: Inspects surface of article for defects, such as holes, cracks, and indentations. Spreads material over flaws, using dauber or knife, and brushes or spreads thinned putty or sealer over surface to conceal blemish. May spray article with prescribed coating, using spray gun. May prepare surface for finishing coat, using wire brushes, sandpaper, power grinder, or sandblasting equipment. May tend oven to bake article before or after application of final coating. May be designated according to article coated as Wheel Filler (auto. mfg.).
GOE: 06.04.33 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

749.684-046 STOVE REFINISHER (any industry)

Cleans, removes rust, polishes, and enamels used stoves and ranges: Dips stove or range shell and fittings into caustic solution which removes dirt and grease, using block and tackle. Transfers dipped article to drying oven. Removes rust from parts, using power-driven rotary wire buffer, and polishes brightwork surfaces on polishing wheel. Dips parts or article in enamel vat, using hoist, and transfers article to drying oven for prescribed time. May similarly refinish other articles, such as refrigerator cabinets, washing machines, and clothes driers.
GOE: 05.12.14 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

749.684-050 PAINT TRIMMER, PIPE BOWLS (fabrication, nec)

Trims excess paint from metal bands on shanks of smoking pipes, using paint trimmer and file: Examines pipe stummels to detect metal bands with excess paint. Places stummel bowl over paint trimmer stud, lowers trim blade, and rotates pipe stummel to trim off excess paint. Files excess paint from metal band around pipe bowl shank on designated pipe styles, using file. May operate tumbler barrel to smooth pipe stems and perform duties as described under TUMBLER OPERATOR (any industry) 599.685-110.
GOE: 06.04.34 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 86

749.684-054 WALLCOVERING TEXTURER (paper goods)

Applies paint to decorate textured wallcoverings in prescribed pattern: Reads production card and paint sample book to determine information, such as colors specified, patterns, and methods of paint application. Positions roll of wall covering stock on worktable, and tapes end of stock to takeup reel of drier used to dry painted stock. Drips specified paint onto stock, using stick or sponge depending on paint application method specified for pattern, dips paint roller into paint solvent, and spreads paint onto stock, according to pattern. Places blotting paper on wet paint, and rubs paper to remove excess paint and achieve pattern design. Pushes button to activate drier takeup reel to move painted wall covering into drier and unpainted stock onto worktable. Removes dried rolls of wallcovering and repeats process, using additional paints to achieve final pattern. Observes wallcovering in drier for breaks and tapes wallcovering together to repair breaks. Sprays water repellent on specified wallcovering, using spray gun.
GOE: 06.04.33 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 86

749.686-010 STRIPER, MACHINE (motor-bicycles)

Feeds motorcycle and bicycle fenders in machine that paints decorative trim on fenders: Inserts and guides fenders between paint wheels of machine that paints decorative stripes on fenders. Removes fenders from discharge end of machine and positions them on rack to dry. Examines stripes for consistency and thickness of paint. Wipes excess paint from fenders, using rag. Pours paint in machine reservoir to replenish supply. Removes drive mechanism and paint wheels from machine, using hex-key wrench, and cleans parts with brush and solvent.
GOE: 06.04.33 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

749.687-010 DIPPER AND DRIER (woodworking)

Immerses wooden articles, such as curtain-pole ends and doorstops in bath of paint or dye to form protective or decorative coating on articles: Hammers articles onto nails protruding from sides of reels (wooden disks with holes at centers), using rubber mallet. Dips article in bath, holding reel in horizontal position. Mounts reels on shafts of drying machines which rotate reels to hasten drying process. Pulls dried articles from nails by hand.
GOE: 06.04.33 STRENGTH: H GED: R1 M1 L1 SVP: 2 DLU: 87

749.687-014 KEG VARNISHER (wood. container)

Mixes varnish and dryer in tank. Dips and rolls keg in mixture to varnish surface.
GOE: 06.04.33 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

749.687-018 MASKER (any industry) alternate titles: body masker; taper

Covers specified areas of metal or wooden parts to be spray-painted, using masking tape, cardboard, or paper: Marks area to be masked on parts or articles, such as aircraft and automobile assemblies, lamp bases, or motorcycle fenders, using rule or template. Cuts or tears paper or cardboard to specified size. Secures masking in place with gummed tape to protect parts while surrounding areas are spray-painted. May smooth unmasked surface, using sandpaper. May dip or coat article with liquid wax instead of applying masking. May tape precut masks or stencils to article.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

749.687-022 PAINTER, SKI EDGE (toy-sport equip.)

Applies stain to ski edges, using felt-tip dauber: Pours specified amounts of enamel and mineral spirits in bowl and stirs mixture with plastic stick to prepare stain. Positions and clamps ski in vise to secure ski for daubing. Scrapes and washes ski edge, using razor blade, putty knife, cotton cloth, and solvent. Slides and dabs stain-saturated dauber along ski edge to apply stain. Wipes off

excess stain, using cotton pad. Occasionally conceals blemishes, such as rough spots and pits, using filler, blade, knife, steel wool, and abrasive cloth.
GOE: 06.04.33 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

749.687-026 PLASTERER (furniture) alternate titles: plasterer, spot
Fills in nicks, welding and die marks, and imperfections in metal furniture with plaster (special quick-drying metal filler) after priming coat is dry and preparatory to application of finishing coats, using putty knife to smooth filled spots. May smooth metal surfaces with sandpaper.
GOE: 06.04.33 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

749.687-030 STRIPPER (furniture) alternate titles: finish remover
Removes paint, lacquer, stain, or other finish from furniture and furniture parts by rubbing surface with cloth, brush, steel wool, and solvent to prepare them for refinishing. Immerses small articles in vat filled with solvent before rubbing. Blows excess solvent from surface with airhose or wipes surface dry with cloth.
GOE: 06.04.39 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

749.687-034 PIPE RACKER (fabrication, nec)
Inserts paper into pipe bowls and inserts dummy stems into bowl shanks to protect openings in stummels during painting process: Places pipes over pegs on bowl tray in specified sequence. Twists and removes stems, places stems in corresponding position on pipe stem tray, places dummy stem in pipe bowl shank, inserts paper into pipe bowl to plug bowl during painting. Replaces plugged bowl on peg. Examines painted pipe bowls, following painting process, to verify conformance to company standards. Removes paper from bowl, using pick. Twists and removes dummy stems and places tray of painted bowls in heated storage area to cure paint.
GOE: 06.04.34 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 86

75 OCCUPATIONS IN FABRICATION AND REPAIR OF PLASTICS, SYNTHETICS, RUBBER, AND RELATED PRODUCTS

This division includes occupations, not elsewhere classified, concerned with laying out, marking, cutting, carving, shaping, scraping, pressing, fitting, modeling, cementing, bench molding, and bench casting of products from plastics, synthetics, rubber, and related materials.

750 OCCUPATIONS IN FABRICATION AND REPAIR OF TIRES, TUBES, TIRE TREADS, AND RELATED PRODUCTS

This group includes occupations concerned with fabricating or repairing solid and pneumatic tires, pneumatic casings, inner tubes tire treads, and related products for such conveyances as vehicles, airplanes, farm equipment, and children's vehicles. Includes recapping and retreading automobile tires. Such minor repairs as patching inner tubes and sealing punctures in tubeless tires are included in Group 915.

750.130-010 SUPERVISOR (rubber tire)
Supervises and coordinates activities of workers engaged in manufacturing rubber tires and tubes. Inspects products in process to ensure adherence to specifications. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to process involved as Bead Supervisor (rubber tire); Curing Supervisor (rubber tire); Millroom Supervisor (rubber tire); Rubber-Compounder Supervisor (rubber tire); Stock-Preparation Supervisor (rubber tire); Tire-Building Supervisor (rubber tire); Tire-Finishing Supervisor (rubber tire); Tire-Room Supervisor (rubber tire); Tube-Room Supervisor (rubber tire).
GOE: 06.02.01 STRENGTH: L GED: R4 M2 L4 SVP: 7 DLU: 77

750.132-010 RETREAD SUPERVISOR (rubber tire)
Supervises workers engaged in vulcanizing, retreading, and recapping automobile tires. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R4 M2 L3 SVP: 5 DLU: 77

750.367-010 QUALITY-CONTROL INSPECTOR (rubber tire)
Inspects completed rubber products or products in process for conformance to specifications: Inspects products for such items as width, weight, length and markings, using ruler, thickness and hardness gauge, protractor, and book of specifications. Verifies temperatures and pressures on machine recording instruments. Tags substandard products and discusses defects with department supervisors to correct them. Writes report on all substandard products. May inspect storage area to ensure specified racking of rubber goods. May inspect mixing machine to ensure that it is functioning according to specifications.
GOE: 06.03.01 STRENGTH: L GED: R3 M3 L2 SVP: 4 DLU: 77

750.382-010 TIRE TECHNICIAN (rubber tire)
Tests experimental and sample production tires to determine strength, wearability, and cause of failure: Inflates tire on test machine, and adjusts controls to simulate road conditions, such as speed, weight-mileage check, and roadbed. Operates test equipment, such as autographic load-deflection recording mechanism, deflection machine, dead-load pressure gauge checking machine, and deflection-variation measurement machine, to evaluate tire uniformity, quality, and durability. Maintains periodic follow up on test until tire fails or has run for specified time. Cuts cross section from test tires, new experimental tires, or actual road tested tires with power saw. Counts bead wires and plies in cross section, verifies angle of plies with protractor, and measures specified areas on tire to ascertain effects of testing. Records test results and prepares graphs to compare test results.
GOE: 06.03.01 STRENGTH: M GED: R3 M3 L3 SVP: 5 DLU: 77

750.384-010 TIRE BUILDER, AUTOMOBILE (rubber tire)
Builds pneumatic tires on collapsible drum device from rubber components, such as beads, ply stock, tread, and sidewalls: Positions ply stitcher rollers and drum according to width of stock, using handtools and gauges. Rubs cement stick on drum edge to provide adhesive surface for plies. Pulls ply from supply rack and aligns with edge of drum. Depresses pedal to rotate drum, winds specified number of plies around drum to form tire body. Cuts ply at splice point and presses ends together to form continuous band. Brushes solvent onto ply to ensure adhesion and repeats process as specified, alternating direction of each ply to strengthen tire. Pushes switch to move bead setters that press prefabricated beads onto plies and to position rollers that turn edges of plies under and over beads. Winds chafers and breaker and ply plies. Aligns tread with guide. Starts drum to wind tread onto plies, and splices ends. Starts rollers that bond tread and plies as drum revolves. Depresses pedal to collapse drum and lifts tire onto conveyor. May turn ends of plies under and over beads with steel rod. May build heavy-service or limited production tires for aircraft, trucks, or equipment and be designated Tire Builder, Heavy Service (rubber tire).
GOE: 06.02.29 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 77

750.384-014 TUBE BUILDER, AIRPLANE (rubber tire)
Cuts and cements rubber stock to build airplane tire tubes: Places templates on calendered gum stock, traces patterns, and cuts stock with scissors, holding edges at angle to obtain beveled cut. Washes edges with solvent and brushes on cement. Joins stock together to form tube by lapping and bonding edges with hand roller. Marks valve location with template and inserts valve in tube.
GOE: 06.02.29 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

750.387-010 TIRE CLASSIFIER (rubber tire)
Examines defective tires rejected by TIRE INSPECTOR (rubber tire) to determine extent of repair and disposition of tires: Segregates tires according to defects, such as spread cords, ply separations, buckles, and blisters, and sends them to TIRE REPAIRER (rubber tire). Probes defects with handtools to determine extent of damage. Prepares daily report of defects. Recommends disposal of nonrepairable tires. May repair minor defects, such as puncturing blisters or applying patches, to prepare tires for storage.
GOE: 06.03.01 STRENGTH: L GED: R3 M1 L2 SVP: 3 DLU: 77

750.681-010 TIRE REPAIRER (rubber tire)
Repairs defects in cured tires as identified by TIRE INSPECTOR (rubber tire), using handtools and rubber patch: Examines and probes tire with awl to determine extent of defect. Buffs blemishes from tire, using portable buffer. Cuts out rubber around cracks and buffs area to prepare it for patching. Cements gum rubber patch into cutout to build up defective area. Rolls down patch with hand stitcher and punctures air pockets in patch to remove trapped air. Buffs and trims excess patch rubber from tire. Replaces treads by cutting defective tread from plies, buffing ply surface, and cementing new tread onto plies. May tend vulcanizing machine to cure patch on tire for specified time. May replace imprinting plates on electronic replating machine to change or clarify markings on tire.
GOE: 06.02.29 STRENGTH: M GED: R3 M1 L2 SVP: 3 DLU: 77

750.684-010 BAND BUILDER (rubber tire) alternate titles: pocket builder
Builds *bands* for use in manufacturing truck tires: Positions ply stock on drum and aligns stock with sides of drum. Depresses pedal to rotate drum while guiding ply onto drum to form band. Swabs wrinkles with benzol and smooths by hand. Splices ends of plies by pressing with fingers. Repeats operation, reversing angle of splice until specified number of plies are formed into band. Depresses pedal or pulls lever to move rollers against band and rotate drum to bond plies. Pushes pedal to collapse drum and pulls band from drum.
GOE: 06.04.29 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

750.684-014 BEAD BUILDER (rubber tire)
Wraps rubberized tape around coiled and rubber coated wire to reinforce tire bead: Positions bead on machine guide wheels and sets roller clamps to hold bead. Applies end of stock(bead-wrap fabric, gum-filler strip, or bead-flipper fabric) to bead. Starts machine and guides stock from roll onto bead as it rotates. Cuts stock with scissors and presses loose ends onto bead with fingers. Releases clamps and lifts bead to rack. Tags and ties specified quantity and type of bead into bundles. May be designated according to stock applied as Bead Filler (rubber tire); Bead Flipper (rubber tire); Bead Wrapper (rubber tire).
GOE: 06.04.07 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

750.684-018 GREEN-TIRE INSPECTOR (rubber tire)
Inspects uncured tires: Measures tread width and sidewall dimensions with ruler and gauge. Weighs tires for conformance to specified tolerance, and keeps weight records on all tires. Verifies thickness of liner and ply stock to be used in tire fabrication, using dial thickness gauge. Stamps approved tires, and marks rejected tires.

GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

750.684-022 TIRE BUILDER (automotive ser.) alternate titles: retreader; tire rebuilder

Builds (molds) semi-raw rubber tread onto buffed tire casing to prepare tire for vulcanization in recapping or retreading process: Applies rubber cement to casing, using brush or spray gun preparatory to application of camelback (new rubber treads). Selects camelback according to whether tire is to be retreaded or recapped, tire width, and tread thickness specified. Rolls camelback onto casing by hand, and cuts it with knife. Rolls hand roller over rebuilt casing, exerting pressure, to ensure adhesion between camelback and casing. May place rebuilt casing in mold for vulcanization process.
GOE: 05.12.12 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

750.684-026 TIRE GROOVER (automotive ser.)

Cuts grooves in treads of worn, vulcanized, or retreaded tires, using hand cutting tool: Fastens tire on holder. Pulls electrically heated grooving knife around circumference of tread to form grooves, following old design or laying out new design. Cuts crosswise grooves in tread in similar manner.
GOE: 05.12.13 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

750.684-030 TIRE INSPECTOR (rubber tire) alternate titles: final inspector

Inspects cured tires to ensure conformance to standards: Lifts tire manually or with hoist onto turntable. Revolves table to inspect for sidewall cracks, foreign material, and blisters. Feels beads to detect kinks and feels inner surface of tire to detect spread cords, ply separations, or buckles. May trim toe of bead and mold overflow with knife [TIRE TRIMMER, HAND (rubber tire) 750.684-034]. Marks defects and sorts tires for removal to balance and label, repair, or classification sections. May use fluoroscope or camera to detect flaws in tires. May inspect inner tubes. May be designated according to type of tire inspected as Passenger-Tire Inspector (rubber tire); Truck-Tire Inspector (rubber tire).
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

750.684-034 TIRE TRIMMER, HAND (rubber tire)

Trims excess rubber formed on solid or pneumatic tires during curing process, using knives: Lifts tire onto turntable or machine-driven rollers, or works on overhead or roller conveyors. Trims excess rubber from tread, sidewall, and inside diameter of tires as tire is rotated manually or mechanically. Lifts tire from table or pulls lever to remove it from rollers. May buff tires to remove defects and foreign matter and impart smooth finish, using power buffing wheel. May remove burrs and marks from rim band of solid tires, using power hand grinder or wire brush. May paint rim bands of solid tires with rust inhibiting coating. May be designated Solid-Tire Finisher (rubber tire).
GOE: 06.04.29 STRENGTH: H GED: R2 M1 L2 SVP: 2 DLU: 77

750.684-038 TIRE VULCANIZER (automotive ser.) alternate titles: cementer; patcher

Vulcanizes breaks and holes in casings and treads of motor vehicle tires: Cuts and trims broken sections of tire with knife. Scrapes and cleans area, using electrically or air-rotated wire brush. Coats break on inside of tire with rubber cement. Cuts raw and corded rubber patches and rolls them into rupture, using hand roller, to ensure adhesion. Covers rupture on outside of tire with tread rubber and works rubber into hole with hand roller. Trims patch, using knife. Places tire in tire mold of vulcanizing machine which has been heated to specified temperature. Adjusts air or steam bag inside tire, inflating it to exert pressure on tire in mold. Clamps tire in mold and allows it to remain until rubber is vulcanized and patch fused with surrounding rubber. May inspect and rebuff tire.
GOE: 05.12.12 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

750.684-042 TIRE-BLADDER MAKER (rubber tire)

Fabricates *bladders* used in tire curing presses, performing any of following duties: Brushes rubber cement on ends of skived rubber stock and splices stock into ring shape, using press to fuse ends. Removes spliced stock and weighs it on preset scale to ascertain conformance to specifications. Places ring in press that forms and cures bladder. May place spliced ring in stock preheater to soften it prior to molding. Dips cured bladder in water tank to cool it after molding. Trims and smooths bladder, using knife, hot knife, and hand buffer. Bolts steel fittings, used to attach bladder to curing press, to finished bladder, using handtools.
GOE: 06.04.29 STRENGTH: M GED: R2 M2 L2 SVP: 2 DLU: 77

750.684-046 TUBE BALANCER (rubber tire)

Tests tubes for airplane tires to ensure conformance to balance specifications and glues patch to tube to equalize weight: Inflates tube with airhose, and fits it over hub of gravity balance wheel to locate heavy area. Determines overweight and selects balance patch to equalize weight. Hand buffs and brushes cement on area to which patch is applied. Bonds patch to area, using hand roller.
GOE: 06.04.29 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

750.684-050 TUBE REPAIRER (rubber tire)

Repairs defects in cured tubes: Cuts out defective areas, such as buckles, cracks, and thin spots, with scissors. Buffs cut edge, washes with solvent, and brushes cement on area to be repaired. Applies uncured gum patch and bonds with hand roller. Removes defective valves, washes area, and applies new valve. Spot-cures repairs on automatic or manually operated air-ram press (hot plate). Buffs repaired areas to smooth finish with hand buffing machine.

GOE: 06.04.29 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

750.685-010 SQUEEGEE TENDER (rubber tire)

Tends unit of *hand* building machine that rolls *squeegee* and gum strip onto ply stock: Lifts rolls of gum strip and squeegee onto letoff rods of machine and threads stock through series of guide rollers. Lifts bias-cut ply stock from conveyor to apron of machine. Turns setscrews to adjust apron guide and provide even application of squeegee and gum on ply stock. Starts machine to run squeegee and gum onto ply stock and to accumulate ply stock in *festoon* for BAND BUILDER (rubber tire). Splices each succeeding section of ply stock to previous one by hand to form continuous strip.
GOE: 06.04.07 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

750.685-014 TIRE RECAPPER (automotive ser.)

Tends machines that recap and retread tires for reuse: Inspects tire to determine whether it is suitable for recapping and rejects tire if damaged beyond repair. Pushes tire against power buffing wheels, using tire holder, to prepare tire for recapping or retreading. Builds new tread onto buffed casing, using brush or spray gun to apply rubber cement, and hand roller to cause tread to adhere to casing. Tends mold that vulcanizes tread onto tire and molds tread design, and adjusts controls to inflate air bag within tire to specified pressure and heat mold to required temperature. May tend machine that automatically ingests, extrudes, and applies rubber to buffed tire.
GOE: 05.12.12 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

750.687-010 INNER-TUBE INSERTER (rubber tire) alternate titles: tuber

Installs inner tubes and flaps in tires preparatory to shipping: Positions tire under hydraulic spreader clamps. Pushes switch to activate clamps that spread sidewall of tire. Inserts inner tube in tire with valve located at point marked by TIRE BALANCER (rubber tire). Inflates inner tube, using airhose. Inserts flap over inner tube to prevent damage.
GOE: 06.04.29 STRENGTH: H GED: R1 M1 L1 SVP: 2 DLU: 77

750.687-014 TIRE BALANCER (rubber tire) alternate titles: tire spotter

Inspects cured tires for conformance to balance specifications: Lifts tire onto balance table manually or with hoist. Pulls lever to spread holding fixture that secures tire in position. Releases lock that permits balance table to float freely on mounting and bubble gauge to function. Observes bubble gauge to determine if tire balance is within specified limits. Marks tire where gauge indicates lightest area, for location of inner-tube valve. Lays aside unacceptable tires and lifts acceptable tires onto conveyor. May affix identification labels on acceptable tires.
GOE: 06.04.29 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

750.687-018 TIRE INSPECTOR (automotive ser.)

Inspects used tires to be retreaded for automobiles, buses, trucks, and other automotive vehicles: Examines breaks in cord, bead and sidewall. Places tire on tirespreading machine and examines inner surface of tire for breaks. Marks breaks with chalk to indicate repairs required prior to retreading. Rejects tires that cannot be retreaded.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

750.687-022 TIRE SORTER (rubber tire)

Sorts cured and uncured tires according to size and type as indicated by identification numbe, on tire: Compares number on tire and numbers on pallets, conveyors, hand or rock trucks leading to further processing, such as curing, finishing, buffing, or testing, and places tire on conveyance. Sorts uncured tires and places them on saddles (storage racks) prior to automatic curing.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

751 LAYING OUT AND CUTTING OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with laymg out, marking, and cutting of plastics, fiberglass, synthetics, rubber, and related materials.

751.381-010 PATTERNMAKER (engraving)

Lays out and cuts plastic patterns used for pantograph engraving according to sketches or blueprints, using drafting instruments and engraving tools: Establishes reference points on plastic sheet and computes layout dimensions, following blueprints. Marks or scribes lines on plastic sheet, using drawing tools, such as straightedge, compass, and scriber. Cuts out pattern, using jeweler's handsaw or jigsaw. May tend injection molding machine to form plastic patterns.
GOE: 01.06.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

751.387-010 STOCK PREPARER (plastic prod.)

Cuts milled plastic materials or rubber molding compounds to size for compression or transfer molding processes, using die press or papercutter. Weighs preforms to verify required weights. Discards off-standard pieces. Stacks preforms on trays for delivery to mold room. Records number of preforms prepared.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

751.584-010 COLD-ROLL INSPECTOR (plastic-synth.)

Examines continuous sheet of plastics materials passing over artificially lighted glass inspection table and cuts out defective areas: Stops progress of plastics

sheet and removes spots, color streaks, wrinkles, and other defects, using knife or scissors. Applies solvent to ends of defective material, laps ends, and pounds lapped material with hands to reform continuous sheet. Threads material through equipment. Turns wheels to synchronize speed of cold rolls with flow of sheeting. Records weight of defective material.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 4 DLU: 77

751.684-010 CUTTER-INSPECTOR (nonmet. min.)
Inspects for defects and cuts tubular knit plastic mesh used to fabricate scouring pads: Mounts roll of mesh onto turntable spindle. Pulls end of mesh across table to align cutting guide thread with mark on table. Pulls handle of hinged knife blade to cut mesh to specified length. Inspects mesh as it is unwound to detect defects, such as skipped or uneven stitches.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

751.684-014 CUTTER, HAND (rubber goods) alternate titles: knife cutter; stock cutter; trimmer, hand
Performs any combination of following tasks to cut gaskets, diaphragms, or parts for hydraulic valves, radios, airplane deicers, and footwear from rubber sheeting, uncured rubber slabs, plastic, or cork: Mounts sheeting roll in letoff rack by hand or with hoist and pulls sheeting from roll or positions material on table. Cements sheets together to build up required thickness or piles together layers for cutting multiple parts. Places template on material, traces outline with pencil, and cuts out parts with scissors or cuts around template with knife. Places cut parts on truck for removal to next process station. Trims top of footwear following outline of binding or flash from molded heels or soles. Cuts slot on side or V in front of footwear to permit insertion of foot. Pares excess rubber or fabric from lasted toe to reduce thickness and prevent outsole from bulging at toe. Stamps sizes on shoe soles, using stamp and pad, and places finished outsoles in *book*. Embosses trademark on arch, using pedal-controlled press. May be designated according to part cut as Outsole Cutter, Hand (rubber goods).
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

751.684-018 CUTTER, HOT KNIFE (boot & shoe; rubber goods)
Cuts parts for rubber footwear from uncured sheet rubber, using electrically heated knife: Presses knife onto rubber and guides it around outline on fabric lining. Strips and cuts away web (scrap) stock and throws into container. Cleans rubber deposit from knife edge, using file.
GOE: 06.04.29 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

751.684-022 FOXING CUTTER, HOT KNIFE (boot & shoe; rubber goods)
Cuts uncured rubber strips to specified lengths for use as foxing with electrically heated knife (hot knife): Places tray-filled parallel strips on worktable. Cuts rows of strips into equal lengths with diagonal ends for firmer bonding, using sample or judging length from experience. Swabs strips with benzine to restore adhesiveness for assembling to footwear. Sets tray of cut foxing on assembly line or stacks them on table.
GOE: 06.04.29 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

751.684-026 PREFORM PLATE MAKER (ship-boat mfg.)
Constructs wooden or paper templates for laying-out cutting lines on fiberglass materials used in manufacturing plastic boats: Positions sheets of paper on sections of molds for hulls, decks, or other parts of boat. Fits paper over contours and into corners of molds and marks outline with chalk. Removes paper from molds and cuts pattern, using scissors. Marks pattern with identifying data. Positions paper pattern on strips of wood and scribes outline of pattern on strips. Cuts wood strip according to markings, using power handsaw. Assembles strips to form template, using screws, nails, and braces. Positions template or pattern on fiberglass material and outlines pattern with chalk or crayon. Cuts material, following outline and using power cutter. Inspects rolls of materials received and stores them on shelves.
GOE: 06.02.31 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

751.686-010 HOSE CUTTER, MACHINE (rubber goods) alternate titles: cutting-table operator
Feeds cured rubber hose into machine that automatically cuts hose to specified lengths, or cuts hose, using miter box and knife. Coils cut hose as it emerges from machine and lifts it onto skid or conveyor for removal to packing area. May attach coupling hardware to hose.
GOE: 06.04.07 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

751.687-010 HOSE CUTTER, HAND (rubber goods)
Measures, rerolls, and cuts rubber hose to specified lengths: Positions reels of hose in letoff rack and empty reels in powered windup rack. Verifies diameter on hose, using gauges. Threads end of hose through measure meter and onto empty reel. Depresses pedal and guides hose onto windup rack. Examines hose for defects, such as snags, cuts, and bulges. Observes measuring meter and cuts hose to specified lengths, using knife. Weighs hose and records information on identification tag. May attach metal couplings or fittings to each end of hose.
GOE: 06.04.29 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

752 FITTING, SHAPING, CEMENTING, FINISHING, AND RELATED OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with fitting, shaping, cementing, finishing, and similarly working plastic, fiberglass synthetics, rubber, and related materials.

752.684-010 BALLOON MAKER (rubber goods)
Cuts out inflatable rubber figures, such as animals and comic characters, for use in parades and carnivals. Punches hole and inserts air valve in each component member of figure, cements valve in place, and cements members together and to body of figure, forming inflatable balloon. Inflates figure and inspects for leaks.
GOE: 06.02.29 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

752.684-014 BELT BUILDER (rubber goods)
Builds up plies (layers) of rubberized fabric and gum to fabricate transmission and conveyor belts: Pulls fabric and gum plies of specified width onto table from rolls on letoff rack and aligns edge with previously laid ply. Cuts ply to length with scissors and bonds plies together, using rollers and stitchers. Builds up specified number of plies and trims irregular edges with scissors or knife. Splices belting to obtain specified belt. Inserts end of finished belt between pressure rollers that bond plies and roll belt onto windup rack. Signals OVERHEAD CRANE OPERATOR (any industry) 921.663-010 to lift and position rolls of stock and belting in work area. Measures finished belts with ruler and gauges for conformance to blueprints. May operate calender machine that coats and feeds plies direct to building table [CALENDER OPERATOR, FOUR-ROLL (plastic prod.; rubber goods; rubber tire)].
GOE: 06.04.29 STRENGTH: H GED: R2 M2 L2 SVP: 2 DLU: 77

752.684-018 BIT BENDER (fabrication, nec)
Softens and bends rubber or plastic smoking pipe bits, using either of following methods: (1) Places bits into machine drums that distribute bits onto conveyor that moves under ultraviolet lamps to soften bits. Bends softened bit, according to pipe style, using pliers. (2) Places bit in tube of hot water to soften bit. Positions bit in shaping bed of die and depresses lever to force platen against bit to shape bit.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 78

752.684-022 BUFFER (plastic prod.)
Removes ridges and rough edges from fiberglass or plastic castings. Holds casting against rotating buffing wheel to grind off ridges. Lifts casting from machine and places it in container.
GOE: 06.04.24 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

752.684-026 CATHETER BUILDER (rubber goods)
Cuts and shapes rubber surgical tubing for medical use: Seals one end of tubing with rubber plug and cuts sealed end to specified shape with knife. Fills tubing with water to aid curing process and ties off end. Lubricates shaped end when tubing dries, and pushes it into glass curing form. Holds vacuum hose over hole in end of form to draw tubing into curing form. Folds extending tied end of tubing down against outside of form, wraps it with tape, and covers hole in tube with cement to make tube airtight. Places form in rack for curing. Removes cement from hole after curing to allow air to enter and pulls tubing from form.
GOE: 06.04.29 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

752.684-030 HOSE MAKER (rubber goods) alternate titles: hose builder
Assembles rubberized fabric, rubber tubing, and gum rubber ply (layer) stocks to fabricate industrial hose: Lifts mandrel, using hoist, and locks end of mandrel in motorized chuck, using wrench. Swabs rubber tubing and ply stocks with solvent and rubber cement to clean them and provide adhesive surfaces. Aligns strips and sheets of ply stock with rubber tubing as specified. Depresses pedal to rotate mandrel and guides ply stock onto rubber tubing to form hose. Rolls assembled hose to ensure adherence of plies, using mechanical or hand roller and stitcher. Smooths wrinkles and presses loose plies together, using fingers and roller. Cements brand on assembled hose prior to curing. Measures dimensions of hose with rule, calipers, and gauges, and cuts off excess rubber with knife. Wraps fabric around hose to prepare hose for curing. Clamps or cements metal fittings to ends of hose, using rubber cement and handtools. May load and unload hose in autoclave heater, using hoist. May move cured hose to storage area, using hoist.
GOE: 06.02.27 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 77

752.684-034 PADDED-PRODUCTS FINISHER (rubber goods)
Repairs defects and finishes padded automotive products, such as dashboards and door panels: Pours or injects with hypodermic needle padding solution (liquid rubber foam) into defects, such as wrinkles and faulty adhesion between padding and plastic covering. Clamps molding form to repaired area and sets it aside to dry. Cuts out wrinkled plastic and selects piece of matching plastic and cements it to defective part. Repairs defects, such as abrasions, faulty embossing, and discoloration, using knives, scissors, hand buffing wheel, and spray gun. Removes wrinkles by softening plastic, using heat lamps, and pressing out wrinkles by hand. Applies solvents, cement, putties or paints to finish product.
GOE: 06.04.27 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

752.684-038 RUBBER-GOODS ASSEMBLER (rubber goods)
Assembles rubber goods, such as water bottles, ice bags, swim fins, water goggles, rubber gloves, and ring cushions: Cements and stretches molded opening in goods to insert styrene eyepieces, closures, and ferrules. Clamps buckles and straps to fins and goggles, using air vise and handtools. Wraps fabric tape around inserted closures and ferrules to hold them in place and stretches band of rubber around tape. Brushes cement on valves and closures. May be designated according to product assembled as Bottle Assembler (rubber goods);

Goggles Assembler (rubber goods); Graphite-Disk Assembler (rubber goods); Ice-Bag Assembler (rubber goods).
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

752.684-042 RUBBER-TUBING SPLICER (rubber goods) alternate titles: splicer

Splices rubber tubing into continuous strips for use as automobile window and door seals: Measures and cuts extruded rubber to specified length, using gauge and knife. Brushes rubber cement on ends of tubing and positions tubing in splicing fixture. Clamps fixture in heated press to complete splice. Removes spliced tubing from press and fixture after specified time. May examine splice for breaks or irregularities.
GOE: 06.04.29 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

752.684-046 SELF-SEALING-FUEL-TANK BUILDER (rubber goods) alternate titles: fuel-cell assembler

Builds up layers of synthetic and rubber sheeting on plaster form to make self-sealing fuel tanks for airplanes: Brushes solution on specified plaster form to provide smooth surface. Fits specified layers of synthetic and rubber sheeting on form and smooths out wrinkles with hands and hand roller. Brushes cement between layers of rubber to provide adhesive surface. Locates areas for fittings on fuel tank, using templates and ruler, and makes cutouts with knife. Cements fittings on fuel tank, rubber reinforcement strips over base of fittings, and reinforcement strips of gum rubber over seams of fuel tank.
GOE: 06.02.29 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 77

752.684-050 SKIN FORMER (rubber goods)

Places skin (plastic sheeting) over jigs to form padded automotive products, such as dashboards and door panels: Lifts precut skin from oven conveyor and stretches it over jig. Depresses pedal to create vacuum in jig to draw skin over jig contours, and smooths wrinkles with hands. Sponges skin with water to cool skin and set shape. Trims excess skin with knife. Releases vacuum and lifts formed skin to rack. Sets oven controls for specified temperature. Presses conveyor cycle buttons to move skins to and from oven.
GOE: 06.04.32 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

752.685-010 SECTIONAL-BELT-MOLD ASSEMBLER (rubber goods) alternate titles: v-belt mold assembler and curer

Tends machine that presses belts to attain V-shape: Stretches belts around molds and fastens several molds together with metal rod and nut. Positions assembled molds between twin parallel power rollers, using hoist. Threads water-soaked cloth liner through tension guides and around molds. Pulls pressure roll down to molds and starts rollers that press belts to attain V-shape and wrap molds with liner. Ties cord around liner to secure it.
GOE: 06.04.07 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

753 OCCUPATIONS IN FABRICATION AND REPAIR OF RUBBER AND PLASTIC FOOTWEAR

This group includes occupations concerned with fabricating and repairing molded rubber and plastic footwear, and vulcanized rubber-solid fabric-top footwear, including rubbers, rubber boots, and galoshes. Occupations concerned with footwear made from leather and other materials are included in Group 690 and Group 788.

753.381-010 BOOTMAKER, HAND (rubber goods)

Builds odd lot, odd size, and specially designed rubber footwear, such as boots, arctics, and gaiters, using handtools: Pushes last onto bench jack. Selects parts in prescribed sequence from *books* and frames and assembles them on last, positioning and aligning them in designated relationship to other parts, using from gauges to locate exact position of such parts as grommet, strap, or buckle. Swabs some parts with benzine or naphtha to restore tackiness and brushes others with rubber cement for better adhesion. Presses parts onto previously assembled parts with fingers and rolls them with handtools for tighter bond. Pares (skives) and trims off excess rubber, using knife and scissors. Pulls last bearing completed article from jack and sets aside for transfer to vulcanizer.
GOE: 06.02.29 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

753.467-010 CLASSIFIER (rubber goods)

Examines rubber or plastic footwear rejected by inspectors and determines whether it can be salvaged as seconds or thirds or must be cut up as scrap. Inspects and segregates pairs by throwing them into separate containers. Keeps running tally of classifications according to grade. Computes percentage in each classification to total pairs in bracket (lot), according to work ticket, and notifies supervisor of recurring defects (pattern). Sets aside rejected pair from pattern for examination by fabricating department. May compute percentages, using calculator or slide rule.
GOE: 06.03.01 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

753.584-010 MACHINE-MADE-SHOE UNIT WORKER (boot & shoe)

Performs any combination of following tasks, as member of crew of rotating machine (merry-go-round) on which plastic soles are molded onto presewn fabric uppers to form low top sport shoes: Holds nozzle of hose to sprue hole of mold and squeezes release on hose handle to fill space between mold and lasted shoe with liquid plastic. Releases lever to stop flow when plastic oozes from toe end of mold into catch pan. Passes insole between rollers to coat underside with latex cement and places it on tray of machine station to partially dry as it is carried one rotation around machine. Brushes sole inside molded shoe with latex cement for bonding with insole and sets on machine tray to dry. Pulls excess plastic from around molded sole, using pliers. Digs and removes plastic plug from sprue hole and excess deposit from toe pan, using pliers. Removes previously cemented insole and molded shoe from machine trays, inserts insole in shoe, and places shoe on adjacent table for pressing insole. Selects pair of right and left lasts according to size and style shoe being processed and sets on pins in machine table. Places shoes on lasts and pushes knobs to lower padded rams that press insoles into shoes. Removes shoes as rams automatically retract after preset time and pushes them along table. Examines shoes for such defects as loose stitching and off center or incomplete molding, and throws them into tote boxes, according to size and acceptance or rejection. Verifies color of shoe with color specified on box label. Removes smudges, using cloth moistened with naphtha or benzine.
GOE: 06.04.32 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

753.587-010 SORTER (boot & shoe)

Sorts rubber footwear according to style, size, and width: Picks footwear from container, identifies style, and locates size and width numbers for sorting. Mates (pairs), counts, tags, and places pairs of footwear on conveyor or in racks or packing boxes. Records quantities of sorted pairs by style and size on form.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

753.684-010 BUFFING-AND-SUEDING-MACHINE OPERATOR (boot & shoe) alternate titles: sueding-and-buffing-machine operator

Holds rubber soles against power-driven abrasive-covered wheel to obtain soft or suede finish. Changes abrasive collar on wheel for different degrees of finish, using wrench.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

753.684-014 CUT-AND-COVER LINE WORKER (boot & shoe)

Fits, places, and joins together on conveyor belt, precut parts and subassemblies of uncured and fabric lined rubber to form uppers or legs for rubber footwear: Adds and joins parts, such as toe piece counters, vamp, binder strip, in designated sequence. Swabs designated parts with benzine-moistened swab to restore tackiness for adherence to other parts. Stamps identifying data on designated part, using hand stamp. Dusts pocket (gusset) with powder to prevent parts sticking together.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

753.684-018 HOOKER-LASTER (boot & shoe)

Mounts fabric shoe uppers on rotating lasts of machine (merry-go-round) to produce fabric top shoes with plastic soles: Pulls and stretches fabric upper and hooks hemmed edge over pins protruding from instep and heel of last, using claw-tipped lasting tool, to secure fabric. Taps puckered fabric at toe and heel with lasting tool to flatten it and permit free flow of plastic during molding of sole. Cuts ends from draw string, using ring knife or hook blade of lasting tool. Pulls lever that releases catch and automatically turns and lowers last and closes top of sole mold.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

753.684-022 LASTER (boot & shoe)

Attaches uppers of fabric top footwear to insoles: Holds last on which upper and insole are premounted to rollers of machine. Inserts projecting margin of upper fabric between folding rollers and presses workpiece upward against flattening roller. Turns workpiece until fabric of upper is folded and pressed against insole all around. Places lasted footwear on conveyor for attaching outsole.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

753.684-026 REPAIRER (boot & shoe)

Repairs and salvages defective rubber footwear, such as boots, gaiters, overshoes, and fabric upper footwear: Examines articles to determine location and extent of defect and method of repair. Swabs loose edges of seams with benzine or naphtha to restore tackiness and rolls or stitches seam to make tighter bond for stress and waterproofing. Presses edges with heated knife to smooth them. Moistens misaligned, creased, or wrong part, such as binding, toecap, heel, outsole, or foxing, with solvent. Pulls defective section from underpart and repositions or replaces part. Trims (skives) excess rubber from insoles to remove bulge of outsole or heel, using knife. Cleans soiled spots with solvent-moistened swab or cloth, soap or detergent, and water.
GOE: 06.04.29 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

753.684-030 ROLLER-STITCHER (boot & shoe)

Presses together layers of uncured rubber parts or sections of rubber footwear, as they pass by on lasts on conveyor line, using hand rolling or stitching tools: Presses tool against designated area or part of workpiece, such as shank, midsole, toecap, outsole, or foxing, and rolls it back and forth or follows designated path around edge or seam until layers are pressed together. Removes footwear from end of conveyor line and rolls and stitches (rolls indentations along narrow strip) seams around edge of outsole as final assembly operation.
GOE: 06.04.29 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

753.687-010 CLIPPER (boot & shoe)

Cuts threads connecting rubber footwear parts, using scissors. Snips off thread ends. Examines parts for loose or missing stitches and for prescribed margins. Arranges parts in boxes or places them on conveyor for next operation. May be designated according to parts separated as Clipper, Counters

(rubber goods); Clipper, Outside Back Stay (rubber goods); Clipper, Tongues (rubber goods).
GOE: 06.04.29 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

753.687-014 DEBRANDER (boot & shoe) alternate titles: brander; rebrander

Melts brand name from articles of plastic footwear, such as rubbers or overshoes, for sale under another vendor's name, using electrically heated tool resembling soldering iron. Cleans adhering plastic from tool tip by rubbing on wire brush.
GOE: 05.12.10 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

753.687-018 FINAL INSPECTOR (boot & shoe) alternate titles: packing inspector; reinspector

Inspects articles of vulcanized rubber or cured slush cast plastic footwear, such as boots, gaiters, overshoes, or fabric-upper sportswear, for misplaced, misaligned, or missing parts, overcuring, undercuring, discolorations, and mismating of size, width, color, or style preparatory to packing. Determines acceptability of article, based on adherence to specifications and on acquired job knowledge of acceptable standards. Measures thickness of uppers, using dial micrometer. Marks defects with chalk and sets rejects aside for disposal by CLASSIFIER (rubber goods).
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

753.687-022 FITTER-PLACER (rubber goods)

Fits and places precut or prepared parts upon others, as they pass by on conveyor belt, to form subassembly of parts for rubber footwear. Removes parts from book, board, frame, bundle, or container and places them on sheet rubber or other parts. Aligns and places parts to allow adequate margins for subsequent joining, where specified. Presses parts together with fingers, and repositions parts to remove wrinkles. Strips off and discards parts that are misplaced, wrinkled beyond correction, or are not tacky. May remove subassembled parts from belt and arrange on board, in frame, or in book for subsequent use.
GOE: 06.04.23 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

753.687-026 MAKING-LINE WORKER (boot & shoe) alternate titles: assembler, rubber footwear

Places parts and joins seams to assemble rubber footwear articles as they pass by on lasts on conveyor jacks, performing any combination of following tasks. Places last on conveyor jack. Removes upper from conveyor, wraps around last, and presses back seam at heel to hold upper onto last. Turns or pulls last upright in position for next operation. Joins seams, such as back, toe, counter, and top, allowing specified margin and pressing seams with fingers to ensure complete union. Removes part from book, frame, board, or stack and adds part to workpiece by fitting and placing in designated location, each worker performing one operation, at successive stations, until article is completed. Aligns parts, using other parts as guides or according to markings stamped on parts or metal form gauges. Swabs dry parts with benzine or naphtha to restore tackiness.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

753.687-030 MOLD FILLER AND DRAINER (boot & shoe)

Casts plastic footwear, performing any combination of following tasks, and working as member of crew: Fills mold under spigot, or mold fills automatically as it moves on conveyor. Empties mold into vat and places it top down on rotary conveyor rack to drain off excess. Removes mold after one rotation and places on conveyor that carries it through oven to gel (set) and dry. Repeats entire process to increase wearability by adding second thickness. Holds mold under spigot and adds liquid, tipping mold back and forth to build up even thickness of sole. Adds additional plastic to heel area to increase thickness of heel.
GOE: 06.04.32 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

753.687-034 MOLD-INSERT CHANGER (boot & shoe)

Changes metal inserts in molds for rubber soles according to size and pattern indicated on worksheet: Selects designated insert, places insert in cavity of mold, and taps it with plastic hammer to wedge it securely in mold. Taps insert through holes in bottom of mold to remove it, using punch and hammer. Replaces inserts in designated bins.
GOE: 06.04.32 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

753.687-038 PACKING-LINE WORKER (rubber goods)

Performs any combination of following tasks as member of conveyor line crew, to finish and pack plastic or rubber footwear: Sorts and mates pairs and places them on conveyor. Opens or closes buckles, snaps fasteners together, inserts laces in eyelets, and ties loops (frogs) around buttons. Counts and tallies production or records on counter. Wraps pair in tissue, places them in shoe box, and packs boxes in cartons. Places rejects in boxes or racks for repair or mating.
GOE: 06.04.39 STRENGTH: L GED: R2 M2 L1 SVP: 2 DLU: 77

753.687-042 STOCKLAYER (boot & shoe)

Piles plies (layers) of cloth, rubber, or rubberized fabric for cutting rubber footwear parts, using winding drum: Selects beam (roll) of material according to job order. Positions beam in cradle, using hoist. Clamps end of material in slot in winding drum, notes yardage indicator reading, and moves lever to engage clutch and start material winding. Stops machine when specified number of units have been recorded on indicator. Cuts through plies, using knife. Tapes ends of unused material, marks amount left on roll, and returns it to storage.
GOE: 06.04.34 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

754 OCCUPATIONS IN FABRICATION AND REPAIR OF MISCELLANEOUS PLASTICS PRODUCTS

This group includes occupations concerned with bench molding, fitting, and finishing plastics and fiberglass products. Structural work occupations are included in Division 80.

754.130-010 DECORATING-AND-ASSEMBLY SUPERVISOR (plastic prod.)

Supervises and coordinates activities of workers engaged in welding and assembling components into plastic products and printing logos on products: Inspects processed plastic components and products to verify conformance to customer specifications and company standards. Demonstrates machine operations to new employees and assigns trainees to work with experienced workers for continued on-the-job training. Diagnoses machine malfunctions and assists workers in determining corrective actions required. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.04.01 STRENGTH: L GED: R4 M2 L3 SVP: 5 DLU: 86

754.137-010 SUPERVISOR, SAMPLE (plastic-synth.)

Supervises and coordinates activities of workers engaged in cutting plastic sheets to specified size for samples, waxing and polishing samples, stamping identifying data on samples, and preparing sample orders for shipment. Trains new employees. Examines samples to detect defects in color, mottle pattern, and surface finish. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.04.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

754.381-010 INTERNAL CARVER (plastic prod.)

Carves designs on paperweights, calender backs and stands, letter openers and handles, and other clear plastics products, using electric hand drill.
GOE: 06.01.04 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

754.381-014 PATTERNMAKER, PLASTICS (plastic prod.) alternate titles: jig and form maker; plug maker

Fabricates patterns, fixtures, jigs, and templates, used in producing plastic articles, from wood or metal stock, following blueprints and using handtools, power tools, and measuring instruments: Lays out cutting lines on stock, using scribe, compass, rule, triangles, and French curves. Cuts stock, using power saw, power shear, and handtools. Assembles pieces, using rivets, bolts, nails, or glue. Smooths surface of assembly, using plane and power sander. Verifies dimensions of assembly, using calipers, rule, and compass. Sprays coat of parting agent, such as sealing lacquer or wax on surface of assembly. May cover pattern with plastic-impregnated fabric to make preforms. May remove preform from pattern when plastic has cured, using airhose.
GOE: 05.05.07 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

754.381-018 PLASTICS FABRICATOR (aircraft mfg.; plastic prod.) alternate titles: plastics bench mechanic; plastics fabricator and assembler

Fabricates, assembles, reworks, and repairs plastic products, applying knowledge of working characteristics of plastics and bonding techniques, using precision instruments, handtools, power tools, machines, and equipment: Reads and interprets blueprints, work orders, and related documentation to determine methods and sequence of operations and dimensional and finish specifications. Lays out cutting lines on plastic materials, such as sheet stock and fiberglass or graphite cloth, following template pattern, blueprints, sketches, or sample part, using measuring and marking instruments. Cuts material to size, using shears, knives, cutters, scissors, router, or saw. Mixes ingredients, such as resins, catalysts, fillers, accelerators, and colors, according to formulas, manually or using mixer. Sets up and operates forming machines and presses, or laminates plastic cloth and resins or preimpregnated cloth onto layup mold or bonding fixture, to shape parts. Wraps bonding fixture or mold in vacuum bagging materials, attaches fittings to mold or fixture, such as vacuum connections, thermocouples, and probes, and exhausts air from vacuum bag to prepare lamination for curing or bonding. Operates oven to cure parts. Trims, drills, reams, countersinks, grinds, and finishes parts to specifications, using templates, handtools, and power tools. Verifies dimensions of parts, using precision instruments, such as dial indicators, micrometers, and calipers. Fits and assembles parts and attaches hardware and fittings, such as brackets and hinges, using clamps, jigs, fixtures, power tools, and fasteners. Applies tape, foam, or other type of adhesives to assembly for subsequent bonding in autoclave. Repairs and reworks damaged or defective parts and assemblies by lay up, foaming, cementing, molding, potting, casting, or similar methods. May heat parts or materials to facilitate shaping, using oven or heat gun. May fabricate and assemble parts from fiber reinforced plastics (composites) and assorted materials, such as metal and honeycomb, and be designated Bonding And Composite Fabricator (aircraft mfg.); Composites Fabricator And Assembler (aircraft mfg.). May press, smooth, trim, measure, and adjust composite tape during automatic application of tape onto mold or fixture by numerical-control tape laying machine, using scale, knife, and scraper. May wind fiberglass, graphite, nylon, or other natural or synthetic fiber or filament around parts, using filament winding machine, manually applying layers of resinous materials to part at specified intervals during winding process. May be designated by type of part or activity involved as Experimental Plastics Fabricator (aircraft mfg.); Filament-Wound Parts Fab-

ricator (aircraft mfg.); Plastic Parts Fabricator (aircraft mfg.); Plastic-Sign Fabricator (plastic prod.); Plastics Rework And Repair Mechanic (aircraft mfg.).
GOE: 06.01.04 STRENGTH: M GED: R4 M4 L4 SVP: 7 DLU: 88

754.684-010 ASSEMBLER (plastic prod.) alternate titles: fabricator

Performs any combination of tasks involved in assembly of plastic articles, such as bags, baby pants, coolers, fiberglass chairs, containers, trays and inflatable toys: Marks cutting lines on plastic sheet of sections to be assembled, following template. Cuts sections from sheet, using knife, scissors, or power cutting machine. Positions sections on jig and aligns seams and air valves. Brushes glue along edges of section, seals edges with hot iron or electric-sealing machine, and trims edges with scissors. Examines articles for defects, such as smeared paint, cuts, and wrinkled seams. Fills inflatable article with air and submerges it in water to detect leaks. Positions plastic patch over leak and fuses it to article, using electric sealing machine. Cleans markings and dirt from article with solvent, folds article, and places it in bag for shipment. Heats cooler brackets, using hot plate, and secures cooler, using bench fixture. Presses bracket into depressed section of cooler to attach bracket. May record number of articles packed. May sort plastic sheets in bins. May seal decorative pieces of adhesive-backed cloth on garment parts, using automatic heat sealer and be designated Thermoelectric-Heat-Sealing-Machine Operator (tex., nec).
GOE: 06.04.24 STRENGTH: M GED: R2 M2 L1 SVP: 4 DLU: 77

754.684-014 ASSEMBLER-AND-GLUER, LAMINATED PLASTICS (plastic prod.)

Assembles plastics laminates, using handtools and electrically heated press: Mixes urea resin glue with water and applies glue to surfaces of wooden boards, using hand spreader. Lays laminates between wooden boards and places unit into press. Removes unit after specified heating time and routes off excess material. Joins self edge, backsplash, or molding edge to laminates, using hacksaw, miter, snips, mallet, and nails. Solders open joints of metal edges, using electric soldering iron. Buffs assembled unit with steel wool, and places it into cabinet.
GOE: 06.04.24 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

754.684-018 BIT SHAVER (fabrication, nec) alternate titles: head facer

Shaves and smooths mouthpieces of smoking pipe bits: Pushes bit against sander to smooth rubber bits, and against revolving blade to shave excess material from plastic bits. May use holding device to hold bit during smoothing or shaving process.
GOE: 06.04.34 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

754.684-022 CASTER (plastic prod.) alternate titles: pourer

Casts thermosetting plastic resins in mold to form plastic products: Coats mold sections with parting agents, such as soap, wax, or lacquer, using brush or spray gun. Assembles sections of mold, using C-clamps, nuts, bolts, and wrench. Weighs specified amounts of resin, catalyst, pigment, and hardening agent, using balance scale, and mixes them in container, using mixing machine or paddle. Pours mixture into mold and places mold in oven or water-bath cooker to cure. Removes product from mold, using airhose and handtools. May be designated according to product cast as Foam Caster (nonmet. min.); Foam Molder (clock & watch).
GOE: 06.02.24 STRENGTH: M GED: R2 M1 L2 SVP: 4 DLU: 77

754.684-026 DRILLER, HAND (button & notion)

Drills holes in plastic buttons for setting rhinestones, using powered bench drill: Inserts specified bit in drill chuck. Places button against guide and presses button against rotating bit to form hole. Determines position and spacing of holes by looking at sample button, exercising care to drill hole evenly and neatly and to depth required to hold stone.
GOE: 06.04.24 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

754.684-030 FINISHER, HAND (plastic prod.)

Trims and smooths molded, laminated, or machined plastics products, using handtools and sandpaper: Examines products for scratches, cracks, and other blemishes, and patches them with plastic fabrics. Scrapes, cuts, files, and sands products to remove gates, burrs, flashing, runners, and other forms of excessive material, using files, knives, and sandpaper. Washes products in soap, naphtha, or other cleaning solution to remove dirt, grease, and stains.
GOE: 06.04.24 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

754.684-034 KNOCK-OUT HAND (plastic prod.)

Removes plaster-forming mandrels from cured plastic products: Places product in tank of water to loosen product from mandrel. Pounds product with mallet to break plaster, utilizing knowledge of plastics to avoid damaging product. Immerses product in water to wash out remaining plaster. Cuts bands of reinforcing tape from product, using knife.
GOE: 06.04.32 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

754.684-038 PLASTIC DUPLICATOR (machine tools)

Casts plastic reproductions of models, patterns, and prototype parts: Examines part to determine sections that can be cast and assembled to obtain reproduction. Constructs boxlike enclosure around section of part to be duplicated. Brushes or sprays surface of section with parting agent to prevent plastic from sticking to surface. Casts part, using either of following methods: (1) Brushes plastic facing coat on section of part to be cast. Mixes plastic resin and brushes thin, uniform coat over facing coat. fiberglass glass cloth to approximate size of cast and places it over resin. Brushes cloth to smooth it, applies additional coat of resin, and repeats procedure until alternate layers of fiberglass and resin are built up to specified thickness. (2) Brushes plastic facing coat on section of part to be cast, mixes plastic resin, and pours it into enclosure until cast is of specified thickness. Removes hardened cast from section. Files, grinds, and sands cast to remove jagged edges and to cut cast down to specified dimensions. Forms base and bracing structure to support cast, using handtools and liquid adhesive. May assemble casts to produce completed model, pattern, or prototype. May bolt or otherwise fasten metal inserts to casts at specified points.
GOE: 06.02.24 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

754.684-042 PLASTICS WORKER (aircraft mfg.) alternate titles: composite worker

Performs any combination of following tasks to fabricate plastic aircraft and missile parts, accessories, and trim according to specifications: Cuts fiberglass or graphite (composite) cloth to size, following template or blueprints, using cutting machine, scissors, or knife. Marks identifying information on material and assembles materials in kits for subsequent laminating. Applies parting agent to mold or bonding fixture. Impregnates cloth with resins by dipping cloth in solutions, feeding cloth between rollers of impregnating machine, or brushing resin onto cloth. Applies layers of impregnated cloth or prepreg onto mold or fixture in predetermined ply sequence, and presses cloth to fit contours of mold, smooth surface, and remove air pockets and excess resin, using squeegee, scraper, or spatula. Fits and laps ends of cloth, using scissors or knife. Encases molded laminate in bagging material and bleeder cloth, attaches vacuum bagging apparatus, such as thermocouples, probes, and vacuum connections, to mold or bonding fixture, and exhausts air from vacuum bag to seal laminate for curing. Tests seal on vacuum bagging apparatus, using leak detector. Trims, drills, burrs, grinds, sands, and finishes cured parts to specifications, using templates, fixtures, handtools, and power tools. Prefits and assembles cured parts into assemblies or subassemblies, using jigs, fixtures, power tools, and fasteners, such as rivets and bolts. Applies adhesives to surface of assembled parts for bonding in autoclave. May assist PLASTICS FABRICATOR (aircraft mfg.; plastic prod.) 754.381-018 in fabricating plastic or composite first article parts and assemblies or parts and assemblies involving compound or complex contours, working to close tolerances. May tend oven to cure parts. May assist AUTOCLAVE OPERATOR (aircraft mfg.) 553.362-014 in loading and unloading parts from autoclave. May form and cure rubber parts, using heat lamps or vacuum molding machine. May be designated by type of plastic or specific activity involved as Bagger (aircraft mfg.); Composite Assembler (aircraft mfg.); Composite Bond Worker (aircraft mfg.); Composite Laminator (aircraft mfg.); Composite Layup Worker (aircraft mfg.); Composite Trim And Drill Worker (aircraft mfg.); Kitter (aircraft mfg.); Plastic Parts Fabricator-Trimmer (aircraft mfg.); Smooth And Burr Worker, Composites (aircraft mfg.).
GOE: 06.02.24 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 88

754.684-046 PLASTICS REPAIRER (plastic prod.)

Repairs plastic products, such as dresser sets, luggage, decorative panels, desk tops, and stands: Examines product for defects, such as blisters, cracks, and broken joints. Grinds defects, using power grinder, to smooth surface and form base for bonding compound. Fills cracks and cements broken joints with compound. Allows compound to set, and removes excess compound with rag dipped in acetone.
GOE: 06.04.24 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

754.684-050 LAMINATOR, PREFORMS (plastic prod.) alternate titles: preformer, impregnated fabrics; squeegeer and former

Lays up fiberglass and resin-coated fabrics on plaster, steel, or wooden forms to mold plastic parts for products, such as boats, sporting equipment, automobile bodies, and airplane seats: Cleans form with solvent and sprays it with parting agent, such as wax or soap. Cuts fabric to specified size, following pattern or template and using knife or scissors. Measures and mixes plastic resins, coloring agents, and catalyst as specified, using scales and portable mixer. Spreads compound on form, positions fabric on compound, and rubs fabric with squeegee to remove air bubbles. Applies additional layers of compound and fabric to build up specified number of laminations. Trims edges of laminated fabric, using scissors or knife. Allows part to cure and removes it from mold. May paint part, using spray gun. May drill and cut part, following template and using power drill and power saw. Sprays mixture of chopped fiberglass, resin, and catalyst on mold to form laminations, using spray gun. May tend machine that wraps resin impregnated fabric strips around mandrel to form plastic rods.
GOE: 06.04.24 STRENGTH: M GED: R2 M1 L2 SVP: 4 DLU: 81

754.685-010 TAB-MACHINE OPERATOR (nonmet. min.)

Tends tab machine that secures threads of plastic mesh scouring ball with plastic label: Slips slotted label over base of threads and positions ball into slot of machine so that threads run length of machine. Presses switch to activate machine that folds and heat seals plastic tape over label and threads to secure threads and hold shape of ball. Turns dial to regulate heat of sealing dies. Turns thumbscrew to loosen and tighten spindle when replacing roll of plastic tape.
GOE: 06.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

754.685-014 ASSEMBLY-MACHINE TENDER (plastic prod.)

Tends variety of machines that weld and assemble components into plastic products and stamp or silk-screen logos on products: Positions plastic products or components on fixtures of hot-stamp, silk-screening, and ultrasonic welding machines, and presses buttons or treadles to actuate machines that apply logos to product or weld components together. Dumps plastic components into vibrat-

ing hoppers of assembly machine that automatically assembles components to form plastic products. Observes machine operations to detect malfunctions and clears jams and blockages, using screwdriver. Positions plastic bottles or components on conveyor or turntable of hot-stamp, flame cleaner, or stamping machines that automatically apply logos or remove molding residue from bottles or fit components into single part. Inspects decorated and assembled finished products for defects, such as discolored logos or misaligned bottle caps. Packs finished products into cartons.
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 86

754.687-010 LABORER, GENERAL (plastic prod.)
Performs any combination of following duties in fabrication of plastic products: Removes molds from ovens, and places them on table. Removes foliage, flower, fruit, and other castings from molds. Cleans molds and returns them to CASTER (plastic prod.). Strips stamped, sealed, or cut plastic bodies from plastic panel. Dips castings or products in solvent to cleanse them. Smooths surfaces of objects with soft cloth. Dapples vinyl inks of various colors onto surfaces of fruit and other castings or products to approximate natural colors and conditions. Fastens or cements leaves or foliage to pineapples, peaches, and other vinyl products. Attaches safety pins to convention badges. Assembles pieces of tablet holders in wooden tray to prepare products for subsequent sealing of seams by machine. Inserts tabs and pencils into slots of tablet holders.
GOE: 06.04.39 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

754.687-014 SEQUINS STRINGER (plastic prod.)
Strings plastic sequins on thread for use as decoration on wearing apparel: Doubles length of thread and hooks it onto cut near end of needle loaded with sequins. Slides sequins from needle onto doubled thread. Cuts off excess thread. Pulls one strand of thread from sequins and ties ends to form loop. Ties specified number of loops in bunch.
GOE: 06.04.24 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

759 OCCUPATIONS IN FABRICATION AND REPAIR OF PLASTICS, SYNTHETICS, RUBBER, AND RELATED PRODUCTS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with fabricating and repairing plastics, synthetics, rubber, and related products.

759.135-010 SUPERVISOR, SCOURING PADS (nonmet. min.)
Supervises and coordinates activities of workers engaged in tending machines to manufacture knit plastic mesh scouring pads: Examines product at various production stages to detect defects, such as skipped stitches in knitting and incorrect folding. Trains workers in use of machines and in techniques used in folding and tying units of knit plastic mesh tubing to form scouring pads. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

759.137-010 SUPERVISOR I (rubber goods)
Supervises and coordinates activities of workers engaged in testing, printing, and assembling dipped latex products, such as balloons, gloves, and prophylactics: Trains new workers in production methods. Inspects quality of work. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to area supervised as Supervisor, Assembling (rubber goods); Supervisor, Printing (rubber goods); Supervisor, Testing (rubber goods).
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

759.261-010 PROTOTYPE-DEICER ASSEMBLER (rubber goods)
Assembles and tests experimental electric or pneumatic airplane deicers according to specifications: Assembles experimental deicers. Tests deicers under simulated flying conditions for pressure leaks, electrical resistance, and shorts, using electric or air pressure testing equipment. Examines deicers to locate ruptures, cracks, or weak spots. Records test results. May instruct customers in installation, repair, or maintenance of deicers.
GOE: 06.01.05 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

759.364-010 HOSE INSPECTOR AND PATCHER (rubber goods)
Inspects and repairs rubber hose, using handtools, vulcanizing equipment, and hydrostatic test equipment: Examines hose and couplings for defects, such as cracks, checks, and faulty seal around couplings. Tests hose, using hydrostatic (water or air) test equipment, to detect leaks and weaknesses in hose walls [HOSE TESTER (rubber goods)]. Cuts out defective area, using knife or saw, or strips rubber coating from fabric backing. Applies cement and cuts and cements patch to fabric backing or cements ends together after removal of defective section. Inserts repaired section in bench-molding machine and turns steam valve to vulcanize patch at specified temperature. Replaces couplings, steel bands, and gaskets, using pliers or crimping machine. Records vulcanizing time, nature of defects discovered, and repairs completed on quality control report. May repair hose returned by customers, according to nature of complaint specified on work ticket.
GOE: 06.03.01 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

759.381-010 RUBBER-GOODS TESTER (elec. equip.; utilities) alternate titles: safety-equipment tester
Tests rubber protective goods, such as gloves, sleeves, blankets or mats, and heavy hoods, used by workers working on high-voltage power lines and equipment: Examines rubber goods to detect defects, such as blisters, breaks, or deterioration. Clips rubber goods to metal rod of dielectric-strength-testing machine and partially submerges articles in water tank of machine. Manipulates controls to discharge excessive voltage through metal rod and rubber goods to water. Observes apparatus for flash or opening of circuit breaker, indicating defective goods. Reads milliammeter on panel to determine if amount of current passed through article to water is within prescribed tolerance. Discards defective equipment. May inflate gloves on special apparatus to detect defects. May make mechanical tests on goods for conformance to purchase specifications, using testing apparatus, such as micrometers, rulers, and tensile-testing machine.
GOE: 06.01.05 STRENGTH: L GED: R3 M2 L3 SVP: 6 DLU: 77

759.384-010 SELF-SEALING-FUEL-TANK REPAIRER (rubber goods) alternate titles: fuel-cell repairer
Repairs defects in self-sealing rubber fuel tanks for use on airplanes: Examines fuel tanks to detect location and extent of defects, such as blisters, ply separations, cracks, and loose seams. Cuts away rubber in defective area with knife and smooths edges with portable buffer. Positions and cements specified patch material in defective area, using hand roller. Cuts out and replaces defective tank fittings and rubber reinforcement strips with handtools, following blueprints. Clamps electric platen on repaired area to vulcanize it. Cleans foreign material from inside of fuel tank, using wire brush, buffer, and vacuum hose. May position fuel tank on jig to verify location of fittings and screw holes.
GOE: 06.04.29 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

759.484-010 ROLL BUILDER (rubber goods)
Builds up plies (layers) of natural and synthetic rubber on metal cores for use on commercial and industrial machines: Positions metal core in building machine by hand or by use of hoist, and applies rubber cement with brush. Pulls ply of rubber from roll in rack onto worktable. Washes rubber plies with solvent and starts machine to revolve core. Wraps specified number of plies around core and splices ends. Starts automatic machine rollers or uses hand roller to compress rubber plies and remove wrinkles and trapped air. Measures thickness of roll, using calipers. Cuts roll to length with knife. Cements and applies finish rubber strips to each end. Wraps finished roll with strips of cloth preparatory to curing.
GOE: 06.04.29 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

759.664-010 BRAIDER SETTER (rubber goods)
Repairs broken or knotted yarn in braided jacket of firehose: Reverses braiding machine to unbraid yarn to defective area. Untangles knots, ties broken strands, and turns spools of yarn to take up slack. Starts machine and signals BRAIDING-MACHINE TENDER (rubber goods) when defect is corrected. Changes pitch gear on braiding machine as specified, using wrench, and verifies pitch of braid with rule. Moves supplies to BRAIDING-MACHINE TENDER (rubber goods) using handtrucks. May inflate hose to specified diameter to prepare it for covering.
GOE: 06.04.06 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

759.664-014 EXPANSION-JOINT BUILDER (rubber goods) alternate titles: expansion-joint finisher
Fabricates expansion joints for ends of rubber hose to permit coupling of hose to pipes or ducts according to blueprints and customer specifications: Examines blueprints and work ticket to determine dimensions and type of joint to be fabricated. Applies solution of soapstone and water to end of hose and builds up specified number of layers of rubber and fabric around end of hose or on mandrel to form expansion joint. Wraps joint with tape and steel curing plates preparatory to vulcanizing, using rule and calipers to ensure conformance to specifications. Removes tape and curing plates or rubber reinforcing material after vulcanizing and trims or grinds joint to specified diameter and contour, using knife and portable grinder. Applies precured rubber patches to cover defects, such as low spots or surface cracks. Marks and punches bolt holes in joint, using templates, scriber, and hand punch. Paints joint, using brush, and hangs completed joint to dry.
GOE: 06.02.29 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

759.664-018 ROLLER MAKER (print. & pub.)
Recovers and reconditions used printing-press rollers, using handtools and such equipment as melting pot and chopping machine: Strips cover from roller manually or with knife, separating meltable from nonmeltable materials. Feeds meltable scrap into chopping machine and dumps chopped material into heated melting pot. Weighs out, mixes, and melts ingredients to form molding compound in mixing kettle, according to formula. Paints roller cores, using brush. Winds twine around roller ends and other areas needing packing. Fits stars (centering devices) in position on cores and molding cylinder. Oils cylinder, using oilcan, and inserts cores in cylinder. Attaches bottom plate, water, and drain lines to molding cylinder, using wrenches. Couples lines from compressor to kettle containing molding compound and to pressure gun used to force molding compound into cylinder. Controls flow of compound according to signals from another worker observing operation from raised platform. Pours cold water over surface of cylinder to congeal molding compound. Inspects finished rollers for imperfections, trims excess molding compound from edges, and directs steam over surface of roller covers to remove wrinkles, using steam hose.
GOE: 06.02.32 STRENGTH: M GED: R3 M1 L1 SVP: 4 DLU: 77

759.684-010 AIRPLANE-GAS-TANK-LINER ASSEMBLER (rubber goods)
Cuts and cements sheets of rubber to make shock absorbers for airplane gas tanks: Cuts rubber sheets to specified size, using scissors or roller-cutter. Brush-

es rubber cement on sheets and presses them together. Hangs completed sheets on revolving drums that pass through curing oven.
GOE: 06.04.29 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

759.684-014 BASE-PLY HAND (rubber goods)

Cements rubber ply (layer) to metal forming plate and lays out parts locations on pneumatic deicers. Places rolls of gum rubber and rubberized fabric ply stocks in letoff racks, using hoist. Pulls rubber ply stocks from roll, aligns rubber plies with edge of forming plate, and cuts plies to size with scissors and knife. Rolls rubber plies with hand roller to remove wrinkles and promote adherence to forming plate. Stencils location of deicer parts on rubber plies, using template and inked brush. Locates centerline on plies by aligning chalkline with guide marks on forming plate. Carries plied-up forming plate to storage rack.
GOE: 06.02.29 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

759.684-018 BELT-BUILDER HELPER (rubber goods)

Performs following duties to build up plies (layers) of rubberized fabric and gum to produce transmission and conveyor belting: Moves rolls of stock to belt-building area, using lift truck or handtruck. Positions stock rolls in letoff rack, using hoist. Pulls fabric and gum plies of specified width onto belt-building table from roll in letoff rack or calender, and aligns edge with previously laid ply. Compresses plies together, using rollers and stitchers. Builds up specified number of plies and trims irregular edges with scissors or knife. Inserts end of finished belt between pressure rollers that bond plies, and rolls finished belt onto windup rack.
GOE: 06.04.29 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

759.684-022 BUFFER (rubber goods; rubber tire)

Buffs rubber articles to clean, smooth, repair, trim, or roughen for cementing, using hand or power buffer: Starts buffer and holds article against it, or holds buffing wheel against article. Changes buffing wheel according to operation performed or type of finish required, using wrench. May weigh, sort, and pack articles for further processing or shipping. May be designated according to article buffed as Tire Buffer (rubber tire); White-Sidewall-Tire Buffer (rubber tire).
GOE: 06.04.29 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

759.684-026 DEICER REPAIRER (rubber goods) alternate titles: ice-guard repairer

Repairs defective parts of airplane deicers: Cuts out premarked defects, such as cracks and blisters, from rubber plies of deicer with knife. Buffs defective area to prepare it for patching, using portable electric buffer. Mends wiring defects in electric deicers, using soldering iron. Cuts out and patches defective spots in rubberized-fabric air tubes and manifolds of pneumatic deicers. Swabs defective area of rubber plies with rubber cement to provide adhesive surface. Positions uncured rubber patch on defective area and rolls down with hand roller to promote adherence. Trims excess rubber from patch with knife. Cures and vulcanizes patch, using portable vulcanizing equipment. Lifts repaired deicer to handtruck for removal to inspection department. May be designated according to type of deicer repaired as Deicer Repairer, Electric (rubber goods); Deicer Repairer, Pneumatic (rubber goods).
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L2 SVP: 4 DLU: 77

759.684-030 DEICER-KIT ASSEMBLER (rubber goods)

Assembles rubber ply stock, molded rubber parts, blueprints, and tools for use in airplane deicer kit box: Selects precut rubber plies (layers) and molded rubber parts from bins for specified deicers. Verifies thickness of rubber ply parts with snap gauge, and lays parts in kit box. Selects specified items, such as punches, dies, blueprints, and templates, and places them in kit box with rubber parts. Weighs loaded kit box to determine conformance to weight specifications. Attaches identification tag to box and places kit box in storage rack.
GOE: 06.04.34 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

759.684-034 FOLDER-TIER (nonmet. min.)

Reverses lengths of tubular knit plastic mesh to form scouring ball: Stretches tubing over post and pulls tubing down length of post. Pulls bottom of tubing up to form double-walled tube. Slides tubing off post and pulls out guide thread. Pushes tubing across bed of device that ties string around middle of tube. Flexes interior walls of tubing with fingers to enlarge cavity and pushes mass of tubing into itself to form scouring ball.
GOE: 06.04.24 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

759.684-038 HOSE WRAPPER (rubber goods)

Wraps strips of fabric around rubber hose to maintain shape of hose during curing: Inserts end of hose-covered mandrel into powered chuck. Pulls end of fabric strip from hand reel and starts strip around end of hose. Starts machine and guides fabric strip onto hose. May mark curing time on hose, using crayon. May load hose onto storage rack, using hoist, or into steam-heated oven for curing. May unwrap fabric strips from cured hose.
GOE: 06.04.34 STRENGTH: H GED: R2 M1 L2 SVP: 2 DLU: 77

759.684-042 MAT REPAIRER (rubber goods)

Repairs molded rubber automobile floor mats: Cuts out defects, such as holes, snags, and tears, in mat with knife. Smooths defective area of mat with emery cloth to prepare surface for rubber patch. Cuts uncured rubber patch to size with knife. Cements rubber patch to defective area and trims off excess rubber. Positions mat in vulcanizer to cure patch for specified time. Cuts felt padding to size with shears and cements it to back of mat on repaired area.
GOE: 06.04.29 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

759.684-046 PATCHER, BOWLING BALL (toy-sport equip.)

Reams out and fills surface holes and scratches, and vulcanizes filling material to patch bowling balls: Reams out surface flaws in bowling balls to uniform depth, using electrically powered router. Pours liquid resin into holes on ball surface to fill flaw. Positions patched balls in heated bench presses and clamps tops of presses down on patched areas of balls to compress and vulcanize patch. Turns timer dial of presses to control heating cycle. May remove excess resin, using drill. May smooth surface, using powered sander and fine sandpaper.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

759.684-050 RUBBER LINER (machinery mfg.) alternate titles: liner; rubber insulator

Lines interior of tanks, valves, pipes, and similar articles with rubber sheeting to prevent corrosion of vessel, and to minimize contamination, shock, ignition, or explosion hazards to contents. May inject compressed air into vessel to bond lining to vessel walls, and introduce live steam or place article in autoclave to vulcanize rubber lining. May prepare vessel for application of lining by sandblasting, scraping, or painting interior surfaces. May test lining for holes and faulty seams, using device that creates spark on contact with metal vessel through apertures in rubber. May visit equipment sites to install linings. May be designated according to article lined as Tank Insulator, Rubber (machinery mfg.); Valve Liner, Rubber (machinery mfg.).
GOE: 06.02.29 STRENGTH: M GED: R3 M1 L2 SVP: 4 DLU: 77

759.684-054 RUBBER-GOODS REPAIRER (any industry)

Repairs rubber products, such as life rafts and vests, gas-tank linings, inner tubes, and rubber vent systems, using oven or autoclave and steam curing iron. Cements rubber patch to torn or damaged areas and vulcanizes patch, using steam curing iron. Cuts rubber into pieces, covers metal and other surfaces with pieces, and places rubber article in oven or autoclave to bond surfaces. May make gaskets, washers, and hose, using molds and dies.
GOE: 06.02.29 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

759.684-058 SPLICER (rubber tire) alternate titles: cord splicer; ply splicer; stock roller;

Splices bias-cut rubberized-fabric stock into plies for use in tire building: Inspects plies and tears off sections having such defects as uncalendered spots or torn fabric. Aligns and splices sections of ply stock by overlapping ends and pressing together with fingers. Presses pedal to wind spliced plies on spool. Determines when spool is loaded by counting plies or observing stop-mark on liner. Guides ply onto spools by hand to prevent wrinkling. May splice stock cut from and tend automatic bias cutting machine. Winds assembled plies onto spool; or cuts it to lengths, using bar cutter, and slides assembly onto conveyor. Notifies maintenance department of machine malfunction.
GOE: 06.04.29 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

759.684-062 TUBE-AND-MANIFOLD BUILDER (rubber goods)

Builds tubes and manifolds of rubberized fabric for use in pneumatic airplane deicers: Lifts roll of rubberized fabric sheeting to letoff racks and unwinds it onto table. Lays out and draws outline of specified size tubes and manifolds on rubberized fabric, using rule, template, and chalkline. Cuts outlined section from rubberized fabric, using scissors and knife. Positions and wraps cut fabric section around metal forming bar, and aligns and splices edges by pressing gum tape over edges of fabric on bar, using roller. Pulls out forming bar and blows soapstone into rubberized tubing with airhose to prevent inner surfaces from sticking together. Winds number of tubing sections required for one deicer onto reel. Attaches identification tag to loaded reel and carries it to storage rack.
GOE: 06.02.29 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

759.684-066 V-BELT BUILDER (rubber goods)

Builds up plies (layers) of rubber and filler to form V-belts: Hoists rolls of calendered rubber for belt base and filler from storage to worktable, using hoist. Sets drum to specified circumference by turning wheel and verifies size with rule. Pulls rubber from rolls and measures and cuts it with scissors. Brushes rubber cement on sides of rubber, lays one or more plies of rubber around drum, and splices ends. Threads end of cemented belt cord from spool through lathe guide and spots ends at edge of base rubber on drum. Sets gauge to wind specified cords per inch around length of base rubber and starts drum revolving. Lays one or more plies of filler rubber on top of cord. Starts pressure rollers that compress material on drum. Positions notched cutting bar across front of drum and cuts belting to specified width by holding knife in notches and pressing knife against revolving drum. Collapses drum and places cut belts on rack.
GOE: 06.02.29 STRENGTH: M GED: R3 M1 L2 SVP: 4 DLU: 77

759.684-070 SPLICER (protective dev.)

Splices ends of safety ropes to prevent raveling: Cuts polypropylene rope to specifications, using electric knife. Inserts end of rope through protective plastic washer in eye of ring or hook. Unravels and interweaves strands to retain ring or hook at end of rope. Holds spliced section of rope over heated coil to fuse strands.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 86

759.684-074 RUBBER-GOODS INSPECTOR-TESTER (rubber goods)

Inspects and tests rubber materials, parts, or products for conformance to specifications: Visually and tactually examines items for defects, such as soils, cracks, and breaks. Verifies dimensions and weights of articles, using scales, calipers, templates, and other measuring instruments, following specifications

and blueprints. Verifies strength, durability, and permeability of materials and products, using tensile strength, compression, inflation, and water tests. Sorts, counts, or marks articles according to size, grade, or color. Records inspection and testing data. May trim excess materials from articles, using knife, scissors, cutting machines, or buffing wheels. May cut out and replace defective areas to salvage parts or products. May bundle or pack goods for shipment. May be designated according to product inspected as Balloon Tester (rubber goods); Hose Tester (rubber goods); Inner-Tube Tester (rubber tire); Rubber-Gasket Inspector-Trimmer (rubber goods); V-Belt Inspector (rubber goods). May be designated: Adhesion Tester (rubber goods); Boot Tester (rubber goods); Calender Inspector (rubber goods); Catheter Finisher-And-Inspector (rubber goods); Dielectric Tester (rubber goods); Hose Inspector (rubber goods); Inflation Tester (rubber goods); Inspector (rubber goods); Inspector And Tester (rubber goods); Inspector, Fuel Hose (rubber goods); Matting Inspector (rubber goods); Mattress Inspector (rubber goods); Molded-Goods Inspector-Trimmer (rubber goods); Padded-Products Inspector-Trimmer (rubber goods); Piston-Cup Inspector (rubber goods); Rubber-Goods Finisher (rubber goods); Rubber-Goods Inspector-Trimmer (rubber goods; rubber reclaim., rubber tire); Rubber-Goods Tester, Water (rubber goods; rubber tire); Slab Inspector (rubber reclaim.).
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 78

759.687-010 DEICER INSPECTOR, PNEUMATIC (rubber goods)
Inspects pneumatic airplane deicers for defects: Inflates deicers with specified amount of air pressure, using hose. Observes air pressure gauge and examines rubberized fabric tubes and manifold of deicers to detect leaks. Sorts and marks defective deicers for repair or scrap. May pull rip strip (rubberized fabric) from deicer to form vent channel, and punch ventholes in specified locations, using die and mallet.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

759.687-014 HOSE-COUPLING JOINER (rubber goods) alternate titles: assembler-crimper; coupler
Joins metal couplings to cured rubber hose: Attaches expansion shaft to air-powered expander device, using handtools. Positions specified expansion ring on shaft and coupling on end of hose. Slips hose over expansion shaft and starts expander device that spreads expansion ring and locks coupling to hose. Cuts hose to specified length before attaching couplings, using miter box and knife. May bolt coupling hardware to hose, using wrench.
GOE: 06.04.34 STRENGTH: H GED: R2 M1 L2 SVP: 2 DLU: 77

76 OCCUPATIONS IN FABRICATION AND REPAIR OF WOOD PRODUCTS

This division includes occupations concerned with fabricating and repairing complete wooden articles, or subassemblies of wooden structures, involving the use of woodworking handtools and power tools.

760 BENCH CARPENTERS AND RELATED OCCUPATIONS

This group includes occupations concerned with laying out stock and shaping, assembling, and smoothing wood articles, using saws, planers, and other carpentry tools.

760.684-010 BENCH CARPENTER (woodworking)
Assembles precut and prefabricated wooden parts to form complete units, using woodworking hand and power tools: Reads blueprints, shop drawings, or written instructions to determine method and sequence of assembling parts. Measures, shapes, adjusts, trims, and sands parts and joints to make parts fit snugly, using rulers, handtools, and sandpaper. Applies glue and inserts dowels or screws to fasten subassemblies together and form complete unit, using handtools and clamps. May install hardware in subassemblies or into completed unit. May work on an assembly line and be responsible for only one phase of assembly process.
GOE: 06.04.25 STRENGTH: H GED: R2 M2 L2 SVP: 3 DLU: 77

760.684-014 BOX MAKER, WOOD (wood, container) alternate titles: carpenter, box; case maker; rate builder
Cuts lumber and assembles cut lumber into boxes and crates, using handtools or power tools: Measures, marks, and saws boards to specified size, using ruler, pencil, and power saws. Assembles and nails boards together, using hammer, power stapler, or nailing machine. Repairs damaged containers by replacing damaged parts, using handtools. Salvages used crating by removing nails from board with hammer, nail puller, or crowbar and by sawing ends with portable electric handsaw. May sharpen saw, using file. May insert cardboard fillers, felt pads, and wooden separators in containers. May build crate around material, using ruler, handtools, and pneumatic nailer. When repairing wooden boxes, may be known as Box Repairer (wood, container) I.
GOE: 06.02.25 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

761 OCCUPATIONS IN LAYING OUT, CUTTING, CARVING, SHAPING, AND SANDING WOOD PRODUCTS, N.E.C.

This group includes occupations concerned with marking, cutting lines on stock, and bending, shaving, carving, sawing, and sanding wood products, using abrasives, handtools, templates, and other devices and materials.

761.130-010 SUPERVISOR, BRIAR SHOP (fabrication, nec)
Supervises and coordinates activities of workers engaged in fabricating smoking pipe stummels from briar blocks: Studies production schedules to determine style and number of stummels to be sawed from blocks. Surveys stummels in stockroom and prepares work order indicating style and quality of stummels needed. Informs workers when to prepare for change-over to new style. Inspects graded stummels to verify conformance to standards. Records quality and quantity of pipes produced from specific suppliers' briar blocks. Trains workers in setup of machines. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

761.131-010 SUPERVISOR, LAST-MODEL DEPARTMENT (wood prod., nec)
Supervises and coordinates activities of workers engaged in shaping wooden and plastic heel and shoe last models: Compares specifications with last patterns to verify style and measurements, using measuring instruments. Designates pattern to be used and informs workers of style and measurement specifications required. Completes forms to requisition work material and supplies, such as sandpaper, wood, and plastic stock. Examines completed lists to verify conformance with customer and company specifications. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

761.281-010 CARVER, HAND (woodworking) alternate titles: wood carver, hand
Carves ornamental designs into wooden furniture parts, using handtools and woodworking machines: Studies sketches and dimensions of ornamental designs submitted by architect, customer, or design department, visualizes finished product, and draws design to scale, using drawing instruments. Transfers design to wooden furniture part by tracing over drawing and carbon paper with stylus. Clamps furniture part in vise and roughs out design freehand or by cutting along lines marked on wood, using chisel and mallet, jigsaw, and router. Selects chisels, gouges, files, and rasps and determines sequence of their use according to intricacy of design. Cuts, trims, or touches up roughed out design, using handtools to finish design. Verifies dimensions of carving, using rule and dividers. Taps *stippling tool* with mallet to stipple design. May saw precut wooden blocks into rough shaped decorative items, using chain saw and portable power saw. May finish carvings roughed out on router, spindle carver, or wood-carving machine and be designated Skin Carver (furniture).
GOE: 01.06.02 STRENGTH: L GED: R4 M4 L3 SVP: 8 DLU: 87

761.281-014 EXPERIMENTAL-BOX TESTER (wood, container)
Designs and constructs boxes for experimental and test purposes. Measures and tests strength of boxes made by competitors, disassembles boxes, and records findings.
GOE: 05.05.02 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

761.281-018 MARQUETRY WORKER (furniture)
Designs, fabricates, and inlays marquetry in custom furniture: Designs and draws marquetry patterns to scale, using drafting tools. Computes quantities of wood needed for shaping marquetry design blocks, and selects woods, such as ebony, teak, and walnut, for marquetry designs according to color, strength, and grain. Shapes pieces of wood to form pattern, using power saws, handsaws, planers, and jigs. Measures wood pieces to verify dimensions, using calipers, scales, and pattern. Applies glue to wood pieces, assembles pieces according to pattern, and clamps pieces between boards to prevent damage and to form marquetry block. Selects wood in which pattern will be mounted and cuts openings in surface of wood and specified piece of furniture to form inlay openings for sections of marquetry block, using routers, chisels, and planers. Saws marquetry block to obtain cross-sections of specified thickness for inlay. Glues and places sections into inlay openings of wood surface and positions wood with marquetry design into opening on furniture. Trims design to fit opening, and sands surface of furniture to attain desired finish, using handtools and power sander. Cleans furniture and applies stain, lacquer, or shellac in prescribed order to finish custom furniture.
GOE: 05.05.08 STRENGTH: L GED: R4 M4 L3 SVP: 7 DLU: 86

761.381-010 BOAT-OAR MAKER (woodworking)
Performs carpentry necessary to cut and shape oars, using special planes, drawknives, and other handtools: Clamps oar in vise. Shapes blade, loom (shaft from handle to blade), and handle, trimming edges and rounding corners according to specified dimensions. Smooths and sands surface preparatory to varnishing or painting. Usually identifies work with personal markings on blade.
GOE: 06.02.25 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

761.381-014 JIG BUILDER (wood, container) alternate titles: setter
Builds jigs used as guides for assembling oversized or special type box shooks, following blueprints: Measures and marks position of stops on worktable, according to blueprint, using tape measure and chalk. Nails stops to worktable as indicated by layout. May build first shook on layout as demonstration.
GOE: 05.10.01 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

761.381-018 LAST-MODEL MAKER (wood prod., nec) alternate titles: model maker
Shapes wood blocks into shoe last models according to specifications and diagrams, using copy lathe and handtools: Lays out and cuts specified size and

shape templates for use in constructing last models and to verify dimensions and contour of finished last models, using scribe, measuring instruments, and razor cutter. Procures last model with backpart (heel of last to ball of last) having same size and shapes as that specified on order. Mounts last model and wood block in copy lathe that automatically turns down end of block to match backpart of last model. Removes model and partially turned wood block from lathe and measures model and block at prescribed points to verify duplication. Clamps partially turned block in vise. Shapes toe area to specified size and contour, using files, drawknives, spokeshaves, sandpaper, and glass. Verifies contour and size with templates and sole patterns. Sands last model to specified size and finish. Hammers tacks along edges to protect model from wear on copy lathes. Files tack heads flush with last. May shape new last models from wood blocks, plastic, or leather, using handtools only, when last models of identical backpart specifications are not available. May specialize in fashioning and fabricating last models for shoe heels or shoe soles.
GOE: 06.01.04 STRENGTH: M GED: R4 M4 L4 SVP: 6 DLU: 77

761.381-022 PATTERN MARKER I (woodworking)
Lays out outlines of frames and furniture parts on woodstock to guide machine operators, working from blueprints, job orders, or models. Studies architectural drawing or blueprint of part or full assembly to be made. Selects stock lumber of necessary size and measures and marks with rule, square, and pencil or crayon, outlines of cuts to be made by various machine operators. May calibrate and record machining dimensions on stock or pattern for use in production as guide for machining parts. May trace outlines from blueprints for decorative or irregular cutting on bandsaw. May trace around patterns to indicate cutting lines.
GOE: 06.02.31 STRENGTH: L GED: R4 M4 L3 SVP: 7 DLU: 77

761.381-026 SKI MAKER, WOOD (toy-sport equip.)
Fabricates skis from wood, using handtools and powered machines. Cuts rough forms for skis, using electrically powered cutting machine. Soaks ski forms in hot water until pliable and places them in bending frame for shaping. Operates shaper to form ridges on top of ski. Pairs skis according to size, weight, and grain of wood. Sands skis and scrapes them with handtool to correct variations in thickness. Operates shaper to form grooves on underside of ski according to type of ski, such as plain, racing, or jumping skis. Finishes surface, using sandpaper. May apply varnish or paint to finished ski.
GOE: 06.02.25 STRENGTH: M GED: R3 M3 L2 SVP: 5 DLU: 77

761.381-030 SMOKING-PIPE MAKER (fabrication, nec)
Performs all hand and machine operations to make smoking-pipe bowls and stems from briar blocks: Sets up preselected block in fixture of wood-turning lathe. Sets up cutters in lathe chuck, and moves block forward to cause cutters to partially turn and face bowl of pipe. Replaces cutting tools to bore inside of bowl. Clamps block in *frazing machine* and forces it against cutters that duplicate lower part of bowl and shank to preselected pipe shape. Places shank in holder of drill press and drills and reams shank hole. Selects appropriate bit and drills airhole from mortice hole through shank into bowl chamber. Removes bowl from drill press and digs into bowl and shank to remove rotten briar and rough spots, using sharp handtool. Threads shank and stem, using threading machine. Inserts metal bushing in shank with handtool. Inspects pipe for flaws, cracks, or irregularities. Dips pipe in stain solution to highlight grain and color of briar and wipes pipe dry with soft cloth. Coats inside bowl chamber with specified mixture to sweeten bowl, using brush. Screws or presses stem into shank to assemble pipe, using handtools. Holds assembled pipe against sanding and buffing wheels to finish and polish surface.
GOE: 06.02.03 STRENGTH: L GED: R4 M2 L2 SVP: 7 DLU: 77

761.381-034 STOCK CHECKERER I (ordnance) alternate titles: checkerer, hand
Carves checkered designs and borders in wooden gunstocks, forearms, and slide handles to provide decorative gripping surfaces: Positions paper or plastic pattern on workpiece and dusts with powdered chalk to transfer outline to surface of wood. Secures workpiece in holding device to facilitate tooling over pattern area. Engraves grooves and decorative borders within chalked outline, using hand checkering and rabbeting tools. May rout recesses in workpiece, using carving tools, and insert wood or metal inlays. May sketch and engrave special designs, such as scrolls, oak leaves, birds, or animals, and be designated Carver And Checkerer, Specials (ordnance). May carve borders only and be designated Borderer (ordnance); or repair defective checkering on worn or damaged stocks and be designated Repairer And Checker (ordnance).
GOE: 01.06.02 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

761.381-038 STOCK MAKER, CUSTOM (ordnance) alternate titles: gunstock repairer; outside repairer, special; shaper
Lays out, fabricates, and finishes standard or wooden gunstocks: Selects wooden blanks according to customer's specifications. Draws outline on blanks following pattern or template. Cuts along outline with bandsaw to form rough stock; and shapes recesses in stock, using chisels, gauges, and rabbetting tools. Bores holes to specified depth in butt of gun, using drill press or brace and bit; and inserts weights to attain specified balance. Attaches frame and trigger assembly to stock and screws barrel into frame. Mounts gun in holding device of layout table and locates and draws finish outline, centerline, pitch, pull, and drop, using pencil, scribe, straightedge, square, and butt drop gauge. Shapes contours, using drawknives, chisels, gauges, rasps, and files. Finishes stock, using sandpaper, emery cloth, steel wool, oil, stain, and varnish.
GOE: 01.06.02 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

761.682-010 LATHE SANDER (woodworking)
Operates lathe or vacuum spindle machine to remove toolmarks and smooth round wooden parts: Positions part to be sanded between headstock and tailstock of lathe, and closes tailstock against part to hold it in place, or places part on rubber cup of vacuum spindle. Starts machine and presses sandpaper of specified grade over and around rotating part. Inspects or feels part to ascertain whether surface is smooth. Removes sanded part from machine. May apply wax or other finishes while part is rotating on machine. May be designated according to machine as Vacuum-Spindle Sander (furniture).
GOE: 06.04.25 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

761.682-014 SANDER, MACHINE (woodworking)
Operates one or more sanding machines equipped with sanding belts or sanding heads, such as disks, drums, spools, or brushes mounted on vertical or horizontal spindles to smooth surfaces and edges of hand-held wooden parts, boards, or furniture parts: Turns handwheels to adjust tension of sanding belt or to adjust height or angle of table or spindle. Presses button or switch to start machine. Holds and turns stock by hand against sanding head or belt or places stock on table or in jig and pushes stock back and forth against sanding head or belt, until rough surfaces and edges of stock are smooth. Examines and feels stock to verify smoothness. Replaces worn sandpaper belts, or sandpaper on sanding heads, using handtools. May cut sandpaper to designated size and shape prior to replacement on machine, using scissors. May select and mount sanding head on spindle according to shape of article to be sanded, using screwdriver or wrench. May be designated according to type of machine operated as Belt Sander (woodworking); Spindle Sander (woodworking); according to type sanding head used as Brush Sander (woodworking); Disk Sander (woodworking); Pneumatic-Drum Sander (woodworking); Spool Sander (woodworking); or according to area of article sanded as Edge Sander (woodworking).
GOE: 06.02.03 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 79

761.682-018 SPINDLE CARVER (woodworking) alternate titles: carver, machine; carving-machine operator
Sets up and operates bench-mounted, single-spindle carving machine to carve decorative designs on wooden furniture stock, following drawing or sample: Studies drawing of design or stock sample of item to be carved and selects cutter according to size and shape of design and type of wood. Attaches cutter to machine spindle, using wrenches and pliers. Starts machine and holds and guides stock against rotating cutter to carve design identical to drawing or sample. May install grinding wheel on spindle and sharpen cutter by holding it against rotating grinding wheel. May attach carving guide and rest stock against guide to cut design in stock.
GOE: 06.02.03 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 78

761.684-010 GOLF-CLUB FACER (toy-sport equip.) alternate titles: facer
Shapes faces of golf club woods to achieve specified contours, using one of following methods: (1) Clamps head of golf club wood in vise and selects file of tooth size, according to amount of material to be removed. Files contours on face. (2) Moves wood head against belt sander to shape face to specified contours. Places serrated cutters and spacers on arbor of motor in specified pattern to set up scoring apparatus. Starts motor and presses face of club into cutters to score face. Measures loft of club with protractor and visually compares faced club with prototype to verify contours.
GOE: 06.02.25 STRENGTH: L GED: R3 M2 L1 SVP: 4 DLU: 77

761.684-014 JIG BUILDER (metal prod., nec)
Builds wood jigs, used as guides in welding wire display racks, following sketch or sample: Lays out and marks jig dimensions on plywood stock according to written instructions or measurements taken from sample. Adjusts saw guides and cuts grooves in plywood to hold wires in place for welding, using table saw. Positions and attaches wood stops to plywood at wire crossing points and drills holes in plywood at crossing points to facilitate welding, using drill press and handtools.
GOE: 06.04.25 STRENGTH: M GED: R2 M2 L1 SVP: 3 DLU: 77

761.684-018 PANEL-LAY-UP WORKER (woodworking)
Matches and gathers boards of specified grain, color, and width to form panels. Inspects boards in stockpile and selects sides with matching grain and color for panel surface. Assembles pieces on table or conveyor, in sequence, and marks them with crayon for reassembly in gluing machine. Measures width of panel to verify work order requirements, using ruler. May place rejected boards on conveyor for reprocessing. May be designated according to type of panel assembled as Piano-Sounding-Board Matcher (musical inst.).
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

761.684-022 PATTERN MARKER II (woodworking) alternate titles: band-saw marker; marker
Marks outlines of irregularly shaped parts on woodstock to provide cutting guides for machine operators: Arranges specified patterns on stock to obtain maximum number of pieces with most effective utilization of wood grain. Traces patterns with pencil or other marking device. May nail pieces of thin stock together for identical parts to be cut simultaneously. May be designated according to woodstock being marked as Veneer Marker (woodworking).
GOE: 06.04.25 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 77

761.684-026 POLISHER (woodworking)
Holds and moves articles, such as baseball bats, wooden tool handles, handbag frames, and shoe lasts against revolving canvas belt or rotating cloth-cov-

ered wheel or disk to smooth and polish their surfaces. Activates polishing apparatus and holds polishing compound stick against belt, wheel, or disk to coat it. Presses and turns articles against belt, wheel or disk, to remove scratches and defects, and to polish surface of article to specified finish. Replaces worn buffs, using wrenches. May be designated according to article polished as Last Polisher (wood prod., nec); Wood Buffer (musical inst.).
GOE: 06.04.25 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

761.684-030 SANDER (fabrication, nec) alternate titles: hand sander; topper

Cleans, shapes, and smooths parts of smoking pipes. Positions specified grade of sandpaper on sanding machine spindle and turns nut to secure sandpaper. Starts machine and holds part, such as bowl or stem, against rotating disk, using varying pressure, or positions pipe bowl on spindle and holds sandpaper against revolving bowl to clean, shape, or smooth pipe. May be designated according to degree of sanding as Fine Sander (fabrication, nec); Rough Sander (fabrication, nec); or according to part or area sanded as Bit Sander (fabrication, nec); Bottom Sander (fabrication, nec); Bowl Topper (fabrication, nec); Shank Sander (fabrication, nec); or according to sanding objective as Putty Remover (fabrication, nec). May sand shank to fit flush with stem and be designated Flusher (fabrication, nec). May position pipe bowl on spindle and hold sandpaper against revolving bowl to smooth and shape bowl.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 78

761.684-034 SANDER, PORTABLE MACHINE (woodworking)

Smooths wood surfaces to facilitate finishing, using portable belt, disk, orbital, or vibrator sanding machine: Attaches sheet, disk or belt of abrasive material to machine rollers or platen, and secures it with thumbscrews or clamps. Starts machine and guides it over surfaces by hand. Inspects and feels stock for smoothness. May remove excess glue from joints, using knife, scraper, or wood chisel. May sand wood surface by hand, using sandpaper.
GOE: 06.04.25 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 80

761.684-038 SHAPER, HAND (furniture) alternate titles: scraper, hand

Dresses and smooths curved wooden furniture parts by clamping roughly sawed or shaped part in vise and shaping it to specified contours and finish, using tools, such as spokeshave, plane, rasps, and power sander.
GOE: 06.02.25 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

761.684-042 STOCK PATCHER (ordnance) alternate titles: patcher-wood welder; stock repairer

Repairs defective or damaged wooden gunstocks and forearms (grips): Trims outline of holes, cracks, chips, and splintered sections to form seat for patch, using punches, chisels, and hammers. Selects wood of matching grain and color and shapes wedges or dowels to form patch, using knives, files, benchsaw, and sanding wheel. Brushes patch with adhesive and positions it in seat. Places patched section between pole plates of heating machine to set adhesive. Trims patch flush with stock surface. Melts stick shellac into scratches, patched section, dents, and blemishes to fill damaged areas, using soldering iron or heated file. Removes excess shellac from repaired area, using sandpaper. May attach specified bakelite cap or ebony tip on stock.
GOE: 06.02.25 STRENGTH: L GED: R3 M1 L1 SVP: 3 DLU: 77

761.684-046 STOCK SHAPER (ordnance)

Scrapes, files, and sands machine-shaped gunstocks to remove excess wood and impart finished appearance to surfaces: Positions and secures stock in vise. Inserts filing jigs into routed recesses and secures them with screws. Scrapes and files wood to fit surfaces flush with jigs and butt-plate and to finish curves and contours of flutes. Smooths areas of stock, using sandpaper and emery cloth. Presses stock against sanding drum to impart smooth finish to stock.
GOE: 06.04.25 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

761.684-050 PANEL CUTTER (furniture)

Cuts plywood or particleboard to form end panels for display fixtures, using portable router: Reads work order to determine style of panel and type of woodstock to be used. Selects pattern and places pattern on woodstock, such as plywood or particleboard. Clamps pattern and woodstock to workbench. Guides portable router around edge of pattern to cut panel from woodstock. Cuts grooves in specified panels, using shaper.
GOE: 06.04.25 STRENGTH: M GED: R2 M2 L2 SVP: 2 DLU: 86

761.684-054 TOUCH-UP CARVER (fabrication, nec)

Carves decorative designs on wood smoking pipes to correct defects, using carving machine or pneumatically powered portable drill: Places designated carving bit in carving machine or drill chuck and tightens bit in chuck, using chuck wrench or pliers. Pushes button to start rotation of carving bit. Holds smoking pipe bowl and shank against bit to recarve designated pattern to specified depth on patched pipe or to correct carving defects.
GOE: 06.04.25 STRENGTH: M GED: R3 M1 L1 SVP: 3 DLU: 86

761.684-058 WIRE BRUSH OPERATOR (fabrication, nec)

Cuts pattern on smoking pipe bowl, using rotating wire brush: Places wire brush attachments over wire brush machine shaft and secures brush on shaft, using wrench. Pushes lever to start wire brush rotating. Holds and turns pipe bowl against rotating wire brush, using varying pressure, to cut pattern on specified surfaces of bowl.
GOE: 06.04.25 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 86

761.687-010 SANDER, HAND (woodworking)

Smooths surface of wooden articles, such as furniture parts, mirror frames, caskets, and cabinet panels preparatory to finishing, or between finish coats, using sandpaper and steel wool. Feels surface of sanded article for smoothness. May scrape article with chisel or scraper to remove burrs, splinters, and excess glue. May mark defects, such as knotholes, cracks, and splits to facilitate repair of article. May be designated Finish Sander (woodworking); First-Coat Sander (woodworking).
GOE: 06.04.25 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 79

762 OCCUPATIONS IN ASSEMBLING WOOD PRODUCTS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with fitting, joining, or interfacing wood products by using bolts, nails, rivets, screws, and adhesives.

762.134-010 SUPERVISOR, COMPONENT ASSEMBLER (mfd. bldgs.)

Supervises and coordinates activities of workers engaged in assembling components for manufactured buildings: Examines completed components to determine whether components, such as cabinets, sink tops, door casings, and closets, conform to specifications. Trains new workers in component assembly techniques. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

762.384-010 GLUED WOOD TESTER (woodworking) alternate titles: tester

Conducts laboratory tests to determine quality and strength of glued wood products, utilizing knowledge of wood species and glue: Soaks plywood in water for specified time and removes plywood from water to air dry, repeating procedure until glued plywood separates to determine soaking effect upon glue. Glues samples of wood together, places samples in oven, and increases temperature at specified intervals until glued samples break apart to determine heat effect upon glue. Tests tensile strength of glue, using pneumatic testing device to pull glued blocks apart. Determines moisture content of wood by weighing sample before and after baking in electric oven. Compiles test data and records results. Examines and measures stock in various stages of production to detect variations from standards. Prepares graphs and charts to show trends in waste of material and substandard lumber.
GOE: 06.03.01 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

762.484-010 REEL ASSEMBLER (woodworking)

Assembles precut wooden pieces to form reels for winding cables or strands. Measures parts, using measuring tape and rule, and assembles them, using hammer. Weighs, marks, and attaches tags to full reels. Rolls reels to stock house. May grease reels to waterproof them.
GOE: 06.04.22 STRENGTH: H GED: R2 M2 L2 SVP: 3 DLU: 77

762.684-010 ASSEMBLER (wood, container)

Assembles parts of wooden cases for use in carrying industrial tools and equipment: Fastens wooden parts of case together with rivets or nuts and bolts. Drills holes in precut metal strips and screws strips to edges of case. Rivets hardware, such as hinges, fasteners, and metal corners to case to complete assembly.
GOE: 06.04.22 STRENGTH: M GED: R2 M2 L1 SVP: 3 DLU: 77

762.684-014 ASSEMBLER, COMPONENT (mfd. bldgs.; vehicles, nec)

Assembles manufactured building and travel trailer components, such as sinks, cabinets, closets, counters, doors, and partitions, using hand and power tools: Obtains precut parts and subassemblies specified on parts list. Positions precut parts and subassemblies on worktable according to blueprint specifications or assembly instructions and examines joints to ensure snug fit. Applies glue to parts, using brush or spray gun, and fastens parts together to form component, using staple gun, hammer, or power screwdriver. Positions template on component or measures to locate position for hardware, such as door knobs, rollers, or faucets, and bores holes or cuts grooves for hardware, such as door hinges, pulls, door knobs, or rollers, using power saw and drill. Fastens hardware in place and hangs doors in frames, using screwdriver and drill. Positions and secures sink or lavatory fixtures in specified position, using pipe wrench. May cut precut lumber to alter dimensions to meet specifications, using power saw and tape measure. May bend portion of wooden counter top to form backsplash, using bending machine. May be designated according to component assembled as Cabinet Assembler (mfd. bldgs.; vehicles, nec); Counter Top Assembler (mfd. bldgs.; vehicles, nec); Partition Assembler (mfd. bldgs.; vehicles, nec).
GOE: 06.02.22 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 77

762.684-018 ASSEMBLY OPERATOR (woodworking)

Fits parts, such as shuttle eyes, tension devices, plates, and spindles, into wooden shuttles: Smooths interior surfaces of openings in shuttles or spindles, using chisel or cutting machine with rotating knives. Bores holes for final assembly, using boring machine. Positions parts in specified opening and screws or bolts them in place, using handtools. Tests tension devices for resistance.
GOE: 06.04.25 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

762.684-022 BASKET MENDER (wood, container)

Trims and repairs rattan baskets prior to application of protective coating: Trims ends of rattan rods and reeds, using knives and shears. Removes thin hairlike strands of reed by singeing with gas torch. Reweaves defective sections of baskets to repair baskets. Removes and replaces defective reeds and rods. Rejects baskets unsuited for repair.

GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

762.684-026 BOX MAKER (fabrication, nec)

Assembles wooden boxes from prepared sections or precut boards for use as shipping or burial cases, using either of following methods, using hand or power tools: (1) Places ends of box in form on workbench, and nails side sections and bottom panels to ends, using hammer or pneumatic nailer. Turns unit over, positions top panels on box, nails batten to panels to reinforce top, and tacks top to box. (2) Clamps and fastens precut boards together to form end, side, and bottom sections and nails sections together, using hand clamps, braces, corrugated fasteners, hammer, and pneumatic nailer. Turns unit over, clamps and nails braces to boards to form top, and tacks top to box. Trims and smooths edges and corners of assembled box, using hand plane, drawknife, and sandpaper. Conveys assembled boxes to storage area, using handtruck. May mark box size on ends of boxes. May paint surfaces of boxes, using spray gun.
GOE: 06.04.25 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

762.684-030 CURTAIN-STRETCHER ASSEMBLER (woodworking)

Assembles component parts of adjustable curtain stretchers: Drills holes and slots according to markings on wooden parts. Fits parts together to form frame, bolting slotted parts together to permit size adjustment. Connects frame to prop by inserting removable brace into drilled holes of frame and prop.
GOE: 06.04.22 STRENGTH: L GED: R2 M2 L1 SVP: 2 DLU: 77

762.684-034 DOOR ASSEMBLER I (woodworking)

Assembles prepared machined parts (stiles, rails, panels, and bars) into doors, according to prescribed patterns, using glue, maul, and jig. Spaces glue-discharge pipes to correspond with dowel holes in stiles, using wrench and sample stile. Places stile on edge of glue tank and depresses pedal to fill dowel holes with glue. Drops glued stile horizontally with dowel holes up into jig on floor. Grasps rails and panels, in sequence, from stacks behind glue tank and aligns protruding dowels from each piece into glued holes of stile on floor. Taps pieces with maul to start dowels into holes. Glues and places second stile over protruding dowel pins of rails and panels and drives assembly partially together with maul. Tips door on bottom edge and stacks door vertically against rack for removal to CLAMPER (woodworking).
GOE: 06.04.22 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

762.684-038 EDGE BANDER, HAND (furniture) alternate titles: veneer-edge bander

Glues veneer bands to edges of case tops and tabletops by hand. Applies glue to veneer strips or edges of top with roller or brush and positions strips on edges. Places top in clamp and closes clamp to hold veneer strips against edges of top until glue is dry. Removes top and trims and smooths joints and edges of veneer with portable laminate trimmer and sandpaper. May cut veneer strips to specified length with handsaw. May use electrically heated or steam-heated clamp to facilitate drying of glue.
GOE: 06.04.22 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

762.684-042 GRIP ASSEMBLER (woodworking)

Assembles gripping units that hold bobbins in wooden shuttles and inserts assembled units in shuttles: Removes burrs from edges of slots inside shuttles, using small knife. Fastens T-shaped shim to bobbin holder (grip) with leather straps and fits grip assembly into slots in shuttle chamber. Inserts tapered rod through length of shuttle and grip assembly to align parts, and screws assembled unit to shuttle. Measures position of unit in shuttle, using gauges, and adjusts unit to specified position, using handtools. Inserts specified bobbin in grip assembly and makes adjustments to obtain specified position and tension of bobbin. Repairs damaged grip units by tapping bent parts with hammer.
GOE: 06.02.23 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

762.684-046 HARDWARE ASSEMBLER (woodworking)

Attaches hinges to wooden bifold doors with power screwdriver, working as member of three-member crew: Pushes cart of matched doors to feed end of conveyor. Removes and places matched pair of doors face to face on their side edges onto conveyor that conveys doors to stop guide under jigs. Places offset hinges in jigs, and flips switch to activate bars that grasp, lift, and hold doors in position under jigs. Screws hinges to doors, using power screwdriver, to join doors. Depresses foot bar to release joined doors onto conveyor for subsequent packing.
GOE: 06.04.25 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

762.684-050 NAILER, HAND (any industry)

Assembles wooden products, such as boxes, packing cases, kegs, pallets, furniture frames, door and window units, and hogshead subassemblies, using handtools: Positions workpiece on table, floor, easel, or jig, according to verbal instructions, and nails or staples materials together at designated points, using hammer, pneumatic gun, or staple gun. Drives nails in carvings, molding, and scroll work, using hammer, before attaching to furniture. Attaches metal cleats to bottoms of nail kegs to reinforce containers, using hammer and nails. Clinches exposed nail ends and places assembled unit aside for further processing or shipment. May insert bolts in predrilled holes and tighten bolts with wrench. May glue joints before nailing. May record production. May repair containers and be designated Box Repairer (any industry). May be designated according to product assembled as Box Maker, Wood (any industry); Panel Maker (woodworking).
GOE: 06.04.22 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 80

762.684-054 SCARF GLUER (millwork-plywood)

Glues scarfed plywood panels together to form panels of specified length: Spreads glue on scarfed edge of panels, using roller, brush or putty knife. Places panels on worktable, fits glued-scarfed edges together to form joint, and staples corners of panel to hold them together while being pressed. Removes staples from cured panels and sands excess glue from surface of joint, using portable sander. Stacks finished panels on pallets and brands grade and trademark on edge, using electric branding iron. May verify strength of bonded joint, using pneumatic test equipment. May push panels into hot-plate press and close press to cure joint.
GOE: 06.04.25 STRENGTH: H GED: R2 M1 L1 SVP: 4 DLU: 77

762.684-058 SIDING STAPLER (millwork-plywood)

Glues and staples wood strips and wedges on edges of plywood panels to make siding panels: Places plywood panels and wood strips near workbench. Examines each panel and rejects those with defects. Positions acceptable panel on workbench with finish surface down. Feeds wood strip through rollers that apply glue to bottom side and glues strip along one surface edge of panel. Positions wood wedge on end of panel and staples strip and wedge to panel, using staple gun. Stacks and ties completed panels in bundles to protect finish surfaces from damage during storage or shipment. Paints edges of bundled panels with weather proofing compound, using spray gun. Cuts rejected panels into strips, using table saw. Fills glue container, adding catalyst to obtain prescribed color. Records production.
GOE: 06.04.25 STRENGTH: H GED: R2 M2 L2 SVP: 2 DLU: 77

762.684-062 TRUSS ASSEMBLER (millwork-plywood)

Assembles precut wooden parts to build trusses and similar supports or wall sections used in building construction. Moves specified precut parts to work area and positions parts in jig by hand or using overhead crane, following supervisor's instructions and blueprint specifications. Places metal reinforcement plates over connecting joints and connects parts at joints, using hammer, screwdriver, or pneumatic staple gun. Verifies dimensions of precut parts and accuracy of assembly, using ruler and gauges.
GOE: 05.10.01 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 77

762.684-066 WOODEN-FRAME BUILDER (furniture)

Assembles wood frames for box springs and studio couches, using handtools: Positions precut frame parts, such as sides, ends, and braces in fixture, and glues, staples, and screws them together to fabricate box spring frame, using handtools, hand stapler, and glue applicator. Trims and smooths edges of frame, using saw and planer. Nails, screws, bolts, and glues precut couch framing and attaches legs, arms, and back pieces, using handtools. Nails, screws, or bolts plywood or other material to frame to form bedding box. May cut wood parts, according to specifications, using power tools. May attach hardware, such as caster, hand-pulls, and spring hinges. May staple spring assembly to wooden frame to form box spring unit, using pneumatic staple gun. May be designated according to type of frame assembled as Box-Spring-Frame Builder (furniture); Studio-Couch-Frame Builder (furniture).
GOE: 06.04.25 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

762.685-010 EDGE BANDER, MACHINE (furniture: millwork-plywood)

Tends machine that glues veneer bands to edges of case tops, tabletops, and plywood panels, using either of following methods: (1) Pours glue in reservoir of banding machine. Places stack of veneer strips in feed chutes. Adjusts conveyor and trimming saws to width and thickness of panels or tops to be banded. Starts machine and feeds stock into machine that applies glue to edges of stock, pulls veneer strips from feed chute onto edges, dries glue on heated plates, and trims strips flush with edges. Regulates speed of belts that convey stock through machine. Sets temperature control to regulate heat of drying plates. (2) Brushes glue on edges of panels or tops. Adjusts stop on bander machine to width of stock. Sets dial on temperature gauge to heat ram and stop according to thickness of stock. Aligns stock and veneer strips between ram and stop. Depresses pedal to activate ram that presses stock against stop and bonds veneer strips to edges of stock. Places stock on worktable for edge trimming and sanding. May mix glue.
GOE: 06.04.03 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 78

762.686-010 EDGE-BANDING-MACHINE OFFBEARER (furniture: millwork-plywood)

Off bears machine that glues veneer bands to edges of case tops, tabletops, and plywood panels. Stacks banded stock on pallet for movement to storage or further processing.
GOE: 06.04.03 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

762.687-010 BANDER (wood. container)

Attaches reinforcing metal bands to ends of wood boxes, using *strapping tool*: Threads strapping tool with metal band. Positions band around ends of box. Pumps handle of tool to tighten band. Pulls lever on machine to crimp and fasten band with metal clip.
GOE: 06.04.25 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

762.687-014 BOX INSPECTOR (wood. container) alternate titles: assembling inspector

Inspects and repairs wood boxes: Examines partially or completely assembled boxes and crates for defects, such as cracks, nicks, holes, and diagonally driven and protruding nails. Removes diagonally driven nails and drives in protruding nails, using hammer. Smooths rough spots and edges, using sanding block or wire brush. Rejects substandard boxes. May sort assembled boxes according to specified groups.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

762.687-018 BOX REPAIRER II (wood. container) alternate titles: box-shook patcher

Examines box shooks and blanks for cracks, knots, holes, and loose binding wire. Fills defects with cement and wood and staples loose binding wires to sides of boxes.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 86

762.687-022 CLAMP-JIG ASSEMBLER (woodworking)

Assembles and clamps together wooden parts for such products as door frames and furniture parts, using jig equipped with power clamping device: Places precut wooden parts in jig in specified sequence and position, and activates mechanism that clamps parts together. Releases clamp and stacks completed items on skid. May turn crank to adjust width of jig. May brush glue on wooden parts or squirt glue in dowel or tenon holes before assembling parts. May be designated according to product as Hollow-Core Door-Frame Assembler (wood prod., nec); Louver-Door Assembler (wood prod., nec).
GOE: 06.04.22 STRENGTH: M GED: R2 M2 L2 SVP: 2 DLU: 78

762.687-026 CROSSBAND LAYER (millwork-plywood) alternate titles: core layer, plywood; glue spreader helper

Stacks glued *crossbands* alternately with *core stock* to assemble plywood panels for bonding, working as member of team: Grasps glue-coated crossbands as they emerge from glue spreader and places them cross-grained between *back sheet*, core stock, and *face sheet* placed by VENEER-STOCK LAYER (millwork-plywood) 762.687-066 until specified ply is obtained. Discards broken crossbands. Pushes assembled panels down conveyor to hot-plate press for bonding into plywood. May assist GLUE SPREADER, VENEER (millwork-plywood; wood prod., nec) 569.685-042 to clean rollers of glue spreader. May brush glue on irregularly shaped veneer sheets that will not fit in glue spreader. May assemble 3-ply panels alone, laying back sheet, glued core or inner sheet, and face sheet in sequence, and be designated Plywood Builder (millwork-plywood).
GOE: 06.04.25 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 78

762.687-030 DOOR CORE ASSEMBLER (woodworking)

Assembles hollow-core or solid-core doors in teamwork, using either of following methods: (1) Inserts preassembled hollow or solid door cores between glue rollers that coat both sides with glue, and alternately stacks cores on press dolly between pairs of veneer panels to assemble doors. Positions lock blocks, cross sticks, and corrugated cardboard spacers within frames of hollow cores. Pushes loaded dolly into press. (2) Inserts braces, stiles, rails, and filler boards between glue rollers, and alternately stacks them in position between pairs of veneer panels on elevator platform that automatically descends as each hollow-core door is assembled. Pushes stack of assembled doors from platform rollers onto conveyor rollers for transfer to press.
GOE: 06.04.22 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

762.687-034 GLUER (woodworking)

Applies glue to surfaces of wooden pieces and clamps them together to form larger pieces or complete units, such as panels, tub bottoms, and tennis rackets: Spreads glue on surfaces to be joined, using brush or hand roller, or by drawing wood across roller partially submerged in glue. Assembles and aligns pieces, and fastens them together until glue dries, using bar clamps, hand clamps, vise, or radial-arm clamp carrier. Presses pedal when using clamp carrier to move racks containing clamped units around frame of device and back to working position. May reinforce joints with nails, screws, or brads, using handtools. May mix glue. May be designated according to type of clamping device used as Clamp-Carrier Operator (woodworking). May be designated according to product as Box Gluer (wood. container); Panel Maker (fabrication, nec).
GOE: 06.04.22 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 78

762.687-038 GLUER-AND-WEDGER (woodworking) alternate titles: wedger-and-gluer

Glues and shapes fibrous veneer strips to sides and ends of wooden shuttle blanks: Brushes glue on veneer strips and aligns them on sides of shuttle blanks to form even surface. Clamps several veneered shuttle blanks together in rack and hangs racks in drying room. Removes racks and brushes glue on underside of veneer strips at tapered shuttle ends, and hammers wooden wedges around tapered ends of shuttles in rack to shape strips to shuttle form. Returns racks to drying rooms.
GOE: 06.04.25 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

762.687-042 HANDLE ASSEMBLER (woodworking)

Attaches metal parts, such as webs and ferrules, to wooden tool and implement handles: Positions metal parts on handle, and drills holes for bolts or rivets, using portable power drill. Inserts bolts or rivets in holes, and tightens or fastens them, using handtools or riveting press. May stamp handles with name or size. May pack handles for shipment. May dip or spray handles to color or preserve them. May be designated according to handle assembled as Saw-Handle Assembler (woodworking); Shovel-Handle Assembler (woodworking); Snath-Handle Assembler (woodworking).
GOE: 06.04.22 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

762.687-046 HARDWARE ASSEMBLER (wood. container) alternate titles: box-hinge and lock attacher

Attaches hardware, such as hinges, latches, or lockplates, to wooden boxes, using either of following methods: (1) Inserts hardware in magnetized holder of ram or die of press. Positions box in jig beneath ram and depresses pedal to press and attach hardware to box. (2) Fits and attaches hardware to grooves on wooden box, using hammer and nails. May be designated according to method used as Box Nailer (wood. container); Hardware Press Operator (wood. container).
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

762.687-050 KNOCK-UP ASSEMBLER (woodworking)

Glues and drives tenons of precut wood parts into mortises of other parts to assemble wood products, such as window sashes, door frames, boxes, or furniture or cabinet parts: Brushes glue on tenons or into mortises. Places wood parts on worktable according to specified pattern and sequence and drives tenons of parts into mortises of adjacent parts, using mallet. Inserts mullions between stiles and rails of multipane windows and fastens them with glue. Stacks completed items on skid. May insert wedges into mortises to fasten parts together. May operate *clamp machine* to squeeze tenons into mortises. May be designated according to product assembled as Door Assembler (woodworking) II; Sash Assembler (woodworking).
GOE: 06.04.22 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

762.687-054 PARTITION ASSEMBLER (wood. container)

Hammers wood partitions into grooves of other partitions to form sections in bottle boxes. Presses partition clips against top edges of partitions and into box ends to fasten partitions.
GOE: 06.04.23 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

762.687-058 SCREEN TACKER (woodworking)

Installs screening in door or window screen frames: Positions roll of screening material on rack and places door or window frame on worktable. Pulls screening material over frame opening, and cuts screen to fit opening, using roller cutter. Forces edge of screen into frame groove, using roller or chisel-like setting tool. Nails molding strip over frame groove or rolls brading cord or spline into groove to secure edge of screen. When rolling in screens, may be designated Screen Roller (woodworking).
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

762.687-062 SHEET TURNER (millwork-plywood)

Stacks veneer sheets on table to supply VENEER-STOCK LAYER (millwork-plywood) engaged in assembling plywood panels: Removes *back sheets*, *face sheets*, and *core stock* from pallets and places sheets in separate stacks on table supplying VENEER-STOCK LAYER (millwork-plywood). Turns exterior side of back sheet down and places back sheet on top of face sheet to ensure that exterior of sheets are on outside of finished panels. Slides back and face sheets toward VENEER-STOCK LAYER (millwork-plywood) to facilitate handling of sheets by VENEER-STOCK LAYER (millwork-plywood).
GOE: 06.04.40 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

762.687-066 VENEER-STOCK LAYER (millwork-plywood) alternate titles: face layer

Stacks veneer sheets alternately with glued *crossbands* to assemble plywood panels for bonding, working as member of team: Positions layup board on conveyor against backstop and inserts poles in socket at end to form jig. Places *back sheets* on layup board to start assembly of individual panels. Places *core stock* between crossbands placed by CROSSBAND LAYER (millwork-plywood) until specified ply is obtained. Places *face sheets* on tops of individual panels to complete panels. Pushes assembled panels down conveyor to hotplate press for bonding into plywood. May turn back and face sheets during assembly of panels to ensure that exterior sides of sheets are on outside of finished panels. May stack chemically treated paper on veneer sheet to make plywood with smooth face sheet suitable for painting or application of wallpaper or cloth.
GOE: 06.04.25 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

762.687-070 WOODENWARE ASSEMBLER (woodworking)

Assembles wooden articles, such as ladders, stools, benches, and folding chairs from prefabricated parts; and fastens them together with bolts, nails, or screws, using hand or power tools. May place parts in jig and force parts together for assembly, using pneumatic press. May fasten sections together and attach brackets, using riveting machine. May inspect ladders for conformance to plant and government standards. May be designated according to product assembled as Towel-Rack Assembler (woodworking). May read work orders to determine materials required, number of assemblers needed, and time required to complete work order. May adjust pneumatic bench press according to blueprint of wooden article to be manufactured.
GOE: 06.04.22 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 78

763 OCCUPATIONS IN FABRICATION AND REPAIR OF FURNITURE, N.E.C.

This group includes occupations, not elsewhere classified, concerned with inlaying, installing, molding, weaving, polishing, and related activities concerned with fabricating and repairing furniture.

763.134-010 SUPERVISOR, QUALITY CONTROL (furniture)

Supervises and coordinates activities of workers engaged in inspecting and repairing finished and unfinished wooden furniture to ensure conformance of furniture to company and customer specifications: Confers with supervisory personnel concerned with assembly of furniture to determine type and quantity of furniture to be processed. Measures wooden parts and assembled furniture articles, using tape measure, ruler, and calipers, to ensure conformance with

blueprint specifications. Scans and feels surface of furniture for construction and finishing defects to determine if quality standards are met. Compares color on finished furniture with master color sample to determine if colors match. Records type and quantity of furniture articles processed daily and reports production to office personnel. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R4 M4 L3 SVP: 6 DLU: 77

763.134-014 SUPERVISOR, FURNITURE ASSEMBLY (furniture)
Supervises and coordinates activities of workers engaged in assembling wood furniture: Determines amount, type, and availability of furniture subassemblies and supplies required for furniture assembly. Examines samples of furniture assembled to ensure conformance to specifications, and instructs workers in methods of correcting defects. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R3 M3 L3 SVP: 7 DLU: 86

763.380-010 FURNITURE RESTORER (museums) alternate titles: furnishings conservator; coater
Restores and preserves historical furniture in collection of museum or similar institution, using variety of handtools and power tools and applying knowledge of antique fabrics and wood furniture: Examines furnishings to determine type of material, extent of deterioration or damage, or date of construction to verify authenticity and plan restoration. Sets up and operates variety of woodworking machines to fabricate, repair, reinforce, and replace parts of furniture. Cuts, shapes, and attaches parts according to blueprints or drawings, using handtools. Matches materials for color, grain, and texture. Strips old finish from furnishings, using solvents and abrasives. Fills cracks, depressions, and other blemishes, using plastic wood or lacquer stick. Treats warped or stained surfaces to restore original contour and color. Glues or replaces veneer sections. Smooths surfaces, using power sander or abrasive material. Washes or bleaches furniture surfaces to prepare surface for application of finish. Selects coatings, such as stain, lacquer, or varnish according to type wood, and brushes or sprays material onto surface to protect surface and produce desired appearance. Polishes, sprays, or waxes finished pieces. Removes damaged or deteriorated coverings from upholstered furniture. Repairs, reinforces, or replaces components, such as springs, webbing, and padding. Selects fabric for new covering, using knowledge of period and style of furniture or following instructions of CURATOR (museums) 102.017-010. Tacks, sews, glues, or staples covering to furniture frame to attach upholstery. Refurbishes leather coverings of furnishings, using softeners, solvents, adhesives, stains, or polishes. Replaces damaged coverings with leather pieces of appropriate color, grain, and weight. Stencils, gilds, embosses, or paints designs or borders on restored pieces to reproduce original appearance. May advise curatorial staff on environmental conditions necessary for preservation of furnishings in exhibit and storage areas. May fabricate replicas of period furniture for use in exhibits. May be designated according to specialty as Finish Specialist (museums); Upholstery Restorer (museums).
GOE: 05.05.08 STRENGTH: L GED: R4 M3 L4 SVP: 6 DLU: 86

763.381-010 FURNITURE FINISHER (woodworking) alternate titles: furniture refinisher; recoater; refinisher; wood finisher
Finishes or refinishes damaged, worn, or used furniture or new high-grade furniture to specified color or finish, utilizing knowledge of wood properties, finishes, and furniture styling: Disassembles article, masks areas adjacent to areas being finished, or removes accessories such as knobs and hinges, using handtools, to prepare article for finishing. Removes old finish from surfaces, using steel wool, sandpaper, or solvent and putty knife. Removes excess solvent with cloth immersed in paint thinner or sal soda. Applies plastic putty, wood putty, or lacquer-stick to surface, using spatula or knife, to fill nicks, depressions, holes, and cracks. Smooths surface for finishing, using sandpaper or power sander. Selects finish ingredients and mixes them by hand or machine to obtain specified color or shade or to match existing finish. Brushes or sprays successive coats of stain, varnish, shellac, lacquer, or paint on workpiece. Grains wood or paints wood trim, using graining roller, comb, sponge, or brush. Polishes and waxes finished surfaces. May restore wood to natural color, using bleaching acid and neutralizer. May spread graining ink over metal portions of surfaces with cheesecloth to simulate wood-grainlike finish. May finish piano and organ cases and be designated Piano-And-Organ Refinisher (woodworking). May finish mirror and picture frames and be designated according to type of finish applied as Powder Gilder (wood prod., nec); Whitener (wood prod., nec). May finish television receiver cabinets and be designated Television-Cabinet Finisher (woodworking). May finish wooden parts of custom-made firearms and be designated Finisher, Special Stocks (ordnance). May stain and finish surfaces of new furniture pieces to simulate antiques, bringing out highlights and shadings by rubbing surfaces with abrasives or cloth, and be designated Antiquer (furniture).
GOE: 05.05.08 STRENGTH: L GED: R4 M2 L2 SVP: 7 DLU: 77

763.381-014 FURNITURE-FINISHER APPRENTICE (woodworking) alternate titles: wood-finisher apprentice
Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.08 STRENGTH: L GED: R4 M2 L2 SVP: 7 DLU: 77

763.681-010 FRAME REPAIRER (furniture)
Repairs frames of sofas and chairs damaged during upholstering in furniture plant: Removes upholstery, burlap, or webbing to expose splits or breaks in frames. Glues and secures splits with screws, dowels, or nails, using handtools. Cuts out or chisels away broken parts of frames, using handsaw, portable power saw, or hammer and wood chisel. Cuts replacement parts to fit adjacent parts of frames and glues and dowels replacement parts to frames.
GOE: 05.10.01 STRENGTH: H GED: R3 M3 L2 SVP: 6 DLU: 86

763.684-010 ASSEMBLY INSPECTOR (furniture) alternate titles: inspector
Inspects unfinished furniture for surface defects and conformance to company standards. Cleans dust from drawers and external surfaces of furniture, using airhose. Examines surface for defects, such as loose or blistered veneer, cracks, knots, exposed nails, warping, loose joints, splits, dents, or scratches. Feels surface to detect rough spots. Marks defective areas with chalk for resanding or repair. Inspects fit of doors and drawers and tightness of joints. May make minor repairs to furniture, such as nailing drawer slides and drawer stops to case, sanding rough areas, and scraping off excess glue. May record number of units inspected.
GOE: 06.03.02 STRENGTH: M GED: R3 M1 L2 SVP: 5 DLU: 79

763.684-014 CABINET ASSEMBLER (furniture)
Assembles radio, television, and phonograph cabinets, using handtools. Fits prefabricated wooden parts together. Trims and smooths parts to fit, using handtools and sandpaper. Inserts screws or dowels in predrilled holes, and fastens parts together with screwdriver, glue, and clamps. Installs hardware, such as hinges, catches, and knobs, on assembled cabinet. May cut baffle cloths and plastic screens to specified size and install them in cabinets, using hand or machine cutters, screwdriver, and stapling gun.
GOE: 06.02.22 STRENGTH: L GED: R3 M2 L3 SVP: 3 DLU: 77

763.684-018 CANER I (furniture) alternate titles: weaver
Weaves twine and strips of cane or other flexible material onto furniture frames to form woven seats, backs, or other panels. Cuts strips or twine to length, using knife. Inserts strips or twine through frame holes and interlaces strips within frame openings in horizontal, vertical, and diagonal directions to form woven panels of specified patterns. Pulls strips taut and loops ends of strips in and out of holes to form decorative edges. Staples or tacks twine to frames. May water-soak cane or other material fibers to increase pliability for weaving. May clamp frames in fixtures to hold frames for weaving. May weave strips or twine on tables and wire racks to form decorative edges.
GOE: 06.02.52 STRENGTH: L GED: R3 M1 L1 SVP: 3 DLU: 77

763.684-022 CANER II (furniture)
Installs or replaces prewoven panels of cane, willow, or rattan in furniture frames: Cuts damaged panel from furniture frame, using knife. Pries wooden splines from grooves in frame, using chisel. Places frame in water to soften dried glue and adhering panel of cane or willow, and scrapes surfaces clean. Brushes glue into grooves around frame opening and stretches water-soaked panel over opening. Forces edges of panel into grooves, using wedge and mallet or pneumatic press. Brushes glue over panel edges in grooves, and forces splines into grooves flush with surface. Trims excess material, using knife. May cut prewoven panels to size, using pattern and scissors or cutting machine.
GOE: 06.04.25 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 78

763.684-026 CASE FITTER (furniture) alternate titles: prefitter
Fits doors, trays, and drawers into unfinished wooden furniture: Trims and shapes edges of uneven or misshapened parts, using chisel, file, sandpaper, and hand plane, or by drawing edges over jointer blade. Pushes thumbtacks into drawer slides to level drawers and to facilitate sliding. Fits prehinged doors to cases and marks and drills holes for insertion of screws, using portable power drill. Attaches doors to cases or sets them aside for painting. Slides drawers in and out to test fit of drawers, and tests doors for ease of opening and closing. May repair, replace, or lubricate defective hardware, using handtools and portable power tools. May be designated according to part fitted as Door Fitter (furniture); Drawer Fitter (furniture).
GOE: 05.10.01 STRENGTH: M GED: R3 M1 L1 SVP: 3 DLU: 78

763.684-030 DRAWER LINER (furniture)
Glues velveteen, felt, or other lining material to bottom or over entire inside of drawers which are used for storage of silver, coins, or other tarnishable articles. Brushes glue evenly on parts to be covered. Positions and smooths precut lining on glue by hand and cuts or trims it as necessary to fit part.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

763.684-034 FINISH PATCHER (furniture) alternate titles: finish cleaner; finish repairer; refinisher; retoucher
Repairs defects, such as holes, cracks, and scratches, in finish of furniture or furniture stock: Examines each defective article to determine method of repair. Fills holes and cracks with shellac or wax, using heated blade to melt and spread wax and shellac. Removes varnish and smooths cracks and scratches with sandpaper. Applies stain to match furniture surface and varnish to protect surface, using brush or spray gun. Smooths and shapes repaired surface with sandpaper, pumice stone, steel wool, or chisel. Nails, screws, or glues broken or split parts together. Rubs glossy spots with pumice stone and oil, and polishes dull spots with wax to match surrounding finish. Dabs moistened cloth to and presses heated blade against dents and scratches to draw indentations to surface. May chisel out defective sections and replace them with patch matching color and grain.
GOE: 05.10.01 STRENGTH: M GED: R3 M1 L2 SVP: 4 DLU: 79

763.684-038 FURNITURE ASSEMBLER (furniture) alternate titles: parts assembler

Assembles wooden parts or assemblies to form sections, frames, or complete articles of furniture: Trims joints to fit, using handtools. Blows dust from mortises and areas to be glued, using airhose. Spreads glue on surfaces to be joined by drawing wood across roller partially submerged in glue, by using brush dipped in glue, or by using glue-filled squeeze bottle. Knocks connecting parts together with mallet or compresses assembled parts in clamp until glue has dried. Wipes excess glue from joints with rag. Drills holes and drives screws into parts to join parts or to reinforce glued joints, using power drill and screwdriver. Attaches glue blocks, metal braces, corner blocks, drawer guides, tops, molding, shelves, dust bottoms, back panels, or skids with nails, screws, glue, or staples, using handtools and power tools. Inspects and verifies accuracy of assembled article for conformance to specified standards, using square and tape measure. Smooths irregular joints with rasp and sandpaper, and levels chair legs, using circular leveling saw. May drill holes and attach hardware, such as drawer guides, drawer locks, catches, and latches, using power drill and handtools. May slide drawers in and out to test ease of movement, and adjust ill-fitting drawers, using handtools. May be known in establishment according to part or article assembled. May work as member of team along conveyor line.
GOE: 06.02.22 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 80

763.684-042 HARDWARE ASSEMBLER (furniture) alternate titles: mounter; upfitter

Attaches hardware, such as drawer pulls, locks, latches, or metal ornaments, to finished furniture, using handtools and power screwdriver: Examines drawings or work ticket to ascertain location and type of hardware to be mounted to furniture. Attaches wooden molding, decorative carvings, trim, and hardware to furniture, using nails, screws, adhesive spray gun, handtools, and power screwdriver. Staples plastic tabs on top edges of drawers or brushes liquid paraffin on drawer edges to facilitate ease of opening and closing drawers. Wraps keys, trays, and drawer dividers in paper and places them inside cabinet. Inserts felt-backed metal clips between drawers and furniture case to hold drawers during shipment. May hang doors by screwing hinges to predrilled holes. May press electric iron against inside panel of furniture case drawers to burn brand name on drawer.
GOE: 06.04.22 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 80

763.684-046 LAG SCREWER (furniture) alternate titles: pin-machine operator

Inserts lag bolts in table legs, using pin machine: Inserts lag screw in hole of table leg or in drill of machine. Pushes leg against rotating drill or pulls lever to lower drill onto leg. Verifies depth of screw in leg, using gauge. Stacks legs on handtruck and conveys them to storage or assembly area.
GOE: 06.04.23 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 77

763.684-050 LAMINATOR, HAND (furniture)

Cements precut laminated plastic covering materials to plywood panels to form furniture parts, such as cabinet tops, countertops, tabletops, and desktops: Applies cement to surface of plywood panels, using brush. Glues plastic laminated covering material to plywood panel to form furniture part and smooths surface with rollers. Wipes acetone on edges of covering and panel with rag and solvent to remove excess cement. Examines edges of laminated part to detect ridges, and removes excess material with file or electric hand trimmer. May attach metal molding trim to edges, using glue and handtools. May cut plastic laminated material and plywood to specified size and shape, using handtools and power tools. May clamp laminated plastic in place until glue sets, using clamps or vise. May install laminated plastic tops on furniture and be designated Plastic-Top Installer (furniture). May cover tops of kitchen and bathroom fixtures and be designated Cabinet Assembler (mfd. bldgs.).
GOE: 06.04.22 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

763.684-054 LEATHER TOOLER (furniture)

Covers wooden table or desk tops with leather: Cuts cardboard pattern to contour of tabletop or desk top and cuts outline of pattern on leather, using knife or shears. Applies adhesive to table or desk top and to leather, and presses leather onto top, shaping and stretching it to remove wrinkles and prevent buckling as adhesive dries. Trims excess leather, using knife. Applies goldleaf or other decorative design to leather, using heated die or printing roller and stencil. May spray lacquer over leather to protect surface of leather.
GOE: 06.02.27 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

763.684-058 PIANO CASE AND BENCH ASSEMBLER (musical inst.)

Performs any combination of following tasks to assemble piano frames, cases, and benches, using carpenter's handtools, templates, jigs, and woodworking machines: Fits keybeds, shelves, music racks, and other case parts for assembly by sawing, drilling holes, and sanding material to fit, using handtools, bandsaw, jig, drill press, and sandpaper. Applies glue to side pieces and back frame parts with brush and positions material in clamp for drying, or gives material to GLUING-MACHINE OPERATOR, ELECTRONIC (woodworking) for gluing and clamping. Installs additional pieces, such as pedalboard, toe rails, music racks, keycover rod, hardware, and decorative items, using handtools, work aids, and portable power tools. May be designated according to item assembled as Bottom Board And Truss Leg Installer (musical inst.); Key-Bed Installer (musical inst.); Piano Bench Assembler (musical inst.); Side Gluer (musical inst.); Top Case Assembler (musical inst.).
GOE: 06.04.25 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 77

763.684-062 PLASTIC-TOP ASSEMBLER (furniture)

Stacks sheets of glue-coated plywood, fiberboard, and plastic, in specified sequence for pressing into laminated tops for furniture, such as dressers, tables, and desks. Builds tops for matched sets, by matching color, type of finish, and grain pattern of face sheets. May tend cold press to compress stack [HYDRAULIC-PRESS OPERATOR (millwork-plywood)].
GOE: 06.04.22 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

763.684-066 SLOT ROUTER (furniture)

Cuts (routes) slots for attaching molding on tabletops, using portable power router: Pushes tabletop from pallet onto worktable. Reads work order to ascertain dimensions and position of slot. Selects and inserts router tool in chuck of router, using wrench. Adjusts guide stop and base plate for depth and position of slot, using rule, and secures item in place, using wing nuts. Positions router on tabletop with guide against edge and starts router. Moves router around periphery of tabletop to cut slot. Pushes slotted tabletop onto rollers of conveyor. Cleans work area.
GOE: 06.04.25 STRENGTH: H GED: R2 M2 L2 SVP: 2 DLU: 77

763.684-070 STOCK-PARTS INSPECTOR (furniture) alternate titles: inspector and patch worker; parts inspector; putty-and-patch worker

Inspects furniture parts for defects and repairs defective parts: Examines furniture parts, such as table and cabinet tops, end panels, and furniture legs for knot holes, cracks, splits, scratches, raised veneer, and defective sanding. Selects filler to match color, type, and species of stock piece, and fills cracks, holes, and dents with filler, using putty knife. Places electric iron on repaired wood defect to dry filler. Smooths rough places with sandpaper and hand plane. Verifies pieces inspected against cutting orders. Orders replacement parts, indicating number of pieces needed, pattern number, and dimensions. May cut out defects, using portable electric saw or knife, and glue patch for patch strips in cutout area. May fill splits with glue and clamp stock for specified time to allow glue to dry.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 78

763.684-074 TABLE-TOP TILE SETTER (brick & tile)

Covers tabletops with mosaic tile squares to form decorative design: Glues cardboard pattern to top of table. Places template over pattern and marks off design, using pencil. Cuts out marked-off portion, using handknife. Applies glue to surface of mosaic tile and tabletop. Sets multicolored squares in position to form prescribed design and color pattern.
GOE: 06.04.30 STRENGTH: L GED: R2 M2 L2 SVP: 4 DLU: 77

763.684-078 WICKER WORKER (furniture)

Fabricates wicker furniture from peeled and softened rattan, reed, or willow sticks: Clamps or secures frame pieces in fixtures. Heats frame pieces and other sticks with blowtorch, and bends them to desired shape. Fastens sticks together with bolts, nails, and screws. Weaves wickers in, through, and around frame, cutting off and concealing or weaving together loose ends to finish edges. Winds wickers around joints to strengthen and conceal them. May be designated according to material used as Rattan Worker (furniture); Reed Worker (furniture); Willow Worker (furniture).
GOE: 06.04.25 STRENGTH: M GED: R3 M1 L2 SVP: 5 DLU: 77

763.687-010 BLOW-OFF WORKER (furniture)

Cleans outside surfaces and inside drawers of furniture, using airhose and cloth, to remove dust, dirt, and chips preparatory to spray finishing.
GOE: 06.04.39 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

763.687-014 CHAIR INSPECTOR AND LEVELER (furniture)

Inspects wooden chairs or stools for defects in construction or finish to ensure conformance with manufacturing standards: Places chair, stool, or frame on bench to determine if item stands level. Slides uneven items over circular saw flush with top of bench to cut excess length from legs. Inspects wooden surfaces for defects in finish, such as cracks, splits, and protruding splinters, and marks defects with chalk or crayon. Stacks defective chairs or stools in designated area. May repair defects in finish, using stain stick. May assemble wooden furniture parts.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 79

763.687-018 DISTRESSER (furniture)

Marks surface of furniture with crayon or strikes surface with rough edged object, such as chain, broken bottle, or rock, to distress (simulate antique) furniture finish: Reads work ticket to ascertain items to be distressed or receives oral instructions from supervisor. Swings chain against surface of furniture to cause dents in surface. Taps surface with wooden hammer containing protruding nails to produce pattern of holes in surface. Scrapes pointed end of metal rod across surface to produce random scratches. Marks surface with crayon to produce desired antique finish. May apply stain to wood furniture to produce antique effect.
GOE: 06.04.25 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 79

763.687-022 DRAWER WAXER (furniture)

Applies wax to drawer slides and unexposed sprayed surfaces of drawer, using brush or cloth. May sand inside of drawer with portable sanding machine or sandpaper-covered wood block.
GOE: 06.04.33 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

763.687-026 FINISHED-STOCK INSPECTOR (furniture) alternate titles: final inspector

Inspects completed furniture for defects in finish, construction, or upholstery, to ensure conformance with manufacturing standards: Verifies color, pattern,

and grade of upholstery, using ticket specifications and shop orders. Inspects upholstery cover for rips in fabric or seams. Feels upholstery padding to determine if padding conforms to specified degree of firmness. Examines wooden surfaces for defects in assembly, wood, or finish. Marks defects with tape. Removes wrinkles, using hand steamer and soil marks, using cleaning fluid. May stamp or mark furniture to indicate acception or rejection. May repair minor defects in finish, using heated blade, wax, lacquer, and stain stick. May be designated according to inspection performed as Finish Inspector (furniture); or product inspected as Chair Inspector (furniture); Radio-And-Television-Cabinet Inspector (furniture); Sofa Inspector (furniture).
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 80

763.687-030 CANE CUTTER (furniture)

Cuts cane and rattan for use in furniture manufacture: Places rolls of cane on holding device, and pulls cane to mark on work surface according to length specified; or positions rattan on work surface to cut ends for mitering. Pulls lever to lower blade and cut cane or rattan, according to instructions. Stacks cane and rattan for further processing.
GOE: 06.04.25 STRENGTH: M GED: R2 M1 L1 SVP: 1 DLU: 86

764 COOPERAGE OCCUPATIONS

This group includes occupations concerned with laying out stock and shaping, assembling, and smoothing barrels, casks, and similar containers.

764.134-010 SUPERVISOR, COOPERAGE SHOP (wood. container)

Supervises and coordinates activities of workers engaged in fabricating or repairing kegs, barrels, or hogsheads: Assigns duties to workers and coordinates activities with other supervisors to maintain production schedule. Patrols work area to observe functioning of machines and directs workers in adjusting machines that fail to meet production standards. Examines finished product to determine whether product meets company specifications. Trains new workers. May purchase wood from supplier for use in producing staves and maintain records of transactions. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to process supervised as Supervisor, Barrel Assembly (wood. container); Supervisor, Heading (wood. container); Supervisor, Stave Finishing (wood. container).
GOE: 06.02.01 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 77

764.387-010 HEAD INSPECTOR (wood. container) alternate titles: quality-control-inspector, heading

Examines finished heading and barrelheads for defects to verify conformance to specifications: Measures finished heading and barrelheads, using tape measure and circular gauge, and inspects them for defects, such as knots, wormholes, and defective jointing, to determine and grade quality of work. Applies chemical to jointed edges of heading to determine sap line in heading, using cloth applicator. Sets aside defective heads for repair. Records results of examination and amount of wood used in heading, and submits quality control report to supervisor. May inspect and mark centers of heading blanks prior to sawing and be designated Head-Inspector-And-Center Marker (wood. container).
GOE: 06.03.01 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 77

764.387-014 MATERIAL INSPECTOR (wood. container) alternate titles: stave grader; stave inspector

Examines sample of staves in shipment to determine price to be paid for shipment: Takes sampling of staves from freight car. Examines staves for defects, such as cracks, warpage, knots, and excessive sap content. Separates and grades staves according to number and type of defects found. Marks grade on staves, using pencil. Inspects bilge, if staves have been jointed, and measures length and width of staves, using tape measure. Computes total usable width of staves in car and prices entire carload based on grading and calculations. May record price paid for staves and quantity purchased. May supervise workers engaged in operation of dry kiln.
GOE: 05.07.06 STRENGTH: L GED: R4 M3 L3 SVP: 5 DLU: 77

764.684-010 BARREL BRANDER (wood. container)

Burns initials or trademark of manufacturer on staves or heads of barrel (or keg): Lays barrel horizontally on carriage of brander and turns handwheel, raising carriage and forcing barrel against hot iron. Turns handwheel to rotate barrel in carriage and bring another stave in contact with iron. Lowers carriage and removes barrels when specified number of staves have been branded. May use hand-operated, gasoline-fired branding iron. May heat irons bearing single letter or mark and apply irons to barrels. May stamp consecutive numbers on barrel staves to facilitate reassembly by customers.
GOE: 06.04.37 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

764.684-014 BARREL CHARRER (wood. container) alternate titles: barrel burner; charrer; charring-room worker, barrel

Burns interior of headless barrel (or keg) to prepare it for aging whiskey: Fits charring rings in each end of barrel to protect surface in which croze is to be cut. Fires gas burner or fire pot containing wood scraps and shavings, and places barrel over flame. Covers top end of barrel with metal plate and allows burning to continue for specified period, according to depth of char desired. Removes plate and quenches burning interior with wet mop or spray from hose. May use device equipped with lever to lower metal hood or exhaust chimney onto top end of barrel to create draft during charring and timer that automatically raises hood or chimney when specified charring time has elapsed. May burn one side of whiskey barrelhead in oven or over fire pot and be designated Head Charrer (wood. container).
GOE: 06.04.18 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

764.684-018 BARREL RAISER (wood. container) alternate titles: barrel maker; keg raiser; raiser; setter-up; setting-up-and-windlass-machine operator

Assembles wooden barrel shells in raising stand. Places staves inside truss hoop and forming rings to form barrel shell. Loops cable of windlass around top of barrel and moves leg control to draw staves together. Slips truss ring on top of barrel shell and presses pedal to release cable. Removes shell from raising stand. May insert truss and forming rings in raising stand. May place barrels on heat tunnel conveyor.
GOE: 06.04.22 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

764.684-022 COOPER (wood. container) alternate titles: barrel repairer; shop cooper

Replaces staves, heads, and hoops, using windlass and handtools to repair barrels: Loops cable of windlass around top of barrel and turns handle to compress staves and loosen hoops. Removes defective stave and inserts and aligns new stave, using wooden mallet. Shapes top edge of stave to conform with others, using saw to trim and spokeshave to bevel inside and outside edges. Cuts croze, using hand crozer. Replaces and tightens hoops. Removes head hoop, using cooper's hammer, and pries out head, using prybar. Inserts edge of new head in croze of staves and forces head into place by hand or using mallet. Replaces head hoop. May rebuild entire barrel. May loosen hoops and force caulking between staves to repair leaking stave joints. May plug knotholes and wormholes with wooden plugs. May tend machine that compresses barrel shell to facilitate removal of forming rings and placement of temporary truss hoops. May build new barrels, buckets, casks, kegs, and tubs, using handtools, and be designated according to type built as Slack Cooper (wood. container); Tight Cooper (wood. container).
GOE: 05.10.01 STRENGTH: M GED: R3 M1 L1 SVP: 5 DLU: 78

764.684-026 HOGSHEAD COOPER I (wood. container) alternate titles: cask maker

Repairs collapsible mats (staves wired or banded together) for reuse as tobacco containers: Examines hogshead mat to determine extent of damage. Removes damaged or broken staves, hinges, wire hoops, or metal bands from hogshead mat, using hammer, crowbar, pliers, or portable circular saw. Positions and nails precut staves or stave patches into hogshead mats, using staple gun or hammer. Straightens or replaces precut wire hoops or metal bands. Threads wire hoop through wire hinge or metal band into metal hinge and secures hinge to hoop or band, using hammer. Nails hoops or bands to staves, using staple gun or hammer. May replace defective cleats (blocks made of wood or metal), using handtools.
GOE: 06.04.22 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

764.684-030 TANK ASSEMBLER (wood. container) alternate titles: tank cooper;

Assembles boards, staves, and rods to form tanks: Arranges boards in shape of bottom and marks identification on each board to facilitate assembling. Marks location of dowel holes in boards or staves and drills holes. Drives croze of staves or bottoms with hammer until tank is completed. Places and tightens washers, rods, and nuts on rectangular tanks to make boards secure. Inspects tank for quality, smoothing uneven joints with drawknife. Marks identification on staves and disassembles tanks to prepare them for shipment. May place metal hoops around staves to withstand pressure. May be designated according to shape or section of tank assembled as Circular-Tank Cooper (wood. container); Rectangular-Tank Cooper (wood. container); Tank-Bottom Assembler (wood. container); Tank-Stave Assembler (wood. container).
GOE: 06.02.25 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

764.687-010 AIR-AND-WATER FILLER (wood. container) alternate titles: air-and-water-tester

Injects compressed air and water into barrels preparatory to inspection by BARREL INSPECTOR, TIGHT (wood. container): Drives rubber valve into bunghole, using hammer. Inserts nozzle into valve and pulls lever to inject air and water into barrel until specified pressure is attained within barrel as determined by automatic cutoff. Removes nozzle from barrel and sets barrel aside for inspection. May taper bunghole prior to insertion of valve and nozzle, using reaming machine. May inject air or water only and be designated Air Filler (wood. container); Barrel Waterer (wood. container).
GOE: 06.04.36 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

764.687-014 ASSEMBLER, FAUCETS (wood. container)

Assembles wooden parts to make faucets for wine and beer kegs and barrels. Brushes glue on faucet parts and fits parts together. Hammers spigot in faucet, using mallet.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

764.687-018 BARREL DRAINER (wood. container) alternate titles: barrel-bung-remover and dumper

Empties water from barrel that has been inspected by BARREL INSPECTOR, TIGHT (wood. container) or weighed, by rolling barrel onto stand and pulling bung from hole by hand, or using bung puller.
GOE: 06.04.40 STRENGTH: H GED: R1 M1 L1 SVP: 1 DLU: 77

764.687-022 BARREL INSPECTOR, TIGHT (wood. container) alternate titles: air tester; barrel tester and drainer; final inspector; final tester; keg inspector

Examines heads and staves of tight barrels or kegs, containing water and compressed air, to determine if they are liquid tight: Rolls and tumbles barrel to spread water over interior of barrel. Examines barrel for faulty stave joints, leaks, loose or defective hoops, and material defects, such as streaks, cross grains, wormholes, and knotholes, in stave and heading material. Marks defects with chalk and rolls barrel to COOPER (wood. container). May make minor repairs to barrel, such as plugging wormholes, knotholes, and small leaks.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 4 DLU: 77

764.687-026 BARREL LINER (wood. container) alternate titles: barrel coater

Coats interior of tight barrels and kegs with sealing material, such as hot paraffin and pitch, to prevent leakage and contact of stored liquid with wood: Melts sealer in heating tank. Places bunghole of barrel over vertical spout of tank and pulls lever to open compressed-air valve that forces melted sealer into barrel, or pours dipperful of melted sealer into bunghole and tumbles, rolls, and shakes barrel to coat and seal inner surface of barrel. Drains excess sealer from barrel into drain trough. Scrapes sealer from bunghole with piece of steel and replaces bung. Scrapes hardened sealer from drain trough.
GOE: 06.04.33 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

764.687-030 BARREL MARKER (wood. container) alternate titles: barrel roller

Lays out and marks position of center hoops on barrel for BARREL ASSEMBLER (wood. container): Pushes marker (bung attached to center of metal strap, length of which is desired distance between center hoops) into bunghole of barrel with strap parallel to stave into which bunghole is cut. Marks barrel with chalk at each end of strap to locate position of center hoops. Removes marker from bunghole and rolls barrel to position near hooping machine.
GOE: 06.04.25 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

764.687-034 BARREL-CHARRER HELPER (wood. container) alternate titles: charrer helper; charring-room-worker helper, barrel

Assists BARREL CHARRER (wood. container) in burning interior of headless barrels (or kegs) to prepare them for aging whiskey. Performs duties as described under HELPER (any industry) Master Title.
GOE: 06.04.18 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

764.687-038 BARREL-RAISER HELPER (wood. container) alternate titles: raiser helper; setting-up-and-windlass-machine-operator helper

Assists BARREL RAISER (wood. container) in assembling wooden barrel shells. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 06.04.22 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

764.687-042 BUNG DRIVER (wood. container)

Covers bunghole of barrel with burlap cloth and hammers bung and cloth into hole to prevent dirt from entering barrel before it is filled.
GOE: 06.04.22 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

764.687-046 CHANNEL INSTALLER (wood. container)

Fits metal channel around heading of hogshead. Taps channel with mallet to force channel over edges of heading.
GOE: 06.04.22 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

764.687-050 COOPER HELPER (wood. container) alternate titles: barrel-repairer helper; hand-cooper helper

Assists COOPER (wood. container) in repairing barrels. Performs duties as described under HELPER (any industry) Master Title.
GOE: 05.12.12 STRENGTH: M GED: R2 M2 L2 SVP: 2 DLU: 77

764.687-054 CULLER (wood. container) alternate titles: barrel-stave inspector; stave inspector and culler; stave matcher

Examines barrel staves after jointing: Examines *bilge of stave* and rejects those not conforming to specification. Examines and rejects staves containing defects, such as knots, wormholes, and checks. Ties accepted staves into bundles, or arranges and fits staves by width between stops of matching rack until total number of staves equals desired barrel circumference. May grade staves for quality of work, and record production and results of examination.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

764.687-058 HEADER (wood. container) alternate titles: header-up; head setter

Installs circular head in croze (groove) of slack or tight barrel: Loosens temporary head loop on barrel by striking hoop, using hammer. Picks up head with spiked tool and fits head into croze of barrel. Draws staves around head, using windlass machine or other equipment. Replaces temporary head hoop with regular head hoop. Taps hoop lightly with hammer to tighten it around barrel and sets barrel aside.
GOE: 06.04.22 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

764.687-062 HEADING MATCHER AND ASSEMBLER (wood. container) alternate titles: doweler; heading pinner

Inserts dowels in pieces of barrel-heading material and assembles pieces to form blank from which barrelhead is cut: Selects, inspects, and arranges specified number of heading material according to size, using gauge, to produce tight fit of barrel when assembled. Hammers dowels into one edge of each piece, using hammer, and lays strip of *flagging* along doweled edges. Fits dowels into dowel holes and hammers pieces together to assemble head blank. Stacks assembled heading blanks on floor or on conveyor for movement to next work station.
GOE: 06.04.22 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

764.687-066 HEADING REPAIRER (wood. container)

Repairs tight barrelhead, using either of following methods: (1) Separates sections of barrelhead with chisel, inserts strips of *flagging* between sections, and hammers them together to enlarge barrelhead to fit croze of barrel. (2) Removes section of head, replaces it with wider board, and sends head to TURNING-MACHINE OPERATOR (wood. container) 667.685-066 for processing.
GOE: 06.04.25 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

764.687-070 HOGSHEAD COOPER II (wood. container) alternate titles: patented-hogshead assembler

Assembles patented hogsheads from prefabricated mats (staves wired together), hoops, and headings, performing any combination of following duties: Stands mat on ends to form cylinder or positions mat around circular form. Inserts tie wire between loops of mats and twists tie wire to fasten ends together, using wire twisters; or fastens mat together by aligning hinges attached to hoops and inserting metal pin through hinge. Positions heading in hogshead shell. Encircles bottom edge of hogshead with metal band and inserts ends of band through *pinch cleat* into jaws of *strapping tool*. Pumps handle of tool to tighten band around hogshead and crimp pinch cleat over end of band. Breaks or cuts surplus ends of metal band, using hatchet, and hammers nails through holes in band to secure bands to staves.
GOE: 06.04.22 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

764.687-074 HOGSHEAD COOPER III (wood. container) alternate titles: hogshead builder

Assembles precut staves and metal bands to form hogshead shells: Places staves in cradle of circular frame until lower portion of hogshead is formed. Inserts liner ring to support staves and places staves over ring to complete hogshead shell. Pulls lever to tighten frame bands around staves and hammers stave ends even. Braces open ends of hogshead shell with wooden boards and positions metal hoops around both ends of shell. Tightens hoop, using hoop puller, and nails hoops to staves. Releases levers, removes braces, and rolls shell to succeeding station. Works as member of team to assemble hogshead shells. May assemble and nail together precut boards or nail shaped parts to shell to form bottom of hogshead [NAILER, HAND (any industry)]. May fasten wire hoops around hogshead to secure staves [HOGSHEAD HOOPER (wood. container)].
GOE: 06.04.22 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

764.687-078 HOGSHEAD HOOPER (wood. container) alternate titles: hooper

Fastens precut lengths of wire (hoops) around hogshead to secure staves: Places wooden board in open end of hogshead to brace staves at opening. Encircles hogshead with wire lengths and inserts wire ends into wire tightener or wire twister. Pumps lever of tightener or turns twister to tighten wire around hogshead and to fasten wire ends together. Bends wire ends under wire hoop and hammers wire flat or cuts wire ends, using wire cutter. Removes brace from open end of hogshead and rolls hogshead to succeeding work station. May staple hoop to staves, using pneumatic staple gun.
GOE: 06.04.22 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

764.687-082 HOGSHEAD MAT ASSEMBLER (wood. container)

Assembles precut staves, cleats (wooden blocks), and metal bands to form hogshead mats: Places cleats in jig on worktable and spaces staves on cleats, using metal disks as spacing guides. Positions metal band across staves and inserts pins in prerivcted hinges on ends of band to secure band to jig. Hammers nails through holes in band to secure staves to band. Drills hole in stave through hole in hinge leaf, using portable electric drill, to facilitate bolting mats together to form hogshead shell. Pulls pins from band hinges to release mat from jig. Stacks mats on floor.
GOE: 06.04.22 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

764.687-086 HOGSHEAD MAT INSPECTOR (wood. container)

Inspects hogshead mats (prefabricated staves banded together) for nailing defects: Positions mat on worktable and inspects mat for nailing defects. Removes misdriven nails and hammers nails through band into stave. Bolts hinges to mats to complete mat assembly, using socket wrench.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

764.687-090 LEAK HUNTER (beverage) alternate titles: couper; patcher; repairer

Inspects barrels filled with beer or whiskey to detect and repair leaking barrels: Walks between rows of stacked barrels and examines each barrel for leaks. Caulks holes or seams, using wicking (twisted cotton), wooden plugs, or strips of adhesive canvas. Records serial number of barrel repaired and date. May examine barrels of beer in shipping area to detect leakage and push leaking barrels aside for removal to dumping area.
GOE: 05.12.12 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

764.687-094 LEVELER I (wood. container) alternate titles: barrel leveler

Taps ends of barrel staves against metal truss, using hammer, or lifts barrel (or keg) and drops it end down on floor to align ends of staves and to smooth and round barrel shell. May hammer truss hoops on barrel.

GOE: 06.04.22 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

764.687-098 PLUGGER (wood, container)
Hammers wooden plugs in small holes in barrel and places iron hoops over barrel for BARREL ASSEMBLER (wood, container).
GOE: 06.04.22 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

769 OCCUPATIONS IN FABRICATION AND REPAIR OF WOOD PRODUCTS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with fabricating and repairing wood products.

769.130-010 SUPERVISOR, FABRICATION (wood prod., nec)
Supervises and coordinates activities of workers engaged in cutting, fitting, and joining preshaped molding to form picture frames. Demonstrates machine functions, work methods, and techniques to train workers, such as machine cutters, drillers, bevelers, spray or automatic spraying machine painters, and hand or machine assemblers in duties. Examines parts or finished articles for defects to maintain qualitative standards. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 77

769.134-010 SUPERVISOR, DIMENSION WAREHOUSE (furniture)
Supervises and coordinates activities of workers engaged in receiving, storing, and issuing dimensional woodstock; sanding stock; and assembling stock parts to form furniture components. Computes stock requirements, based on inventory and production schedules, and requisitions material needed. Inspects stock in process for dimensional accuracy and quality of construction to ensure adherence to company standards. Demonstrates new or more efficient work methods to workers. Observes sanding and assembling operations and reassigns personnel to alleviate detected bottlenecks. Trains new workers. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

769.137-010 STOCKING-AND-BOX-SHOP SUPERVISOR (ordnance)
Supervises and coordinates activities of workers engaged in manufacture of stocks, guards, and other wooden parts of rifles and machine guns and in construction of wooden shipping boxes. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

769.137-014 SUPERVISOR, ASSEMBLY (woodworking)
Supervises and coordinates activities of workers engaged in assembling wooden parts or assemblies to form sections, frames, or completed articles, using knowledge of wood products and assembly processes. Analyzes work orders to determine production schedules. Determines amounts of woodstock and other materials required for assembly, based on production schedules, and requisitions materials from storage area. Prepares work tickets and gives oral instructions to workers pertaining to type of assemblies to be processed. Inspects parts, assemblies, or completed articles to verify conformance to company standards. Trains new workers in methods of assembly. Confers with supervisors in other departments to coordinate flow of materials and products into and out of department. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to method of assembly as Supervisor, Gluing (woodworking).
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 78

769.381-010 COMPO CASTER (wood prod., nec) alternate titles: ornamenter, hand
Compounds and casts ornamenting putty (compo) into designs and glues designs to picture moldings. Measures glue, resin, linseed oil, and water into separate gluepots and weighs them. Melts glue and resin and combines ingredients into one pot. Inspects mixture to ascertain viscosity and pours it into tube that contains whiting (powdered chalk). Stirs, kneads, and shapes putty into loaf. Presses loaf into mold with hand and thumbs. Clamps board over filled mold and places it in press. Pushes button or turns handwheel to activate and release press. Removes casting, trims design, and places it on table to harden. Brushes glue on back of hardened ornament and lays it in place on blank picture molding.
GOE: 06.02.32 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

769.387-010 WOODWORK-SALVAGE INSPECTOR (ordnance) alternate titles: salvage inspector, wood parts
Examines rejected wooden parts of small arms weapons to determine salvageability. Inspects parts to determine whether cause of damage resulted from defective wooden stock, machine malfunction, or faulty assembly. Routes salvageable parts to repair department. Records findings in salvage report.
GOE: 06.03.01 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

769.664-010 SHAKER REPAIRER (grain-feed mills)
Repairs shaker tables and reel frames used in processing corn products. Places frame on worktable, assisted by another worker. Examines screen surface to detect weak spots and holes. Removes old bolting cloth, using tack pullers and pincers. Cuts new cloth piece, stretches it over panel, and tacks it in place. May tack strip of bias tape over edges to hold cloth securely. Repairs damaged wood frames and builds new ones, using handtools. Remounts reel frames on cribs, using wrench and screwdriver. Replaces shaker tables on supporting springs.

GOE: 06.04.25 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

769.684-010 BASKET ASSEMBLER II (wood, container)
Performs any combination of following tasks in fabrication of reed and wicker baskets: Cuts out premarked basket bottoms from flakeboard sheet, using bandsaw. Drills specified number of rod holes around edge of each bottom, using gauge and drillpress. Dips end of presized birch dowels into glue pot and inserts rods into holes of bottoms to form basket frames for WEAVER (wood, container). Bevels ends of soaked reed handle, using knife, and attaches handle to woven basket by inserting ends through woven sides, at specified points, to base of basket. Immerses basket into glue drum to bind woven reed and leaf material to rods and give luster to finished basket.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

769.684-014 BASKET PATCHER (wood, container)
Inspects and repairs defective baskets and basket covers, using handtools. Examines basket or covers for defects, such as knotholes, split or misaligned staves, and unstapled parts. Places basket or cover over form or on table to facilitate repair. Loosens, tightens, bends, or replaces basket or cover parts, using hammer and nails. Stacks repaired baskets and covers on floor to conserve space.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

769.684-018 BENDER, HAND (woodworking)
Bends pliable wooden parts by hand after steaming: Places stock in vat of boiling water. Removes stock from vat when pliable and places part in form. Presses stock around form and clamps free end of stock to form. Places form containing stock on handtruck and transfers them to kiln to dry and set in permanent shape.
GOE: 06.04.25 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

769.684-022 FINAL INSPECTOR, SHUTTLE (woodworking)
Inspects completely assembled wooden shuttles for imperfections: Examines wood and fiber (veneered) surfaces and measures dimensions of shuttles [SHUTTLE INSPECTOR (woodworking)]. Ascertains that metal tips are securely attached to tapered shuttle ends, that eyeholes are aligned, and that bobbin-grips and other parts of shuttle are positioned as specified. Tightens loose screws, using handtools. May imprint trade name on shuttles, using stamping machine.
GOE: 06.03.01 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

769.684-026 OIL DIPPER (woodworking)
Oils and polishes wooden shuttles and saws openings for insertion of shuttle eyes: Places shuttles in wire basket and lowers basket into tank, using hoist. Turns valves to fill tank with heated oil, drain tank, and dry oil-coated shuttles. Inspects shuttles to ensure specified oiling and buffs surfaces of oiled shuttle, using leather-covered wheel. Cuts eye openings in shuttle shoulders, using jigsaw.
GOE: 06.04.25 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

769.684-030 PATCHER (woodworking) alternate titles: patch setter
Repairs defects in surfaces of finished lumber, wood doors, veneer sheets, and plywood panels to improve appearance and increase market value, performing any combination of following tasks: Examines material to be repaired to determine type of repair needed. Mixes specified amounts of colored putties or patching compound with paint thinner to obtain workable consistency and fills defects, such as cracks, splits, and crevices with mixture, using putty knife. Cuts defective sections from material, using portable router or saw. Glues and sets shims, or trims and inserts wood patches in locations where defects have been cut out, using glue and hammer. Brushes water on dents and raises grain in dent with hot iron. Smooths patched areas, using hand sander. Stacks patched material on conveyor for movement to next processing station. May press patch into position and cure glue, using electronic-heat press. May be designated according to product repaired as Door Patcher (woodworking); Plywood Patcher (millwork-plywood).
GOE: 06.04.25 STRENGTH: M GED: R2 M2 L1 SVP: 3 DLU: 78

769.684-034 REELER (woodworking)
Fabricates and repairs wooden reels for winding wire: Cuts lumber according to templates, using portable saw. Bolts or screws pieces together to assemble reel and reel heads and installs steel axle core in reel, using handtools and power tools. Paints reels with spray gun and stencils specifications on sides of reel. Repairs reels or dismantles reels for scrap or salvage.
GOE: 06.04.25 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

769.684-038 REPAIRER, ASSEMBLED WOOD PRODUCTS (woodworking)
Repairs surface defects of wood products, such as sashes, doors, furniture, cabinet work, mirror frames, and picture frames to prepare them for finishing, gilding, painting, or packaging: Visually inspects workpiece for rough edges, surface nicks, dents, nail holes, cracks, open seams, veneer blisters, glue, dirt, or inspector's marks. Trims and smooths rough edges and surfaces, and removes scratches, dirt, and glue, using knife, scraper, sandpaper, and portable electric sander. Applies moisture and heat to remove dents, using wet sponge and electric iron. Fills cracks, seams, depressions, and nail holes with filler, such as putty. Touches up defects and filler, using stain, paint, or touchup crayons. Lifts and glues loose veneer to surface. May cut out damaged or blistered veneer or molding and trim, fit, and glue matching piece in place. May reglue defective joints [GLUER (woodworking) 762.687-034]. May be designated by

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product repaired as Repairer, Mirror And Picture Frame (wood prod., nec); Repairer, Sash And Door (wood prod., nec); Repairer, Wood Furniture (furniture).
GOE: 05.10.01 STRENGTH: M GED: R3 M1 L2 SVP: 5 DLU: 79

769.684-042 SAMPLE MAKER, VENEER (millwork-plywood)
Cuts and glues veneer samples on display boards for use by sales personnel and furniture manufacture customers: Selects samples of veneer strips from various wood species. Cuts samples to specified uniform size, using handsaw and tape measure. Pastes label containing identifying information, such as species, grade, and marketing data, on each sample. Positions and glues samples on wooden display board to provide rigidity and facilitate handling and storage of display boards.
GOE: 06.04.25 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

769.684-046 SHUTTLE INSPECTOR (woodworking)
Inspects wooden shuttles before attachment of parts for defects in material and work quality: Measures exterior and interior dimensions of shuttles, using calipers, gauges, squares, and rulers, to ensure conformance to specifications. Examines surfaces of shuttles for defects, such as knots, splits, and scratches, and returns defective shuttles for repairs. May attach metal shuttle tips to wooden shuttles.
GOE: 06.03.01 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

769.684-050 STOCK-PARTS FABRICATOR (ship-boat mfg.)
Lays out, cuts, and laminates woodstock for boat components such as bulkheads and doors: Traces outline of component part on plywood stock, using pattern and marking devices. Cuts part from stock along lines scribed from pattern, using portable jigsaw. Cuts grooves in part to accommodate interpanel wiring, using portable router, and positions precut electrical wiring in grooves. Applies contact cement to plastic laminate sheet and component part, using glue roller. Positions and glues sheet on part and presses out air bubbles, using roller. Trims edges of laminate sheet to shape of component part, using portable router.
GOE: 06.02.25 STRENGTH: M GED: R3 M1 L1 SVP: 3 DLU: 77

769.684-054 WEAVER (wood. container) alternate titles: basket maker; wicker worker
Weaves baskets of specified size and shape by interlacing paper strips, willow, rattan, or other materials: Removes precut rattan stakes (rods) from soaking tank and glues or staples rods into solid or woven bottom of basket. Places completed bottom in form that conforms to shape of basket to be woven. Weaves reeds through rods to form sides of basket. Interlaces ends of rods or weaves reed strips through upper portion of rods to form braid around top of basket, using handtools. May make solid bottom boards, using bandsaw, drill press, and carpenter's handtools. Cuts off excess ends of rods, using cutting shears. May interlace reeds through stakes, secured in screw blocks, to form parts of basket, such as woven bottom. May design baskets. May be designated according to type of basket woven as Hamper Maker (wood. container); Market-Basket Maker (wood. container) II; or according to material used as Rattan Worker (wood. container); Willow Worker (wood. container).
GOE: 06.04.34 STRENGTH: S GED: R2 M1 L2 SVP: 4 DLU: 77

769.684-058 REPAIRER, VENEER SHEET (furniture)
Repairs defects in decorative veneer sheets and tapes veneer border to sheets: Holds veneer sheets against light and examines sheets for defects, such as splits, holes, thin spots, and untaped veneer strips. Moistens tape, using sponge, and presses tape to veneer splits to pull splits together, using flat pressing tool. Cuts and inserts splinters or sections of veneer in holes of sheet, using knife, sponge, and tape; or applies wood putty to opening in sheets, using putty knife. Sands wood particles that overlap veneer joints, using sandpaper and wood block. Positions and tapes shaped veneer borders around perimeter of veneer sheets to add decorative appearance.
GOE: 06.03.02 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 86

769.685-010 PANEL EDGE SEALER (millwork-plywood) alternate titles: edge plugger
Tends machine that automatically applies putty to side edges of plywood panels to seal crevices; and seals crevices in end edges of panels, using putty gun: Injects putty into crevices in end edges of panels stacked on handtruck, using putty gun, and pushes handtruck into position over feeder mechanism of edge-sealing machine. Adjusts automatic feeding and discharge elements of machine according to panel thickness, using wrench. Starts machine that feeds panels between injection heads, that apply putty to edges of panels to seal crevices, and mechanism that stacks processed panels at discharge end of machine. Monitors operation of machine and adjusts control mechanism, using wrench, to ensure specified application of putty and stacking of panels. Brushes excess putty from edges of panel with handbrush. Transfers pump from empty to full barrel of putty to replenish supply for machine. Removes and cleans putty heads, using wrench and cleaning solution.
GOE: 06.04.21 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

769.687-010 BASKET GRADER (wood. container)
Inspects finished baskets for defects, such as splits in wood, discoloration, warping, and rot. Discards imperfect baskets and stacks accepted ones in tiers to conserve space and to ensure that baskets conform to size standards. Ties each tier with twine and transfers baskets to storage area.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

769.687-014 BOBBIN INSPECTOR (woodworking)
Examines and rejects finished wooden bobbins with imperfections, such as splinters, cracks, rough finish, and defective spindle holes.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

769.687-018 CANOE INSPECTOR, FINAL (ship-boat mfg.)
Inspects canoes and rowboats prior to painting for flaws in work and blemishes in aluminum or wood. Vacuums interior of boat. May partially submerge canoes under pressure in water to test for water tightness.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

769.687-022 FRAME TRIMMER II (wood prod., nec) alternate titles: filler and sander
Sands wooden mirror or picture frames with sandpaper preparatory to finishing and staining to remove nicks or rough edges. Spreads putty over nail holes, using spatula or knife. May touch up marred or discolored spots with matching color paint.
GOE: 06.04.25 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

769.687-02 INSPECTOR (woodworking)
Inspects dimensional woodstock, wooden furniture, or wood products, such as doors, panels, window sashes, and window screen frames for defects and conformance to machining specifications: Visually examines and feels surface of woodstock or products to detect defects, such as mismatched veneer, dents, splits, blemishes, loose and uneven joints, holes, and faulty sanding. Verifies conformance of woodstock or products to dimensional specifications, using ruler, caliper, gauges, and square. Records quantity of material approved and rejected on inspection report. May sand uneven areas, using sandpaper, and fill dents and cracks, using filler and putty knife.
GOE: 06.03.02 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 78

769.687-030 INSPECTOR, PICTURE FRAMES (wood prod., nec)
Inspects wood picture frames for conformance to specifications: Examines frames for defects, such as defective shading, splinters, and uneven corners. Knocks uneven corners of frame together, using stick. Removes sides of frame containing defects, and passes side to designated worker for reprocessing. Records production.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

769.687-034 PLUG SORTER (woodworking)
Picks out split, broken, or knotty cedar plugs, used to fill holes resulting from removal of spikes in railroad ties or telephone poles, as they pass on conveyor.
GOE: 06.03.02 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

769.687-038 PUTTY MIXER AND APPLIER (wood. container)
Mixes oil, drier, and water with whiting (powdered chalk) to make putty. Fills holes in wood with putty, using putty knife.
GOE: 06.04.34 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

769.687-042 SORTER II (wood prod., nec) alternate titles: cork sorter
Examines, grades, and sorts corks according to degree of porosity and number and size of cracks.
GOE: 06.03.02 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

769.687-046 VENEER MATCHER (millwork-plywood) alternate titles: splicer matcher
Matches precut veneer strips according to grain, pattern, and shade to form face sheet of specified size: Lays strips of veneer on table and inspects them for defects. Stacks rejected strips aside for removal. Arranges suitable pieces in order of similar grain, pattern, and shade to form face sheet of specified minimum width. Numbers strips in sequence for assembly and stacks them on pallet. May trim end pieces to size, using knife. May assemble strips into flitches in matched pattern sequence for assembly. May match and tape together veneer sheets for use in furniture manufacture and be designated Veneer Matcher (furniture).
GOE: 06.03.02 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

769.687-050 VENEER-STOCK GRADER (wood. container)
Inspects veneer stock, used in making slat baskets and wirebound boxes, and removes defective stock containing splits, knots, or other surface flaws. Sorts and stacks material on table or in bins according to size and intended use. May distribute stock to assembly workers.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

769.687-054 WOODWORKING-SHOP HAND (woodworking) alternate titles: mill laborer; woodworking-shop laborer
Performs any combination of following duties to facilitate cutting, finishing, storing, cleaning, and shipping wood products, and inspects products prior to shipment: Stacks lumber or wood products on floor or in bins to supply machine operators or assemblers, or in kiln cars, yard, or shed for storage or seasoning. Places sticks between lumber to permit air circulation, and binds stacks together during seasoning. Hammers shaped steel bands into timbers and railroad ties to prevent splitting during seasoning and inserts bolts or metal dowels through split timbers to hold parts together. Dismantles crates and removes nails and other metal from wooden parts to salvage material, using handtools. Applies filler, putty, or other material, using brush, putty knife, and fingers to fill wood pores, holes, cracks, or other indentations. Removes paint, lacquer, and other finishes from wood products, using solvent, steel wool, brush, and cloths, and sands rough spots, using sandpaper or sanding machine, to prepare surfaces for finishing. Traces patterns on lumber stock as guide for machine operator. Attaches articles to wires, cord, or hooks preparatory to dipping. Dips article into vats to coat them with paint, asphalt, or other ingredients. Marks

furniture surfaces with crayon or rough-edged object to simulate antique finish. Brushes surfaces with glue preparatory to covering surfaces with leather, paper, or other materials. Nails together lumber for cutting, and places lumber on machine table. Examines materials and products for defects, finish, and grade, and accuracy of dimension and matching panels, using measuring instruments. Stamps grade on product and weighs and records units processed and inspected. Changes cutterheads and blades, adjusts belts, and performs other duties as instructed to facilitate setting up woodworking machines. Loads and unloads materials from railroad cars, trucks and barges by hand, using handtruck or industrial truck to move material to designated areas. Cleans cars and trucks and lines them with paper preparatory to loading.
GOE: 06.04.25 STRENGTH: V GED: R2 M1 L1 SVP: 2 DLU: 81

769.687-058 BRIAR-WOOD SORTER (fabrication, nec)
Sorts briar-wood blocks used in making pipe stummels, using metal gauge. Removes briar-wood block from bin and compares block with metal gauge to determine size classification of block. Tosses block into specified burlap bag, according to shape and dimensions of block. Discards scrap briar-wood.
GOE: 06.03.02 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 86

77 OCCUPATIONS IN FABRICATION AND REPAIR OF SAND, STONE, CLAY, AND GLASS PRODUCTS

This division includes occupations concerned with handcraft and related activities involving specialized handtools and power tools used in grading, cutting, and polishing precious or semiprecious stones, including natural or synthetic gems, jewel bearings, and diamond wiredrawing dies; cutting and polishing ornamental and structural stone; forming, decorating, and finishing porcelain, pottery, tiles, and other ceramic products; molding, shaping, and decorating artistic and laboratory glassware, pressed lenses, and other handmade glass products; and producing commercial or industrial abrasives.

770 OCCUPATIONS IN FABRICATION AND REPAIR OF JEWELRY, ORNAMENTS, AND RELATED PRODUCTS

This group includes occupations concerned with precious and semiprecious, natural and synthetic, ornamental and industrial stones, gems, jewel bearings, and diamond dies.

770.131-010 JEWEL SUPERVISOR (clock & watch)
Supervises and coordinates activities of workers engaged in fabricating watch jewels from raw stock. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.04.01 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

770.131-014 SUPERVISOR, DIAMOND FINISHING (jewelry-silver.)
Supervises and coordinates activities of workers engaged in girdling, brilliandeering, and lopping diamonds, and marks defects on diamonds to be removed by cutter. Examines rough diamonds with magnifying glass to detect defects in color, quality, and physical structure. Outlines defects to be removed by diamond cutter, using ink pen. Distributes cut diamonds to workers for finishing process. Trains new workers in job duties. May cleave (split) diamonds to remove imperfections. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.14 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

770.261-010 BRILLIANDEER-LOPPER (jewelry-silver.)
Cuts and polishes facets, table, and culet on diamonds, using table-mounted polishing plate: Mixes bort (diamond dust and oil), starts motor that spins plate, applies bort to plate with fingers, and presses leather strap against plate to work bort into surface. Positions diamond in cup of dop and aligns dop in holding device to set angle of diamond for cutting. Lowers diamond onto spinning plate, exercising care to prevent damaging diamond. Positions holding device between guide pins on table or holds device in hands and regulates pressure of diamond against spinning plate with hand or metal weight. Examines diamond frequently to ensure that angle and position of cuts are within specified limits. Measures cuts, using loupe and gauges, and feels diamond to determine that cuts are with grain. Removes and replaces polishing plate as necessary, using wrench. May saw diamonds, using bench lathe. May cut and polish facets, tables, and culets on girdled diamonds and be designated Blocker (jewelry-silver.). May be designated according to section of diamond cut as Bezel Cutter (jewelry-silver.); Pavilion Cutter (jewelry-silver.).
GOE: 05.05.14 STRENGTH: S GED: R3 M2 L2 SVP: 6 DLU: 77

770.261-014 GIRDLER (jewelry-silver.)
Laps girdle on rough diamonds, using diamond girdling lathe, and utilizing knowledge of diamond finishing techniques: Examines diamond to determine size, width, and shape of stone to be girdled and selects flat or hollow tipped dop, depending on surface of diamond. Screws dop onto end of heating rod, heats dop over gas flame, places cement on tip of dop, and presses diamond onto cement in position to facilitate girdling. Selects two dop-mounted diamonds and screws one onto lathe and one onto *girdling stick*. Starts lathe and works irregular shaped sides of stick diamond against lathe diamond to remove points and lap girdles on diamonds. Examines diamonds during girdling, using loupe or magnifying glass, to determine that girdles are shaped to specifications. Heats dop to soften cement and removes diamond from dop. Lubricates, dismantles, and cleans lathe and motor, and replaces motor belt as required.
GOE: 05.05.14 STRENGTH: S GED: R3 M2 L2 SVP: 6 DLU: 77

770.267-010 DIAMOND EXPERT (jewelry-silver.)
Examines rough diamonds with magnifying glass to detect defects in color, quality, and physical structure. Marks sections of stone with india ink to outline defects to be removed by diamond sawyers. May appraise diamonds for customers.
GOE: 05.05.14 STRENGTH: S GED: R4 M3 L3 SVP: 8 DLU: 77

770.281-010 DIAMOND SELECTOR (jewelry-silver.) alternate titles: diamond assorter; diamond grader
Selects diamonds according to type and size, for use in cutting tools and ring mountings: Studies grade, quality, color (skin), and physical structure of rough or finished diamonds. Sorts stones according to quality and type, using magnifying glass or loupe. Determines size of stone, using measuring gauge or sizing plate, and sorts diamonds of same size into containers. May weigh stones, using diamond weighing scale, to verify weight.
GOE: 05.05.14 STRENGTH: S GED: R4 M2 L3 SVP: 8 DLU: 77

770.281-014 GEM CUTTER (jewelry-silver.) alternate titles: cutter; lapidary; stonecutter
Cuts, shapes, and polishes precious and synthetic gems: Positions rough stone in holder and holds stone against edge of revolving saw or lapidary slitter impregnated with diamond dust to cut and slit stone. Removes cut stone and places it in lapidary stick. Selects shaping wheel and applies abrasive compound. Holds lapidary stick against revolving shaping wheel and lapidary disk to further shape stone and grind facets. Examines stone for accuracy of cut, using magnifying glass. Polishes stone, using felt or canvas-covered polishing wheel, and polishing compounds, such as tripoli or rouge. May use mechanical facet-cutting device. May cut and polish diamonds for industrial purposes and be designated Industrial-Diamond Polisher (jewelry-silver.).
GOE: 05.05.14 STRENGTH: S GED: R4 M3 L3 SVP: 6 DLU: 77

770.381-010 BEAD MAKER (jewelry-silver.) alternate titles: glass-bead maker; glass blower
Makes glass beads and decorative jewelry findings, such as petals and leaves: Melts end of solid glass rod, using gas burner. Picks up small globule of molten glass on end of metal wire and twirls wire until sphere is formed to make solid bead, or rolls globule of glass in groove of block of hard wood to form bead of correct diameter and contour. To make solid decorative findings, flattens globule into disk with spatula, and shapes disk by twisting and elongating it with pliers, or shapes disk in specially setup embossing dies in handpress. To make hollow glass articles, picks up globule of molten glass with blowpipe and inflates it to size of sample article by blowing into pipe or inflates globule to half-size of finished article and places it in metal mold, inflating it fully so that glass will assume shape of mold cavity. Cools and solidifies glass article by holding it over jet of compressed air, or dips article into water to cool and solidify glass. May shape heated rods into novelty items, such as fish, boats, and pins and be designated Glass-Novelty Maker (glass prod.).
GOE: 01.06.02 STRENGTH: L GED: R3 M2 L2 SVP: 7 DLU: 77

770.381-014 DIAMOND CLEAVER (jewelry-silver.) alternate titles: cleaver; splitter
Splits rough diamonds along premarked lines to remove imperfections, such as internal spots and flaws, and to obtain optimum value from stones. Positions diamond in holder and presses diamond-studded tool along premarked lines to make incision for splitting. Places steel blade in incision and taps blade with jeweler's hammer to split stone.
GOE: 05.05.14 STRENGTH: S GED: R3 M2 L2 SVP: 6 DLU: 77

770.381-018 DIAMOND DRILLER (machine tools) alternate titles: driller, fine-diamond dies
Drills minute channels in industrial diamonds for use in wire-drawing dies, using drill, lathe, and handtools: Positions diamond in chuck of lathe equipped with diamond-charged wire (drilling point) or forms wax cup around diamond by hand, fills cup with diamond dust mixture, and inserts steel needle into lathe to act as drilling tool. Regulates speed of revolutions and reciprocating action of drilling mechanism. Advances cutting point of drill according to specifications covering depth and contour of channel, working to tolerance of 0.0001 inch. Examines depth and shape of channel with microscope and regrinds point of drill. Drills backout (hole drilled from opposite side of stone to meet channel) to prevent chipping surface of stone. Laps inner wall of channel by means of machine that revolves stone as rotating wire or needle rocks back and forth in channel, working to hole diameter tolerance of 0.0000018 inch. Tests accuracy of die hole by pulling specified length of wire through die and measuring its resistance in Wheatstone bridge having readings translated into wire diameter or by taking a series of readings along length of wire with electronic micrometer. Secures stone in metal mounting, using molten solder. May drill cavity (spot) in face of stone to hold diamond dust mixture, by pressing pointed end of diamond chip against revolving stone, using pliers. May be designated according to operation performed as Finisher, Fine-Diamond Dies (machine tools).
GOE: 06.01.04 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

770.381-022 DIAMOND-DIE POLISHER (machine tools) alternate titles: die cutter, diamond; die polisher

Laps and polishes bores of diamond wire drawing dies to specified dimensions: Positions die in holding device of machine. Inserts steel needle in machine spindle, positions needle inside bore of die and starts machine which rotates needle in bore. Dabs progressively finer diamond-dust paste or solution on needle during lapping operation. Pulls specified gauge wire through bore and measures wire with micrometer to verify bore dimension. Inspects bore of die for cracks and other defects, using magnifying glass or microscope. Replaces worn needles and sharpens points on grinder. May insert and press hand lapping tool in bore of rotating die. May drill initial bore, using diamond drills.
GOE: 06.01.04 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

770.381-026 JEWEL BLOCKER AND SAWYER (clock & watch) alternate titles: jewel sawyer

Cuts boules (raw stock from which jewels are fashioned) into small squares by successive blocking and sawing operations: Secures boule on block with melted sealing wax preparatory to sawing. Cuts boules into half moons (boule cross sections), using saw equipped with diamond-impregnated circular copper blade. Turns indexing handle to move saw blade for successive cuts. Blocks half moons and saws them into strips. Blocks and saws strips into squares. Trues blades after diamond dust has been pressed into cutting rim in hydraulic press, by peening on flat metal surface until metal is so distributed throughout blade that blade does not snake (shimmy) when turning.
GOE: 06.01.04 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

770.381-030 JEWEL-BEARING MAKER (clock & watch)

Grinds, drills, and finishes sapphire jewel bearings for use in precision instruments, such as compasses, meters, and chronometers: Grinds and faces sapphire blanks to flatten surfaces, and turns edges, to form bearings of specified size and thickness. Drills and finishes holes in centers of bearings.
GOE: 06.01.04 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

770.381-034 OLIVING-MACHINE OPERATOR (clock & watch) alternate titles: jewel-oliving-machine operator

Grinds olive-shaped contour to bearing surface of olive-jewel hole: Fits wire strung with jewels, and on which wire diamond dust is spread, in holding bow. Holds bow so that jewel is rotated between shaped rotating wheels of machine while rocking bow back and forth so that action of wire on rotating jewel will wear away sides of hole to olive shape. Repeats bowing operation on rest of jewels on string. Inspects jewels for shape of olive and measures hole size with graduated, tapered needle.
GOE: 06.01.04 STRENGTH: S GED: R3 M2 L2 SVP: 5 DLU: 77

770.381-038 SAPPHIRE-STYLUS GRINDER (comm. equip.)

Grinds sapphire stylus to specified shape for use in machine that records sound on wax or plastic master plate, using abrasive cutting wheel.
GOE: 06.01.04 STRENGTH: S GED: R3 M2 L2 SVP: 5 DLU: 77

770.381-042 SPOTTER (machine tools)

Locates and marks specified drilling position on surfaces of diamonds used as dies: Places diamond under microscope and moves it at various angles until clear channel through gem can be seen. Forms indentation in diamond surface to mark spot for drilling, using diamond chips held in pliers. Drills starting hole of minute dimensions, using electrically powered hand drill.
GOE: 05.05.14 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

770.382-010 LATHE OPERATOR (jewelry-silver.) alternate titles: sawyer

Operates lathe type saw to saw rough diamonds along premarked lines preparatory to shaping operation, using bench lathes: Attaches sawing wheel (bronze plate) to lathe and applies abrasive compound. Positions stone in cement holder of lathe, starts lathe, and presses diamond against revolving wheel to groove stone along premarked lines. Adjusts arm of lathe to apply pressure required to saw diamond. Periodically examines sawing operation to ensure standard production.
GOE: 06.02.08 STRENGTH: L GED: R3 M2 L3 SVP: 6 DLU: 77

770.382-014 PHONOGRAPH-NEEDLE-TIP MAKER (comm. equip.) alternate titles: grinder, needle tip; needle grinder; single-pointed operator

Sets up and operates grinding machines to grind and polishes precious-stone tips of phonograph needles to specified point and finish: Mounts tip in holding shank, using tweezers, chemical dropper, and soldering iron. Sets up grinding wheel, dresses wheel with dressing tool, mounts shank containing tip in spindle or chuck, and grinds tip to form specified point, observing grinding under microscope or through loupe or viewing lens. Polishes tip on buffing wheel. May hold mounted tip against preset grinding wheel to do preliminary grinding. May examine finished tip for accuracy, using shadowgraph.
GOE: 06.02.08 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

770.582-010 FACER (clock & watch)

Operates lathe to polish faces of jewel bearings: Affixes boxwood lap (polishing disk) impregnated with diamond dust to faceplate of lathe. Starts lathe and moves bearing against revolving lap, using pointed stick to facilitate handling jewel bearing. Inspects polished bearings to ensure conformance with standard, using magnifying glass.
GOE: 06.02.30 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

770.682-010 JEWEL-BEARING BROACHER (clock & watch) alternate titles: broacher; pinner, jewel bearing

Operates lathe to finish holes drilled in partially processed jewel bearings: Inserts bearings in lathe chuck. Dips brass wire (broach) in diamond dust, inserts it into bearing hole, and rubs away high spots, working within tolerances of 0.0001 inch. Inspects holes with magnifying glass and measures them with gauges and micrometers. Bevels edges of holes.
GOE: 06.02.30 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

770.682-014 JEWEL-BEARING DRILLER (clock & watch)

Operates bench lathes to drill holes of specified size in jewel bearings: Sharpens diamond drill, using diamond cutter and other tools. Mounts chuck in lathe and inserts shaped and ground sapphire bearing between jaws of chuck, using tweezers. Starts lathe and holds drill against center of bearing, cutting halfway through. Reverses bearing in chuck and drills through center of bearing from other side until holes meet.
GOE: 06.01.04 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

770.682-018 JEWEL-BEARING FACER (clock & watch) alternate titles: flat-grinder operator

Operates lathe to grind jewel bearings to specified thickness: Mounts fixture in chuck of lathe and inserts jewel bearing into recess of fixture, using tweezers. Mounts grinding disk impregnated with diamond dust on opposite faceplate of lathe. Manipulates controls to bring bearing into contact with grinding disk and to govern grinding process, working to tolerances of 0.0005 inch. Examines bearings, using measuring instruments, such as gauges and micrometers, to ensure conformance with specifications.
GOE: 06.02.08 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

770.682-022 JEWEL-BEARING TURNER (clock & watch)

Operates lathe to turn edges of partially processed jewel bearings: Chips edges of ground sapphires to approach disk shape, using chisel and hammer. Mounts bearing in chuck of lathe. Starts lathe and presses diamond cutter against circumference of bearing. Examines shaped bearing, using magnifying glass and dial micrometers, to ensure conformance with specifications.
GOE: 06.02.30 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

770.682-026 JEWEL-HOLE DRILLER (clock & watch)

Operates battery of horizontal, multispindle, drilling machines to drill center holes in round jewel bearing blanks: Puts molten shellac on end of work spindle and centers jewel on spindles, using needle, hand centering tool. Fits drill bits in soft shellac in drill head. Trues up (aligns) bit by holding bit lightly with tweezers to detect any play indicative of poor alignment; straightens bit by moving its tip slightly to eliminate play. Inserts work spindle, applies diamond dust with wire to drilling point, and removes jewel when spindle spring opens and thus indicates hole is drilled. Inspects holes for size by manually turning them on standard bit used as gauge.
GOE: 06.02.02 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

770.684-010 JEWEL GRINDER II (clock & watch) alternate titles: grinder, outside diameter

Grinds outside diameter (periphery) of watch jewels to size, using diamond-bonded wheel under water jet: Fits wire filled with jewels in small holding tool (shaped similar to small bucksaw) and turns adjusting screw to pull wire taut. Positions rubber holding wheel so distance between grinding wheels is identical to specified outside diameter of jewels. Holds jewels against grinder, moving holder back and forth until jewels are ground sufficiently to pass between wheels. Measures jewel diameter with precision jaw gauge and regrinds if necessary.
GOE: 06.04.30 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

770.684-014 JEWEL-HOLE CORNERER (clock & watch)

Smooths hole corners on flat side of bar jewels: Dips tapered point of cornering tool in mixture of diamond dust and oil. Secures jewel by putting tool point into jewel hole, and holding jewel on revolving rubber disc until action of cornering tool and dust shape corner in revolving jewel.
GOE: 06.04.30 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

770.684-018 ROUGH OPENER, JEWEL HOLE (clock & watch) alternate titles: jewel-hole rough opener

Opens (enlarges) holes in jewels by drawing tapered wire through holes by hand: Strings inch-long row of jewels on wire. Inserts row in space between holders in center of holding tool and pulls wire back and forth through center openings to wear away inside diameter. Applies diamond dust to wire to act as abrasive and speed enlarging. Unwinds tapered wire gradually from spool and feeds larger portion of wire through jewels as opening operation proceeds.
GOE: 06.02.30 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

770.685-010 FLAT SURFACER, JEWEL (clock & watch) alternate titles: jewel polisher

Tends *lapping* machine that polishes flat surfaces (ends) of round jewel bearings: Blocks in molten shellac in circular row near outside edge of flat, circular steel block. Sets blocks, usually four or five at once, in holding chuck and turns screw press to force blocked jewels against diamond dusted revolving lap. Observes polishing to detect signs of overheating and removes hot block for cooling before shellac melts and jewels are damaged by being turned on edge. Examines finish of jewels for appearance with loupe and verifies thickness with upright dial gauge.
GOE: 06.04.08 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

770.685-014 JEWEL GRINDER I (clock & watch)

Tends centerless grinding machine that fashions round jewels from square blanks: Positions and aligns row of square jewels on edge in trough. Brushes

head of honey on row of jewels, places row on rest of grinder, and secures row in place with spring device that applies pressure against each end of row. Starts grinder that rotates and grinds jewels, which are held in place in triangular area formed by grinding wheel, driving wheel, and rest. Measures outside diameter of round jewels for size on jaw gauge.
GOE: 06.04.08 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

770.685-018 JEWEL-BEARING GRINDER (clock & watch)
Tends lathe that grinds sapphire jewel-bearing blanks flat on both sides: Applies diamond dust to surface of grinding disk (lap). Mounts lap in revolving chuck. Inserts single bearings into cavity at base of holder (rod) and holds bearings against revolving lap to grind them on one side. Mounts several bearings on metal disk coated with adhesive material, and holds disk against lap to grind other side of bearing.
GOE: 06.04.08 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

770.685-022 JEWEL-BEARING POLISHER (clock & watch)
Tends lathe that polishes internal surfaces of holes in jewel bearings: Inserts jewel bearing into chuck of lathe. Starts lathe and polishes surfaces by inserting splint coated with ground diamond dust into hole of bearing. Cleans hole with splint dipped in benzene. Inspects hole under magnifying glass to ensure that polished surfaces conform to standard.
GOE: 06.04.08 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

770.685-026 JEWEL-CORNER-BRUSHING-MACHINE OPERATOR (clock & watch)
Tends machine that shapes and smooths outside (lead-in) corner of bar jewels: Blocks jewels with melted shellac on circular metal block. Places block in spindle of machine and positions work against brush. Turns on power and allows machine to run until, from experience and by touching block to estimate its temperature (heated by friction), worker knows jewels are shaped and smoothed. Inspects jewels under loupe to determine if corner is properly finished.
GOE: 06.04.08 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

770.685-030 JEWEL-CUPPING-MACHINE OPERATOR (clock & watch)
Tends cupping machine that cuts and polishes oilcups in jewel bearings. Depresses pedal to open chuck, inserts jewel with tweezers, and releases pedal to clamp jewel in place. Lowers head holding diamond and borax broaching tool to working position, starts machine, and loads other machines. Removes finished jewel when machine automatically stops. Examines cupped jewels for correctness of cut. Verifies dimensions of recess on upright gauge.
GOE: 06.04.08 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

770.685-034 TURNER, MACHINE (clock & watch)
Tends grinding machine that grinds sapphire squares to disk shape, for use as jewel bearings: Glues specified number of sapphire squares together to form stack. Positions stack between abrasive and rubber rolls of grinding machine and starts machine that grinds sapphires to disk shape. May operate similar machine equipped with diamond-dust-coated wheel to smooth edges of sapphire disk.
GOE: 06.04.08 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

770.687-010 ARTIFICIAL-PEARL MAKER (jewelry-silver.) alternate titles: pearl dipper; pearl maker
Dips glass beads in solution of pearl lacquer to make pearls: Sticks beads on pins or toothpicks and mounts them on wooden blocks. Sets blocks in device that dips beads in solution. Cuts pearls off pins with knife. May finish pearls by applying glue, stringing on thread, and linking together.
GOE: 06.04.33 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

770.687-014 DIAMOND SIZER AND SORTER (clock & watch; jewelry-silver.)
Sorts diamonds according to size for use in watches and jewelry, using sieve, loupe, and precision measuring instruments: Reads work orders to determine sizes required to fit mountings. Measures diamonds, using gauge and loupe, or sorts diamonds, using sieve of specified diameter, to segregate sizes required. Places diamonds of specified size in containers. May size and sort jewels other than diamonds and be designated Jewel Sorter (clock & watch).
GOE: 06.03.02 STRENGTH: S GED: R3 M2 L2 SVP: 4 DLU: 77

770.687-018 JEWEL GAUGER (clock & watch)
Measures inside and outside diameters of watch jewels and segregates jewels according to size: Gauges inside diameter of jewel hole by slipping jewel on graduated, tapered needle. Places jewel in precision jaw gauge and measures its outside diameter. Segregates jewels according to size and rejects those jewels failing to meet tolerances as fine as 0.0001 inch. May measure hole size of jewel bearings, using go-not-go gauge. May be designated according to measurements made as Jewel-Diameter Gauger (clock & watch); Jewel-Hole Gauger (clock & watch).
GOE: 06.03.02 STRENGTH: S GED: R3 M2 L2 SVP: 4 DLU: 77

770.687-022 JEWEL INSPECTOR (clock & watch) alternate titles: inspector, jewels
Examines watch jewels for defects, such as cracks, rough cuts and cups, misshapen holes, and chips, using microscope: Places quantity of jewels on glass table, which is lighted from beneath, and positions each jewel individually beneath microscope with tweezers. Turns jewel to view all surfaces. Segregates rejects according to type of defect.
GOE: 06.03.02 STRENGTH: S GED: R3 M3 L2 SVP: 4 DLU: 77

770.687-026 JEWEL STRINGER (clock & watch)
Strings watch jewels on wire for further processing, using tweezers and loupe. Strings jewel settings, right side up, on wire for transfer to feeding tubes of automatic shaving press.
GOE: 06.04.30 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

770.687-030 PULVERIZER (jewelry-silver.) alternate titles: cracker; enamel cracker; enamel pulverizer
Pulverizes pieces of enamel to be used in decorating jewelry settings, using mortar and pestle: Places lumps of enamel crystals in mortar and crushes them by striking pestle with hammer. Pours pulverized material through sieve. Recrushes those pieces that do not pass through sieve.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

770.687-034 ROCK BREAKER (retail trade; stonework)
Breaks rocks into small pieces for use in fabricating novelties, such as mineral specimen cards, ash trays, book ends, and paperweights, using hammer.
GOE: 05.12.07 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

771 STONE CUTTERS AND CARVERS

This group includes occupations concerned with cutting, shaping, and finishing granite, slate, marble, and other types of stone.

771.137-010 SUPERVISOR, SLATE SPLITTING (stonework)
Supervises and coordinates activities of workers engaged in splitting slate for use as flagstone, caping, window sills, and flooring: Examines quarried slabs and indicates thickness for workers to split stone for maximum utilization. Measures thickness of split stone to verify conformance to standards. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.04.01 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

771.281-010 STENCIL CUTTER (stonework) alternate titles: blaster; rubber cutter; shape carver
Lays out inscriptions and decorative designs on stenciling material applied to stone and cuts out stencil preparatory to sandblasting: Applies stenciling material to stone surface by spreading cement over surface of stone and positioning material on stone, stripping cloth from adhesive surface of material and positioning adhesive surface on stone. Aligns pattern on stencil, using rule and square, and marks over pattern with straightedge to transfer carbon lettering and design to stenciling material. Cuts out lettering and designs along marks to expose stone surface for sandblasting, using stencil knife. Trims and smooths edges of stencil to ensure detailed reproduction of intricate designs.
GOE: 01.06.01 STRENGTH: M GED: R4 M2 L2 SVP: 6 DLU: 77

771.281-014 STONE CARVER (stonework) alternate titles: hand carver; sculptor
Carves designs and figures in full and bas-relief on stone, employing knowledge of stone carving techniques and sense of artistry to produce carving consistent with designer's plans: Analyzes artistic objects or graphic materials, such as models, sketches, or blueprints; visualizes finished product; and plans carving technique. Lays out figures or designs on stone surface by freehand sketching, marking over tracing paper, and transferring dimensions from sketches or blueprints, using rule, straightedge, square, compass, calipers, and chalk, or scriber. Selects chisels and pneumatic tools and determines sequence of their use according to intricacy of design or figure. Roughs out design freehand or by chipping along marks on stone, using mallet and chisel or pneumatic tool. Shapes, trims, or touches up roughed out design with appropriate tool to finish carving. Periodically compares carving with sketches, blueprints, or model and verifies dimensions of carving, using calipers, rule, straightedge, and square. Moves fingers over surface of carving to verify smoothness of finish. May smooth surface of carving with rubbing stone. May be designated according to type of work as Monument Carver (stonework); or according to kind of stone carved as Granite Carver (stonework); Marble Carver (stonework).
GOE: 01.06.02 STRENGTH: M GED: R4 M4 L4 SVP: 8 DLU: 77

771.381-010 STONECUTTER APPRENTICE, HAND (stonework) alternate titles: granite cutter apprentice
Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

771.381-014 STONECUTTER, HAND (stonework) alternate titles: chisel worker; stone dresser; stoneworker
Cuts, shapes, and finishes rough blocks of building or monumental stone according to diagrams or patterns: Traces around pattern or transfers dimensions from diagrams to stone, using rule, straightedge, compass, square, and chalk or scriber. Selects surfacing tools according to finish specified or step in finishing process. Chips fragments of stone away from marks on stone, working surface of stone down to specified finish. Verifies progress of finishing to ensure adherence to specifications, using straightedge, level, plumb, and square. May dress surface of stone with bushhammer. May cut decorative designs in stone surface. May cut moldings or grooves in stone that cannot be reached by machine. May drill holes in stone. May be designated according to product as Building Stonecutter (stonework); Curbing Stonecutter (stonework); Monument Stonecutter (stonework).

GOE: 05.05.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

771.384-010 COPER, HAND (stonework) alternate titles: cutter; marble coper

Cuts rough-sawed slabs of stone, using pneumatic hammer, into blocks used for capping (coping) of brick or stone walls: Measures and marks slab according to specifications, using square, rule, straightedge, chalk, or crayon. Selects cutting chisel and inserts it into pneumatic hammer. Chips slab along markings with pneumatic hammer to form breaking groove. Inserts coping tool in groove and taps it to break stone, using hammer or mallet. May turn slab and cut groove in opposite side to facilitate breaking. May smooth edges of broken stones, using chisels and mallet. May smooth edges of broken stones, using grinder.
GOE: 06.02.30 STRENGTH: H GED: R3 M1 L2 SVP: 3 DLU: 77

771.484-010 BEVELER (stonework)

Bevels and smooths edges of marble or slate slabs, using handtools: Positions slabs on workbench. Marks width of bevel on slab edges, using rule, square, straightedge, and scribe. Removes excess slab material along edge markings to produce bevel of specified angle, using rasp. Smooths beveled edges with fine file. May finish smoothed edges, using sandpaper.
GOE: 06.02.30 STRENGTH: H GED: R3 M2 L2 SVP: 5 DLU: 77

771.684-010 ROCK SPLITTER (stonework) alternate titles: block maker; driller

Splits rough dimension stone into smaller units, such as paving blocks, ashlar, or rubble, using airhammer, wedges, and shims: Scans stone to determine rift and grain lines of splitting, usually at right angles to each other. Chips rough edges from stone, using chipping hammer. May be designated according to product made as Paving-Block Cutter (stonework) II. May split rough slabs of slat into sheets for use as coping, flooring, and roofing and be designated Slate Slitter (stonework).
GOE: 05.12.07 STRENGTH: H GED: R3 M1 L1 SVP: 6 DLU: 77

772 GLASS BLOWING, PRESSING, SHAPING, AND RELATED OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with such handmade products as art glassware, laboratory apparatus, and tableware. Occupations concerned with such machine mass-produced products as bottles and light-bulb blanks are included in Group 575.

772.281-010 GLASS BLOWER, LABORATORY APPARATUS (glass products; inst. & app.) alternate titles: glass technologist

Develops specifications for glass component parts and apparatus, such as test tubes, retorts, and flasks, used in medical and laboratory products, and blows and shapes glass to required dimensions, applying knowledge of glass technology and glass blowing techniques: Develops sketch into blueprint specifications, correlates product design, and determines type of glass to use to fabricate product, utilizing knowledge of factors, such as effects of heat, vacuum, and corrosive chemicals. Heats glass tubing to pliable stage, using gas flame. Blows tubing into specified form, using compressed air or own breath. Shapes, bends, or joins sections of blown glass tubing, using flaring, pressing, and flattening handtools, and stop cork. Inspects and measures product to verify conformance to specifications, using instruments, such as micrometers, calipers, magnifier, and ruler. May anneal product, using annealing oven. May cut glass tubing to specified size and polish tube edges, using hand cutting and polishing wheels. May operate lathe grinder [GLASS GRINDER, LABORATORY APPARATUS (glass products; inst. & app.) 775.382-010] to grind stopcocks and joints to modify glass products. May operate glass blowing lathe [GLASS BLOWING LATHE OPERATOR (glass products) 772.482-010] to join and shape glass tubing.
GOE: 05.05.11 STRENGTH: M GED: R4 M2 L3 SVP: 8 DLU: 90

772.381-010 GLASS BENDER (fabrication, nec) alternate titles: glass blower; glass-tube bender

Heats and bends glass tubes to form scroll of electric neon signs according to pattern: Tacks asbestos pattern onto workbench. Cuts length of tubing required to form letters, using file. Holds tube over gas burner at point to be bent, rotating tube to heat it uniformly. Places rubber hose over end of tubing. Blows into hose to prevent glass from collapsing and bends tube by hand. Superimposes bent tubing on asbestos pattern to ensure accuracy. When letter or scroll has been formed, places electrode in each end of tube and heats with gas burner to fuse in place. Paints or tapes portions of tubing to separate letters. Repairs broken scroll by replacing with new sections of tubing. May charge tubing with gas [NEON-TUBE PUMPER (fabrication, nec)].
GOE: 01.06.02 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

772.381-014 PATTERNMAKER (fabrication, nec)

Lays out pattern of neon sign lettering for use in fabricating scroll, using sketch: Fastens sheet of paper to worktable and blocks in letters, using drafting instruments and pencils. Transcribes letters from sketch to pattern, and outlines sign borders. Superimposes full scale drawing of sign on pattern and perforates pattern along pencil lines, using stylus or perforating tool. Places perforated pattern on asbestos sheet, and dusts pattern with powdered charcoal to form outline on asbestos sheet. Darkens outline with pencil.
GOE: 01.06.03 STRENGTH: L GED: R4 M3 L4 SVP: 8 DLU: 77

772.381-018 WARE FINISHER (glass mfg.) alternate titles: glassware finisher

Finishes hand pressed or blown glassware by forming and attaching lips, handles, and pedestals: Cuts required gob (lump) from molten glass, using shears. Forms gob into handle, using wooden paddles to shape handle. Drops gob into hand-press mold to form pedestal. Presses handle and pedestal to glassware to attach them. Shapes handle and forms lips by rubbing and pressing with carbon stick. Smooths pedestal, using wooden buffer. May be known by article attached as Foot Caster (glass mfg.).
GOE: 06.01.04 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

772.381-022 GLASS BLOWER (glass mfg.) alternate titles: blower; gaffer

Shapes gather (gob of molten glass) into glassware by blowing through blowpipe: Receives blowpipe from GATHERER (glass mfg.) 575.684-026 and examines gather on blowpipe for imperfections, utilizing knowledge of molten glass characteristics. Blows through pipe to inflate gather while rotating pipe to prevent sagging and to obtain desired shape, or blows and rotates gather in mold or on board to obtain final shape. May dip end of blowpipe into molten glass to collect gather on head of pipe. May strike neck of finished article to separate article from blow pipe. May pull gather with tongs to aid in shaping. May use compressed air to inflate gather. May be designated according to article blown as Bottle Blower (glass mfg.).
GOE: 06.01.04 STRENGTH: L GED: R3 M2 L2 SVP: 7 DLU: 79

772.482-010 GLASS-BLOWING-LATHE OPERATOR (glass products)

Operates glassblowing lathe to join and shape glass or plastic tubing, according to blueprints and work orders: Selects, inserts, and clamps specified mandrels in head and tailstock of lathe, using wrenches. Turns knobs to adjust rotation speed. Inserts and clamps tube and other glass parts of various lengths, shapes, and diameters to be joined in chucks, using mallet and wrenches. Lights fixed jets and hand torches and turns gas valves to adjust height and color of flames and obtain specified temperature. Turns handwheels to move head and tailstock and bring workpieces in contact with flames. Blows through hose connected to center of chuck to shape glass or maintain air pressure within tube. Selects and manipulates spatula, hand torches and tips, and glass rods to shape, seal, splice, imbed, and weld rotating parts according to specifications. Uses hand torch and fixed jets to anneal joined or shaped areas. Turns handwheels to move head and tailstock and stretch or separate heated stock to specifications. May manually move glass tube over flame and blow it into specified shape.
GOE: 06.02.08 STRENGTH: L GED: R3 M2 L3 SVP: 6 DLU: 77

772.684-010 DEFECT REPAIRER, GLASSWARE (glass mfg.)

Repairs forming defects in glassware, using acetylene torch and molds: Ignites torch and moves flame over defective area to soften glass for reworking. Inserts softened glassware in mold for reshaping and removes glassware from mold after reshaping. Examines finished glassware to ensure defect is repaired.
GOE: 05.09.03 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

772.684-014 HOT-WIRE GLASS-TUBE CUTTER (glass products)

Holds and rotates glass tubing against hot wire to cut tubing to specified length: Sets guide at specified distance, using rule and wrench. Turns on electric current to heat wire. Places glass tube against guide and hot wire. Turns tubing to heat glass. Places hot glass under stream of cold water, causing it to break along heated line.
GOE: 06.04.30 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

772.684-018 WARM-IN WORKER (glass mfg.)

Reheats blown or pressed glassware in furnace to fire-polish glassware and make it malleable for further processing: Clamps snap (long-handled pincers) on hot glassware, grasps snap, and inserts glassware into furnace opening (glory hole). Rotates ware to heat it evenly to ensure retention of its molded shape. Withdraws ware from furnace when it is heated to an orange-red color. May remove or add clay to furnace opening to enlarge or reduce its size to accommodate glassware being processed. May adjust fans to control ventilation that blows fire blast back into furnace and cools snap handle.
GOE: 06.04.30 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

772.684-022 WATCH-CRYSTAL MOLDER (glass products)

Molds glass and plastic watch crystals: Places glass or plastic blank on mold of specified shape and size. Heats glass with hand torch or softens plastic in oven until it conforms to contour of mold. Holds crystal against revolving wheel to polish surface. May cut glass or plastic blanks. May grind edges of crystal.
GOE: 06.02.32 STRENGTH: S GED: R3 M1 L1 SVP: 4 DLU: 77

772.687-010 GLASS-WORKER, PRESSED OR BLOWN (glass mfg.) alternate titles: glass technologist

Performs any combination of following tasks to produce pressed or blown glassware from molten glass: Balances gather (gob of molten glass) on blowpipe, and blows through and simultaneously rotates blowpipe to maintain gather in globular form for blocking, redipping, or final shaping. Moves controls that open hinged molds to receive gather for shaping by press or attaches blower head to opening of blank-filled mold and turns valve to admit compressed air that shapes blank to mold contour. Removes glassware from mold, using pincers or fork, or catches ware from inverted molds on paddle (tray) and carries ware to reheating furnace, glazing machine, or lehr. Strikes glassware with metal bar to break (crack off) ware from blowpipe. Removes excess glass from

ware, using bar, hand cutter, flame, or saw. Inspects glassware for defects, such as cracks, chips, and malformations.
GOE: 06.02.30 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

772.687-014 SPOTTER (glass mfg.)
Locates and marks apex of curvature of formed glassware to provide index point for cutting operations. Holds flat edge of glassware on illuminated bullseyed board. Locates shadow of mold indentation and positions marking pencil on glassware so tail pencil shadow falls in center of indentation shadow. Marks center of indentation on glassware to indicate apex of curvature. Inspects glassware for visable defects.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

773 OCCUPATIONS IN COLORING AND DECORATING BRICK, TILE, AND RELATED PRODUCTS

This group includes occupations concerned with such coloring and decorating tasks as printing designs on brick, tile, and related products, and arranging tiles into designs for use as table tops, flooring, and similar purposes.

773.131-010 PASTER SUPERVISOR (brick & tile)
Supervises and coordinates activities of workers engaged in arranging mosaic tile on pattern boards and pasting backing on arrangements, setting up and operating automatic tile-gluing machine, inspecting sheets of tile for defects, and packing tile in cartons. Trains new workers. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R4 M2 L3 SVP: 7 DLU: 77

773.381-010 TILE DECORATOR (brick & tile) alternate titles: decorator
Prints lettering or designs on unglazed tile, using silk-screen process. Reads job order and examines drawing of design to determine method of making stencil. Cuts stencil by hand or photographs design on film. Selects colored glaze and thins it, using glaze thinner and stirring sticks. Prints design on tile, using silk-screen process. Catalogs and stores screens for future orders. May trace, transfer, stamp, or stipple designs on tile, using brushes, stamps, sponges, stencils, or decalcomanias. May load tile in kiln and sort and grade fired tile.
GOE: 01.06.03 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 77

773.487-010 CLAY-STAIN MIXER (brick & tile)
Mixes powdered stains for coloring clay used to make mosaic tiles, following charts and formulas. Reads formula to determine materials required, and scans chart to determine ratio of stain to tonnage of clay. Calculates quantity of materials needed, and weighs dry ingredients. Pours ingredients into container and writes identifying information on container. Adds stain to clay during blending process.
GOE: 06.04.34 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 77

773.684-010 COLORER (brick & tile) alternate titles: hand decorator; top-tile decorator
Applies colored glazes to tile following stamped or outlined design. Reads job order for work procedure and examines color sketches to determine colors to be applied. Fills bulb of applicator with specified glaze color. Applies glaze to design following color scheme on sketches. Cleans used applicator bulbs. May spray glaze onto tile, using spray gun. May apply liquid gold to tile, using china painting brush.
GOE: 01.06.03 STRENGTH: M GED: R3 M2 L3 SVP: 4 DLU: 77

773.684-014 PASTER (brick & tile) alternate titles: tile paster
Arranges tiles into designs for such use as flooring or sink tops and pastes paper on tile to preserve arrangement of design. Inserts individual colored tiles in slots in form-board following sample design. Pastes sheet of paper on top of tile arrangement. Places sheets of tiles in cartons.
GOE: 06.04.30 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

773.687-010 PASTING INSPECTOR (brick & tile)
Inspects mosaic tiles pasted on backing sheets for defects. Inspects tiles pasted on sheets for defects, such as coloring shades and chipped or cracked tile. Examines layout to determine that specified tile arrangement and color scheme have been carried out. Examines backing to determine that specified backing was used, tiles are firmly pasted onto backing, and spacing and position of tiles is uniform. Maintains department production records.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

774 OCCUPATIONS IN FABRICATION AND REPAIR OF POTTERY AND PORCELAIN WARE

This group includes occupations concerned with forming, decorating, and finishing pottery and porcelain ware.

774.130-010 SUPERVISOR, CLAY SHOP (pottery & porc.)
Supervises and coordinates activities of workers engaged in forming, inspecting, and finishing pottery and porcelain ware. Directs workers in casting, jiggering, and finishing ware. Sets up machine units, installs dies and shaping tools, and adjusts and sets controls of forming machines and equipment. Adjusts controls on drying ovens to regulate temperature and drying time for ceramic ware. Demonstrates to workers techniques in handling ware to avoid breakage; recognizing and evaluating extent of defects, such as cracks, chips, and pinholes, refinishing defective ware; use of grading and color charts in sorting ware; and rubbing ware surfaces with abrasives to remove rough spots. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

774.381-010 THROWER (pottery & porc.) alternate titles: clay thrower; pot maker
Molds plastic clay into such ware as vases, urns, saggers, and pitchers, as clay revolves on potter's wheel. Positions ball of clay in center of potter's wheel and starts motor, or pumps treadle with foot to revolve wheel. Presses thumbs down into center of revolving clay to form hollow. Presses on inside and outside of emerging clay cylinder with hands and fingers, gradually raising and shaping clay to desired form and size. Constantly adjusts speed of wheel to conform with changing tenacity (firmness) of clay as piece enlarges and walls become thinner, judging degrees of change by feel. Smooths surfaces of finished piece, using rubber scrapers and wet sponge. Verifies size and form, using calipers and templates. Pulls wire held taut between both hands through base of article and wheel to separate finished piece, or removes piece from wheel to dry. May form saggers only and be known as Sagger Former (pottery & porc.).
GOE: 06.02.30 STRENGTH: M GED: R3 M2 L3 SVP: 7 DLU: 77

774.382-010 POTTERY-MACHINE OPERATOR (pottery & porc.) alternate titles: jigger operator; pot maker
Operates pug mill, jigger machine, and drying chamber, that form, dry, and finish ceramic ware, such as bowls, cups, plates, and saucers. Adjusts and sets controls of pug mill that mixes, extrudes, cuts, and deposits clay charges in or over molds as specified. Installs shaping tool in head of jiggering unit, using handtools. Sets controls to regulate temperature of drying chamber. Installs trimming tools and abrasives on arms of ware-finishing unit, using handtools. Starts machine unit and conveyors and observes lights and gauges on panelboard to verify operational efficiency. Examines finished ware for defects and measures dimensions, using rule and thickness gauge. Adjusts pressures, temperatures, and trimming tool settings as required. May operate jigger machine only and be designated Potter (pottery & porc.). May form urns and planters, using jolly, and be designated Jollier (pottery & porc.).
GOE: 06.02.08 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

774.384-010 INSPECTOR II (pottery & porc.)
Examines ceramic and porcelain products at various stages of manufacture for defects and adherence to standards. Examines ware surfaces for defects, such as pin marks, glaze runs, chips, cracks, mold marks, and deformities. Marks correctable defects with pencil, or finishes ware, using trimming tools, abrasives, and sponges. Feels edges (rims) and surfaces of ware with finger tips to detect rough spots. Smooths rough spots, using pumice stone or wet sponge and abrasive powder. Mixes ceramic and porcelain ingredients and examines mixture for foreign matter. May verify measurements of metal dies for machine forming presses, using calipers, gauges, and micrometers. Maintains records of test results, and prepares analysis of defect causes based on test results. May measure viscosity and specific gravity of mixed ceramic, porcelain, and glaze batches, using viscometer and volume device. May test durability of ware at prescribed temperatures, using electric oven. May conduct chipping test, using impact tester.
GOE: 06.03.01 STRENGTH: L GED: R2 M1 L1 SVP: 5 DLU: 82

774.684-010 BISQUE CLEANER (pottery & porc.) alternate titles: bisque finisher; bisque grader; grinder; scourer; scraper
Cleans and finishes bisque ware by hand preparatory to glazing. Examines ware for visible defects. Fills cracks, pinholes, and scratches with liquid clay, using brush. Grinds down rough spots with abrasive stones, smooths ware surfaces with sandpaper, and cleans ware with airhose. Holds surface of earthenware against sanding wheel to remove warps, grog (clay fragments), and scratches. Verifies dimensional accuracy of ware to ensure correct fit of lids on such items as compotes and teapots, using templates. Discards substandard pieces.
GOE: 06.04.30 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

774.684-014 DIPPER (pottery & porc.)
Dips bisque ware, ceramic tile, or greenware in solution to cover article with protective glaze. Grasps article with tongs or fingers and dips it in tub of glaze solution. Twists and turns article to spread glaze over surface and shakes off excess. Sets article on rack to dry. Rubs glaze over missed areas, using fingers. May pour glaze on ceramic tile or hold tile against roller to apply glaze. May clean edges of ceramic tile, using wire brush.
GOE: 06.02.30 STRENGTH: L GED: R3 M1 L1 SVP: 5 DLU: 77

774.684-018 FINISHER (pottery & porc.) alternate titles: fettler; shaper; sponger
Trims and smooths edges and surfaces of greenware preparatory to bisque firing. Trims excess clay from ware. Positions circular pieces, such as plates and cups, in center of whirler. Starts whirler revolving and moves various-shaped knives over ware surface, following contours of piece, to remove rough spots and mold marks. Smooths ware surfaces, using abrasive cloth, felt, and moist sponge. May be designated according to type of ware finished as Flatwork Finisher (pottery & porc.). May finish handles preparatory to joining them to such ware as cups and be designated Handle Finisher (pottery & porc.).

GOE: 06.04.30 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 81

774.684-022 HANDLER (pottery & porc.) alternate titles: handle sticker; sticker

Attaches handles and knobs to cups and other greenware preparatory to bisque firing: Trims ends of handle to fit ware. Dips ends of handle in slip (semiliquid clay) and presses handle onto clay piece in position specified. Trims and smooths joint, using handtools and wet sponge. May finish ware before attaching handles (FINISHER (pottery & porc.)).
GOE: 06.02.30 STRENGTH: L GED: R3 M1 L1 SVP: 5 DLU: 77

774.684-026 PLASTER-DIE MAKER (pottery & porc.) alternate titles: ram-die maker

Casts plaster dies for hydraulic ram press that forms pottery ware: Places wire mesh over die face of master model and presses or taps mesh with wooden mallet to contour of model. Wires nonmetallic conduit to wire mesh. Removes wire mesh assembly and sponges soap solution on model surface to separate die halves after casting. Lowers steel die rings over outside rim of each half of model and places wire mesh assembly over model face. Wires assembly to die rings. Mixes hydrostone (powdered plaster) with water and pours mixture into each half of model to top of die ring. Separates die from model and attaches airhose to die to remove water from dies. Sponges remaining moisture from dies. Places finished dies in storage rack.
GOE: 06.02.30 STRENGTH: H GED: R3 M1 L1 SVP: 5 DLU: 77

774.684-030 SAGGER MAKER (pottery & porc.)

Pounds clay over mold or frame to shape sagger sides and bottom, using maul: Lays pliable clay in circular or rectangular frame and pounds to shape to form of frame, using maul. Hammers slabs of clay over iron frame and cuts into strips to form sides, using knife. Folds strips around drum or wooden mold placed on prepared bottom to form sagger sides. Wets ends of strip and applies hand pressure to join. Plucks spare clay off bottom to fasten to sides, using wooden plucking tool. Smooths surface, using knife and wooden paddle and removes mold. Places sagger in drying room.
GOE: 06.04.30 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

774.684-034 STICKER-ON (nonmet. min.)

Attaches clay arms to clay figurines by wetting shoulders of figurine with sponge, and dipping tops of arms into wet clay and pressing them onto shoulders. Washes off excess clay to smooth joints, using syringe. Removes clay from between fingers of figurine, using hooked tool.
GOE: 06.04.30 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

774.684-038 TURNER (pottery & porc.)

Shapes green (unfired) clayware, using lathe: Positions clayware on lathe, starts machine, and guides edge of handtool against revolving ware until clay object is trimmed to specified shape and size. May verify accuracy of shape and dimensions of object, using calipers and templates.
GOE: 06.02.30 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

774.684-042 WARE DRESSER (pottery & porc.) alternate titles: back grinder; back polisher

Dresses and polishes glazed and decorated ware and segregates ware into standard grades: Chips pin marks from bottom of ware with dressing iron. Grinds down dressed spots and other defects, such as glaze droplets, kiln dirt, and color spots, using grinding wheel. Polishes dressed ware, using power buffer. Verifies shape and dimensional accuracy of ware, using templates. Segregates pieces into standard grades according to number and type of defects in form, color, and uniformity of glaze coverage.
GOE: 06.04.30 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

774.684-046 PATCHER (pottery & porc.)

Fills holes and attaches parts to greenware ceramic figures prior to firing: Breaks off pieces of clay of matching color used to patch greenware, and fills holes formed during casting. Applies water to clay, and shapes clay to contour of greenware, using handtools. Forms holes in greenware at designated locations to vent steam created during firing. Applies wet clay to designated locations on greenware, and attaches clay parts, such as heads, arms, legs, or musical instruments, to complete greenware figures. Smooths clay used to attach parts to figure. Inserts wire in specified greenware to form legs and feet, and adjusts wires to level greenware. Counts greenware and records total on forms for production records. Places greenware on trays, covers greenware with towels or sponge pads, and places trays on racks to await further processing.
GOE: 06.04.30 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 86

774.687-010 BISQUE GRADER (pottery & porc.)

Sorts, selects, inspects, and stamps bisque ware; and fills orders: Sorts ware according to size. Taps pieces with trimming iron to detect cracks and selects sound pieces for underglaze decoration. Rejects cracked and malformed pieces. May sort ware into first and second grades. Stamps trademark or other inscription on bottom of ware with rubber stamp.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L3 SVP: 3 DLU: 77

774.687-014 LACER (nonmet. min.)

Attaches lace decorations to clay figurines prior to baking: Cuts specified length of lace with scissors, dips it in clay, and presses it lightly onto figure, arranging it with pointed stick.
GOE: 06.04.30 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

774.687-018 PRINT INSPECTOR (pottery & porc.) alternate titles: decorator inspector

Inspects printed decoration on pottery and porcelain ware: Compares printed decoration and quality of workmanship of ware with sample and discards misprinted ware. Returns salvageable pieces for rework. Rubs ware with abrasive stone or wet sponge to remove paint spots.
GOE: 06.03.02 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

774.687-022 WARE CLEANER (pottery & porc.) alternate titles: finisher

Smooths surface of pressed, cast, or glaze-dipped clay products to remove flash, cracks, and loose material, using fingers, pick knife, sponge, or sandpaper: Trims soft flash or picks loose clay from indentations of cast or pressed clay products, using pick knife and wet sponge. Smooths hardened surface, using sandpaper. Wipes fingers over glazed surfaces to distribute glaze evenly over checks and cracks prior to firing. Wipes excess glaze solution from dipped article, using rags, wet sponge, or suction device.
GOE: 06.04.30 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

774.687-026 TESTER (pottery & porc.)

Tests toilet bowls for compliance with company standards, using any of following methods: (1) Positions water tank suspended from overhead rail over water inlet of toilets, and pulls lever to lower water tank gasket onto water inlet of bowls preparatory to flushing. Places rags in bowls and pulls handle of water tank to force water into bowls and flush rags through flush channels. Removes rags caught on obstructions or rough surfaces, using plunger. Marks bowls requiring smoothing of flush channels, using grease pencil. (2) Tips bowls, inserts tip of squeeze bottle containing dye into specified hole in base of bowls, and squirts dye into opening to detect leaks in bowls. Marks bowls to indicate leaks. (3) Places level in several directions across rim of bowls and observes bubble of level to determine levelness of bowls. Marks bowls to indicate need for further grinding of bowl base. Removes defective bowls from conveyor line for further processing. When using dye to test bowls, may be designated Dye Tester (pottery & porc.); or when flush testing, may be designated Flush Tester (pottery & porc.).
GOE: 06.03.02 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 86

775 GRINDING, FILING, POLISHING, FROSTING, ETCHING, CLEANING, AND RELATED OCCUPATIONS, N.E.C.

This group includes occupations concerned with grinding, filing, polishing, frosting, etching, cleaning, and similar working of sand, stone, clay, and glass products.

775.130-010 SUPERVISOR, FINISHING (glass mfg.)

Supervises and coordinates activities of workers engaged in grinding and polishing pressed or blown glassware: Inspects products for defects and adherence to specifications. Directs or assists workers in machine setup and operating techniques. Requisitions materials and supplies. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to department supervised as Supervisor, Crack-Off (glass mfg.); Supervisor, Grinding (glass mfg.); Supervisor, Polishing (glass mfg.).
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

775.131-010 SUPERVISOR, CONCRETE-STONE FINISHING (concrete prod.)

Supervises and coordinates activities of workers engaged in repairing, etching, and polishing ornamental stone-faced or plain surfaced concrete products. Demonstrates methods of troweling, dry brushing, and acid etching. Inspects work for quality, quantity, and size. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

775.134-010 CUTTING SUPERVISOR (glass products)

Supervises and coordinates activities of workers engaged in cutting flat glass or mirrors to customer specifications. Cuts and finishes plywood patterns according to blueprints for use by GLASS CUTTER (any industry). Trains new workers in glass cutting techniques. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R4 M4 L3 SVP: 6 DLU: 77

775.281-010 SURFACE-PLATE FINISHER (stonework)

Inspects surface of stone plates to determine areas requiring lapping, and levels stone surface to specified tolerance for use as surface plates: Builds bed of timbers on floor beneath head of lapping machine. Positions stone on timbers, using hoist. Aligns stone with arm of lapping machine and levels stone on timbers, using wedges, blocks, and spirit level. Moves straightedge over stone to detect uneven areas on stone surface. Wets stone surface, using hose, and applies abrasive to stone, using brush. Selects lapping block (metal or stone) according to uniformity of stone surface or step in finishing process. Lifts block onto stone, using hoist. Secures block to arm of lapping machine, using wrench. Starts machine and presses buttons to guide spinning block over uneven areas of stone surface. Moves tolerance dial indicator through specified patterns on stone and observes dial to detect tolerance deviations. Changes lapping blocks according to readings from tolerance dial indicator and laps surface down to level finish. Laps stone by hand to level surface to specified tolerance. Sights through convex lens of collimator at specified positions on stone surface to determine whether surface plate has been finished within prescribed limitations of accuracy and determine tolerance deviation of plate's surface. Prepares graph of collimator readings, indicating tolerance deviation at any point on surface of plate. Drills adapter holes in surface plate to facilitate attachment of measuring instruments, using diamond drill.

GOE: 05.05.01 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

775.381-010 ENGRAVER (glass products) alternate titles: flower cutter; glassware engraver; miter cutter; wheel engraver

Engraves monograms, coats of arms, and ornamental designs on glass and glassware, using copper, steel, or stone wheels: Traces or sketches design on glass or glassware, using stencil and china-marking pencil, chalk, or brush pen. Mounts wheel of specified size and miter on lathe. Pours water in pans beneath abrasive cutting wheel to cool wheel and prevent dust when grinding glass. Starts lathe and holds glass or glassware against outer edge of wheel, twisting and turning article so that wheel will grind glass according to marked design. May originate and suggest designs to customer or management. May dress and shape cutting wheels by holding dressing stone against rotating wheel. May brush or smear abrasive on cutting wheel. May polish engravings, using felt and cork wheels. May be designated according to type of wheel used as Steel-Wheel Engraver (glass prod.).
GOE: 01.06.01 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

775.381-014 GLASS DECORATOR (glass mfg.; glass products)

Etches or cuts artistic designs in glass articles, such as bowls, vases, and stemware, using acid solutions, sandblasting equipment, and design patterns, using any of following methods: (1) Dips glass in molten wax to coat ware with wax. Places perforated pattern against waxed ware and sprays ink through pattern to transfer design to wax. Exposes glassware surface to be etched, using stylus to remove wax. Immerses waxed ware in hydrofloric acid to etch design on glass surface, and immerses ware in hot water to remove wax. (2) Masks glassware with tape, places pattern against taped glassware, and sprays ink through pattern to transfer design to ware. Cuts away inked sections of tape, using knife to expose glassware surface. Sandblasts exposed area of glass, using spray gun, to cut design in surface. Peels off tape after sandblasting design. (3) Places template against glassware surface and sprays with sand to cut design in glassware surface. May etch design on inside, rather than outside, of article. May draw freehand designs on masked glassware. May be designated according to method used as Glass Etcher (glass mfg.; glass prod.); Sandblaster, Glass (glass mfg.; glass prod.).
GOE: 01.06.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

775.382-010 GLASS GRINDER, LABORATORY APPARATUS (glass products; inst. & app.)

Operates lathe grinder to grind glass laboratory apparatus and component parts to specified dimensions: Installs holding device, such as chuck or faceplate, on headstock spindle. Positions and secures workpiece in holding device, and installs abrasive wheel in tailstock. Starts machine and turns handwheel to feed abrasive wheel against workpiece or engages automatic feed. Inspects and measures workpiece to verify conformance to specifications, using calipers and gauges.
GOE: 06.02.08 STRENGTH: L GED: R3 M1 L2 SVP: 5 DLU: 90

775.584-010 GLASS CALIBRATOR (glass products) alternate titles: engraver

Measures, marks, and etches units on side of glass tube (pipettes) or similar measuring devices, using calibrating device and solution of hydrofluoric acid: Fills tube with specified quantity of mercury and marks meniscus of mercury with special pen. Covers tube with wax. Positions tube in calibrating device, aligns needle guide with calibrated ruler, and turns locknut to hold guide in place so that exact measurement can be marked, starting from meniscus. Turns handwheel that moves needle in back-and-forth motion to remove wax and expose glass to be etched with acid. Realigns needle guide to next unit to be marked and continues sequence until tube is calibrated. Removes tube from calibrating device and dips it into solution of hydrofluoric acid so that acid will permanently etch area of glass not covered with wax. Rinses tube in cold water to remove excess acid and in hot water to remove wax.
GOE: 06.02.31 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

775.664-010 STONE POLISHER, HAND (stonework) alternate titles: buffer; polisher, hand; stone finisher; stone rubber

Grinds and polishes stone to smooth or lustrous finish, using portable grinding and polishing tool: Selects abrasive wheel according to type of stone, finish specified, or step in finishing process, and attaches wheel to tool, using wrench. Wets stone surface, using hose, and guides rotating wheel over stone to smooth surface. Washes grit from stone, using hose. Moves hand over stone surface to detect uneven areas. Spreads emery powder or other polishing compound on stone, attaches buffing wheel on tool, and guides wheel over stone to polish surface. Rubs stone surfaces that cannot be finished by machine or portable tool with abrasive blocks to smooth or polish stone. When surfacing marble, fills cracks or imperfections in stone with wax that matches color of stone. May be designated according to type of stone polished as Granite Polisher, Hand (stonework); Marble Polisher, Hand (stonework).
GOE: 06.04.30 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

775.684-010 BEVELER (glass mfg.; glass products)

Bevels edges of pattern (irregularly shaped) glass, using grinding wheels: Turns valve to start flow of water through abrasive compound onto grinding wheel. Holds and turns glass against rotating wheel to grind rough bevel. Observes glass to determine when bevel of specified width, depth, and angle has been obtained. Rinses glass in tub or sprays with water to remove abrasive residue. Holds and turns rough-beveled glass against rotating smoothing wheel. Observes and feels glass to determine when standard degree of smoothness has been obtained. May polish beveled surface, using polishing wheel. May dress grinding wheels with honing block or stone. May repair defects in machine beveled edges. [POLISHER (glass mfg.; glass products)]. May be designated according to work performed as Rougher (glass products); Smoother (glass products).
GOE: 06.02.30 STRENGTH: H GED: R3 M2 L2 SVP: 5 DLU: 77

775.684-014 EDGER, HAND (glass mfg.; glass products)

Pencil edges seam or smooths edges of rectangular or pattern (irregularly shaped) glass, using grinding wheel: Installs grinding wheels on spindle of machine according to width of glass or mirror edge, using wrench. Starts flow of coolant onto grinding wheel. Holds and turns edge of glass or mirror against grooved rotating wheel to pencil-edge, seam, or smooth edges or corners. Examines edge to determine when standard degree of smoothness has been obtained. May be designated according to type grinding wheel used as Diamond-Wheel Edger (glass products).
GOE: 06.04.30 STRENGTH: H GED: R2 M2 L2 SVP: 2 DLU: 77

775.684-018 EDGER, TOUCH-UP (glass products)

Removes imperfections, found by inspector, such as scratches and chips, from mirror edges, using grinding wheel. Examines and feels edge of mirror to determine if defects have been removed. Wipes mirror with gloved hand to remove inspector's mark.
GOE: 06.04.30 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

775.684-022 GLASS CUTTER (any industry) alternate titles: cutter; pattern cutter; straight cutter

Cuts flat glass and mirrors to specified size and shape, using patterns, straightedge, tape measure, and glass cutting tools: Positions pattern on glass or measures dimensions and marks cutting lines, using glass cutting tool. Scribes around pattern or along straightedge, using cutting tool. Breaks away excess glass by hand or with notched tool or glass pinchers. May smooth rough edges, using belt sander.
GOE: 06.02.30 STRENGTH: H GED: R3 M1 L1 SVP: 4 DLU: 82

775.684-026 GLASS FINISHER (glass products)

Cuts and finishes plate glass to make variety of glass products: Lays out pattern on plate glass and cuts it, using glasscutter. Holds glass against series of rotating grinding and polishing wheels to bevel and polish edges. Sprays silver solution on glass to provide mirrored surface, using spray gun. Assembles glass pieces to make various novelties. May lay out design or monogram on glass and sandblast surface within guidelines, using sandblasting tool.
GOE: 06.04.30 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

775.684-030 GLASS GRINDER (glass products)

Grinds glass or plastic blanks to specified dimensions for use as watch crystals: Holds blank against rotating abrasive wheel to grind edge. Polishes edges of blank, using felt and pumice stones. Verifies dimensions of crystal with calipers or gauges, or fits crystal into watchcase. May glue crystal into case.
GOE: 06.02.30 STRENGTH: S GED: R3 M2 L2 SVP: 6 DLU: 77

775.684-034 GLASS GRINDER (glass mfg.)

Removes rough edges and surface convexities from formed glassware, using belt or disk grinder: Turns valves to regulate flow of abrasive compound and water on metal disk or to regulate flow of water on grinding wheel or belt grinder. Presses and turns edges and surfaces of glass or glassware against revolving grinding tools to remove rough and uneven areas. May measure glassware for conformance to specifications, using steel tape, template, and fixed gauges. May grind glass container mouth with mating glass stopper to ensure fit and be designated Stopper Grinder (glass mfg.).
GOE: 06.04.30 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 77

775.684-038 GLASS POLISHER (glass mfg.) alternate titles: glass buffer; glass smoother

Inspects sheet glass for flaws and polishes surface to remove less extensive defects, using electric hand buffer: Examines surface and edges of glass sheets for chips, cracks, or roughness. Starts electric hand buffer, equipped with sand and pumice grinding wheels, and passes it over surface to remove flaws. Imparts final polish to glass, using buffer equipped with cloth or felt buffing wheels.
GOE: 06.04.30 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

775.684-042 GLASS SANDER, BELT (glass products) alternate titles: belt seamer; sander

Seams edges of glass, using belt sander: Selects abrasive belt according to type of finish specified and installs belt on pulleys of machine. Turns screw to tighten and center belt on pulleys. Turns valve to start water spray on wet-belt machine or pushes switch to start exhaust on dry-belt machine. Holds glass edges against revolving belt to obtain finish. Places large glass on rollers or table for support while seaming. Feels edge of glass to verify smoothness. Wipes glass clean, using cloth, and places glass on skid.
GOE: 06.04.30 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

775.684-046 LEVEL-VIAL MARKER (cutlery-hrdwr.) alternate titles: glass marker

Cuts bubble guidelines in glass vials used as levels in tools and instruments, using bench grinder: Positions glass vial in fixture and guides it against rotating abrasive disk to cut lines.
GOE: 06.04.30 STRENGTH: S GED: R2 M1 L2 SVP: 3 DLU: 77

775.684-050 MARK-UP DESIGNER (glass mfg.)
Lays out and cuts stencils and traces designs on glassware for etching or grinding: Sketches design on cardboard with drafting instruments, following blueprints. Cuts out designs along lines, using razor blade or knife. Positions stencil on glass and brushes stenciling ink over stencil to transfer design onto glass or positions glass over stencil and traces design on glass with china-marking pencil or brush pen. Draws freehand design on glass when limited number of one design is to be etched or ground. May immerse glassware in acid bath before tracing design.
GOE: 06.02.31 STRENGTH: M GED: R3 M2 L3 SVP: 3 DLU: 77

775.684-054 PATCH SANDER (stonework)
Sands repaired areas of sandstone table and counter tops, using portable sander and sandpaper: Moves portable sander equipped with abrasive disc across patched area of stone top down to level of stone. Feels and examines sanded area to detect rough areas and sands patched sections, using sandpaper. Replaces abrasive disc on portable sander, using wrench.
GOE: 06.04.30 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

775.684-058 POLISHER (glass mfg.; glass products)
Polishes edges or surfaces of flat glass, using polishing wheels: Pours polishing compound into hopper of automatic feeder or applies compound to polishing wheel with brush. Holds and turns glass edge or engraved or beveled surface against white (cork) polishing wheel for rough polishing. Presses glass edge, or scratched, engraved, or beveled surface against felt polishing wheel for final polishing or to remove scratches. Wipes polished area and examines glass for smoothness. May be designated according to area polished as Edge Polisher (glass products); Engravings Polisher (glass products); Scratch Polisher (glass products).
GOE: 06.04.30 STRENGTH: H GED: R2 M1 L1 SVP: 4 DLU: 77

775.684-062 WATCH-CRYSTAL EDGE GRINDER (glass products) alternate titles: edge grinder, machine
Grinds edges of watch-crystal blanks, using abrasive wheel: Places blank on die of specified size and clamps die and blank in chuck. Starts grinding wheel and adjusts flow of water on wheel. Holds blank against wheel and grinds it until die is stopped by guide. Rotates blank and die until all edges are ground.
GOE: 06.04.30 STRENGTH: S GED: R2 M1 L2 SVP: 4 DLU: 77

775.685-010 CUTTING-MACHINE TENDER, DECORATIVE (glass mfg.)
Tends automatic cutting machine that cuts designs in glassware. Depresses pedal to raise holding fixture and places glassware in fixture. Pushes button to index fixture to cutting stations which cut designs in glassware. Removes finished glassware and places it in tray.
GOE: 06.04.08 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

775.687-010 FINISHER (nonmet. min.)
Finishes surfaces of plaster castings, such as lamp bases, statues, figurines, and architectural ornaments, by patching holes in chipped places, using spatula. Removes excess plaster, using scraping tool, and smooths surface of casting with damp sponge, steelwool, or sandpaper. Attaches member parts, such as horns, to figurines, using fresh plaster to moisten surface and pressing parts onto figurine. May deepen defect or mar surface of article to impart antiqued appearance.
GOE: 06.04.30 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

775.687-014 GLASS DRILLER (glass mfg.)
Drills premarked holes in glass lampshades for attachment of frames or fixtures, using electric hand drill.
GOE: 06.04.30 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

775.687-018 GLASS-CUTTER HELPER (any industry)
Assists GLASS CUTTER (any industry) in cutting and handling glass or mirrors: Carries glass or mirrors to worktable and places cutting tools on table. Removes excess glass from working area. Measures layout dimensions, using tape measure, and counts cut glass or mirrors to verify measurements and quantity cut. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 06.04.30 STRENGTH: H GED: R2 M1 L2 SVP: 3 DLU: 77

775.687-022 GOLD BURNISHER (pottery & porc.)
Rubs hollowware with burnishing brush or polishing cloth to polish gold band or trim. Mounts flatware on rotating spindle and applies pressure to ware surface with burnishing brush to polish it. Examines and discards defective pieces. May rub surface of ware with rag or steelwool to remove excess paint and produce antiqued appearance.
GOE: 06.04.24 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

776 OCCUPATIONS IN FABRICATION AND REPAIR OF ASBESTOS AND POLISHING PRODUCTS, ABRASIVES, AND RELATED MATERIALS

This group includes occupations concerned with such activities as blending, coating, cutting, gluing, and forming asbestos and polishing products, abrasives, and related materials.

776.487-010 GRINDING-WHEEL INSPECTOR (nonmet. min.)
Inspects and tests finished grinding wheels for adherence to specifications: Inserts spindle in wheel, and mounts spindle on tripod. Spins wheel and examines it for defects, such as heavy spots, uneven faces, and cracks. Measures diameter and width of wheel, using calipers and tape measure. Mounts wheel on machine that spins it at specified number of revolutions per minute to test it for cracks and soft spots. Weighs wheels on balance scale and stacks them in pile according to grade and weight. Marks defective wheels to be refinished or discarded. May record number, size, and type of wheels inspected.
GOE: 06.03.01 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

776.667-010 INSPECTOR (nonmet. min.) alternate titles: inspector, brake lining
Inspects asbestos brake linings for defects: Examines linings for cracks, blisters, and other imperfections to ensure adherence to specifications. Measures width and thickness of linings to ensure attainment of specified tolerances, using calipers or other measuring devices. Discusses discrepancies with machine operators or supervisory personnel and keeps record of rejects. May determine resistance of lining stock to surface abrasion, using hardness testing device.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 77

776.684-010 BELT MAKER (nonmet. min.) alternate titles: sleeve maker; sleeve wheel maker
Cuts and glues sandpaper to form cylindrical sleeves or endless belts for sanding drums or machines: Inserts paper of specified width and grit in bench fixture and cuts it to length, using knife and guide bar. Presses ends of paper against grinding wheel to remove grit and form smooth margin for lapping and gluing. Spreads glue on ends and overlaps them to form cylindrical sleeves or endless belts. Presses glued ends in lever press to set glue.
GOE: 06.04.34 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 77

776.684-014 POLISHING-WHEEL SETTER (any industry) alternate titles: wheel setter
Replaces worn abrasive surface on leather or felt polishing wheels, canvas belts, and metal or fiber disks, and balances wheels: Immerses wheel or disk in solution to soften glue. Mounts wheel on electrically driven, pedestal-mounted spindle, using wrench, and holds pumice stone against rotating wheel to remove compacted abrasive. Rubs fingers over wheel surface to detect abrasive fragments. Brushes binding agent on wheel or disk. Rolls wheel in tray of abrasive powder or sprinkles powder over disk to cover surface with abrasive. Pounds wheel or disk with wooden block to force abrasive into binding agent. Centers wheel on static balancer to locate placement for lead weight to balance wheel. Removes lead weight from heavy side of wheel or nails counterweight to opposite side to balance wheel.
GOE: 05.10.04 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

776.687-010 BELT-MAKER HELPER (nonmet. min.)
Assists in forming and packaging abrasive belts, performing any combination of following tasks: Brushes adhesive onto splice lap area of end of abrasive-coated strip and holds end of strip in position on press bed. Helps to wind abrasive belts into compact coil, by hand, and wraps coil in moistureproof plastic film, places plastic-wrapped coils in boxes, and seals boxes with tape. Inserts metal spindle through core of roll of abrasive-coated material, hooks overhead hoist chains to ends and moves roll along rail from storage to work area. Presses hoist control button to lower roll, positioning spindle on rack.
GOE: 06.04.38 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

777 MODELMAKERS, PATTERNMAKERS, MOLDMAKERS, AND RELATED OCCUPATIONS

This group includes occupations concerned with building clay or plaster models and patterns of one-of-a-kind or mass-produced products made of metallic or plaster materials; and making molds used in casting or forming such items as three-dimensional maps, trophies, or jewelry.

777.081-010 MODELER (brick & tile)
Molds from plaster of paris original models for special designs in decorative tile, such as fountains and waterspouts, sculpturing model by cutting, scraping, and finishing. May construct wooden molds for use in casting original clay models, using carpenter's handtools, or may supervise CARPENTER, MOLD (brick & tile; concrete prod.) in preparing wooden molds from original models.
GOE: 01.06.02 STRENGTH: M GED: R4 M4 L4 SVP: 5 DLU: 77

777.131-010 SUPERVISOR, MOLD SHOP (pottery & porc.)
Supervises and coordinates activities of workers engaged in casting plaster dies and block, case, and production molds used to form ceramic pottery ware: Examines design sketches and production schedules to determine type of plaster models to be formed and quantities of production dies and molds to be cast. Inspects completed products for accuracy of dimensions, fitting, and alignment, and presence of surface defects, using dial indicators, gauges, calipers, and rules. Trains new workers in preparing plaster batches to specified consistency, handling and storing dies and molds to avoid surface damages, and verifying dimensions with aid of precision instruments. Assists workers in solving problems in casting and finishing products with aid of blocks, trimming knives, hand scrapers, and wet sponges. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

777.261-010 MODEL MAKER I (any industry)
Constructs scale model of objects: Builds and molds models, using clay, metal, wood, fiberglass, other substance, depending on industry for which

model is constructed, such as ship and boat building or automobile manufacturing.
GOE: 01.06.02 STRENGTH: L GED: R5 M3 L3 SVP: 7 DLU: 77

777.281-010 CONCRETE SCULPTOR (concrete prod.)
Constructs models and molds for use in casting concrete garden furniture and statuary: Constructs metal armature for use as framework to support figure while modeling. Shapes model, following drawings or pictures, by modeling clay with hands and handtools. Brushes successive coats of rubber paint on clay model to form cast. Covers cast with layers of fiberglass to form shield. Cuts hardened fiberglass shield in sections with hand or power tools and removes shield from model. Removes rubber cast from clay model by peeling or cutting into sections. Reassembles sections of fiberglass shield around rubber cast and fills cast with concrete.
GOE: 01.06.02 STRENGTH: H GED: R4 M2 L2 SVP: 7 DLU: 77

777.281-014 MODEL MAKER (pottery & porc.) alternate titles: modeler; patternmaker
Constructs model of particular piece of ware to be used in casting molds: Forms model by carving it from plaster or from clay or both, or by shaping material with hands as it revolves on spinning table [THROWER (pottery & porc.)], or by shaving it with steel cutting tools as it revolves [TURNER (pottery & porc.)].
GOE: 01.06.02 STRENGTH: M GED: R4 M3 L2 SVP: 7 DLU: 77

777.281-018 PATTERNMAKER, PLASTER (aircraft mfg.) alternate titles: loft patternmaker; model maker, plaster and plastic; patternmaker, plaster and plastic
Plans, lays out, and constructs master full-scale models, forms, mockups, check jigs, and plaster patterns for casting master tooling used in manufacturing aeronautical and aerospace products, utilizing knowledge of plaster patternmaking, metal forming, and foundry practices and procedures, using precision instruments, tools, and equipment: Studies engineering tool design data, loft information, and blueprints to determine sequence of operations and to develop layout for constructing master model. Lays out, locates, and aligns steel skeletons and master contour templates on surface table or other base structure to form model frame, using precision measuring instruments and devices, such as micrometers, calipers, and transit. Forms plaster over template frame and hand finishes plaster to peripheral dimensions of contour templates, using scrapers, fairing tools, and other handtools. Verifies finished dimensions of master model, using precision instruments. Scribes butt, water, and station lines on master model to establish location points, reference lines, and contours for subsequent pattern casting. Casts plaster pattern (splash) from sections of master model, and recasts pattern to produce working patterns of contour templates, check templates, and related tooling. May fabricate master patterns, jigs, templates, or mockups from materials other than plaster, such as wax, plastic, and fiberglass. May cut out and fabricate flat contour templates from engineering or loft information.
GOE: 06.01.04 STRENGTH: M GED: R4 M4 L4 SVP: 7 DLU: 88

777.361-010 EAR-MOLD LABORATORY TECHNICIAN (plastic prod.)
Makes wax pattern of ear and molds plastic impression of ear for use in hearing aids, using handtools, grinder, and polishing wheels: Forms red designing wax into shape of ear, using spatulas, brushes, and gas burner. Mixes ingredients to make plaster and pours it over wax pattern to form plaster mold of ear. Removes plaster mold from wax pattern. Mixes ingredients to make plastic compound and pours it into plaster mold to form impression of ear. Applies hot and cold water and air to mold to harden plastic liquid in cavity of mold. Removes rough casting of ear from mold. Grinds and polishes casting to obtain plastic ear impression, using electric grinder and polishing wheels. Examines impression for blemishes, and places it in box for shipment.
GOE: 05.05.11 STRENGTH: M GED: R4 M3 L2 SVP: 7 DLU: 77

777.381-010 MODEL MAKER, FIBERGLASS (concrete prod.)
Makes fiberglass model or molds for casting concrete products: Brushes wax on model to prevent adhesion of fiberglass. Lays up fiberglass on top of model to form mold, building layers of resin and fiberglass around model for smooth, hard finish. Constructs and repairs wooden molds, using carpenter tools.
GOE: 01.06.02 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

777.381-014 MODEL-AND-MOLD MAKER (brick & tile)
Forms plaster models from drawings or blueprints, and constructs molds from model to cast brick or tile products: Mixes water and powder or catalytic compound, and clay, according to specifications, to form plaster. Places plaster on worktable. Cuts, shapes, and finishes plaster according to model specifications, using knife, strips of wood, and fingers. Pours measured amount of plaster into wooden mold form. Coats dry model with soap solution to facilitate removal. Places model into wet plaster to form hand of mold. Removes model from hardened half mold and repeats process to form completed mold.
GOE: 01.06.02 STRENGTH: L GED: R4 M2 L2 SVP: 6 DLU: 77

777.381-018 MODEL-AND-MOLD MAKER, PLASTER (concrete prod.)
Makes plaster models or molds for casting concrete products, such as cornices, panels, and grave markers: Lays out profile of product on sheet metal, following working drawings or blueprints. Cuts out template of profile, using hand shears, and nails template to wood guide, to make modeling frame. Mixes water and plaster to required consistency in tub, using paddle. Brushes liquid soap on modeling frame to prevent adhesion of plaster. Scoops up mixed plaster and places it on modeling frame. Builds up layers of plaster and reinforcing hemp, allowing time for hardening between layers, and pushes template across built up material to remove excess plaster and form model or mold to required dimensions. Cuts off sections of hardened model or mold, using saw. Lays out sections to form mold pattern and cements sections together with burnt shellac. Fills joints or defects with plaster and smooths plaster with hands and molding tools. May make sectional mold impressions of existing models. May make molds or models of clay. May be designated according to specialty as Model Maker, Plaster (concrete prod.); Mold Maker, Plaster (concrete prod.).
GOE: 01.06.02 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

777.381-022 MOLD MAKER II (jewelry-silver.)
Fabricates plaster molds from models of jewelry articles and trophy figurines preparatory to casting metal molds: Presses one side of model into clay. Builds up clay around exposed half of model to retain plaster. Mixes plaster powder with water and pours it around exposed half of model to form mold. Allows plaster to set and removes clay and model from plaster mold. Brushes loose particles from mold and applies shellac to preserve mold and to prevent absorption of moisture. Covers surfaces of mold with dry bone powder to prevent shellacked surface from sticking in sand mold.
GOE: 06.01.04 STRENGTH: L GED: R3 M1 L2 SVP: 7 DLU: 77

777.381-034 PLASTER MOLDER I (foundry) alternate titles: patternmaker, pressure cast
Lays out parting line on patterns and casts plaster molds according to blueprints, sketches, and oral instructions, applying knowledge of metal characteristics, pattern contours, and pouring procedures: Locates and scribes parting line on wood, metal, or plastic patterns, using measuring instruments, such as calipers, square, depth gauge, and straightedge. Mixes plaster powder and water according to standard formula. Places cope and drag (upper and lower half of flask) on molding table. Pours liquid plaster into drag and positions pattern in plaster up to parting line. Removes excess plaster, using straightedge, and allows mold to harden. Places cope on completed drag, and makes depressions in plaster around drag pattern to ensure accurate joining of mold halves for casting. Brushes parting agent on surfaces of mold, pattern, and flask and pours liquid plaster into cope. Separates cope and drag after specified time and removes pattern. Repairs cracks and broken edges of molds, using molder's handtools, such as spoon, trowel, and slick. Removes excess plaster from molds, using knife or bandsaw. Joins cope and drag sections of mold together by aligning them in flask and pouring liquid plaster over them. May cut gates and risers into baked mold. May position cores in drag and assemble mold. May pour molten metal into molds, using hand ladle.
GOE: 06.02.30 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

777.381-038 PLASTER-PATTERN CASTER (machine tools) alternate titles: loft patternmaker
Casts and finishes plaster patterns used in making precision sand molds for dies, tools, and machine parts, according to specifications: Constructs boxlike enclosure around part to be cast, filling in cracks and openings with clay. Lubricates surface with parting agent that prevents plaster from sticking to part. Mixes plaster and pours it into enclosure. Reinforces plaster with hemp fiber and small steel rods or heavy wire. Removes hardened plaster cast from enclosure. Patches broken edges and fractures, using clay or plaster. Trims plaster pattern to tolerance by scraping and shaping plaster surfaces by hand following blueprint, using flat metal scrapers. Verifies dimensions, using measuring instruments, such as calipers, vernier gauge, and protractor. Makes identifying marks on pattern with crayon, inked rubber stamps, or pointed tool. Shellacs finished surfaces to harden and smooth them.
GOE: 01.06.02 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

777.381-042 RELIEF-MAP MODELER (any industry) alternate titles: three-dimensional-map modeler
Makes plaster relief-map models from which molds are prepared to produce duplicate scale models of land forms: Mixes plaster, water, and retarder in container. Punches holes in map's surface, using stippler or scorer so that plaster will adhere. Pours plaster over sea-level contour map, and spreads it evenly over surface with brush or spatula. Covers drainage, river, and city lines with transparent media or leaves border without plaster to preserve lines. Builds mound or elevation of plaster around spot elevation pins, leaving pinhead exposed. Observes printed lines indicating contour planes, and consults reference map to ascertain number, elevations, and shapes of contours to be built up with plaster. Pours and spreads plaster on contour planes of successively higher elevations. Fills with plaster angles formed by contour planes at two successive elevations to achieve natural and realistic surface appearance. Removes excess plaster and smooths surface of model with file and sandpaper.
GOE: 01.06.02 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

777.381-046 SAND TESTER (foundry) alternate titles: sand technologist
Tests sand to determine its usability for making sand molds or cores: Collects samples of sand mixes and compresses sand into sample piece, using specimen sand rammer. Determines properties of sand samples, such as moisture content, permeability, compression and shear strength, clay content, and sand-grain size and distribution, using sand-test equipment, such as moisture teller, permeability meter, sand-strength tester, and sieve set. May perform similar tests on ladle lining refractories. May test quality of incoming materials, such as cereal or core oils to be used in sand mixes by mixing and testing sand samples.

GOE: 06.01.05 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

777.684-010 FORM MAKER, PLASTER (plastic prod.) alternate titles: molder; slusher

Casts plaster patterns used in shaping plastic or plastic-impregnated materials: Brushes inside of mold sections with lubricant, and bolts sections together. Mixes specified amounts of plaster and water in mixing machine. Pours plaster into mold and positions mold in machine that rolls mold to distribute mixture evenly and facilitate drying. Repeats operation, after each layer of plaster has set, to build casting to specified thickness. Removes bolts from mold and pries sections apart, using bar. Removes fins and flanges from pattern, using scraper. Fills bubble holes and smooths uneven surfaces with wet plaster. Places pattern in drying room to cure. May coat pattern with sealing lacquer.
GOE: 06.02.30 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 77

777.684-014 MOLD MAKER (nonmet. min.)

Constructs molds used for casting plaster objects, such as ashtrays, plaques, figurines, and statuary, using wet plaster, treated fiberglass, or liquid rubber: Covers model of object from which mold is to be made with lubricant to prevent mold from sticking to model. Immerses portion of model in container of wet plaster to make half of mold and allows plaster to harden. Immerses other half of model to complete mold. Makes section of fiberglass mold by covering portion of model with layers of fiberglass treated to harden when allowed to set. Allows fiberglass to harden and repeats process, covering other portions of model until mold is complete. Sprays liquid rubber over model to make rubber mold, using spray gun. Allows rubber to harden and pulls model from rubber mold. Removes mold sections of plaster or fiberglass mold form. Bores holes in edges of sections of mold for insertion of bolts to hold sections together, using power drill, or binds sections together with cord. Smooths surfaces of mold, using scraping tool and sandpaper.
GOE: 06.02.30 STRENGTH: L GED: R3 M1 L2 SVP: 5 DLU: 77

777.684-018 MOLD MAKER (pottery & porc.) alternate titles: block and case maker; blocker; caser

Casts plaster block molds, case molds, and working molds used in forming pottery ware, using models, clay, and plaster: Places model in clay with upper half of model exposed. Brushes soap solution on exposed half of model. Places wooden form around model or builds up wooden box sides. Mixes plaster and pours it over exposed half of model to form one half of block mold. Allows plaster to harden, removes wooden box sides, and turns mold over, leaving model in plaster mold. Removes clay, smooths surface of mold, using knife and scrapers and applies soap solution. Replaces box sides around mold and pours in plaster to form other half of block mold. Casts case mold in similar manner, using block mold as pattern.
GOE: 06.02.30 STRENGTH: H GED: R3 M1 L2 SVP: 6 DLU: 78

779 OCCUPATIONS IN FABRICATION AND REPAIR OF SAND, STONE, CLAY, AND GLASS PRODUCTS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with fabricating and repairing sand, stone, clay, and glass products.

779.131-010 SUPERVISOR I (nonmet. min.)

Supervises and coordinates activities of workers engaged in molding, casting, and finishing plaster statuary, plaques, and other art objects. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 01.06.02 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

779.281-010 CLAY MODELER (any industry)

Molds full-sized or scale models of products, such as automobiles, automobile parts, television sets, radios, washers, refrigerators, caskets, or boats from clay following artist's sketches or from verbal instructions: Builds rough lumber form to fit around model or centers preformed lath-covered wood frame on grid platform. Kneads clay into slots between laths so clay will adhere to frame. Molds clay by hand to approximate shape. Pulls sheet aluminum forming tool over surface of clay to shape areas that have constant cross sections. Shapes sculptured surfaces, using various types of sculptor's tools and scrapers. Verifies uniformity and smoothness of curved surfaces with splines and sweeps. Scrapes clay from high areas and builds up and smooths low areas to attain desired shape. Cuts cardboard templates for use as guides to shape symmetrical sections. Takes measurements from completed half of model and duplicates them on unfinished half to make both sides symmetrical. Covers bumpers, lights, door handles, and other parts with aluminum foil to simulate chrome or colored glass.
GOE: 01.06.02 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

779.381-010 GLAZIER, STAINED GLASS (glass products) alternate titles: glazier artist

Selects and cuts colored glass for use in stained-glass windows in churches, memorials, and residences, following original pattern: Selects bits of glass of color, thickness, and texture that will yield color shade shown in original design. Selects and places one piece of glass over another (double-plating) if exact color cannot be found. Cuts glass according to various shapes of pattern pieces, using glasscutter. Assembles glass, according to design, and solders joints of lead stripping between glass pieces. May reinforce with steel rods. Repairs stained glass windows by replacing broken glass and straightening buckled sections. Repairs stained glass lamp shades by replacing broken glass and soldering joints of lead stripping. When assembling glass between lead strippings only, may be designated JOINER (glass prod.).
GOE: 01.06.02 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

779.381-014 MOSAIC WORKER (glass products; nonmet. min.)

Cuts, shapes, and sets blocks of colored glass, enamel, marble, or ceramic tile for installation on walls, ceilings, or panels or for use as table tops or decorative screens, according to specifications: Brushes glue over surface of manila paper on which sections of design have been drawn in reverse, according to full-size drawings and tile charts. Selects color and type of tile specified for section according to tile charts. Cuts or breaks tile to shape and size, using hand-cutters and hammer. Positions tile, finished-side down, on glue-covered paper, using fingers or tweezers. Applies completed tile sections to surface previously covered with mastic cement and removes manila paper. Applies colored cement grout to seal joints of tile after section has been installed and washes surface with damp cloth. May apply tile to wall, ceiling, or panels on which design has been drawn.
GOE: 01.06.02 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

779.381-018 REPAIRER, ART OBJECTS (any industry)

Repairs and restores objects of art, such as figurines and vases made of antique or fine porcelain, glass, or semiprecious stone: Fits together broken or otherwise marred pieces with wires and glue or other adhesive. Refinishes surfaces with lacquer or paint. Restores decorative patterns by repainting blemished lines or creating new designs.
GOE: 01.06.02 STRENGTH: S GED: R4 M3 L3 SVP: 7 DLU: 77

779.381-022 TRACER (construction; stonework) alternate titles: decorator

Lays out or traces lettering and designs on surface of marble and granite to prepare stone for cutting, using any of following methods: Positions stone on bench, stool, or floor with aid of other workers, hoist, or crane. (1) Lays paper bearing lettering and design on stone, centers paper and traces outline with stylus. (2) Lays out lettering with drafting instruments and sketches designs freehand, working to specifications. (3) Centers and pastes paper bearing lettering and design on face of stone.
GOE: 01.06.02 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 77

779.387-010 FINAL INSPECTOR (glass products)

Inspects defective glass or mirrors to determine salvageability: Examines glass or mirrors to determine extent of defect and routes product for repair, cutting to smaller size, or stripping of silver and paint. Writes replacement tickets for glass or mirror to be cut down or stripped. Marks area of mirror to be salvaged, using crayon or wax pencil. Measures mirror or glass to determine footage loss, using ruler. Records number of glass or mirror pieces replaced, type of glass and defect, size, and footage loss. May examine damaged mirrors returned by customers. May buff mirrors to remove scratches and surface defects, using portable buffing wheel and polishing compound.
GOE: 06.03.01 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

779.387-014 INSPECTOR I (concrete prod.)

Inspects finished plaster wallboard for conformance to specifications: Inspects sides, edges, and ends of wallbaord for surface defects. Measures length, width, and thickness, using rule and micrometer. Weighs sample on scale. Tests sample for hardness by penetrating board edge with knife. Cuts across board surface and observes peel-back of surface paper. Measures unabsorbed moisture in board, using moisture sensitive meter. Records quantity of board produced and number and types of rejects. May test hardness of wallboard, using hardness meter.
GOE: 06.03.01 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

779.584-010 PATTERNMAKER (glass products)

Lays out and cuts pattern pieces for stained-glass windows: Places cartoon (full-size working drawing) over pattern paper and traces *cutlines*, using stylus, to transfer cartoon to paper. Cuts out pattern pieces, using double-bladed pattern shears. Marks pattern part to indicate relative location in design, using pencil.
GOE: 06.02.31 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

779.681-010 MICA SPLITTER (mine & quarry) alternate titles: splitter

Splits mica to sheets of specified dimensions and trims defects from mica sheets, using knife: Measures thickness of mica sheets, using dial or caliper-type micrometer, to determine amount of mica to remove. Locates cleavage plane in mica and inserts point of knife between layers. Peels layers of mica from sheets to reduce thickness of sheets. Gauges mica sheets with micrometer to determine amount of mica to remove and to verify thickness of split sheets. Examines mica for defects, such as stains, cracks, or scale and trims defects, using knife. Deposits mica sheets into containers according to size and rejects sheets that fail to meet thickness specifications. Compares mica to templates of parts being produced and deposits mica in container according to part. May measure length of sheets with rule and trim excess mica from sheets, using scissors or knife. May rub edges of mica sheets over sandpaper-covered portion of worktable to locate cleavages in sheets.
GOE: 06.02.30 STRENGTH: S GED: R3 M2 L3 SVP: 4 DLU: 77

779.684-010 CEMENT FITTINGS MAKER (concrete prod.)

Casts concrete pipe sections to mold fittings, performing combination of following duties: Tamps concrete into steel molds and smooths edges, using trowel, to cast elbows, lids, or traps. Places fittings on pallets or shelves to harden

and adheres hardened sections to complete assembly. Dips hardened sections into grout (liquid cement) to facilitate waterproofing. Divides pipe sections, using saw, trowel, or hammer to form Y-shapes or T-shapes and seals joints with grout. Transports finished fittings to yard, using handtruck. Mixes grout and concrete. Cleans and lubricates molds. May prepare production records.
GOE: 06.04.32 STRENGTH: H GED: R2 M1 L2 SVP: 4 DLU: 77

779.684-014 CONCRETE-PIPE MAKER (concrete prod.) alternate titles: poured-pipe maker

Casts concrete pipes and manhole covers, performing any combination of following duties: Moves overhead crane to position steel mold sections reinforcing cage on pallet, and to insert mold core and pouring plate. Fastens mold sections together, using wrenches to tighten screw clamps and bolts and nuts. Positions manhole form into side of reinforcing cage and fastens manhole form with tie wire to provide side hole in manhole casting. Inserts pins through apertures in mold to form holes in casting for insertion of hoisting bar. Brushes or sprays mold and core with oil to prevent concrete from adhering. Positions concrete-filled pouring bucket over pouring plate on top of mold, using hoist. Strikes trip bar of bucket to release concrete onto pouring plate and into mold. Bolts pneumatic vibrator to mold, using wrench, and starts vibrator to settle concrete in mold; or presses switch to start vibrator and holds internal vibrator with worm drive tube submerged in concrete to compress concrete poured in mold. Places steam hoses inside filled mold, lowers curing box over mold with hoist or covers mold with canvas and turns valves to admit steam to cure concrete. Dismantles mold and core after concrete has cured. Inserts and cements metal ladder rungs into precast holes inside manholes.
GOE: 06.04.32 STRENGTH: H GED: R2 M1 L2 SVP: 2 DLU: 78

779.684-018 FETTLER (brick & tile) alternate titles: tile edger

Grinds and sands ceramic products, such as clay slabs, refractory tiles, ceramic tiles, and bisque tiles to remove defects, press marks, or rough spots: Grinds, brushes, or scrapes surface of ceramic product to remove rough spots, press marks, and defects, using power grinder and wire or stiff brush. Smooths (fettles) edges and surface of product, using sandpaper or handstone. Discards broken or poorly pressed tile. Stacks ceramic tile or clay slates in specified pattern on boards, plates, trays, or in saggers. May measure dimensions of tile for conformance to specifications, using gauge. May tend machine that automatically fettles tile.
GOE: 06.04.30 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 78

779.684-022 GLASS CUTTER, OVAL OR CIRCULAR (glass mfg.)

Cuts sheet glass into oval or circular shapes, using cutting table equipped with manually guided cutting tool suspended above surface of glass: Adjusts cutter to produce specified shape and guides cutting tool, mounted on steel rod, over glass to score and cut surface.
GOE: 06.04.30 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

779.684-026 GLASS-LINED TANK REPAIRER (beverage) alternate titles: tank refinisher

Patches fractured glass linings of steel tanks used for storing beer: Crawls inside tank and locates fractured lining areas. Melts fractured area, using propane torch. Removes melted material with burning knife. Heats and dries cleaned area. Heats patching material in bucket to specified temperature and consistency, using torch. Applies hot liquid patching material with paint brush. Smooths material after it has set, using torch.
GOE: 05.10.01 STRENGTH: L GED: R3 M1 L2 SVP: 3 DLU: 77

779.684-030 INSPECTOR-REPAIRER, SANDSTONE (stonework)

Examines and repairs sandstone table and counter tops, using handtools: Examines and feels sandstone for defects, such as flaking or bubbles in paint, pits, cracks, and chipped areas, and for variations in surface texture. Sands top and edges of stone, using fine grit abrasive paper. Fills cracks and holes with stone cement to level of stone surface or to match corner or edge of stone, using spatula. Applies flame of propane torch to defective painted area to ensure adhesion of stone cement to painted surface. Reads blueprint specifications and verifies dimensions and location of holes in table and counter tops, using tape and micrometer.
GOE: 05.10.01 STRENGTH: V GED: R3 M2 L2 SVP: 3 DLU: 77

779.684-034 LEVEL-VIAL SEALER (cutlery-hrdwr.) alternate titles: capper

Rotates tips of alcohol-filled glass vials to be used in levels against pinpoint gas flame to melt glass and seal hole in tip. Taps sealed vials on wooden block to see if they will break.
GOE: 06.04.30 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

779.684-038 MIRROR SPECIALIST (glass products; wood prod., nec)

Performs any combination of following tasks involved in mirror production: Loads and unloads conveyors and feeds and off bears machines, such as washers, polishers, bevelers, edgers, and seamers. Cleans mirrors by hand with powdered pumice. Cuts fiberboard or plywood to size for mirror backs, using table saw. Rivets clips and hangers on fiberboard backs, using riveting machine. Drills holes in glass and unframed mirrors to accommodate bolts, screws, and cords, using single-spindle drilling machine. Folds prescored cartons and pads over form, inserts mirror, and closes and staples carton. Cuts lumber and assembles pieces to form boxes or crates, using handtools and power tools. Packs mirrors in excelsior-filled crates and labels and addresses them, using stencil. May install and fasten mirrors into prepared frames by nailing and gluing wood blocks to frames around back of mirror and tacking wood or cardboard backs to blocks.
GOE: 06.04.08 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

779.684-042 PIPE FINISHER (brick & tile) alternate titles: corrugator; finisher

Finishes socket or spigot ends of green sewer pipe, using handtools: Aligns pipe on roller conveyor, bench, or stand. Trims socket, using hand or machine trimmers. Smooths inside and outside of barrel and overlap of spigot, using handtools, sponges, and water. Shines light inside of barrel and examines interior to detect defects or blisters. Bursts blisters with knife and patches defective area with clay. Coats outside of socket with grease, oil, or water to retard drying process, using hand applicator or swab.
GOE: 06.04.30 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

779.684-046 PLASTER MAKER (nonmet. min.) alternate titles: caster

Casts plaster art objects, such as statuary and plaques, using flexible molds: Assembles mold that consists of inner shell and outer casing. Mixes specified proportions of water and plaster, by hand or using mechanical mixer, and pours mixture into rubber mold. Shakes and squeezes mold to eliminate air bubbles, and smooths plaster mixture at mouth of mold, with spatula. Flexes mold to remove casting, when plaster has set. Places casting in oven to dry. May be designated according to object cast as Plaque Maker (nonmet. min.).
GOE: 06.02.30 STRENGTH: M GED: R3 M1 L2 SVP: 5 DLU: 77

779.684-050 PLASTIC MOLDER (fabrication, nec)

Constructs plastic segments of mannequins and display forms, using molds, liquid plastic, and glass fiber cloth: Brushes paste wax onto inside surfaces of mold halves to facilitate removal of molded form. Inserts aluminum fitting block corresponding to segment of form being constructed into recess of mold. Brushes coat of liquid plastic onto inside surfaces of mold halves. Lays strips of glass fiber mesh on surface of mold cavity and fastens ends of strips to inside projections of fitting blocks. Brushes liquid resin adhesive over glass fiber strips. Builds up form to specified thickness with alternate layers of glass fiber strips and adhesive. Sprinkles chopped glass fiber particles on built-up area and applies final coat of liquid adhesive. Clamps halves of mold together and places it on rack to dry. Removes dried form from mold and places it on rack for finishing.
GOE: 06.02.32 STRENGTH: L GED: R3 M1 L2 SVP: 3 DLU: 77

779.684-054 SECOND CUTTER (glass mfg.) alternate titles: glass breaker; glass cutter, hand

Cuts glass sheets by hand to reduce sheets to specified dimensions or eliminate blemishes: Examines sheet of glass for defects, such as breaks, chips, scratches, and blisters. Scores kerf on glass surface, using T-square and cutting tool. Breaks scored sheet into specified sizes by use of pincers or by snapping kerf over crossbar. Places defective glass in cullet (waste glass) bin. Measures and scores glass sheet into standard size plates, using ruler and glass-cutting wheel or splitter (diamond cutting tool). Breaks off plates and places them on racks. Works as member of two-person team when cutting at discharge end of lehr. May be designated according to work area as Lehr Cutter (glass mfg.); Warehouse Cutter (glass mfg.).
GOE: 06.04.30 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 77

779.684-058 STONE REPAIRER (stonework) alternate titles: sticker

Mends broken marble slabs to restore them to usable condition, using either of following methods: (1) Cleans broken surfaces with wire brush. Heats surfaces with gas torch. Smears shellac evenly over heated surfaces from stick while playing torch flame on stick to thoroughly melt shellac. Presses broken surfaces of slabs tightly together and wipes surplus shellac from joint. Clamps sections together and allows shellac to dry. May drill holes into opposing surfaces of broken slab sections with drill press or portable electric drill and join broken slab sections with dowel pins in addition to shellac. (2) Lays broken grooved sections of slab wrong side up on bench and fits them together. Heats marble along groove with blowtorch. Inserts sulfur-coated steel rod to completely fill groove (sulfur expands during cooling to lock rod in groove). Scrapes off excess sulfur and allows joint to set.
GOE: 05.10.01 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

779.687-010 BREAKER (glass products) alternate titles: glass breaker

Breaks excess glass from glass stock along lines cut by GLASS CUTTER (any industry), using notched tool, glass pinchers, or pliers, to form products, such as watch crystals, meter dials, goggle lenses, or mirrors.
GOE: 06.04.30 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

779.687-014 CARTRIDGE LOADER (elec. equip.)

Fills cartridge cores of heating units with cement and holds them against motor-operated vibrating shaft to pack cement. Places cores in containers preparatory to further processing.
GOE: 06.04.34 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

779.687-018 GLASS-BULB SILVERER (glass products)

Coats interiors of ornamental glass balls with silvering solution: Pours solution into balls through small openings. Holds stopper over openings and shakes balls until interior surfaces are covered. Pours surplus silvering solution out of balls.
GOE: 06.04.33 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

779.687-022 INSPECTOR, GLASS OR MIRROR (glass products) alternate titles: face cleaner; glass inspector; mirror inspector

Inspects glass or mirrors to detect imperfections, such as scratches, seeds (sandholes), chips, or cracks: Examines glass or mirror at discharge end of glass

washing and drying machine or silvering range, or places glass or mirror on padded table under light. Turns glass or mirror in circular motion to inspect both sides. Wipes gloved hand over glass or mirror to remove dust. Marks defects with crayon or wax pencil. May move glass or mirror onto skids or conveyors. May keep record of rejections, type of defects, and footage loss. May glue labels onto mirrors.
GOE: 06.03.02 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 78

779.687-026 MICA INSPECTOR (mine & quarry) alternate titles: inspector

Inspects articles formed from mica for defects, such as spots, streaks, scratches, and cracks: Spreads articles over illuminated table and scans them for defects, or places articles on bed of microscope, using tweezers or pneumatic lifting device, and examines articles through microscope to detect defects not visible to naked eye. Rejects defective articles. Packs high quality or optical grade mica in protective paper or envelopes and packs parts in plastic boxes.
GOE: 06.03.02 STRENGTH: S GED: R3 M2 L2 SVP: 4 DLU: 77

779.687-030 MICA SIZER (mine & quarry)

Splits built-up mica washer rods into washers of specified thickness, using rod splitter: Positions built-up mica washer rod on work surface and pulls lever to press rod against sharp edged cutting blade to cut off washers of specified thickness.
GOE: 06.04.30 STRENGTH: S GED: R2 M2 L1 SVP: 3 DLU: 77

779.687-034 STOCK SHEETS CLEANER-INSPECTOR (glass products)

Cleans, inspects, and polishes stock sheets (large mirrors): Places stock sheets on vertical tabletop and depresses pedal to move tabletop to flat position. Cleans and inspects mirror and removes surface scratches, using portable scratch polishing wheel. Measures mirror with ruler and records size. Cuts defective edges from mirror with glasscutter. Glues label on mirror. Packs mirror in shipping crate.
GOE: 06.03.02 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

779.687-038 WAXER (glass products) alternate titles: glass-etcher helper

Brushes coat of wax on glass speedometer and radio dials, leaving stenciled numbers and figures free for etching.
GOE: 06.04.33 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

78 OCCUPATIONS IN FABRICATION AND REPAIR OF TEXTILE, LEATHER, AND RELATED PRODUCTS

This division includes occupations concerned with laying out, marking, and cutting materials; hand-sewing or machine-sewing parts of mass-produced products, such as drapes, slip covers, sheets, pillowcases, and ready-to-wear apparel; fitting and stitching made-to-measure garments and accessories; hand knitting complete garments, garment parts, or accessories; hand weaving and embroidering to embellish or repair garments and accessories; fabricating footwear, except molded rubber and plastics; and other activities concerned with fabricating or repairing garments, canvas goods, house furnishings, and related products.

780 OCCUPATIONS IN UPHOLSTERING AND IN FABRICATION AND REPAIR OF STUFFED FURNITURE, MATTRESSES, AND RELATED PRODUCTS

This group includes occupations concerned with upholstering such products as furniture, automobile seats, and caskets, and forming, stuffing, and assembling padding, mattresses, and bedsprings.

780.131-010 SUPERVISOR, CUTTING-AND-SEWING DEPARTMENT (furniture)

Supervises and coordinates activities of workers engaged in spreading, marking, cutting, and sewing fabric used in upholstered furniture: Inspects processed parts to verify dimensions, color, quantity, and style against work order or sample. Trains employees in operations. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to specialty as Supervisor, Cutting Department (furniture); Supervisor, Sewing Department (furniture).
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 79

780.131-014 SUPERVISOR, UPHOLSTERY DEPARTMENT (any industry)

Supervises and coordinates activities of workers engaged in padding, covering, trimming, or renovating upholstered articles, such as furniture, mattresses, or vehicle seats: Reviews production schedules and computes amounts of padding, fabric, and supplies necessary to achieve production. Assigns workers to stations according to workers' abilities and qualifications. Observes workers performing duties and interprets drawings, sketches, and work orders for workers based on knowledge of upholstery methods, style, and design of articles. Analyzes inventories of fabrics and materials to determine production costs and estimates. Inspects upholstered articles to verify conformance to customer's order or company standards. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 79

780.134-010 SUPERVISOR, COVERING AND LINING (fabrication, nec)

Supervises and coordinates activities of workers engaged in covering and lining caskets: Inspects caskets for exposed edges of material, faulty lining installation, fit of casket top after covering, and overall appearance, to determine conformance to company standards. Demonstrates procedures to train new employees in lining and covering caskets. Performs duties as described under SUPERVISOR (any industry) Master Title. May cut cloth, using hand shears.
GOE: 06.02.01 STRENGTH: M GED: R4 M2 L2 SVP: 8 DLU: 77

780.134-014 SUPERVISOR, SPRING-UP (furniture)

Supervises and coordinates activities of workers engaged in cutting and installing webbing and springs in chair and sofa frames and cushions prior to upholstering. Examines frames and cushions at work stations to ensure specified materials are being used and work meets manufacturing standards. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 78

780.137-010 SUPERVISOR, MATTRESS AND BOXSPRINGS (furniture)

Supervises and coordinates activities of workers engaged in padding and covering assembled spring units to make finished mattresses and box springs: Schedules flow of cotton and sisal through *garnett machines* for cleaning and felting. Directs workers in covering of spring unit with sisal pad and in box-filling and closing, tape- and roll-edging, and tufting. Performs other duties as described under SUPERVISOR (any industry) Master Title. May set up machines. May be designated according to department as Supervisor, Border Department (furniture); Supervisor, Cutting-And-Sewing Room (furniture); Supervisor, Finishing Department (furniture).
GOE: 06.02.01 STRENGTH: L GED: R4 M2 L2 SVP: 7 DLU: 77

780.381-010 AUTOMOBILE UPHOLSTERER (automotive ser.)

Repairs or replaces upholstery in automobiles, buses, and trucks: Removes old upholstery from seats and door panels of vehicle. Measures new padding and covering materials, and cuts them to required dimensions, using knife or shears. Adjusts or replaces seat springs and ties them in place. Sews covering material together, using sewing machine. Fits covering to seat frame and secures it with glue and tacks. Repairs or replaces convertible tops. Refurbishes interiors of streetcars and buses by replacing cushions, drapes, and floor coverings. May be designated according to specialty as Body Trimmer (automotive ser.); Bus Upholsterer (automotive ser.); Top Installer (automotive ser.).
GOE: 05.05.15 STRENGTH: M GED: R3 M2 L3 SVP: 6 DLU: 77

780.381-014 AUTOMOBILE-UPHOLSTERER APPRENTICE (automotive ser.) alternate titles: passenger-car-upholsterer apprentice; upholsterer apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.15 STRENGTH: M GED: R3 M2 L3 SVP: 6 DLU: 77

780.381-018 FURNITURE UPHOLSTERER (any industry) alternate titles: upholsterer

Repairs and rebuilds upholstered furniture, using handtools and knowledge of fabrics and upholstery methods: Removes covering, webbing, and padding from seat, arms, back, and sides of workpiece, using tack puller, chisel, and mallet. Removes defective springs by cutting cords or wires that hold them in place. Replaces webbing and springs or reties springs [SPRINGER (furniture) 780.684-106]. Measures and cuts new covering material [CUTTER, MACHINE (any industry) I 781.684-014]. Installs material on inside of arms, back, and seat, and over outside back and arms of wooden frame. Tacks or sews ornamental trim, such as braid and buttons, to cover or frame [UPHOLSTERY TRIMMER (furniture) 780.684-126]. May operate sewing machine to seam cushions and join various sections of covering material. May repair wooden frame of workpiece. May refinish wooden surfaces [FURNITURE FINISHER (woodworking) 763.381-010]. May upholster cornices and be designated Cornice Upholsterer (any industry). May repair seats, carpets, curtains, mattresses, and window shades of railroad coaches and sleeping cars and be designated Upholsterer (r.r. trans.).
GOE: 05.05.15 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 81

780.381-022 FURNITURE-UPHOLSTERER APPRENTICE (any industry) alternate titles: upholsterer apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.15 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

780.381-026 UPHOLSTERER, LIMOUSINE AND HEARSE (auto. mfg.)

Upholsters interior of limousine and hearse bodies, performing any combination of following duties: Selects and cuts material to specifications, using shears and pattern. Sews material together, using sewing machine. Installs padding, and fastens and sews covering material in place in body of vehicle. May fasten interior and exterior trim to vehicle body. May design new patterns.
GOE: 06.02.27 STRENGTH: M GED: R3 M2 L3 SVP: 5 DLU: 90

780.381-030 PAD HAND (leather prod.) alternate titles: pad cutter and assembler

Cuts, assembles, and joins fabrics, leather, or other materials to form cushioned seat of saddle: Positions pattern on material and cuts material, using knife or scissors. Positions padding, such as cotton batting, foam rubber, or mohair

between covers. Sews edges of covers to form pad, using needle and thread. Inserts pad between leather covers of saddle seat and sews edges of covers to form cushioned seat.
GOE: 06.02.32 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

780.381-034 SLIPCOVER CUTTER (retail trade; tex. prod., nec)

Cuts material for slipcovers according to size and shape of furniture to match patterns and ensure economical use of material: Reads order to determine type and amount of material required, and obtains materials from stockroom. Determines from experience and knowledge of materials approximate yardage necessary to cover furniture, allowing for shrinkage and stitching. Measures, drapes, and smooths material, wrong-side-out, over sections of furniture to ensure most economical use and to serve as guide in matching shades, colors, and designs in cloth. Determines cutting lines by pinning or marking fabric, using shape of furniture as outline. Cuts fabric along marked lines. Pins cut pieces together and fits assembled unit over furniture, making adjustments with pins to attain required fitting. Wraps fitted pieces together and delivers to shop for sewing. Records amount of time required for each assignment. May visit customer's home to cut material for slipcovers. May cut material for draperies. May cut out slipcover parts from patterns, using rotary knife.
GOE: 05.05.15 STRENGTH: L GED: R3 M2 L3 SVP: 6 DLU: 77

780.381-038 UPHOLSTERER, INSIDE (furniture)

Upholsters inside sections of chairs and sofas, utilizing knowledge of upholstery materials and methods: Lifts frame of article and places it on workbench. Tacks material along front rail, outside and inside arms, and onto top outside back. Places padding and material over seat springs and tacks material onto frame to complete seat upholstery. Repeats operation to upholster arms. Places and shapes layers of padding over inside back and tacks material to complete inside upholstery of article. May use grooved foam rubber padding and work excess material into grooves to produce channeled effect and secure material with buttons, using needle, thread, and cotton. May cover burlap with horsehair and cover it with muslin to prepare article for tufting. May cut openings in muslin and push horsehair away from opening and secure it with buttons to create tufting effect.
GOE: 06.02.27 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 79

780.384-010 AUTOMOBILE-SEAT-COVER-AND-CONVERTIBLE-TOP INSTALLER (automotive ser.) alternate titles: automobile-upholstery-trim installer; top-and-seat-cover fitter

Fits and installs automobile seat covers and convertible-top: Examines standard pattern or removes automobile seat or top and measures it to determine amount of cover material required. Cuts material, using shears, and places it on pattern or pins it to seat or top frame. Marks material with chalk to indicate where it is to be sewed, reinforced, and decorated. Secures completed covers, using tacks, staples, and pliers. May operate sewing machine.
GOE: 05.05.15 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 77

780.384-014 UPHOLSTERER (aircraft mfg.)

Lays out, fabricates, and assembles aircraft upholstery, insulation, soundproofing, and interior trim items from assorted materials, according to specifications, using handtools, power tools, machines, and shop equipment: Stacks, aligns, and smooths materials on cutting table. Draws cutting lines on materials, such as leather, fabric, rubber, cork, fiberglass, and plastic, following patterns, templates, sketches, or blueprints, using chalk, pencil, paint, or other method. Cuts along marked lines, using power cutters, scissors, knives, or shears. Drills or punches holes in material. Sews, staples, glues, and cements materials to assemble upholstery or trim items, using handtools, power tools, machines, and equipment. Attaches snap fasteners, grommets, buckles, cords, and other accessories to upholstery or trim items, using handtools or equipment. Attaches binding or applies solutions to edges of cut material to prevent raveling. Hand sews buttons, hooks, or other fasteners onto fabric. Covers aircraft parts, such as tubing and duct work, with specified materials.
GOE: 06.02.32 STRENGTH: M GED: R3 M2 L3 SVP: 6 DLU: 87

780.587-010 SORTER, UPHOLSTERY PARTS (furniture) alternate titles: bundler; upholstery bundler; upholstery handler

Collects, sorts, counts, and bundles upholstery parts in furniture sewing department: Collects parts and carries parts to worktable. Sorts, counts, and stacks parts according to color, quantity, material, and part-number specifications on work ticket. Marks identifying number on top part in stack, using chalk. Copies color, quantity, material, and part number from work ticket onto production report form, using pen or pencil. Ties stacked parts into bundle, using string [PACKAGER, HAND (any industry) 920.587-018]. Carries bundled parts to storage area and places bundles in bins or on shelves according to part number.
GOE: 06.03.02 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 79

780.682-010 SEWING-MACHINE OPERATOR (furniture) alternate titles: tick sewer

Operates sewing machine to join mattress parts, such as covers. May be designated according to part joined as Cover Assembler (furniture). Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

780.682-014 SLIP-COVER SEWER (tex. prod., nec)

Operates sewing machine to join parts, stitch piping or welt to seams, and stitch pleats to form slip covers: Guides parts under machine needle to join them. Positions piping or welt on seam and guides under machine needle to strengthen and decorate covers. Folds pleats in covers, using ruler to measure width and distance between pleats, and guides them under machine needle to stitch pleats. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

780.682-018 UPHOLSTERY SEWER (any industry)

Operates sewing machine to join cut fabric parts to fabricate upholstery coverings for aircraft, automobile, boat, household, and railroad furnishings: May sew pull bands into seams of upholstery parts. May sew welts or false pleats into upholstered furniture covers and be designated Welt Sewer (furniture). May sew cord into fabric to make boxpleats and be designated Boxing-Machine Operator (furniture). May be designated according to section or part seamed as Cover Maker (furniture); Cushion Closer (furniture; tex. prod., nec); Cushion Maker (furniture) II. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 79

780.684-010 BACK PADDER (furniture) alternate titles: upholsterer helper

Assembles padded wooden backs for metal chairs, performing any combination of following duties: Joins padding material, such as wood fiber or cotton, to wooden backplate, using hand stapler or staple gun. Inserts end of padded backplate in stretched cover and depresses pedal to lower ram that forces entire padded plate into cover. Inserts and aligns cardboard strips between cover edges and bottom edge of backplate. Staples cover edges and cardboard strips to backplate. Trims excess material from cover edges with scissors. Burns holes through cover to coincide with predrilled holes in backplate, using heated handtool. Inserts tubular metal frame supports into holes and joins to backplate, using hammer or pneumatic screwdriver.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

780.684-014 BAND-TOP MAKER (furniture) alternate titles: band-top assembler

Assembles and rivets metal strips into rectangular latticework used in construction of bedsprings: Lays specified number of long bands on worktable, evenly spaced and parallel. Inserts rivets and rivet collars through holes in bands. Lays cross bands over long bands, lining up holes with protruding rivet shanks. Strikes shanks with hammer to flatten rivets and secure bands together, forming lattice.
GOE: 06.04.22 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

780.684-018 BOX-SPRING MAKER I (furniture)

Assembles, upholsters, or repairs box springs, using handtools: Fastens coil springs to slats of wood frame, using hammer and nails or stapler. Clips edge-wire to border coils with metal clips and pliers and interlaces coils with twine to secure springs in position. Measures and cuts padding and upholstering fabric, using tape measure and scissors or knife. Spreads materials over coils and staples them to frame to upholster box spring.
GOE: 06.04.34 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

780.684-022 BOX-SPRING MAKER II (furniture)

Staples padding and fabric on coil spring units to upholster box springs: Spreads padding over springs and tucks it in corners of assembly. Places fabric over padding, pulls it to obtain smooth surface, and staples fabric to wood frame, using stapling hammer. Nails fabric handles to frame and tacks dust cloth to bottom of frame, using hammer. May compress spring assembly to facilitate stapling of fabric to frame, using hydraulic or air press.
GOE: 06.04.22 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

780.684-026 CASKET COVERER (fabrication, nec) alternate titles: casket trimmer

Fits and glues fabric covering to outside of casket body, top frame, and top panel: Brushes glue over sides and ends of casket body, top frame, and top panel. Spreads fabric over glued surface, pulling, pressing, and smoothing cover over casket surfaces. Trims excess fabric at corners. Folds edge of cover under bottom and glues, tacks, or staples it to bottom. Tacks or glues trimming material over seams and exposed edges. Cuts and glues paper cover to bottom of casket. May attach hinges to fasten top frame to body. May attach top panel to top frame with screws. May be designated according to part of casket covered as Body Coverer (fabrication, nec); Cap Coverer (fabrication, nec); Panel Coverer (fabrication, nec); Top Coverer (fabrication, nec); Top-Frame Coverer (fabrication, nec).
GOE: 06.04.27 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

780.684-030 CASKET LINER (fabrication, nec) alternate titles: casket upholsterer

Pads and lines inside of bodies and tops of caskets: Spreads layer of excelsior evenly over bottom of casket and spreads layer of cotton over excelsior. Cuts cloth from supply roll, using hand shears, and tacks or staples cloth over bottom padding. Pads and covers sides and ends of casket with cotton and crepe. Staples or tacks lining over padding. Tacks or staples prepared lining into top panel or cuts or drapes lining material into top, depending on casket style. May attach handles and supporting hardware. May fit and glue fabric to inside of casket cover body to fashion designs onto head panels.
GOE: 06.02.22 STRENGTH: H GED: R3 M1 L1 SVP: 3 DLU: 79

780.684-034 CHAIR UPHOLSTERER (furniture) alternate titles: chair trimmer

Upholsters chairs having no springs: Cuts out and molds padding material in place on arms, seats, or backs, and covers padding with cotton wadding,

Stretches and tacks or staples canvas, burlap, or denim over wadding, leaving opening for further filling. Molds and packs wadding under cover, using hands or rod to eliminate lumps. Closes opening with tacks when packing is completed. Stretches precut upholstery covering over covered padding and tacks it in place. Sews or glues trimming over tacks and raw edges of upholstery. May glue foam cushions to particle board backing to form seat cushions for chairs. May glue upholstery material onto shaped foam to make cushions for upholstered furniture.
GOE: 06.02.27 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

780.684-038 COTTON DISPATCHER (furniture)
Tears or cuts cotton wadding or cushioning material to specified size or shape for use in padding upholstered furniture or slip seats: Measures specified length on cotton roll of width and thickness indicated on work ticket and tears cotton apart or places form over wadding and cuts around form. Cuts edging to required length.
GOE: 06.04.27 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

780.684-042 CRUSHER (fabrication, nec) alternate titles: smocker
Crushes (puffs) cloth to form three-dimensional geometric patterns for fancy linings in caskets: Lays material on female crushing die and fits male crushing die or crushing rod over material and into depression of female die. Steams material on crushing board to set shape, using steam hose. Removes male dies or crushing rods. Brushes or sprays glue onto screen and presses backing material against screen. Lays backing material on raised portion of facing material on crushing board. Wipes cloth over backing material to stick fabrics together. Removes and hangs finished article to dry. May sew linings and pillows.
GOE: 06.04.27 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

780.684-046 CUSHION BUILDER (furniture) alternate titles: upholsterer
Secures padding over cushion springs, previously tied into metal frames to form furniture cushions: Places padding on springs and frame. Fastens padding in place, using needle and cord. Sews inner covering of cotton material and outer covering over padded frame. Routes padded cushion to other workers for final sewing.
GOE: 06.04.22 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

780.684-054 CUSHION MAKER I (furniture) alternate titles: cushion assembler; cushion filler; cushion-mat maker; cushion stuffer; machine stuffer, automatic
Fills cushion covers with moss, hair, kapok, down, foam cushions, or spring units, using any of following methods: (1) Stuffs loose fibers, layers of material, or foam cushions into cover with hands. Beats cushions with hands to smooth out lumps. (2) Places layers of cotton wadding or foam cushions in forming box of stuffing machine, or tears and cuts wadding, covers cushion-spring assembly and places wrapped spring assembly in box. Lowers top of forming box and pushes lever or turns handwheel to close side panels and compress cushioning material. Slips cover over open end of forming box and depresses pedal to eject cushioning material into cover. (3) Dumps down, kapok, or other fibers into hopper of blower. Holds end of cushion cover over spout of blower and starts blower to fill cover. Weighs cushion and adds or removes material to obtain cushion of specified weight. May sew ends of cushion covers after filling, using needle and thread or power sewing machine.
GOE: 06.04.23 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 79

780.684-058 EDGE ROLLER (furniture)
Installs and pads first covering on upholstered pieces, such as armrests and chair seats not equipped with springs, to prepare piece for final covering. Spreads cotton, kapok, or moss padding evenly over part. Draws and tacks covering of canvas, burlap, or denim tightly over padding, using upholstery tacks and hammer.
GOE: 06.04.22 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

780.684-062 FABRICATOR, FOAM RUBBER (any industry) alternate titles: assembler; cementer; foam fabricator
Cuts and assembles padded articles, such as mattresses or cushions, from molded foam rubber sheets, pads, or scrap. Positions and measures or marks pattern outline on foam rubber piece, using tape measure and crayon or pencil. Cuts around measurement or pattern outline, using electric knife or bandsaw. May place two identical pieces together, brush cement along edge, and press edges of pieces together to form cushion or mattress. May cement strips around edges of assembled pieces and over seams to provide smooth finish and reinforce seams. May staple spring assembly to wood frame and leno or sisal cloth to top of springs to form box-spring unit.
GOE: 06.04.29 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

780.684-066 FILLER (tex. prod., nec) alternate titles: stuffer
Fills pillows, cushions, and comforters with down, kapok, wool, or other filler, using filling machine: Ties or holds opening of cover around discharge tube of filling machine and presses button to start blower that sucks filling into cover. Estimates amount of filler blown into cover by either timing blower or weighing articles. Stuffs filling into open end of cover, using metal rod. May stuff covers by hand. May be designated according to article filled as Cushion Filler (tex. prod., nec); Pillow Filler (tex. prod., nec); Sleeping-Bag Filler (tex. prod., nec); or according to kind of filler used as Down Filler (tex. prod., nec).
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

780.684-070 MATTRESS FINISHER (furniture) alternate titles: finisher, hand; stitcher, hand
Tufts and stitches mattresses to finish them: Measures and marks off tufting points on both sides of mattress with rule and crayon. Threads cotton tufts or tufting buttons and sews through mattress to tie them to tufts or buttons on under side. Stitches mattress border (boxing) to side padding to stiffen mattress edge and prevent sagging through displacement of padding. Gathers corners of padding to shape and to stitch rolled edge and preserve box-like shape of mattress. May tend equipment, such as tape-edge, roll-edge, or tufting machines. May be designated by specific function or specialty as Roll-Edge Stitcher, Hand (furniture); Side-Stitcher (furniture).
GOE: 06.02.27 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 77

780.684-074 MATTRESS MAKER (furniture)
Pads and covers innerspring assemblies to form mattresses: Cuts cover material, using electric cutting knife and scissors, and spreads and staples burlap, leno, or sisal cloth to both sides of innerspring assemblies. Spreads padding over sides of innerspring and tends tape-edge machine that sews cover over padding. Tufts mattresses by hand or by tending machine to hold padding in place. Sews roll edges on mattress by hand or by machine.
GOE: 06.02.27 STRENGTH: M GED: R3 M1 L2 SVP: 4 DLU: 77

780.684-078 PADDER, CUSHION (furniture) alternate titles: seat padder
Assembles seat pads, backrest pads, and arm covers for metal chairs, using pneumatic press and handtools: Positions specified material, such as cotton, foam-rubber padding, or precut leather, on base of pneumatic press. Depresses pedal or pushes handle to lower press onto materials. Draws wire through passage around edge of material and twists ends of wire together to tighten covering, using pliers. Hammers upholstery clips through covering to fasten edge to bottom of frame. Removes excess covering with scissors. Releases pedal or pulls handle to raise press. May assemble backrest pads or arm covers, using pliers, scissors, glue, and wire.
GOE: 06.04.22 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

780.684-082 PANEL COVERER, METAL FURNITURE (furniture) alternate titles: side-piece coverer
Covers sheet metal sections of furniture with precut cotton padding and upholstery materials, such as fabric, leather, or plastic: Selects sheet metal panel, padding, and upholstery material according to work ticket. Coats surface of panel with glue, using brush or spray gun. Positions and presses padding on panel and trims excess cotton from edge, using scissors. Positions upholstery material over padding and pulls material taut to remove wrinkles. Presses edges of upholstery material onto prongs protruding from back of panel and bends prongs to secure material, using hammer. Trims excess material from edges with scissors. May be designated according to type of panel padded as Back-Panel Padder (furniture); Inside-Panel Padder (furniture); Side-Panel Padder (furniture).
GOE: 06.04.22 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

780.684-086 PANEL MAKER (furniture) alternate titles: panel coverer
Pads and covers panels for use in upholstered furniture: Places precut felt or cotton batting over cardboard or wood panel and stretches covering material over padding. Staples edges of material to back of panel so that material is tight, smooth, and even. May sew edging on panels, using sewing machine.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

780.684-090 POCKETED-SPRING ASSEMBLER (furniture) alternate titles: racker
Sews together sections of pocketed coil springs to assemble innersprings for mattresses: Cuts sections of uniform length from chain of pocketed coils with shears, and spreads specified number in layer across pegs of vertical rack. Sews fabric of pocket sections together (length and width of assembly), using needle and thread. Turns assembly over and repeats process.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

780.684-094 SLIP-SEAT COVERER (furniture)
Pads and covers slip-seats (removable chair seats), using one of following methods. (1) Places padding on wooden panel, stretches cover over padding, and tacks or staples edges of cover to panel. (2) Inserts foam rubber cushion in cover and tacks or staples cushion to wooden backing panel. (3) Places cover, right side down, on form under air press. Lays padding, fiber filling, and backing panel over cover. Opens valve to lower press against backing panel to compress assembly. Cuts excess padding and filler from panel, using shears. Draws edges of cover over panel and tacks or staples edge to panel. May staple, tack, or paste material content tag to backing panel.
GOE: 06.04.27 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

780.684-098 SPRING ASSEMBLER (furniture) alternate titles: coil placer; coil-spring assembler
Assembles and fastens coil springs in wire frames to form box spring units for beds or chairs: Lays bed of crossed wiring in jig and clinches or wires coil springs to wiring. Fastens tops of coils together with tie wires or metal clips. Clips edge wire to tops of outside coil springs, using clipping tool. Cuts protruding ends of wires, using pliers. May staple springs to wooden frame individually or as assembled unit, using stapler. May attach channel-shaped rim to top coils of bedsprings by crimping edges of channel together over wire, using handtools. May be designated according to type of spring as Bedspring Assembler (furniture); Chair-Spring Assembler (furniture); Cushion-Spring Assembler (furniture).
GOE: 06.04.22 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

780.684-102 SPRING CLIPPER (furniture)
Cuts and clips spring to form assembly units of specified size and shape: Cuts spring assembly units, using wire cutters. Fits units together, according to

specifications, using *clinching tool*. Clinches border wire to spring assembly to reinforce unit.
GOE: 06.04.24 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

780.684-106 SPRINGER (furniture) alternate titles: hand-tier; spring setter; spring tacker; spring tier; spring upholsterer

Installs webbing and springs in furniture frames preparatory to upholstering: Tacks or staples ends of webbing strips to side of frame, using tack hammer or staple gun. Stretches webbing across frame with *webbing stretcher* and tacks ends to opposite side of frame. Tacks strips to back of frame and weaves them through crosspieces to cover opening. Cuts webbing overlap with hand shears. Positions coil springs on webbing and fastens spring to webbing with needle and twine or with metal clips, using *clinching tool*. Tacks twine to edges of frame opening and laces and ties twine to springs to stabilize and secure them in place. Cuts burlap or canvas to cover springs, places cover on springs, and tacks to edges of frame. May install zigzag or no-sag springs in backs of sofa and chair frames, using metal clips and hammer. May tack metal support strap on frame, using hammer. May fasten border wire to springs, using metal clips or by twisting crimp wire around border wire and top of spring. May cover frame opening by attaching web-fabric panels to frame with small springs. May sew heavy paper over border wire, using needle and stitching twine to soften edge.
GOE: 06.02.32 STRENGTH: H GED: R3 M1 L2 SVP: 4 DLU: 79

780.684-110 TESTER, CONVERTIBLE SOFA BEDSPRING (furniture)

Repairs assembly and operational defects in convertible-sofa bedsprings preparatory to framing and upholstering: Examines unit for missing parts, and tightens loose rivets with pneumatic riveting gun. Places mattress in unit, pulls unit open and pushes it closed to test ease of operation. Adjusts pivot bolts and straightens connecting rods and brackets, using handtools. Rubs rough surfaces and joints with thinner and solvent to remove excess paint and grease and minimize friction.
GOE: 06.02.24 STRENGTH: M GED: R3 M1 L2 SVP: 4 DLU: 77

780.684-114 TRIMMING ASSEMBLER (furniture) alternate titles: cover assembler

Selects upholstery trimmings, such as gimp, braid, or fringe, to match material used for covering furniture. Cuts off amount required to complete upholstering of each furniture unit.
GOE: 06.02.23 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

780.684-118 UPHOLSTERER, OUTSIDE (furniture)

Upholsters outside sections of furniture such as chairs and sofas, utilizing knowledge of upholstery procedures: Tacks cardboard, padding, and upholstery material to top, side, and bottom rails of outside arms, fitting and shaping materials to obtain specified contour. Tacks covering material to top, bottom, and side rails of back frame and sews upholstery covering edges onto inside back and outside arm coverings with needle and thread to complete upholstery of furniture piece. Tacks cover to bottom rails to enclose bottom area. Attaches trimming material, such as gimp, braid, binding, skirts, and panels to upholstered frames, using glue, staples, nails, or tacks. May screw leg units to frame.
GOE: 06.04.27 STRENGTH: M GED: R3 M1 L2 SVP: 5 DLU: 79

780.684-122 UPHOLSTERY REPAIRER (furniture)

Repairs or replaces damaged or defective upholstery on chairs or sofas: Examines upholstery to locate defects. Sews tears or rips with needle and thread. Pulls tacks or staples from defective upholstery, using hammer or pliers, and removes upholstery from frame. Tacks, sews, or staples replacement upholstery to frame. May cut covering from bolt of cloth, using part removed as pattern, or may carry defective parts to cutters to have replacement parts cut to specifications.
GOE: 05.05.15 STRENGTH: M GED: R3 M1 L1 SVP: 6 DLU: 77

780.684-126 UPHOLSTERY TRIMMER (furniture) alternate titles: gimp tacker

Attaches gimp, braid, binding, skirts, or other trimming material to upholstered frames, following instruction on work ticket, using glue, staples, nails, or tacks.
GOE: 06.04.27 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 79

780.684-130 WEBBING TACKER (furniture)

Stretches and tacks or staples webbing to underside of couch or chair frames to provide foundation for springs: Stretches and tacks or staples specified number of webbing pieces to sides of frame. Secures ends of other pieces to end of frame. Weaves pieces lengthwise through crosspieces and stretches and secures them to other end of frame until opening is covered with interlaced webbing.
GOE: 06.04.27 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

780.684-134 UPHOLSTERER, ASSEMBLY LINE (furniture)

Upholsters one section of sofa, chair, or furniture frames, using one of following methods: (1) Attaches spring assembly section to seat and back of frame with clips or ties springs with twine and tacks ends of twine to frame. (2) Places padding and covering over seat springs and tacks or staples covering to frame to complete seat upholstering, using tack hammer or powered staple gun. (3) Places padding and covering over inside of arms and tacks or staples covering to frame to complete inside arms. (4) Places layers of padding over inside back, shaping padding to specifications, and tacks or staples covering over padding to make inside back. (5) Tacks or staples cardboard, padding, and upholstery material to top, side, and bottom rails of outside arms, fitting and shaping materials to obtain smooth contour.(6) Tacks or staples covering material to top, bottom, and side rails of back frame, and sews upholstery covering edges to adjoining inside back and outside arm coverings with needle and thread to complete upholstery of furniture piece. (7) Tacks or staples cover to bottom rails to enclose bottom area. May attach trimming material, such as gimp, braid, binding, skirts, and panels to upholstered frames, using glue, staples, nails, or tacks. May screw leg units to frame. May be designated according to part or pieces upholstered as Arm Maker (furniture); Back Maker (furniture); Seat Maker (furniture).
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 86

780.685-010 MATTRESS-FILLING-MACHINE TENDER (furniture)

Tends machine that compresses padded spring assemblies and inserts them into prefabricated covers to form mattresses: Spreads precut and weighed cotton bats into compression box of filling machine. Places sisal-covered innerspring assembly on top of batting and spreads cotton batting on top of spring, stuffing excess at ends into springs. Pushes cover over discharge spout and depresses pedal to compress and insert padded spring into cover. May operate sewing machine to close open end of mattress cover. May build up layers of batting in compression box without innerspring to make crib pads and be designated Crib-Pad Maker (furniture).
GOE: 06.04.20 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

780.685-014 STUFFING-MACHINE OPERATOR (furniture) alternate titles: pad maker

Tends machine that cleans and fluffs filling and blows it into prefabricated covers to form mattress or other upholstered pads: Weighs filling material, such as cotton or sisal, to obtain specified weight and dumps into hopper of machine. Places cover over discharge tube and starts machine that cleans, fluffs, and blows filling material into cover. Removes filled cover and closes end, using sewing machine. Places pad on table and strikes it with wood pole to beat and level filling. Turns pad over and repeats process. May fill pad by piling required amount of filling on table and slipping cover over pile. May pad by hand [TUFTER, HAND (furniture) 780.687-050] or by machine [TUFTING-MACHINE OPERATOR (furniture) 687.685-014].
GOE: 06.04.36 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 78

780.685-018 WIRE-BORDER ASSEMBLER (furniture) alternate titles: topper

Tends machine that attaches edge-wire frame to coil spring assemblies with *helical springs*: Places spring assembly on table and positions edge wire on top of springs. Inserts helical spring in spinner and depresses pedal to start and control speed of spinner. Guides emerging helical spring so that it joins edge wire and tops of coil springs on ends and sides of assembly. Removes surplus helical spring, using nipper, and crimps end with pliers. Turns and positions assembly to attach edge wire to remaining ends or sides. Turns spring assembly over and repeats process.
GOE: 06.04.20 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

780.687-010 BORDER MEASURER AND CUTTER (furniture) alternate titles: border measurer

Winds border fabric around pegs to obtain specified lengths for mattresses and cuts fabric into lengths, using scissors. May sew together ends of border with sewing machine.
GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

780.687-014 CLIPPER AND TURNER (furniture)

Clips ends of innersprings, using wirecutter and pliers, and turns wires under spring to prevent them from piercing mattress. Cuts excess material from *helical springs* and crimps ends around coil spring loops, using pincers.
GOE: 06.04.24 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

780.687-018 HASSOCK MAKER (tex. prod., nec)

Fills sewed hassock covers with precut polyfoam filler: Places filler inside tack (cover) and centers evenly between ends of cover. Places hassock in pleater and draws strings together to pleat and close ends. Attaches buttons to ends of hassock with cord and hook. May stuff filling material, such as cotton, excelsior, or kapok, into hassock cover and compress it under hydraulic press to shape and firm hassock.
GOE: 06.04.34 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

780.687-022 INSPECTOR II (furniture)

Examines mattresses and box springs for defects prior to packaging: Inspects surfaces for puckers, gathers, and irregular corners. Measures length and width of mattress and box spring to ensure conformity with specifications, using tape measure. Cuts loose threads and fabric ends from mattresses meeting standards and removes defective ones from conveyor. May use water on surfaces to shrink puckers, using spray gun.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 4 DLU: 77

780.687-026 MATTRESS STRIPPER (furniture)

Strips and removes padding from used mattresses preparatory to reconditioning them: Places mattress on table. Cuts tufts or buttons and stitching, using knife or scissors, or rips cover off to open mattress, and removes padding.
GOE: 06.04.27 STRENGTH: M GED: R1 M1 L1 SVP: 4 DLU: 77

780.687-030 MATTRESS-SPRING ENCASER (furniture) alternate titles: spring encaser

Covers innerspring assemblies with cotton or sisal fabric to prevent upholstery material from shifting: Spreads precut fabric on table, lays innerspring on

fabric, and spreads fabric on top of spring. Draws edges together and sews edges with needle and twine or staples edges together, using hand stapler. Positions sisal on innerspring unit and staples perimeter, using pneumatic staple gun.
GOE: 06.04.22 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

780.687-034 PADDING GLUER (furniture)
Fastens padded edging to sofa and chair frames prior to upholstering, using glue and *clinching tool*. Cuts strips of foam rubber and burlap edging to fit seat edges and armrests of sprung-up chair and sofa frames, using knife. Applies glue to seat edge, armrests and foam rubber strips, using spray gun, and presses surfaces together. Aligns and attaches burlap edging to edges of seats, using clinching tool. Slides sprung-up frames to conveyor and loads frames onto conveyor. Cleans spray gun with solvent and refills glue tank.
GOE: 06.04.27 STRENGTH: H GED: R2 M1 L1 SVP: DLU: 77

780.687-038 SPRING COVERER (furniture)
Staples or tacks burlap, canvas, denim, or synthetic material over springs in furniture frames prior to upholstering where fabric is not installed by SPRINGER (furniture). Cuts covering material to specified size, using scissors. Sews twine through covering material and around coil springs to stabilize them.
GOE: 06.04.27 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

780.687-042 STAPLER, HAND (furniture) alternate titles: sisal operator; wire stitcher, hand
Staples padding to both sides of innerspring or top of boxspring assemblies: Places spring assembly on table, spreads leno or sisal cloth over top of springs, and staples it to edge wire and tops of spring coils. Spreads padding over cloth, folding edges over edge wire and into coils, and staples it to edge wire. Turns innerspring assembly over and spreads cloth and padding and staples them to assembly. May fasten padding to edge wire, using hog rings and pliers. May hand sew padding to springs. May staple covering to boxsprings, using hydraulic press. May staple coil spring assembly to wood frame and be designated Stapler, Coil Unit (furniture).
GOE: 06.04.22 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

780.687-046 STUFFER (tex. prod., nec)
Stuffs pads and cushions with filling material, such as excelsior, foam rubber, kapok, or cotton, by hand.
GOE: 06.04.23 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 78

780.687-050 TUFTER, HAND (furniture) alternate titles: button tufter; pad tufter
Sews and tufts mattresses and pad to hold filling in place: Places mattress or pad in press and moves button to lower press head. Tilts press to upright position. Pushes needle carrying tufting cords through mattress or pad at openings in press head. Ties buttons or knots tufts to cord ends on both sides. Moves button to raise press head and removes mattress or pad.
GOE: 06.04.27 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

780.687-054 UPHOLSTERER HELPER (any industry)
Assists AUTOMOBILE UPHOLSTERER (automotive ser.) or FURNITURE UPHOLSTERER (any industry) to repair and rebuild upholstered furniture or automobile seats: Rips or cuts away worn covering material and padding from frame and pulls tacks from frame, using tack puller. Lifts furniture onto worktable. May remove spots from upholstery, using cleaning fluids. May assist in rebuilding of fabric automobile tops. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 06.04.27 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

780.687-058 UPHOLSTERY CLEANER (furniture)
Cleans upholstery on new furniture preparatory to storage or shipping: Inspects spots to ascertain composition, selects solvent, and applies it to spot with cloth or brush. Cleans dust, lint, and cloth scraps from fabric, using airhose or vacuum cleaner. Applies steam to upholstery from steam hose to raise nap, brighten color, and tighten fabric. May smooth upholstery into folds or push padding to corners of cushions and backs with pick. May rub exposed wooden parts with furniture polish. When applying steam to cleaned upholstery, may be designated Steam Cleaner (furniture).
GOE: 06.04.39 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 78

780.687-062 BACK TUFTER (furniture)
Attaches tufting buttons to foam cushions for use in backs of upholstered furniture: Positions cushion on worktable and spreads and smooths upholstery fabric over cushion. Selects matching (color) button, punches button by hand through precut hole in cloth and cushion, and secures button to cushion with spring washer. Forces cloth around button into pleats, using wedge and fingers.
GOE: 06.04.27 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 86

780.687-066 INSPECTOR I (furniture)
Inspects wood frames and metal springs of upholstered furniture to ensure assembled parts meet company specifications: Examines wood furniture frames to detect defects, such as loose joints, splits, and warped areas. Marks defects with chalk for repair. Inspects metal springs installed in frames for defects, such as misalignment and faulty attachment to frame. Measures position of springs in frame, using ruler, to ensure assembly is mounted according to specification. Examines fabric covering spring assembly to ensure that fabric is taut and secured to springs.
GOE: 06.03.02 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 86

780.687-070 SKIRT PANEL ASSEMBLER (furniture) alternate titles: skirt clipper
Fastens rigid plastic-coated fabric between upholstery skirt panel and liner, and presses panel for smoothness and shape, using steam iron and presser. Cuts threads joining sewn panels, using scissors. Presses panels right-side out, using hand steam iron. Cuts coated fabric from roll and inserts fabric between panel and liner and staples fabric to parts to impart body to panel prior to final assembly. Presses assembled panel to flatten seams and shape panel, using steam presser. Examines panel to ensure specifications are attained. Places pressed panels in designated area.
GOE: 06.04.27 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 86

781 LAYING OUT, MARKING, CUTTING, AND PUNCHING OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with laying out, marking, cutting, and punching garment, canvas goods, and house furnishing parts from single or multiple layers of material preparatory to piecing up, fitting, and stitching or machine-sewing.

781.131-010 SUPERVISOR, PATTERN MARKING (garment)
Supervises and coordinates activities of workers engaged in marking, reproducing, and assembling paper garment patterns for use by manufacturers: Observes operations to verify that pattern parts are marked for fabric weave lines, coded to specifications, reproduced clearly, and assembled in specified order. Modifies new patterns, using knowledge of mathematics and pattern-making principles. Determines layout for various pattern sizes to prevent waste and estimates material yardage required. Trains new workers to mark, reproduce, and assemble patterns. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.03.02 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

781.134-010 SUPERVISOR, CUTTING DEPARTMENT (any industry)
Supervises and coordinates activities of workers engaged in spreading, marking, and cutting fabrics: Determines quantity and type of material to be cut and cutting patterns or dies to be used, according to cutting orders and design specifications. Directs MARKERS (any industry) I 781.384-014 in positioning patterns or paper markers on lays of cloth to ensure that pattern and weave of parts match when assembled and to minimize waste. Examines cut parts for conformance to outline, notches, and other marks on pattern. Trains workers by demonstrating work methods and techniques and use of spreaders and cutting equipment. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 78

781.287-010 CLOTHING-PATTERN PREPARER (garment) alternate titles: dopster
Determines style and size of standard patterns and any variations to be used in cutting out made-to-measure clothing: Prepares work order ticket, using previously recorded notations indicating customer's measurements and style and fabric preferences. Designates standard patterns to be used in cutting out each article of clothing. Makes notations on ticket to indicate to MARKER (any industry) I any variations from standard patterns necessary to fit individual customer, utilizing knowledge of pattern-modification techniques.
GOE: 06.02.31 STRENGTH: S GED: R4 M4 L3 SVP: 6 DLU: 77

781.361-010 ASSISTANT DESIGNER (garment)
Lays out, marks, and cuts muslin pattern and garment parts for manufacturer of women's sportswear, using design sketch, master pattern, and scissors: Traces outline of specified paperboard pattern onto muslin fabric, and cuts muslin pattern, using scissors. Positions and pins muslin pattern sections onto dressmaker model form for marking of style lines by designer. Removes marked sections from model and traces style lines on pattern, using tracing wheel and carbon paper. Positions and pins garment and muslin patterns onto form for designer to approve that patterns conform in proportion, harmony, and balance to design-sketch concept. Traces and cuts garment fabric parts, following muslin pattern. Advises workers who sew garment parts together on procedures, such as type of stitching, positioning of collars and sleeves on garments, and correcting defects.
GOE: 05.05.15 STRENGTH: L GED: R3 M2 L3 SVP: 7 DLU: 86

781.361-014 PATTERNMAKER (furniture; garment; tex. prod., nec)
Draws and cuts out sets of master patterns for articles, such as garments, parachutes, and upholstery, following sketches, sample articles and design specifications: Examines sketches or sample articles and design specifications to ascertain number, shape, and size of pattern parts and quantity of cloth required to make finished article, using knowledge of manufacturing processes and characteristics of fabrics. Discusses design specifications with designer, when necessary. Draws outlines of parts on paper, using drafting instruments, such as calipers, squares, straight and curved rules, and pencils. Draws details on outlined parts to indicate position of pleats, pockets, buttonholes, and other items. Marks outlined garment parts with lines and notches that serve as guides in joining parts of garment. Cuts out master patterns, using scissors and knife, and marks size and style information on patterns. May draw and cut out sets of patterns of different sizes, following master patterns [PATTERN GRADER-CUTTER (garment) 781.381-022]. May fabricate template from plywood, trace around template with chalk to outline pattern on material, and cut off parts.

using power shears [DEVELOPER PROVER, INTERIOR ASSEMBLIES (aircraft mfg.) 693.261-010].
GOE: 05.03.02 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 78

781.381-010 CARTOON DESIGNER (tex. prod., nec)
Lays out and draws embroidery cartoon on pattern paper to form embroidery pattern for emblems, according to specifications: Lays out and draws sketch of cartoon, using drafting instruments, such as triangle, pencils, and crayons. Places customer-approved cartoon in enlarging apparatus. Positions pattern paper on drawing board beneath enlarger and pushes button to illuminate enlarger. Looks through eyepiece of enlarger and traces image of cartoon onto pattern paper to form embroidery pattern. Writes specifications on border of pattern and marks identifying information on outside of pattern, using pencil.
GOE: 01.02.03 STRENGTH: S GED: R4 M3 L3 SVP: 7 DLU: 77

781.381-018 LEATHER STAMPER (leather prod.) alternate titles: decorator; leather tooler; tooler
Cuts, stamps, stains, or paints lettering and decorative designs on leather products, such as belts, handbags, luggage, saddles, and novelty items: Draws design and lettering on wet leather with stylus or transfers design by placing pattern or template on leather and pounding with mallet. Cuts outline of design and lettering with knife. Bevels and flares edges of cuts and fills in design and background, using various stamping tools and mallet. May trim and punch leather pieces and sew them together by hand or machine. May apply various colors and shades of stain to design and background and be designated Spanisher (leather prod.).
GOE: 01.06.02 STRENGTH: L GED: R3 M1 L1 SVP: 5 DLU: 77

781.381-022 PATTERN GRADER-CUTTER (garment)
Draws and cuts out sets of patterns for specified ranges of garment sizes, grading (increasing or decreasing dimensions) master pattern for each size within set, using either of following methods: (1) Obtains data from charts that specify modifications of master pattern dimensions necessary to produce patterns of various sizes. Positions master pattern on paperboard and drafts reference points on paperboard to modify dimensions of master pattern, according to specification charts, using drafting instruments. Draws lines between reference points, producing outline of graded pattern. (2) Positions master pattern in clamp of grading device and places paperboard under pattern. Turns knobs to set dial indicator at specified size and moves master pattern through series of reference points on paperboard. Marks reference points on paperboard. Draws lines between reference points, producing outline of graded pattern. Marks location of notches in graded patterns that serve as guides for joining garment parts. Cuts out graded patterns, using scissors, and marks garment size, sections, and style number on each pattern piece.
GOE: 05.03.02 STRENGTH: L GED: R3 M3 L3 SVP: 6 DLU: 77

781.381-030 SAIL-LAY-OUT WORKER (tex. prod., nec)
Lays out and draws pattern of sail on floor, following design specifications and dimensions: Calculates dimensions and specifications from sales order and enters data on worksheet. Computes dimensional allowances for draft of sail and stretching of sail cloth, and corrects dimensional specifications of pattern. Draws actual size and shape of sail on floor with chalk, chalkline, and measuring tape. May supervise other workers in shop engaged in cutting, sewing, and finishing cloth to produce complete sail. May lay out and cut sail cloth [SAIL CUTTER (tex. prod., nec)].
GOE: 05.05.15 STRENGTH: M GED: R4 M3 L2 SVP: 8 DLU: 77

781.381-034 GRADER MARKER (garment)
Draws and cuts sets of garment patterns, grading (increasing or decreasing pattern dimensions) master pattern for each set, and draws marker pattern for use in cutting garment material: Receives set of master garment patterns from PATTERNMAKER (furniture; garment; tex. prod., nec) 781.361-014 for grading. Positions paperboard, grading device, and master pattern in specified sequence on worktable to mark reference points that serve as guides for joining garment part and pattern outline. Turns knobs on grading device to set dial indicators at specified settings, utilizing reference chart and reference points on master pattern. Marks reference points on paperboard and draws lines between points to outline pattern. Cuts paperboard along pattern outline, using scissors, and marks each pattern section with information, such as garment style, size, and number. Positions carbon paper, marking paper with printed measurements, and complete paperboard pattern sets on worktable, and arranges patterns on marking paper to minimize waste and to determine material needed to position complete pattern set. Draws outline of patterns on marking paper for use in cutting garment material.
GOE: 05.03.02 STRENGTH: L GED: R3 M2 L3 SVP: 6 DLU: 86

781.384-014 MARKER I (any industry) alternate titles: pattern marker
Arranges patterns and marks identifying numbers, assembly guidelines, and outline of patterns on lay of cloth, leather, paper, or other materials to facilitate cutting and sewing operations, employing knowledge of marking, cutting, and manufacturing processes to minimize waste: Selects lay of material and patterns according to specifications. Compares pattern with cutting order to verify style of garment, size scale, type and yardage of cloth, and number of garments to be cut. Positions pattern on lay according to type, print, or weave of material, so that parts match when assembled and waste is minimized, using rules and squares as work aids. Outlines patterns on top of materials, using chalk stick, dust bag, crayon, soap, or wax. May mark part size and model number within outlines. May pin marked paper or outlined patterns onto material. May notch, drill, and mark holes in lay to serve as guides for attachment of other parts, using notcher, electric drill, or electric drill equipped with cartridge containing fluorescent marking solution. May be designated according to type of material marked as Canvas Marker (tex. prod., nec), or according to article marked as Dress Marker (garment); Hat Marker (hat & cap); Shirt Marker (garment).
GOE: 06.02.31 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 78

781.384-018 SAIL CUTTER (tex. prod., nec)
Spreads sail cloth over floor pattern and cuts cloth into specified lengths and shapes for subsequent sewing into complete sail: Lays first width of sail cloth over pattern and fastens it into position, using weights or awls. Marks outline of sail on cloth, following pattern and allowing margin of material to overlap for seams. Cuts cloth along outline, using hand shears. Draws seam guidelines on edge of cloth with pencil to mark seam overlap. Spreads succeeding widths of cloth over pattern in specified manner and cuts with hand shears until sail is complete. Draws lines across joints of cloths with pencil as guides to match cloths for assembly. Picks up, marks, and stacks cloths in order of sewing. Lays out and cuts reinforcing patches for sails. Trims sails after machine seaming and creases edges by hand to prepare for machine finishing. May prepare sails for repair by opening seams and cutting out defective cloth or rope with hand shears. May shrink cotton cloths before cutting by soaking in water. May lay out and draw sail patterns on floor [SAIL-LAY-OUT WORKER (tex. prod., nec)].
GOE: 06.02.27 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

781.484-010 PLEAT PATTERNMAKER (garment; tex. prod., nec)
Lays out cardboard patterns as specified for use in making pleats in fabrics: Computes dimensions of pleats according to length of material, and size and style of garment specified on work ticket. Measures and marks top and bottom of pattern into designated widths for pleats, using ruler and protractor. Punches hole in cardboard to mark positions, using pin. May score pleat crease lines and fold pattern.
GOE: 06.02.31 STRENGTH: L GED: R3 M3 L2 SVP: 5 DLU: 77

781.667-010 ASSEMBLER (glove & mit.)
Sorts glove parts after cutting according to size, style, type of material, and color. Stacks specified number of parts for each style in box or tray. Stores extra parts in bins. May carry dies from storage to cutting machine and assist DIE CUTTER (any industry) in mounting gang dies onto rack of machine.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

781.682-010 TRIMMER, MACHINE (garment; knitting)
Operates sewing machine equipped with cutting blade attachment to trim excess fabric from material or article. Depresses pedal to start machine, moves hand and foot controls, and guides material or articles under blade to trim excess fabric and facilitate subsequent operation. May be designated by type of article or material trimmed as Collar Trimmer (garment; knitting); Brassiere-Cup-Mold Cutter (garment).
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

781.684-010 CARPET CUTTER I (carpet & rug) alternate titles: cut order hand; rug cutter
Measures and cuts carpet from stock rolls to specified dimensions or according to diagrammed instructions, using tape measure, triangle, chalkline, and hand cutting tool: Unrolls carpeting on floor, measures cutting dimensions, using triangle and tape measure, and marks cutting guide lines, using chalkline. Inserts and aligns hand cutting tool under carpet, and pushes and guides cutting tool across carpet to cut required size and shape carpet from stock roll. Rerolls carpeting to be returned to storage and rolls up cut carpet to facilitate further operations.
GOE: 06.02.27 STRENGTH: M GED: R2 M2 L2 SVP: 4 DLU: 77

781.684-014 CUTTER, MACHINE I (any industry) alternate titles: cloth-cut.ing-machine operator
Cuts multiple layers of fabric into parts for articles, such as canvas goods, house furnishings, garments, hats, stuffed toys, and upholstered furniture, using portable electric cutter: Inserts base of cutter under layers of fabric, starts cutter, and guides cutter around edges of pattern or template or along markings on fabric to cut out parts. Drills holes through layers of fabric, using electric drill, or cuts notches in edges of parts with scissors or electric cutter to mark parts for assembly. Sharpens blade with abrasive stone or belt attached to cutter as quality of cut indicates dull blade. Changes cutter blades, using screwdriver or wrench. May guide layers of fabric around blade of stationary cutter (bandsaw), according to pattern markings. May spread fabric on table preparatory to cutting [SPREADER, MACHINE (any industry) 781.685-010]. May arrange patterns on top ply of fabric and mark outline of pattern on fabric with chalk or crayon [MARKER (any industry) I 781.384-014]. May separate cutting waste according to color of material. May be designated according to type of cutting machine used as Circular-Knife Cutter, Machine (any industry); Straight-Knife Cutter, Machine (any industry); or according to type of material, article, or part cut as Canvas Cutter, Machine (tex. prod., nec); Cover Cutter, Machine (furniture; tex. prod., nec); Drapery Cutter, Machine (tex. prod., nec); Garment-Parts Cutter, Machine (garment); Hat-Parts Cutter, Machine (hat & cap). May be designated: House-Furnishings Cutter, Machine (tex. prod., nec); Terry-Cloth Cutter, Machine (tex. prod., nec); Upholstery Cutter, Machine (furniture).
GOE: 06.02.27 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 79

781.684-018 CUTTER, ROTARY SHEAR (tex. prod., nec)
Cuts toweling into individual towel lengths, using rotary shear: Pushes boxes of material into feeding position and threads toweling under guides on cutting

table. Pulls material across table and guides rotary shear along cut marks woven into material to cut toweling into individual lengths. Presses button on side of rotary shear to tally production. Stacks towels on table. May feed cloth from finishing ranges onto cutting table.
GOE: 06.04.27 STRENGTH: L GED: R2 M[illegible]2 SVP: 3 DLU: 77

781.684-022 CUTTING INSPECTOR (tex. prod., nec)
Examines parts of articles, such as bedspreads, curtains, or draperies, prior to assembly to detect cutting defects: Compares parts with pattern to determine accuracy of cutting. Trims parts to fit pattern, using scissors. Marks parts at specified places to indicate assembly point, using chalk or pencil.
GOE: 06.03.02 STRENGTH: L GED: R3 M1 L1 SVP: 3 DLU: 77

781.684-026 DRAPER (garment; knitting)
Examines fit and hang of garments, and marks location of trimmings and fasteners to be added and defects to be corrected: Positions garment on sized model form and examines fit and hang of garment for conformity to model. Indicates defects, such as wrinkles, bulges, or puckers, and positioning of fasteners and trimming, such as belts, buttons, sashes and snaps, by pinning garment or marking with chalk. May be designated according to garment draped as Coat Draper (garment); Dress Draper (garment).
GOE: 06.02.31 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 77

781.684-030 DRAPERY-HEAD FORMER (retail trade)
Forms heading in drapes, using shears, steam iron, and sizing device: Lays drapes on table to straighten fabric. Measures fabric to specification and fastens material to table, using sizing device and clamps. Cuts uneven edges of material with shears. Folds material over crinoline and presses material with steam iron to form heading.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

781.684-034 LAY-OUT-MACHINE OPERATOR (tex. prod., nec) alternate titles: prehemmer; tabler
Measures curtains, draperies, and bedspreads to determine if lengths meet specifications and pins or marks hems in them, using layout table: Slides adjustable straightedge of layout table to specified position, using graduated marks of table as guide. Clamps edge of material to straightedge and spreads material over table. Verifies length of material against scale and removes surplus with shears. Folds edges of material and pins them in place to form hems.
GOE: 06.04.27 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

781.684-038 NYLON-HOT-WIRE CUTTER (tex. prod., nec)
Marks and cuts nylon webbing and cord for parachute harness and lines, using heated wire cutter: Positions article on board under marking guide and marks assembly and sewing guides, using pencil. Depresses pedal to lower heated wire that cuts and seals edges of nylon to prevent raveling.
GOE: 06.04.27 STRENGTH: L GED: R2 M2 L1 SVP: 3 DLU: 77

781.684-042 PERFORATOR (tex. prod., nec) alternate titles: pattern-perforating-machine operator
Punches designs on paper to form embroidery patterns (stencils), using either of following methods: (1) Inserts needle in holder of electric perforating tool and turns dial to regulate perforating speed. Positions paper on felt pad beneath tool and presses button to start tool. Guides needle over paper following predrawn design, to perforate paper and form embroidery pattern (stencil). (2) Inserts pins into foam rubber pad, following drawings or paper patterns. Positions paper over pins and presses paper against pins to perforate paper and form pattern.
GOE: 06.04.26 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

781.684-046 RUG CLIPPER (carpet & rug) alternate titles: carver; clipper; rug cutter
Guides cutting head of powered clipper over surface of hooked and tufted rugs to cut nap to uniform length or to cut design into rug, following guidelines. Measures depth of cut, using ruler. May vacuum rug to remove cut yarn. May comb pile to raise uncut loops, using steel-toothed comb, and cut loops, using scissors.
GOE: 06.04.27 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 77

781.684-050 RUG-SAMPLE BEVELER (carpet & rug) alternate titles: sample finisher
Trims edges of sample rug swatches, using beveling machine, and glues beveled edges to prevent raveling: Holds rug sample edge against guide on feed bed of beveling machine, and moves edge under blade that cuts edges on slant for appearance. Inserts beveled edge into slit of glue bottle, turns bottle upside down, and slides edges of rug sample through slit to glue edge and prevent raveling.
GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

781.684-054 SLITTER (knitting)
Slits welt of hose for use in making panty hose or leotards, using one of following methods: (1) Positions welt of hose on edge of board equipped with electrically heated protruding wire, aligns mark on welt with slot, and pulls welt down to specified point on board passing through heated wire and slitting welt. (2) Pulls hose over upright board, aligns mark on welt with slot, and pulls welt down to specified point on board. Slits welt using solder iron equipped with heated wire. (3) Pulls hose over board, aligns welt over slot, and pulls welt down to specified point on board. Slits welt by pushing small flat iron equipped with electrically heated wire along slotted area under welt. May control temperature of wire by adjusting heat gauge. May scrape residue from wire, using knife or metal object.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

781.684-058 TRIM-STENCIL MAKER (any industry) alternate titles: pattern-punching-machine operator
Lays out and traces patterns on paper to make stencils used for cutting cloth upholstery: Arranges master patterns on paper in such manner as to minimize waste when cloth is cut. Traces patterns on paper, using pencil. Perforates paper, using hand punch or by guiding automatic punch around traced lines so that pattern will be transferred to material when chalk powder is dusted over stencil.
GOE: 06.04.26 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

781.684-062 WASTE SALVAGER (garment) alternate titles: small-piece cutter
Sorts usable pieces of cloth from cloth discarded after cutting, and cuts garment parts from salvaged pieces: Cuts out defects, using hand shears, following instructions on cutting ticket. Positions pattern on material and cuts around pattern, using hand shears or electric knife. Stacks garment parts according to size, style, and color. May separate defective cloth according to color and type.
GOE: 06.02.27 STRENGTH: L GED: R3 M1 L2 SVP: 3 DLU: 77

781.684-066 MATERIAL ASSEMBLER (furniture)
Gathers and assembles specified upholstery materials and accessories for use in manufacture of upholstered furniture: Reads work ticket to determine type and quantity of materials needed by upholsterers to upholster unit according to specifications. Gathers materials and accessories, such as *edge rolls*, polyfoam or dacron padding, plywood panels, and metal fasteners, from storage areas and places materials with designated furniture frame to facilitate subsequent processing. Cuts edge rolls and polyfoam to specified length and pattern, using electric cutter. Sprays edges of back and seat cushions with glue.
GOE: 06.04.27 STRENGTH: M GED: R2 M2 L2 SVP: 4 DLU: 86

781.684-070 SAMPLE CUTTER (furniture)
Cuts upholstery fabric into squares for use as sample swatches, using electric knife, scissors, and pinking machine: Reads sample list to determine specified fabric and pattern and quantity of swatches to be fabricated. Spreads fabric on table in single or multiple layers. Positions pattern over fabric to ensure fabric design is on swatch area and traces outline of pattern, using chalk. Removes pattern and cuts along outline, using scissors, electric knife, and pinking machine, to form swatch. Punches holes in swatches, using drill press.
GOE: 06.02.27 STRENGTH: V GED: R2 M1 L1 SVP: 3 DLU: 86

781.684-074 CUTTER, HAND I (any industry)
Cuts out, shapes, or trims material or articles, such as canvas goods, garment parts, hats and caps, house furnishings, or knit goods, to facilitate subsequent operations, using scissors or knife: Unrolls and lays out material along calibrated scale on cutting table or measures material with ruler and cuts material into lengths, using scissors or knife. Positions pattern or template on material or marks around pattern or template, using chalk or pencil, and cuts out parts, using scissors or knife. Cuts notches in edges of parts to mark them for assembly. Shapes or trims excess material from parts. May match materials for color or shade. May cut or trim knit goods, using hot-wire device. May mark identification numbers on parts. May spread cloth on table in single or multiple lays prior to cutting. May assemble and fold articles after cutting. May be designated according to type of material or article cut as Applique Cutter, Hand (tex. prod., nec); Bedspread Cutter, Hand (tex. prod., nec); Blanket Cutter, Hand (tex. prod., nec); Canvas Cutter, Hand (tex. prod., nec); Curtain Cutter, Hand (tex. prod., nec); Drapery Cutter, Hand (tex. prod., nec); Garment-Parts Cutter, Hand (garment). May be designated: Hat-And-Cap-Parts Cutter, Hand (hat & cap); Knit-Goods Cutter, Hand (knitting); Terry-Cloth Cutter, Hand (tex. prod., nec).
GOE: 06.02.27 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 80

781.684-078 CUTTER APPRENTICE, HAND (any industry)
Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 06.02.27 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

781.685-010 SPREADER, MACHINE (any industry) alternate titles: layer up
Tends machine that spreads cloth in successive layers on table to prepare cloth for cutting: Positions bolt of cloth on carriage of machine, turns handle to align edge of cloth with marks on table, threads cloth end through feed rollers, and clamps cloth to end of table. Starts machine that automatically spreads cloth in even layers as it moves back and forth over table, or pushes machine along track over cutting table. Inspects cloth as it is spread to detect defects, such as dye shadings and holes. Cuts out defects with hand shears. Laps ends of cloth at points marked on table. Straightens edges and smooths layers of cloth with hands. Turns handwheel to adjust feeding mechanism of machine according to weight of cloth. Cuts cloth from roll, using hand shears. May mark pattern outlines on top ply of cloth [MARKER (any industry) I 781.384-014]. May cut spread cloth [CUTTER, MACHINE (any industry) I 781.684-014].
GOE: 06.04.05 STRENGTH: H GED: R3 M2 L2 SVP: 3 DLU: 78

781.687-010 ASSEMBLER (garment; glove & mit.) alternate titles: assorter; bundler; bundle tier; feeder; fitter, factory; folder; matcher; piecer-up; tier
Assembles specified number of selected garment, glove, or mitten parts into bundles for distribution to production workers: Selects parts required to make

complete article according to size, style, and color, following style guides or applying knowledge of styles. Counts specified number of garment parts of same size, style, and color and ties parts into bundles by hand. Ties production ticket to bundles of parts. Stacks bundles onto handtruck according to style, size, and color. May mark parts to indicate points of assembly or openings to be cut, using chalk or pencil, or by cutting notches with scissors. May replace defective parts found while assembling bundles. May assemble completed suit ensembles, such as coat, vest, and pants. May notify cutting department of need for additional parts to replace stock shortage.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 78

781.687-014 CLOTH EXAMINER, HAND (textile) alternate titles: fabric inspector; finished-cloth checker; shader and folder; stretcher

Examines finished cloth for defects, such as grease spots, tears, and variations in color, finish, and dimensions. Measures width of cloth with ruler to detect variations from customer and plant standards. Turns through cloth folds or pulls cloth over inspection frame and feels and scans cloth to detect defects and variations in color and finish. Cuts defects from cloth, using scissors, or marks defects with chalk, thread, or label to indicate yardage allowance for defects. Records yardage for each cut of cloth examined. Routes cloth that does not conform to customer and plant specifications to CLOTH GRADER (textile). May tear sample strip from each cut of cloth. May count folds to determine yardage in each cut of cloth. May be designated according to specialization as Cloth-Colors Examiner (textile); Cloth-Cutting Inspector (textile).
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

781.687-018 CLOTH TEARER (garment) alternate titles: tearer

Tears pieces from hemmed bolts of cloth prior to their fabrication into articles, such as handkerchiefs. Tears cloth, beginning at nick in cloth and stopping at opposite hem. Cuts through hem with scissors. May nick edge of cloth by folding and impaling it on equally spaced spikes on table and snipping edge with scissors. May tear cloth woven in special pattern so that pattern is centered in each article.
GOE: 06.04.27 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

781.687-022 CUTTER HELPER (any industry)

Assists in cutting materials for articles, such as bedspreads, curtains, draperies, garment parts, and glove parts. Spreads material on cutting table. Removes cut material from table and lays it over rack or in handtruck. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

781.687-026 CUTTER, HAND II (any industry)

Cuts narrow material, such as buckram, elastic, labels, lace, or ribbon to specified length with scissors or knife, using either of following methods: (1) Unrolls material from spool or bolt along calibrated scale on cutting table or measures material with ruler and cuts material into lengths, using scissors. (2) Winds strand of material around reel or pegs on cutting table and cuts material at specified points, using scissors or knife. May tie lengths of material into bundles. May be designated according to type of material or article cut as Band Cutter (knitting); Elastic Cutter, Hand (any industry); Lacing Cutter (plastic synth.); Venetian-Blind-Tape Cutter (furniture).
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 78

781.687-030 CUTTER, HAND III (any industry) alternate titles: dinker; mallet-and-die cutter

Cuts out parts of articles from materials, such as cloth, felt, leather, or plastic, using dies and mallet. Spreads one or more layers of material on table, positions specified die on material, and strikes die with mallet to force die through material. May be designated according to product cut as Felt-Pad Cutter (button & notion); Glove Cutter (glove & mit.; leather prod.); Petal Cutter (button & notion).
GOE: 06.04.34 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

781.687-034 GLOVE-PARTS INSPECTOR (glove & mit.) alternate titles: leather-piece inspector

Inspects and sorts parts of leather gloves or mittens after cutting. Examines parts to detect defects, such as holes, scars, and cutting nicks. Trims part to remove defects, using hand shears. Feels leather part to determine weight and thickness. Sorts parts according to color, weight, and quality standards for specified styles and leather parts of comparable quality required to make complete glove or mitten [ASSEMBLER (garment; glove & mit.)].
GOE: 06.03.02 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

781.687-038 GOODS LAYER (textile) alternate titles: cloth layer-out

Lays out cloth in preparation for sewing into continuous strips. Cuts bands from bale with wire snips and removes burlap wrapping. Stacks folded cloth on floor or handtruck with ends exposed to facilitate sewing. Records lot numbers and total yardage of cloth laid out on work ticket.
GOE: 05.09.02 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

781.687-042 MARKER (garment; retail trade; tex. prod., nec)

Marks sewing guides on garments or material, using chalk, crayon, or pencil, to facilitate further sewing operations, by any of following methods: (1) Measures specified distance from edge or reference point on article, using ruler or tape measure, and marks sewing guides for position of buttons, buttonholes, snap or gripper fasteners, hems, cuffs, buckram, crinoline, or other trimmings. (2) Turns screws to set chalk holders in position along horizontal bar of lever-type marking device, according to size of garment. Positions garment on table beneath bar and depresses pedal or moves lever to lower bar that marks position of buttonhole or buttons. (3) Aligns weave and print of adjacent edges of garment parts, following markings (notches), and marks sewing guidelines. (4) Positions pattern on garment and marks around pattern, or lays transfer paper on stack of garments beneath lever-type marker and lowers marker to transfer sewing guides to material. May trim excess material from hemlines, using scissors. May place buttons in garment pocket. May be designated according to marking objective as Button-Buttonhole Marker (garment); Hem Marker (garment; retail trade; tex. prod., nec); Matcher (garment); Pocket Marker (garment).
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

781.687-046 MARKING STITCHER (garment)

Draws thread through several layers of garment parts to mark points for attachment of other parts, using handpowered machine. Places spool of thread on spindle and draws thread through guide and eye of needle. Positions several layers of garment parts on machine bed under needle. Depresses lever that forces needle downward to draw thread through parts, following markings on fabric. Cuts thread between layers of fabric, using scissors, leaving thread through each part to serve as guide for attachment of other parts, such as flaps and pockets.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

781.687-050 RIBBON CUTTER (narrow fabrics)

Cuts woven narrow fabrics, such as labels, ribbon, or webbing from loom, using scissors. May thread fabric through portable measuring device as it is wound onto roll. May transport boxes of fabric to storage.
GOE: 06.04.27 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

781.687-054 RUG-BACKING STENCILER (carpet & rug)

Stencils designs on rug backing material, using mop, lampblack solution, and perforated paper patterns to prepare backing for hooking operations. Measures and cuts material, using ruler and scissors. Assembles spiked frame on floor, using screwdriver, and pulls material taut over spikes. Positions and pins pattern to material and mops lampblack solution onto pattern to transfer design. Dry mops pattern to remove solution and removes material from frame. May stretch material onto hooking frame and remove hooked rug from frame.
GOE: 06.04.27 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

781.687-058 SPREADER I (any industry) alternate titles: cloth layer; cloth spreader

Spreads layers of cloth on table preparatory to marking and cutting parts for such articles as garments, mattress or upholstery covers, and bedspreads. Mounts roll of cloth in rack at end of table. Unreels successive lengths of cloth onto table, spreading each length evenly on length beneath. Places weights on cloth, fastens edges of fabric lay, using stapler, or clamps edges of cloth to hold material in position for cutting. May measure specified length of material to be cut according to work order or verbal instructions. May cut out parts, using scissors. May assemble cut garment parts. May work as member of two-person team and position, secure with metal rules, and cut cloth, using shears, rather than folding successive layers, to allow front surface of each layer to face upwards.
GOE: 06.04.27 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

781.687-062 STAMPER I (tex. prod., nec)

Transfers decorative designs from paper embroidery stencils (patterns) onto fabric articles, such as armbands, banners, and shirts to serve as guides for embroidery or other sewing operations, using either of following methods: (1) Positions stencil on fabric and brushes stamping solution through perforations to form outline of design on fabric. (2) Rubs powdered marking chalk over perforated pattern with blackboard eraser to force powder through perforations onto fabric.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

781.687-066 STENCILER (garment; tex. prod., nec)

Applies chalk, fluorescent powder, or fluorescent solution to perforated stencil to mark garment part for cutting or for subsequent sewing operations, such as making darts, attaching pockets, or embroidering.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

781.687-070 TRIMMER, HAND (any industry) alternate titles: finisher; hand clipper

Trims ravelings, loose threads, or excess material from articles, such as garments, hosiery, textile products, embroidered articles, or bolts or rolls of cloth, using scissors. May scan trimmed articles for soiled spots and stitching and dyeing defects. May clean spots or stains from articles, using cleaning fluids, rags, brushes, or sponges. May be designated according to material trimmed as Cloth Trimmer, Hand (textile); Facing-End Trimmer (knitting).
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

782 HAND SEWERS, MENDERS, EMBROIDERERS, KNITTERS, AND RELATED OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with basting, trimming, stitching, and related handwork to join, shape, decorate, fin-

ish, or repair garments and accessories or related products. Price being the controlling factor, this work is more extensively performed on fine-quality garments and tailored apparel.

782.361-010 CORSET FITTER (retail trade)

Fits and alters foundation garments, such as girdles and corsets, to customer's measurements: Measures customer, using tape measure, and records measurements on alteration tag. Pins garment at various points or marks with chalk to indicate alterations required. Sews garment by hand or machine, performing alterations, such as adjusting length of garment, garters, or straps, or taking in darts.
GOE: 05.05.15 STRENGTH: L GED: R3 M2 L3 SVP: 7 DLU: 77

782.361-014 EMBROIDERY PATTERNMAKER (retail trade; wholesale tr.)

Draws designs on tracing paper and transfers them onto cloth to provide guide for embroidery: Sketches patterns with pencil, selecting or creating designs approved by customer. Guides pattern under needle of machine that perforates pattern lines. Rubs wax, powder, or charcoal over perforated lines with wet brush or pouncer to transfer pattern outline to cloth, providing guide for embroidery.
GOE: 01.06.03 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

782.381-010 HAT TRIMMER (laundry & rel.)

Replaces and sews hat trimmings, such as linings, hatbands, ribbons, and ornaments on cleaned hats, by hand or using sewing machine: Cuts ribbons and leathers to length, using scissors. Folds ribbon to form bows and other ornaments, and stitches them to hat. Bastes linings and ribbons to hat, using needle and thread. Blind stitches (whips) leather to hat to form sweatband, by hand or sewing machine. Folds ribbon to form binding, by hand or uses sewing machine equipped with binding attachment. May cut and rip out stitches to remove trimmings before hat is cleaned. May scrub lining ribbons and bows of women's hats and press them with hand iron. May reshape artificial flower ornaments by hand to freshen them.
GOE: 06.02.27 STRENGTH: L GED: R3 M1 L2 SVP: 5 DLU: 77

782.381-014 ORIENTAL-RUG REPAIRER (any industry)

Reweaves damaged areas of oriental or other expensive rugs, following color, pattern, and weave of rug: Tacks damaged area of rug onto wooden frame. Trims and removes tuft yarns and backing twine of damaged area, using scissors or knife. Inserts needle and twine into edge of damaged area, draws twine across area and into opposite edge, and interlaces twine to form rug backing. Selects tuft yarn, according to kind of yarn in rug, color, and pattern of rug. Weaves yarn into backing twine, using needle, and following pattern and weave of rug, to form rug pile. Trims loose thread ends. May stretch oriental rugs to restore shape of rug and remove wrinkles or misshapen areas [ORIENTAL-RUG STRETCHER (any industry)].
GOE: 05.05.15 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

782.381-018 RUG REPAIRER (laundry & rel.)

Repairs and remodels rugs and carpets: Cuts patch from corner or edge of defective rug, or from carpet material or another rug of similar color and pattern for use in repair of damaged rug. Darns holes in rug-backing by hand, using cross-stitch to sew fibers together. Selects matching rug fibers and stitches them to rug-backing with needle and thread to reburl (reweave) damaged area and restore nap (pile). Patches rug by stitching edges of rug and patch together with carpet stitch. Remodels rugs by cutting to required size and shape, using hand shears. Binds edges of rugs by operating serging machine, or sews edges of rug or carpet, using needle and thread.
GOE: 05.05.15 STRENGTH: M GED: R3 M2 L3 SVP: 6 DLU: 77

782.381-022 WEAVER, HAND (personal ser.) alternate titles: french weaver; inweaver; overweaver; repair weaver; reweaver; section weaver; thread weaver

Weaves threads or patches into fabric articles to repair holes, tears, or worn places, using weavers' hand needles: Cuts patch from seam or hem allowance of article, using scissors. Pins article to padded block. Reweaves defective area by either of following methods: (1) Pulls lengthwise and crosswise threads from patch. Inserts ballpoint or latch needle some distance from edge of hole and interlaces it over and under threads of article running perpendicular to needle, across hole or worn area, and into fabric on opposite side, following original pattern. Inserts raveled thread in needle and pulls needle and thread through fabric, leaving thread ends projecting from fabric. Repeats interlacing of raveled threads (reweaving) until hole or worn area is filled. Pulls strands back and forth with fingers until woven part forms color or pattern design of article. (2) Ravels threads from edge of hole and patch, leaving frayed appearance, and pins or bastes patch under hole so that pattern matches. Interlaces needle over and under threads of article perpendicular to needle. Inserts end of raveled patch thread and pulls needle and thread through fabric. Repeats process until loose (raveled) ends around hole are rewoven into patch. Turns article over and repeats process to reweave thread ends of patch into fabric of article. Cuts off projecting thread ends and marks repaired area with thread to facilitate inspection. May press article, using steam iron or damp cloth and dry iron.
GOE: 05.05.15 STRENGTH: S GED: R3 M2 L2 SVP: 5 DLU: 77

782.487-010 NETTING INSPECTOR (tex. prod., nec) alternate titles: inspector and mender; mender

Inspects and mends netting: Stretches netting over frame and examines rows of mesh for defects, such as broken twine and irregular knots. Measures mesh with rule to ensure that net meets size specifications. Ties loose mesh with net-mending needle and cuts loose ends of twine with knife or scissors. Folds net preparatory to stretching or packing. May tie strips of netting together.
GOE: 06.03.02 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

782.684-010 CANVAS REPAIRER (any industry)

Repairs damaged or worn tent, awning, or other canvas articles: Spreads canvas on worktable and examines it for holes, tears, and worn areas. Trims edges of damaged area, using scissors or knife. Patches holes, sews tears, or darns defective area, using needle and thread or sewing machine. Stamps grommets into edges of canvas, using mallet and punch or eyelet machine. May repair leatherette fabrics. May measure structures for canvas coverings, using tape measure.
GOE: 06.04.27 STRENGTH: H GED: R2 M1 L1 SVP: 4 DLU: 77

782.684-014 CROCHETER, HAND (knitting)

Crochets edges, seams, and decorative pieces for garments, using crochet needles and yarn. May crochet coverings for buckle frames, buttons, and other similar trimmings.
GOE: 06.02.27 STRENGTH: L GED: R3 M1 L2 SVP: 5 DLU: 77

782.684-018 EMBROIDERER, HAND (tex. prod., nec) alternate titles: decorator, hand

Embroiders ornamental designs by hand over stamped or stenciled designs on fabric material: Fastens embroidery hoop over fabric to keep fabric taut. Threads needle with kind and color of thread specified on work ticket. Sews along cut lines of stamped design, utilizing knowledge of various stitches that may be required. May place fabric in frame instead of embroidery hoop to keep fabric taut. May use strings of beads instead of colored thread for ornamental work. May pin design on fabric preparatory to embroidering. May be designated according to specialty performed or item worked on as Initial Maker (garment); Quilt Sewer, Hand (tex. prod., nec).
GOE: 06.02.27 STRENGTH: S GED: R3 M1 L2 SVP: 5 DLU: 77

782.684-026 FISH-NET STRINGER (tex. prod., nec) alternate titles: net hanger; slugger

Strings fish netting to meter lines or ropes to form gill or pound nets, using needles and thread or twine, using either of following methods: Ties seaming twine or thread to end of meter line or rope. (1) Runs twine through outside meshes of netting, and over and under meter line to string gill net, using needles. (2) Draws shuttle-type wooden needle through successive meshes of netting, brings needle over and under rope at specified distance, and makes half hitch to fasten twine to rope. May be designated according to type of net strung as Gill-Net Stringer (tex. prod., nec); Webbing Seamer, Pound Net (tex. prod., nec).
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

782.684-030 HOSIERY MENDER (knitting) alternate titles: darner; mender, hand; mender, machine

Mends defects in hosiery, panty hose, or leotards (tights), such as holes, runs, and pulled threads, using one or combination of following methods: (1) Sews holes with needle and thread. (2) Stretches portion of hose containing hole or run over mending cup and secures one end of broken thread, using needle and thread. Reknits dropped stitch or run, using latch needle. Bastes across other end of broken thread. Clips loose threads from hose with scissors. (3) Stretches hose over mending cup and moves powered-mending device across hose to return picked or pulled thread to position. Pulls hose on inspection form or over mending cup to locate defects. May smooth and fix mend, using electric iron. May be designated Greige Mender (knitting) when repairing undyed hose or Finish Mender (knitting) if repairing dyed hose.
GOE: 06.02.27 STRENGTH: L GED: R3 M1 L1 SVP: 3 DLU: 81

782.684-034 KNITTER, HAND (tex. prod., nec)

Knits garments, such as sweaters, dresses, and suits, and accessories, using yarn and needles determined by type of garment and stitch specified and individual measurements for garment. May sew linings, buttons, and fasteners onto garments. May shape, block, and steam garments.
GOE: 06.02.27 STRENGTH: L GED: R3 M3 L2 SVP: 5 DLU: 77

782.684-038 MATCH-UP WORKER (garment) alternate titles: damage cutter; thread cutter

Removes damaged parts of completed garments, following information on repair tags or markings on parts: Cuts and pulls threads to remove damaged parts, using scissors or knife. Obtains replacement parts from cutting department and routes garments and replacement parts to sewing department. May be designated according to type of garment repaired as Corset Repairer (garment).
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

782.684-042 MENDER (carpet & rug; textile)

Mends torn or defective portions of unfinished or finished cloth or carpets and rugs by handweaving: Examines cloth or rug for tears or defects, or marking that indicate imperfections. Reweaves thread or yarn to close holes or repair defects, using needle and thread or *burling iron*, and blends repair thread or yarn with existing pattern. Draws missing warp or filling threads through cloth and pulls out coarse and surplus threads, using burling iron, tweezers, and needle and thread. Pulls loosely woven threads through back of cloth to reduce slack, using tweezers. May trim yarn from defect, using scissors. May weave patch into hole, pounding repaired area smooth, and be designated Rug Mender (carpet & rug).

GOE: 06.02.27 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

782.684-046 MENDER, KNIT GOODS (garment; knitting)

Repairs defects, such as holes, runs, dropped or pulled threads, and needles lines, in knitted cloth and garments, using needle and thread or latch needle. Examines cloth or garment to detect defects or markings indicating defects. Sews up holes, using needle and thread. Reknits runs and replaces broken threads, using latch needle. Pulls knots to wrong side of garment, using hook. May operate sewing machine to resew defective seams or sew up holes in fabric. May clean soil spots from fabric or garment, using spray gun and cleaning fluid.
GOE: 06.02.27 STRENGTH: L GED: R3 M1 L1 SVP: 3 DLU: 77

782.684-050 PASSEMENTERIE WORKER (tex. prod., nec) alternate titles: fringer, hand; sewer, hand

Fashions and hand sews cloth, braid, silk, and other materials to make ornaments for dresses, coats, and housefurnishings. Attaches fasteners and trimmings (passementerie), such as tassels, braids, cords, loops, and beads to ornaments. May tie colored ribbons into bows and do hand embroidery and fagoting. May weave or knot yarn to make braid or fringe and hand sew knots to prevent raveling.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

782.684-054 PINNER (tex. prod., nec)

Decorates fabrics or garments with embroidery or applique, performing any combination of following tasks: Positions and pins designs or pattern on fabric, following stamped pattern. Hangs embroidered fabrics in heating cabinet or irons fabric to char buckram. Rubs and kneads cloth with hand or scrapes it with blunt instrument to loosen charred buckram. Examines finished fabric for imperfections and loose threads. Cuts off loose threads, using scissors. Removes stains from fabric, using cloth and cleaning fluid. Counts pieces and verifies number with work ticket.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

782.684-058 SEWER, HAND (any industry) alternate titles: assembler; bander; band sewer; garment finisher; garment sewer, hand; hand stitcher; hand tacker; needleworker; table worker, sewing; trimmer

Joins and reinforces parts of articles, such as garments, curtains, parachutes, stuffed toys, or sews buttonholes and attaches fasteners to articles, or sews decorative trimmings to articles, using needle and thread: Selects thread, according to specifications or color of parts. Aligns parts, fasteners, or trimmings, following seams, edges, or markings on parts. Sews parts with various types of stitches, such as felling tacking, stitch and basting. Trims excess threads, using scissors or knife. May trim edges of parts, using scissors. When sewing fasteners or trimmings to articles, may be designated Finisher, Hand (garment). May be designated according to stitch sewn as Baster, Hand (garment); Feller, Hand (garment). May be designated according to article or part sewn as Armhole Baster, Hand (garment); Bow Attacher (garment); Bow Tacker (hat & cap) I; Buttonhole Maker, Hand (garment); Buttonhole Tacker (garment); Button Sewer, Hand (garment); Collar Feller (garment). May be designated: Collar Tacker (garment); Drapery Sewer, Hand (tex. prod., nec); Dressmaker (garment); Edge Maker (garment); Hook-And-Eye Attacher (garment); Label Sewer, Hand (any industry); Lapel Baster (garment); Lapel Padder (garment); Lining Finisher (garment); Neck Feller (garment); Sleeve Baster (garment); Sleeve-Bottom Feller (garment); Tacker (garment); Top-Collar Baster (garment); Trimming Finisher (garment).
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 78

782.684-062 WEAVER, HAND (narrow fabrics; textile) alternate titles: endless-belt finisher; splicer

Weaves sections of loom-woven belting to finish them or join them to form endless belts: Ties selvages together to secure belts. Inspects belting and removes loose filling threads. Draws warp threads over and under filling threads, using hook. Cuts warp threads to specified length, using tape measure and shears, and ties or laps warp threads together to join belts. Counts number of filling and warp threads per square inch and draws new filling and warp threads through belting to maintain specified weave pattern and to finish belting. May use hurdle fork to move filling threads close together when weaving narrow belting.
GOE: 06.02.27 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

782.687-010 BASTING PULLER (garment)

Breaks, cuts, or pulls basting stitches or loose threads from completed garments or garment parts, using fingers, scissors, or bodkin. Brushes chalk marks and lint from garments.
GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

782.687-014 BUTTONER (garment; knitting)

Buttons or snaps garments to prepare them for pressing or packing. Cuts off excess threads between buttons or around buttonholes, using hand shears. May turn garment right side out before buttoning.
GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

782.687-018 CLOTH-BALE HEADER (textile) alternate titles: bale coverer; burlapper

Sews lapped edges of burlap that protects bales or rolls of cloth during shipment, using needle and thread.
GOE: 06.04.27 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

782.687-022 ELASTIC-TAPE INSERTER (garment)

Inserts and draws elastic tape through hem channel of stretch garments, using leader: Selects strip of elastic of same length and width as hem channel, by aligning strip over hem. Pins tape to leader, using safety pin, inserts leader into hem channel, and draws tape through it. Unpins leader and hand staples channel at ends of hem to secure tape for sewing operation. May pin two leg bands together to make pair.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

782.687-026 PINNER (garment; tex. prod., nec) alternate titles: table draper

Positions and pins trimming and other ornamentation onto garments or garment parts, preparatory to sewing, according to paper patterns or markings. May be designated according to type of trimming or ornamentation as Lace Pinner (garment; tex. prod., nec).
GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

782.687-030 PULLER-THROUGH (glove & mit.)

Pulls loose ends of stitching threads from outside through to inside of gloves and mittens with hook, knots threads, and cuts off loose ends with scissors.
GOE: 06.04.27 STRENGTH: S GED: R1 M1 L1 SVP: 1 DLU: 77

782.687-034 RAVELER (knitting)

Unravels rows of excess fabric along looped seams of knitted garments by cutting several stitches with scissors and pulling out yarn by hand.
GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

782.687-038 RIPPER (garment; retail trade; tex. prod., nec)

Cuts or rips stitches from sections of articles or garments to prepare them for resewing, using razor blade, scissors, or seam ripper. Pulls out loose threads. May be designated Garment Ripper, Alterations (garment).
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

782.687-042 RUG BRAIDER, HAND (carpet & rug) alternate titles: braided-rug maker

Makes braided rugs by hand from strips of wool, cotton, or synthetic materials: Selects strips in matching, contrasting, or blending colors and interweaves three or more at time to form continuous braid. Lays braid on flat surface. Coils or bends it into shape, stitching edges together by hand. May cut material into strips and sew ends together by hand or machine. May dye materials.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

782.687-046 SACK REPAIRER (any industry) alternate titles: bag patcher; sack mender

Repairs worn or torn burlap and cloth sacks, using needle and thread or sewing machine. Cuts burlap or cloth to form patches for sacks, using shears. May close open end of sack to prepare sack for filling through valve.
GOE: 06.04.27 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

782.687-050 SECONDS HANDLER (knitting)

Sorts repaired knitted garments according to size, style, and color. Folds garments and places them in stockroom.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

782.687-054 TAPE STRINGER (garment; knitting)

Threads tape, ribbon, or yarn through tubing, lace, or garment parts, using bodkin. May tie ends into bow.
GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

782.687-058 THREAD MARKER (garment) alternate titles: basting marker

Sews temporary basting stitches along markings on garment parts to mark position of vees, pleats, and other garment parts to serve as guides for subsequent sewing operations, using needle and thread.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

783 FUR AND LEATHER WORKING OCCUPATIONS

This group includes occupations concerned with cutting, piecing, shaping, and sewing prepared skins of fur-bearing animals and leather to fit, alter, finish, or repair fur or fur-lined garments and accessories; and the fabrication of leather articles, such as harnesses, luggages, pocketbooks, purses, saddles, and other leather products. Fabrication and repair of hats, caps, gloves, and related products are included in Group 784. Fabrication and repair of footwear is included in Group 788.

783.131-010 SUPERVISOR, FURRIER SHOP (fur goods)

Supervises and coordinates activities of workers engaged in manufacture, alteration, and repair of fur garments: Inspects pelts for conformity with dressing and dyeing specifications. Directs workers in matching furs, and in cutting, shaping, and sewing operations. Inspects finished garments for conformance to standards of workmanship and pattern. Performs other duties as described under SUPERVISOR (any industry) Master Title. May sort, match, and cut pelts [FUR CUTTER (fur goods); FUR SORTER (fur goods)]. May discuss alterations or repairs with customer. May supervise one group of workers, such as FUR FINISHERS (fur goods), and be designated Fur Finisher, Head (fur goods).
GOE: 05.05.15 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

783.132-010 SUPERVISOR (leather prod.)

Supervises and coordinates activities of workers engaged in cutting, assembling, and joining parts to form articles, such as belts, briefcases, gun cases and

holsters, handbags, wallets, and other leather products: Trains workers in operation of machine cutters and sewing machines. Examines parts or finished articles for defects. Prepares requisition forms to order supplies. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to department supervised as Assembly-Department Supervisor (leather prod.); Cloth-And-Leather-Department Supervisor (leather prod.); Cutting-Department Supervisor (leather prod.); Sewing-Department Supervisor (leather prod.).
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L4 SVP: 5 DLU: 80

783.261-010 FURRIER (fur goods) alternate titles: fur repairer; fur tailor
Designs, makes, alters, restyles, and repairs fur garments, applying principles of fur garment construction and styling. May purchase pelts required to make garment. May estimate cost of making, repairing, or restyling garment. May sell furs [SALESPERSON, FURS (retail trade)].
GOE: 05.05.15 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

783.361-010 CUSTOM-LEATHER-PRODUCTS MAKER (leather prod.)
Lays out, cuts, and assembles custom leather products, such as belts, purses, sandals, and garments, from original designs or existing patterns: Examines customer's sketch or sample of leather product to be fabricated and confers with customer regarding specifications of product. Draws outline of leather parts on paper or cardboard to form pattern, and cuts out pattern pieces, using square, compass, ruler, pencil, and scissors. Selects leather, positions pattern on leather, and cuts leather parts, using knife and shears. Assembles leather products according to sketch, utilizing knowledge and experience and work devices, such as sewing machine, needle and thread or leather lacing, glue and clamps, or rivets and riveting tool. Applies liquid dyes, soaks leather in water, or engraves designs on leather to obtain special effects or shapes. Attaches buckles, metal rings, decorative brads, or grommets according to design, using handtools. Stitches or glues fabric or leather linings according to product design. Occasionally displays items and sells them to customers.
GOE: 05.05.15 STRENGTH: L GED: R3 M2 L3 SVP: 7 DLU: 86

783.381-010 FUR CUTTER (fur goods)
Selects and cuts pelts to make, alter, or repair garments or other fur articles: Selects required number of fur pelts and matches them for size, color, texture, and quality. Arranges pelts on pattern according to design and color, placing finest pelts where they will show to best advantage and give garment symmetrical appearance. Numbers pelts to indicate their pattern location. Cuts off inferior or unusable parts, such as heads, necks, sides, rumps, and tails. Slits skin of furs into diagonal strips, leaving uncut margin at edge, to obtain specified length and shape of pelt, using furrier's knife. Cuts pelts to shape them to garment pattern.
GOE: 06.02.27 STRENGTH: L GED: R3 M3 L2 SVP: 7 DLU: 77

783.381-014 FUR FINISHER (fur goods) alternate titles: fur sewer; fur tailor
Completes, alters, and repairs fur garments, sewing by hand or using sewing machine: Sews interlining to inside of fur skin by hand or using blindstitch sewing machine. Selects lining pattern or measures garment shell or old lining, cuts out lining parts, and sews parts together, using sewing machine. Sews lining into shell, using sewing machine or needle and thread. Sews on hooks, rings, hem tape, buttons, monograms, and padding for collars and cuffs, using needle and thread. May baste lining parts together by hand to facilitate machine sewing. May sew preassembled lining into shell. May sew linings only and be designated Fur Liner (fur goods). May replace linings and repair damaged skins and be designated Lining Finisher (laundry & rel.).
GOE: 06.02.27 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

783.381-018 HARNESS MAKER (leather prod.; retail trade)
Cuts, assembles, and joins leather and other parts of harnesses, following customer specifications concerning color and thickness of leather and size or type of harness, to fabricate new or repair damaged or worn harness: Traces outline of part on material. Cuts parts along outline from leather or canvas [CUTTER, HAND (any industry) I]. Assembles and joins edges of parts, using needle and thread or stitching machine. Inserts harness strap ends through buckles, rings, or other hardware, and loops and joins end to body of strap, using stitching machine or hand riveting tool. Punches buckle holes in harness, using awl or punch. Carves specified design on material, using handtools. Laces leather thong around article to form decorative edge. Applies paint and liquid dressing to harness to produce glossy finish, using brush or sponge. Cuts lining from fleece, following pattern and glues it to inside of saddle or holster. May clean harness. May specialize in replacing damaged harness parts, such as bridle, breast, or body harness and be designated Harness Repairer (leather prod.).
GOE: 05.05.15 STRENGTH: M GED: R3 M3 L3 SVP: 7 DLU: 77

783.381-022 LUGGAGE MAKER (leather prod.)
Covers and lines luggage frames with fabric, leather, imitation leather, or vinyl plastics and attaches hardware to complete luggage according to sketches or customer's order: Measures luggage frame with rule to determine size of cover material. Cuts material to size with guillotine knife, drapes material over frame, and trims it to fit, using scissors or knife. Spreads glue over back of material with brush and glues material to frame. Sews edges of material to frame, using foot-controlled stitching machine, to provide additional bond. Drills holes for rivets and attaches handles and hardware, using foot-controlled rivet punch machine. Cuts lining to fit inside of frame and glues it in place. Sews welting, piping, or chafing strips to decorate or protect luggage, using stitching machine. May build wooden luggage frames. May operate stamping machine to stamp initials on luggage [STAMPING-PRESS OPERATOR (any industry)]. May repair or renovate worn or damaged luggage [LUGGAGE REPAIRER (any industry)].
GOE: 06.02.27 STRENGTH: M GED: R3 M2 L3 SVP: 7 DLU: 77

783.381-026 SADDLE MAKER (leather prod.)
Cuts, assembles, and joins leather parts and other materials to form saddle, following specifications, such as size of saddle, color and grain of leather, or type of saddle: Cuts out parts, according to specifications. Joins edges of parts to form saddle tree cover, using needle and thread or stitching machine. Positions covering and cushioning materials, such as cotton batting, foam rubber, or mohair over saddle tree. Joins covering to saddle tree, using cement, nails, needle and thread, or stitching machine. Attaches accessories or ornamentation to saddle with rivets or needle and thread. Applies paint and liquid dressing to produce glossy finish, using brush or sponge. May cut and stamp lettering and decorative designs into surface of leather. [LEATHER STAMPER (leather prod.)]. May be designated according to type of saddle made as Western-Saddle Maker (leather prod.). May specialize in replacement of damaged saddle parts, such as cushioned seats, canvas girths, cinches, and saddle bags and be designated Saddler (leather prod.; retail trade).
GOE: 05.05.15 STRENGTH: H GED: R3 M3 L3 SVP: 8 DLU: 77

783.384-010 FUR SORTER (fur goods) alternate titles: fur grader; fur matcher
Assorts fur skins into single-garment bundles according to shading, size, pattern, and density of fur: Compares pelts with sample pelt of each grade, stroking fur to feel its density, to see undercolor, and to judge height of hair. Selects those pelts that match or blend and have same thickness and length of fur. Judges number required for particular garment to be manufactured, and assembles them into bundles.
GOE: 06.03.01 STRENGTH: L GED: R3 M1 L2 SVP: 7 DLU: 77

783.387-010 FUR-REPAIR INSPECTOR (retail trade)
Inspects fur garments or pieces, following customer instructions, to determine cost of remodeling or repair: Examines article for frayed linings, worn spots and tears, and determines alterations needed to remodel article. Marks pattern and work ticket to indicate alterations or repairs to be made. Examines remodeled or repaired articles to verify repairs. May remodel or repair fur articles. May be designated according to type of article inspected as Coat-Repair Inspector (retail trade).
GOE: 05.05.15 STRENGTH: L GED: R3 M2 L2 SVP: 8 DLU: 77

783.681-010 FUR BLENDER (leather mfg.) alternate titles: fur dyer; fur tinter
Tints, bleaches or dyes furs according to specifications by applying liquid dye or bleaching compound to tips of guard hair or to all surface hair, using feather or brush to produce lustrous finish and to accentuate colors and shades of furs.
GOE: 01.06.02 STRENGTH: L GED: R3 M1 L2 SVP: 6 DLU: 77

783.682-010 FUR-MACHINE OPERATOR (fur goods) alternate titles: fur joiner; fur operator; fur sewer
Operates *fur machine* to join fur strips and pelts into garment parts or garments, such as collars, cuffs, linings, coats, and capes: Selects thread according to color, places spool on spindle, and draws thread through machine guides, tensions and needle eye. Inserts bobbin into shuttle and draws thread through guide and looper eye. Depresses pedal to open horizontal *feed cups*, aligns pelt edges and positions them between cups, and releases pedal to close cups against pelts. Guides fur strips or pelts between feed cups and across horizontal needle to join fur strips or pelts to form garment parts or garment, following markings on pelts and designer's pattern. May cut slits in fur pelt to separate it into strips, using knife, to let out pelts. May alter finished garment, such as removing excess fur to reduce highlighted color in fur texture, following designer's instructions. May join edges of lambskin strips to form paint roller covers.
GOE: 06.02.05 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

783.682-014 SEWING MACHINE OPERATOR (leather prod.)
Operates sewing machine to join parts of leather products, such as suitcases, handbags, and wallets. May operate machine equipped with shirring attachment. May operate machine equipped with wrapping and folding attachment to join parts of handbag handles and be designated Handle Sewer (leather prod.). May cut thread, using blade attached to machine or scissors. May oil machine and change needles. When joining or decorating handbag parts with decorative stitches, is designated Fancy Sewer (leather prod.). May be designated according to parts joined as Applique Sewer (leather prod.); Lining-Parts Sewer (leather prod.); or according to article assembled and sewed as Briefcase Sewer (leather prod.); Handbag Finisher (leather prod.). Performs duties as described under SEWING MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R3 M1 L1 SVP: 3 DLU: 80

783.684-010 ASSEMBLER, LEATHER GOODS I (leather prod.)
Assembles leather products, such as coin purses, handbags, keycases, pocket secretaries, or wallets, performing any combination of following duties: Turns handbag inside out and presses inner folds against flat-edged rod to sharpen creases. Punches holes in leather to facilitate attaching straps, snaps, or trim, using awl or perforating machine. Attaches buttons, clasps, straps, or trim to

leather parts, using eyelet machine. Folds and creases or pleats edges, using scissors, creasing iron, hammer, or *folding bone*. Applies cement to edges or parts, and presses parts together to secure parts. May sew edges or parts, using sewing machine. May select and match materials to assemble. May be designated according to article assembled as Assembler, Handbags (leather prod.); Coin-Purse Assembler (leather prod.); Keycase Assembler (leather prod.); Pocket-Secretary Assembler (leather prod.); Wallet Assembler (leather prod.).
GOE: 06.02.27 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 78

783.684-014 FUR NAILER (fur goods)
Lays out pelts and secures them to board to stretch and block pelts into desired shape: Brushes skin side of fur with water, to dampen it. Positions, stretches, and shapes pelt, skin side up, and nails or staples to board. Positions paper pattern over pelt and marks outline, using crayon, to indicate sections of pelt to be trimmed and to mark sewing guidelines for assembly operations. Removes dried furs from board. May trim fur along pattern outline, using knife, to obtain smooth edge. May moisten, press, and comb fur, using brush, steam and dry irons, and comb, to restore nap and luster to fur.
GOE: 06.02.31 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

783.684-018 INSPECTOR-REPAIRER (leather prod.)
Examines coin purses, handbags, wallets, and other leather articles for defects, such as missing seam stitches, faulty frame alignment, and blemishes, and repairs minor defects, using handtools. Trims excess material and thread from articles, using clippers. Wipes spots and stains from articles, using cleaning solution and cloth. Brushes stain on cuts, cements loose edges, presses out wrinkles, and aligns frame, using brushes, heated iron, pliers, and screwdriver. May place inserts, such as coin purses, combs, and tissue paper into articles. Attaches inspection tag to articles and records articles inspected. May place article in plastic bag prior to packing.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 80

783.684-022 LEATHER CUTTER (leather prod.)
Lays out, marks, and cuts leather or skins into parts for articles, such as holsters, belts, gun cases, garments and garment trim, surgical appliances, and paint roller covers, using leather knife or shears: Lays leather or skins on cutting table and positions pattern pieces on leather or skins to determine number of cuts. Marks outline of pattern on leather or skins, using pencil. Cuts around outline, using leather knife or shears. Turns screws on strap knife to adjust width of cut when cutting leather for rifle slings and gun case handles. Lays leather side on table, positions dies on leather to obtain maximum number of cuts from side, and strikes die with mallet to cut out part. May stack and tie cut pieces together. May cut parts with guillotine cutter. May punch holes in parts, using kick press.
GOE: 06.02.27 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

783.684-026 LEATHER WORKER (leather prod.)
Punches holes, installs rivets, and finishes edges of leather products, such as holsters, rifle cases, and belts, using handtools: Marks holes in article, using template and marking pencil. Punches holes for rivets, snaps, or buttons, using hand punch. Fastens parts together, using rivets, stitching machine, needle and thread, or adhesive. Attaches eyelets and metal decorations to article, using hammer and punch. Cuts around edge of article to smooth edge, using knife. Brushes stain on cut edge to match color of article. Rubs finished article with damp cloth to clean leather and rubs paste wax on surface, using cloth, to produce shine. May emboss designs on leather surface. May be designated according to article fabricated or repaired as Holster Maker (leather prod.); Rifle-Case Repairer (leather prod.).
GOE: 06.02.27 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

783.684-030 UTILITY BAG ASSEMBLER (leather prod.)
Assembles leather utility bags, using handtools and power tools: Brushes cement on underside of utility bag frame, positions frame unit in zipper template and zipper on cemented surface of unit to align and join zipper to unit prior to stitching operation. Brushes cement on bottom of bag frame flaps, positions metal frame bar on cemented surface, and folds leather flaps over bars. Places frame unit on bar cutter bed, depresses pedal to lower ram that holds unit in position, and pulls bar cutter knife handle to trim ends of zipper and frame. Brushes stain on cut ends. Positions frame on bending machine template, depresses pedal to lower ram that holds unit in position, and presses ends of unit down to shape frame into utility bag opening. Positions frame unit and carrying strap on anvil of stapling machine and depresses pedal to staple frame and strap. May hold seam between jaws of hammering device that straightens stitched seam and pushes seam out to form bead.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

783.685-010 COVERING-MACHINE TENDER (leather prod.)
Tends pneumatic-powered machine that stretches and presses precemented leather part over metal keycase half to form decorative covering on keycase: Turns knobs and handles to actuate heating element in machine and open air valves. Places metal keycase half in machine ram-head depression, and positions precemented leather part in bottom die jaws of machine. Presses buttons to open air valves that force ram head down into die jaws to cover keycase half with leather. Removes part from machine and inspects leather for defective covering. Presses loose edges of leather into snap slot, using *folding bone*.
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

783.685-014 CREASER (leather prod.)
Tends heated press to fold and crease edges of leather for products, such as coin purses, wallets, and cigarette cases: Positions die in ram and turns setscrews to secure die. Positions and bolts template guide on machine guide, using screwdriver and wrench. Turns rheostat to adjust heating element in ram to specified temperature. Folds leather part along fold line, using fingers. Positions folded part in guide template, and depresses pedal to lower heated creasing ram onto leather part to crease fold in edge of leather. Releases pedal to raise ram and removes part from machine.
GOE: 06.02.05 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

783.685-018 DISK-AND-TAPE-MACHINE TENDER (leather prod.)
Tends machine that affixes reinforced tape and plastic disks to closing snaps of flaps on leather articles, such as coin purses and wallets: Threads roll of linen tape on machine spools and pulls tape over and through rollers and guide. Places disk on tape on bed of machine and positions snap of coin purse flap over disk. Depresses pedal to activate mechanism that affixes tape and disk to snap and cuts tape.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

783.685-022 LAMINATOR II (leather prod.)
Tends machine that laminates (bonds) leather and plastic parts of leather articles, such as wallets, purses, and eyeglass cases: Presses buttons to activate heat element and conveyor, and turns knobs to adjust pressure of rollers. Positions precemented parts together and places them on conveyor belt that moves parts under heating element and through rollers to laminate parts.
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

783.685-026 MARKING-MACHINE TENDER (boot & shoe; leather prod.)
Tends machine that prints stitch markings on leather parts to guide worker during stitching operations: Selects type of printing die, template guide, and ink cloth to use in machine according to specifications. Positions roll of ink cloth in machine holding arms and threads cloth through rollers. Positions printing die in machine and turns setscrews to secure die. Positions and bolts template in bed of machine, using screwdriver and wrench. Positions leather part in template and pulls lever to move ink cloth and die onto leather part to mark stitching guidelines. Releases lever and removes leather part.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

783.687-010 ASSEMBLER, LEATHER GOODS II (leather prod.)
Assembles leather products, performing any combination of following duties: Cuts loose threads from product, using scissors. Affixes cardboard backing to lining, using double-sided-gum tape. Cements cardboard to metal handle and staples preassembled leather parts to cardboard, prior to sewing operation, to assemble handles for handbags or luggage. Attaches handles to frame, using rings and pliers. Brushes cement on parts, such as tabs, slots, marks, and edges, and presses parts together to join them. Cements decorative leather or fabric strips onto metal frames to assemble handbags. Inverts presewn plastic or vinyl linings and inserts them in bags. Inserts plastic windows, card and photo holders, memo pads, ballpoint pens, identification cards, and price tags into specified sections of article. May stuff article with wadded paper to give shape to article. May place finished article in display box. May be designated according to job duties as Filler And Trimmer (leather prod.); Frame Coverer (leather prod.); Handle Attacher (leather prod.); Handle Maker (leather prod.).
GOE: 06.04.23 STRENGTH: L GED: R3 M1 L2 SVP: 2 DLU: 80

783.687-014 FUR TRIMMER (fur goods)
Trims blocked fur garments to remove excess fur around chalk-marked pattern on inside of garment, using hand knife.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

783.687-018 HIDE INSPECTOR (leather mfg.) alternate titles: hide examiner
Examines shipments of hides or skins for compliance with specifications, such as grade, type, and weight, and for defects, such as cuts or scars. Records data on work ticket.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

783.687-022 MATCHER, LEATHER PARTS (leather prod.)
Matches pieces of leather to be used in manufacture of leather products. Examines leather for defects, such as cuts and blemishes. Matches and sorts specified number of pieces of same color, texture, and size. May count number of pieces inspected and matched.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

783.687-026 PASTER, HAND OR MACHINE (leather prod.)
Presses belt tops and linings together, using hands and machine filled with paste: Loads hopper of machine and feeds belt top and lining through machine to apply coat of paste. Aligns belt top and lining by hand and runs parts through mangle to press them together. May apply paste to belt top and lining, using brush or spray gun. When top and lining are partially dry, aligns and presses them together by hand.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

783.687-030 TABLE WORKER (leather prod.)
Inserts sheets of waxed paper between precemented parts of small leather articles to prevent parts from sticking together. Places stacks of parts in boxes and carries boxes to next work station for further processing.

GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

784 OCCUPATIONS IN FABRICATION AND REPAIR OF HATS, CAPS, GLOVES, AND RELATED PRODUCTS

This group includes occupations concerned with working textile and leather materials into hats, caps, and gloves.

784.130-010 SUPERVISOR, CAP-AND-HAT PRODUCTION (hat & cap)
Supervises and coordinates activities of workers engaged in cutting, assembling, sewing, trimming, and blocking, men's and boy's caps and hats: Reviews work orders to determine staffing requirements and to plan and schedule production operations. Requisitions materials. Trains workers in operation of equipment, such as sewing machines, kick presses, cutting machines, and knives. Inspects samples of products for adherence to specifications for cutting, sewing, sizing, and blocking. May select and distribute materials to be assembled to workers. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to department as Supervisor, Body Department (hat & cap); Supervisor, Braid Department (hat & cap); Supervisor, Finishing Department (hat & cap); Supervisor, Harvest-Hat Department (hat & cap); Supervisor, Sewing Deparment (hat & cap). May supervise and coordinate activities of workers engaged in blending fur cuttings and be designated Supervisor, Back Shop (hat & cap).
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 78

784.132-010 SUPERVISOR (glove & mit.)
Supervises and coordinates activities of workers engaged in glove and mitten manufacturing activities, such as cutting, sewing, inspecting, and shipping: Examines gloves or mittens for defects, such as irregular stitches and misaligned parts. Instructs workers in operation and minor maintenance of sewing machines, and in methods to detect and correct defective work. Instructs workers in turning and pressing gloves or mittens made of materials, such as flannel, cotton, canvas, and leather. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 78

784.261-010 MILLINER (retail trade)
Fabricates hats for individual customer or for store's stock: Cuts pattern from material to desired size and shape, using original design or adapting or copying existing model. Lays pattern on material and cuts material, following pattern. Molds, drapes, and blocks material, using hat forms and steam iron. Sews lining and other sections of hat together and trims with materials, such as ribbon, veil, feathers, and flowers, using needle and thread or sewing machine. Reproduces hats in various colors and materials. Alters stock hats to customer's wishes by changing ornaments and veiling.
GOE: 01.06.02 STRENGTH: L GED: R4 M2 L2 SVP: 6 DLU: 77

784.361-010 PATTERNMAKER (hat & cap) alternate titles: caster; mold maker; plaster whittler; whittling-room operator
Casts plaster hat-making patterns from sample hat and shapes patterns to specified form and dimensions, using hand knife: Melts and pours thin, even layer of wax over hat to stiffen it. Presses hat into loose sand to create impression that duplicates dimensions and shape of hat. Mixes plaster powder with water and pours it into sand impression to form pattern. Lifts pattern from sand after it hardens. Whittles, cuts, and scrapes plaster from pattern with hand knife to achieve specified form and dimensions, measuring and comparing pattern with hat, using rule and tape.
GOE: 01.06.02 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

784.387-010 INSPECTOR (hat & cap) alternate titles: brusher; hat measurer; passer; racker; repairer; selector; trimmer
Inspects finished or partially finished hats, caps, hat parts, and millinery for defects and damage, and repairs less extensive flaws: Examines articles for irregularities, such as faulty coloring, shaping, sizing, and stitching. Rejects or returns extensively damaged articles to originating department for repair. Informs supervisor regarding types of article defects or damage. Repairs less extensive damage, performing any combination of following tasks: Trims excess material and loose or protruding threads, using clippers or scissors. Removes spots or stains from article, using sponge and water, and brushes surface of hat to remove dust or foreign matter. Applies sizing solution to cover holes or thin spots, using dauber or brush. Resews loose stitches and size tags, using needle and thread. Hangs or stacks hats and caps on rack or on table for packing. May be designated according to specific inspection function as Hat-Body Inspector (hat & cap); Hat-Cone Inspector (hat & cap); Trimming Inspector (hat & cap).
GOE: 06.03.01 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 78

784.387-014 LEATHER GRADER (glove & mit.) alternate titles: leather sorter
Examines and grades pieces of leather used to make gloves and mittens: Examines leather to detect defects, such as scars and holes and feels leather to detect thin and thick areas. Grades and stacks leather according to number of defects, thickness, and color.
GOE: 06.03.01 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

784.587-010 HAT-BODY SORTER (hat & cap)
Sorts and stacks hats, according to color, size, and style, for further processing: Pulls hat over marked *plug* to measure hat size. Marks size in hat crown, using pencil or crayon. Stacks hats on shelf, according to color, size, and style specified. May compare and sort hats for height of crown and width of brim. May place adhesive-backed size and brand label in hat. May place inverted hat body over steam tank to remove excess gloss.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

784.682-010 GLOVE SEWER (glove & mit.)
Operates sewing machine to join or decorate glove and mitten parts or finished article: Guides parts under machine needle to join thumb pieces to back and palm; to assemble finger pieces and join pieces to glove; to join sides of cuffs or cuff to glove; to stitch around fingers, thumb, and sides of glove to close glove openings; to sew on knuckle strap or finger tips; to join parts of mittens; or to stitch knit linings to elastic wristbands to complete cuffs. May repair gloves with defective stitching and be designated Mender (glove & mit.). May be designated according to part sewn or operation performed as Closer (glove & mit.); Fingerer (glove & mit); Fourchette Sewer (glove & mit); Knuckle-Strap Sewer (glove & mit); Mitten Stitcher (glove & mit); Palm-And-Back Forger (glove & mit). May be designated: Strapper (glove & mit); Thumb Sewer (glove & mit); Tipper (glove & mit); Wrist Closer (glove & mit); Wrister (glove & mit); Wrist Liner (glove & mit). Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 79

784.682-014 HAT-AND-CAP SEWER (hat & cap)
Operates sewing machine to join, decorate, or reinforce hat or cap parts or finished article: Guides parts under machine needle to form crown, sides, brim, sweatband, or visor, or to join parts together to fabricate article. May join *reeding* onto hat parts to reinforce them and be designated Brim-Welt-Sewing-Machine Operator (hat & cap); Cap Sizer (hat & cap); Leather Fitter (hat & cap); Reeding-Machine Operator (hat & cap); Wire-Machine Operator (hat & cap). May be designated according to part sewn as Chin-Strap Sewer (hat & cap). May be designated: Brim Stitcher (hat & cap) II; Label Sewer (hat & cap); Lining Maker (hat & cap); Ribbon-Sweatband Operator (hat & cap); Straw-Hat-Machine Operator (hat & cap); Tip Maker (hat & cap); Top Stitcher (hat & cap). Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R3 M1 L1 SVP: 3 DLU: 77

784.684-010 BOW MAKER (garment; hat & cap)
Folds and shapes ribbon sections to form decorative bows: Clips ends of folded ribbons to form tips of bow, using scissors, and folds tips of sewn ribbon sections according to specified style of bow. Glues sticker to back of shaped tip to secure tip in place. Folds and positions crosspiece in center of bow and secures in place, using wet glue sticker. Irons ribbon section to curve and shape ribbon to crown of hat. Ties western-style bows and lingerie bows by hand.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 78

784.684-014 BRIM IRONER, HAND (hat & cap) alternate titles: brim setter; hat-brim curler
Presses felt-hat brims to smooth, curl, and shape brim, using hand iron (shackle): Sets hand iron on heated plate to heat iron. Places cardboard protector ring over crown to protect sides from hot iron. Moistens brim, using damp sponge. Lifts iron from heated plate, inserts hat brim edge into forming slot of iron, and places hat on worktable. Presses iron around brim to smooth, curl, and shape hat brim. May place hat brim over steam hose to improve finish and remove iron marks. May shape and form depressions and creases in hat crown by hand according to style of hat.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 78

784.684-018 CAP MAKER (hat & cap) alternate titles: cap-machine operator; cap operator
Aligns cap parts and joins them to form finished cap, using needle and thread or sewing machine: Assembles parts, such as visors, covers, sweatbands, and ornaments, and joins them, using needle and thread; or operates sewing machine [HAT-AND-CAP SEWER (hat & cap)] to join parts. May join parts with basting stitches. May be designated according to type of cap joined as Dress-Cap Maker (hat & cap); Uniform-Cap Operator (hat & cap).
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L2 SVP: 4 DLU: 77

784.684-022 DECORATOR (hat & cap) alternate titles: hat trimmer
Sews or glues decorative trimmings to articles, such as hats, caps, or millinery: Pulls article over block to secure article for trimming. Pins trimmings, such as artificial flowers, bows, and ribbons, on article, following sample or specifications. Cements or sews trimmings to article, according to size and type of trimming, using brush, cement gun, or needle and thread. Cements label inside article, using brush. May cut, sew, cement, or tie ribbons or cloth parts to make trimmings and be designated Braided-Band Assembler (hat & cap). May lace decorative material through precut slots and holes and be designated Hat Lacer (hat & cap). May be designated by article trimmed as Ladies'-Hat Trimmer (hat & cap).
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 78

784.684-026 FLANGER (hat & cap) alternate titles: brim flanger; brim shaper; flanging operator; hat-brim curler
Presses hat brims to set shape and impart specified finish, using hand iron and heated sandbag: Inserts hat in specified size flange (metal or wood collar)

with brim resting on flange. Spreads pressing cloth over hat brim and ties cloth to base of form, using cord. Dampens cloth with sponge and irons brim, using dry or steam iron. Lowers preheated sandbag, suspended by rope and pulley, onto brim to set and shape brim against flange. Raises sandbag after specified time and unties cord. Examines hat for flaws in shape and appearance. May be designated according to type of hat flanged as Felt-Hat-Flanging Operator (hat & cap); Panama-Hat Flanger (hat & cap); Wool-Hat Flanger (hat & cap).
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 78

784.684-030 FOUNDATION MAKER (hat & cap)
Makes foundations to provide shape and form for hats and caps: Positions wire, cardboard, or plastic foundation between layers of knitted or woven fabric. Staples or hand-sews fabric together after insertion of foundation. May insert cardboard between layers of fabric to provide stiffening for hat or cap brims. May brush paste on cap-visor lining and apply fabric or plastic covering to lining. May be designated according to material used as Wire-Shape Maker (hat & cap).
GOE: 06.04.34 STRENGTH: S GED: R2 M1 L2 SVP: 2 DLU: 77

784.684-034 HARDENER (hat & cap) alternate titles: hand hardener; manual hardener
Kneads fur felt hat cones to mat together interlocking fibers and harden cones for shaping into hats: Wraps wet cones in burlap, squeezes wrapped cones to extract water, and removes cones from burlap. Rolls cones in blanket and kneads to interlock fibers and harden cones. Unrolls blanket, refolds and repositions cones in blanket, and repeats kneading until cones are sufficiently hardened to withstand subsequent handling and shaping into hats. Stacks hardened cones on bench or tray.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L2 SVP: 4 DLU: 77

784.684-038 HAT BRAIDER (hat & cap)
Cuts, braids, and shapes felt-covered wire to form head clips (women's hats): Pulls several feet of tubing from spool and cuts to specified length, using cutting pliers. Wraps tubing over nail driven into worktable and braids tubing to form decorative effect. Crimps together exposed wire at ends of tubing to form continuous loop, cutting sharp ends to prevent injury to wearer's head. Spreads tubing with fingers and forces it over knee to form head shape. Packs completed head clips in cartons for shipment.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

784.684-042 HAT MAKER (hat & cap)
Assembles ladies' hats by folding, draping, pinning, and sewing fabric, trimmings, and presewn hat parts to unfinished hat bodies, following color and design specifications or sample hat: Slips hat body onto block to secure hat for assembly. Folds, twists, and drapes material, such as satin or silk, around crown and brim to shape and decorate hat. Pins material in place. Sews parts, such as brim and trimmings to hat body, using needle and thread. May cut, tie, cement, or sew ribbon or cloth, to form trimmings, such as artificial flowers or bows. May cement trimmings to hat, using brush. When working under instructions of FASHION DESIGNER (profess. & kin.) to assemble sample hats, may be designated Hat-Designer Helper (hat & cap).
GOE: 06.02.27 STRENGTH: L GED: R3 M1 L2 SVP: 5 DLU: 77

784.684-046 MENDER (hat & cap)
Repairs damaged straw, woven-paper, or knitted hats or caps, using needle and thread: Repairs holes by weaving thread over them, selected to match original fabric. Stitches together cut or torn fabric. May be designated according to type of hat repaired as Woven-Paper-Hat Mender (hat & cap).
GOE: 06.04.34 STRENGTH: S GED: R2 M1 L1 SVP: 3 DLU: 77

784.684-050 ROUNDER, HAND (hat & cap) alternate titles: brim rounder; hand trimmer; welt-edge rounder
Cuts hat brims or cones to trim excess material from irregular edges, according to one of following methods: (1) Places hat on worktable and cuts excess material from raw or sewn welt edge, using adjustable razor cutting tool. (2) Pulls hat cone over block, places cutting edge against material, and turns mounted hat cone under cutting blade to remove excess material. May affix label inside hat crown to identify hat size.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 78

784.684-054 SIZER, HAND (hat & cap) alternate titles: sizer
Dips felt hat cones in hot water to shrink cones and wrings them to remove excess water. Kneads cone to mat together and strengthen interlocking fibers. Rolls cone, using rolling pin, to remove wrinkles and smooth surface. Inserts and spreads hands inside cone to enlarge and shape it. Measures cone, using ruler, and repeats dipping and kneading process until cone has shrunk to specifications.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

784.684-058 SIZER, MACHINE (hat & cap) alternate titles: starter; stumper
Moistens, folds, wraps, and places unfinished felt hat bodies in machine that agitates bodies to harden and shrink fur fibers to specified size: Sprinkles hat bodies with hot water or immerses bodies to shrink them. Wrings bodies to remove excess water, using hands. Folds hat bodies in prescribed manner and wraps burlap around folded bodies to protect fur fibers. Places bundle of bodies between machine rollers that agitate bodies, causing further shrinking and matting together of interlocking fibers. Measures bodies, using ruler. Continues refolding and passing hat bodies between rollers until bodies have become firm and have shrunk to specified size.
GOE: 06.04.16 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 78

784.684-062 SLICKER (hat & cap) alternate titles: lurer
Brushes felt hats to clean hats and applies polish and wax to surface to impart smooth, finished appearance: Brushes hat to remove dust, lint, and loose fibers and rotates hat over steampipe to remove excess gloss and condition fibers. Pulls hat onto block of revolving spindle and depresses pedal to start block rotating. Brushes silk polish (banana oil solution) onto hat to produce gloss. Applies wax to lure (cloth pad), rubs pad against heated iron to melt wax, and holds heated pad against rotating hat to smooth and finish appearance of felt. May place hi-roll hat in metal jig to shape and sharpen style lines.
GOE: 06.04.33 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 78

784.684-066 SMOOTHER (hat & cap)
Shapes felt-hat cones after dyeing to smooth, shape, and remove wrinkles. Pulls hat cone over metal block, presses and rubs hat to smooth and shape cone, and folds and stacks shaped cones flat on worktable for further processing.
GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

784.684-070 STEAMER-BLOCKER (hat & cap; knitting)
Positions hats or caps on shaped blocks to steam headwear and impart specified size and shape: Pulls hat linings, hats, or caps onto hat blocks. Holds block over steam jet, using hands to smooth and shape fabric. Places knit headwear on perforated aluminum head forms. Depresses pedal to force steam through form to soften headwear while shaping it by hand, using padded asbestos gloves. Sews hat brims to crowns, using needle and thread.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

784.684-074 TOP-HAT-BODY MAKER (hat & cap) alternate titles: silk-top-hat-body maker
Builds top-hat bodies from shellacked muslin, shellacks assembled body, and irons top, crown, and brim: Wraps several layers of shellacked muslin around shaped hat block to form crown of hat. Cuts several layers of muslin to shape of brim, using knife, slides them over crown, and fastens them to crown with tape to form brim. Cuts out top for hat, using scissors or knife, and fastens it to crown with tape. Applies several coats of shellac to hat body, using brush. Cuts brim to specified width when shellac is dry, using *rounding jack* [ROUNDER, HAND (hat & cap)]. Slips felt cover over hat body and presses top, crown, and brim, using iron. May press brim over flange to press and curl brim [FLANGER (hat & cap)]. May assemble collapsible opera hat body.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

784.684-078 TRIMMER (hat & cap) alternate titles: hat-band attacher; specialty trimmer
Attaches buttons, studs, snaps, chin straps, braid, and ornamental bands to caps, using needle and thread, stapler, or handpress. Attaches ornamental hat bands, using hot-glue gun or adhesive tape. May operate sewing machine to attach bands, chin straps, or bows.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 78

784.685-010 BAND-AND-CUFF CUTTER (glove & mit.)
Tends machine that cuts wristbands or knuckle straps for gloves or mittens: Positions rolls of banding material on holders and draws ends through guides. Starts material under revolving wheel set with dies that cut material to shape and size, or starts material under fingers that pull material under blade that cuts it to length. Stacks specified number of cut bands in box. May tend machine with sewing attachment to sew over edge of material before cutting.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

784.685-014 BRIM STITCHER I (hat & cap)
Tends one or more sewing machines that automatically sew circular row of stitches on hat brims to reinforce and decorate brims: Turns screw to position guide on bed of machine. Inserts hat brim into guide, under presser foot and needle. Performs duties as described under SEWING-MACHINE OPERATOR, AUTOMATIC (any industry) Master Title.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

784.687-010 BRIM RAISER (hat & cap) alternate titles: steam finisher; straw-hat-brim-raiser operator; straw-hat finishing operator
Dampens strawhats, using sponge, and holds hats over steam jet to cause straw to swell and resume shape after hat has been pressed.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

784.687-014 CARROTER (hat & cap) alternate titles: brusher, hand
Applies chemical solution onto fur pelts, using brush, to condition fur fibers for manufacture of felt hats.
GOE: 06.04.33 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

784.687-018 CROWN POUNCER, HAND (hat & cap) alternate titles: felt-hat-pouncing operator, hand; hand pouncer; pouncer
Slips unfinished hat over specified size hat block and rubs crown in one direction to remove excess fibers and impart smooth finish. Feels surface of crown to ascertain when specified texture has been attained. Removes hat from block and places it on wheeled rack.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

784.687-022 EAR-MUFF ASSEMBLER (hat & cap)
Assembles ear muffs by inserting wire loops of adjustable metal headband into presewn fur or fabric ear covers, selected according to color and material specifications.

GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

784.687-026 ENDBAND CUTTER, HAND (hat & cap) alternate titles: endbander; endband sizer; sizing end-bander

Measures and cuts end bands (ear flaps) to size for caps: Positions band against size gauge to measure band, and cuts band, according to size specified on work ticket, using scissors. Bundles cut parts, using ribbon or string.
GOE: 06.04.27 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

784.687-030 FLOORWORKER-DISTRIBUTOR (hat & cap)

Selects and distributes materials, such as unfinished hat bodies and trimmings, to workers engaged in assembling and trimming hats. May inspect finished work. May oversee activities and maintain production records of assembly workers.
GOE: 06.04.40 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

784.687-034 GLOVE PAIRER (glove & mit.) alternate titles: gauntlet pairer

Matches right- and left-hand gloves according to size, style, and color, and stacks them in lots of specified number of pairs. May tie gloves in lots onto cardboard, by hand or with tying machine, to prepare them for packing. May insert pair of gloves into plastic bag and pack specified number of pairs into shipping carton.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

784.687-038 GLOVE TURNER (glove & mit.)

Turns gloves and mittens right-side-out: Pulls thumb and each finger of glove over *turner tube*, depresses pedal to lower rod that pushes tips of fingers into tube, and pulls partially turned glove from tube. Pulls thumb and each finger over shaped form (punch-out stick) to complete turning and to push out finger tips. May pull turned glove over heated form to press glove [GLOVE FORMER (glove & mit., laundry & rel.) 363.687-010] and be designated Glove Turner-And-Former (glove & mit.).
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 78

784.687-042 INSPECTOR-PACKER (hat & cap)

Inspects, repairs, and packs repaired finished hats or caps: Inspects hats or caps for flaws, such as poor stitching and improperly placed visors, bands, or ornaments. Makes minor repairs to hats or caps, such as sewing in missed stitches, using needle and thread, clipping loose threads, using scissors, and fastening loose ornaments. Sorts hats or caps into piles according to size. Lines boxes or cartons with tissue paper and packs hats or caps in containers. Marks contents on outside of containers. May spray hats, using airhose, to remove lint prior to packing. May perform final finishing operations, such as buckling chin straps. May be designated according to hat as Felt-Hat Inspector And Packer (hat & cap); Strawhat Inspector And Packer (hat & cap).
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 78

784.687-046 LINER (glove & mit.)

Inserts cloth linings in leather mittens: Places lining on specified size metal form and pulls mitten over lining. Folds wristlets back over lining preparatory to stitching to leather. Removes lined mitten from form.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

784.687-050 MATERIAL ASSEMBLER (hat & cap) alternate titles: trim preparer

Sorts and assembles cap, hat, or millinery parts and trimming material according to color, quantity, size, or style, to facilitate attachment to article: Measures and cuts ribbon or other material, following specifications, using ruler and scissors. Gathers and bundles parts and trimmings specified for each hat, such as flowers, feathers, ribbons, and sweatbands, using pins or twine. May maintain records of materials issued to HAT MAKER (hat & cap) 784.684-042 and of ribbon inventory. May be designated according to material cut as Ribbon Cutter (hat & cap).
GOE: 06.03.02 STRENGTH: L GED: R3 M1 L2 SVP: 3 DLU: 78

784.687-054 OPENER I (hat & cap)

Slits rabbit pelts along abdomen and opens them out, using knife. Cuts off ears, tail, and feet and places parts in bags to be processed as inferior fur. Piles opened skins, fur sides together, to facilitate processing of fur into felt hats. May cover skins with burlap and tie into bundles, using string.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

784.687-058 POWDERER (hat & cap)

Rubs or sprays powder of specified color onto unfinished felt hat bodies, using powder-filled cloth bag or compressed-air gun, to stiffen, finish, or prepare bodies for further processing.
GOE: 06.04.33 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 78

784.687-062 SINGER (hat & cap)

Holds felt hats over flame to burn away protruding hairs prior to finishing operations: Depresses pedal to release steam from jet and holds and turns hat, mounted on block, in current of steam to moisten felt. Activates gas jet and turns hat in flame to burn away protruding hairs without scorching felt. May place hat body on revolving block to burn off excess fuzz or lint.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

784.687-066 SMOKE-ROOM OPERATOR (hat & cap)

Tends burning room to bleach strawhats with burning sulfur: Loads racks with hats and wheels them into room. Pours powdered sulfur into pan provided with electric heating unit, closes door of room, and turns electric switch to burn sulfur in pan. Turns on ventilator fan and removes hats after specified time.
GOE: 06.04.34 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

784.687-070 STICKER (hat & cap) alternate titles: sticker-on

Glues pieces of hides, such as rabbit, beaver, muskrat, or nutria to paper sheets to facilitate machine cutting of fur from skin: Brushes glue onto paper sheets. Presses bits of fur, skin side down, onto glued surface to create fur area large enough to be accommodated by clipping machine that cuts fur from skins.
GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

784.687-074 STRAW-HAT BRUSHER (hat & cap)

Cleans and polishes strawhats: Slips hat on wooden block, wipes powdered sulfur onto hat with cloth, and brushes hat by hand.
GOE: 06.04.39 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

784.687-078 STRAW-HAT-WASHER OPERATOR (hat & cap) alternate titles: stiff-straw-hat washer

Rubs strawhats with damp sponge to remove excess sizing: Slips hat over shaped hat block, rubs surface with damp sponge, and hangs hat on rack to dry. May hold hat over steam jet to soften sizing, preparatory to rubbing with sponge, or place hats in tub equipped with steam jets and cover top of tub with burlap cloth to allow steam to soften sizing and condition straw and be designated Steamer (hat & cap).
GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

784.687-082 WIRE INSERTER (hat & cap)

Cuts and inserts wire into crown of caps to shape and support crown: Measures wire, using ruler. Positions wire on bed of cutter beneath blade and presses lever to cut wire to specified length. Bends wire to form circle and fastens ends of wire together with metal clip. Inserts circular wire into crown of cap, using fingers.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

784.687-086 HAT CONDITIONER (hat & cap) alternate titles: muller

Sprays felt hats with water and refrigerates hats to condition hat fibers in fancy finish department of hat manufacturer: Sprays hats with fine mist, using water spray nozzle, and positions burlap around hats to confine moisture. Places hats in refrigerated room for chilling to condition hat fibers. Removes hat after specified time and places hats on racks for further processing.
GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 86

784.687-090 SWEATBAND SHAPER (hat & cap)

Shapes sweatbands to conform to hat crowns, using heated metal blocks: Places hats on heated metal blocks, according to hat size. Removes hats after specified time. Places hats on racks and pushes racks to designated location for further processing.
GOE: 06.04.27 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 86

785 TAILORS AND DRESSMAKERS

This group includes occupations concerned with performing all tasks required to design and produce finished made-to-measure garments or to perform specialized stitching and machine-sewing requiring tailoring skill in the manufacture or alteration of ready-made or tailored apparel.

785.131-010 SUPERVISOR, ALTERATION WORKROOM (retail trade)

Supervises and coordinates activities of workers engaged in altering ready-to-wear garments: Assigns duties to workers according to type of garment and alteration to be performed. Examines work of subordinates periodically to detect faulty work. Performs duties of absent workers and assists workers to maintain production when necessary. Trains new employees. Requisitions supplies. Confers with workers, customers, and other supervisors regarding garment alterations. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.15 STRENGTH: L GED: R3 M3 L3 SVP: 6 DLU: 77

785.261-010 ALTERATION TAILOR (garment; personal ser.; retail trade) alternate titles: alterer; busheler

Alters clothing to fit individual customers or repairs defective garments, following alteration or repair tags or marks on garments: Examines tag or garment to ascertain necessary alterations. Removes stitches from garment, using ripper or razor blade. Shortens or lengthens sleeves and legs, expands or narrows waist and chest, raises or lowers collar, and inserts or eliminates padding in shoulders while maintaining drape and proportions of garment. Trims excess material, using scissors. Resews garment, using needle and thread or sewing machine. Repairs or replaces defective garment parts, such as pockets, pocket flaps, and coat linings. May fit garments on customer to determine required alterations [GARMENT FITTER (retail trade) 785.361-014]. May press garment, using hand iron [PRESSER, HAND (any industry) 363.684-018] or pressing machine [PRESSER, MACHINE (any industry) 363.682-018]. May be designated according to type of garment altered or repaired as Tailor, Men's Ready-To-Wear (retail trade); Tailor, Women's-Garment Alteration (retail trade); or according to garment part altered or repaired as Pants Busheler (Retail trade); Vest Busheler (retail trade).
GOE: 05.05.15 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 81

785.261-014 CUSTOM TAILOR (garment; personal ser.; retail trade) alternate titles: made-to-measure tailor; tailor

Develops designs and makes tailored garments, such as suits, topcoats, overcoats, and other dress clothing, applying principles of garment design, construc-

trim, and styling: Confers with customer to determine type of material and garment style desired. Measures customer for size and records measurements for use in preparing patterns and making garment. Develops designs for garments or copies existing designs. Draws individual pattern for garment or alters standard pattern to fit customer's measurements. Outlines patterns of garment parts on fabric and cuts fabric along outlines, using scissors. Assembles garments, sewing padding to coat fronts, lapels, and collars to give them shape and joining garment parts with basting stitches, using needle and thread or sewing machine. Fits basted garment on customer and marks areas requiring alterations. Alters garment and joins parts, using needle and thread or sewing machine. Sews buttons and buttonholes to finish garment. May press garment [PRESSER, HAND (any industry); PRESSER, MACHINE (any industry)]. May supervise activities of other workers in tailoring shop. May specialize in making garments and be designated Coat Tailor (garment). May perform specific tasks in tailor shop and be designated Coat Fitter (garment); Try-On Baster (garment).
GOE: 05.05.15 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

785.261-018 TAILOR APPRENTICE, ALTERATION (garment; personal ser.; retail trade) alternate titles: alterer apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.15 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

785.261-022 TAILOR APPRENTICE, CUSTOM (garment; personal ser.; retail trade) alternate titles: made-to-measure-tailor apprentice; master-tailor apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.15 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

785.361-010 DRESSMAKER (any industry)

Makes women's garments, such as dresses, coats, and suits, according to customer specifications and measurements: Discusses with customer type of material, pattern, or style to be used in making garment. Measures customer to determine modification from pattern, using tape measure. Positions and pins pattern sections, such as collar, sleeve, or waist, on fabric, and cuts fabric with scissors following pattern edge. Pins or bastes together fabric parts in preparation for final sewing. Sews fabric parts by hand or operates single-needle sewing machine that joins fabric parts to form garment. Sews *felling stitch* in hem of garment by hand to conceal thread. Presses garment, using hand iron, to smooth seams and remove wrinkles [PRESSER, HAND (any industry)]. May draft standard pattern according to measurements of customer and adapt pattern to obtain specified style. May make garment according to picture furnished by customer.
GOE: 05.05.15 STRENGTH: L GED: R3 M3 L3 SVP: 7 DLU: 77

785.361-014 GARMENT FITTER (retail trade)

Fits ready-to-wear garments on customer to designate alterations required for desired fit of garment: Studies garment on customer and measures pieces, such as sleeves, pants, and hems. Pins altering folds or marks on cloth with chalk at seams, darts, or necklines to indicate alterations to be made. Measures and marks hem to specified length. Records required alterations and instructions concerning alterations on tag and attaches tag to garment, or calls out instructions to salesperson for recording on alteration tag. May alter garments, using sewing machine, as required by work load. May be designated according to garment fitted as Men's Garment Fitter (retail trade); Women's Garment Fitter (retail trade).
GOE: 05.05.15 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

785.361-018 SAMPLE STITCHER (garment) alternate titles: sample maker; sample maker, original; sample sewer; sample tailor

Marks and cuts out material and sews parts of new style garments, following patterns, sketches, and design specifications, to prepare sample garments: Selects garment parts and threads, according to design specifications. Positions and aligns parts of sample garment together, following markings on parts, sketches, and patterns. Sews parts and attaches accessories and ornamentations, using needle and thread or sewing machine. Drapes garment on model form, examines fit and hang of garment, and marks garment to indicate position of fasteners and trimmings, such as sashes, belts, and emblems. May sew fasteners and trimmings to garments, using needle and thread or sewing machine. May mark and cut materials to obtain garment parts, following patterns or designer's sketches. May press garments by hand or machine. May join dress parts to prove correctness of pattern as to fit and hang of garment and be designated Duplicate Maker (garment).
GOE: 05.05.15 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

785.361-022 SHOP TAILOR (garment; retail trade)

Performs specialized hand and machine sewing operations in manufacture of made-to-measure or ready-to-wear clothing, applying knowledge of garment construction and fabrics: Trims and shapes edges of garment parts preparatory to sewing and cuts excess material from seam edges, using shears or knife. Fits collar facing to underfacing, trims edge of undercollar with shears, and sews undercollar to collar. Bastes collar or sleeves to coat body and sews collar or sleeves to coat with permanent stitches. Stitches shoulder padding, coat facing, and lining together at armhole. Bastes and sews canvas material in various coat parts, such as undercollar, shoulder, and front edge. Joins shoulder padding to coat with basting stitches. May sew on buttons and make buttonholes to finish suits. May be designated according to tasks performed or garments sewn as Coat Baster (garment; retail trade); Coat Padder (garment; retail trade); Collar Setter (garment; retail trade); Lapel Padder (garment; retail trade); Sleeve Tailor (garment; retail trade); Suit Finisher (garment; retail trade). May be designated: Top-Collar Maker (garment; retail trade); Undercollar Baster (garment; retail trade); Undercollar Maker (garment; retail trade); Vest Tailor (garment; retail trade).
GOE: 05.05.15 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

785.361-026 SHOP TAILOR APPRENTICE (garment; retail trade) alternate titles: finisher-tailor apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.15 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

786 SEWING MACHINE OPERATORS, GARMENT

This group includes occupations concerned with operating regular sewing machines, tending semiautomatic machines to sew garments (as defined in GARMENT INDUSTRY), or to ultrasonically seam garments in imitation of sewing.

786.132-010 SUPERVISOR, GARMENT MANUFACTURING (garment)

Supervises and coordinates activities of workers engaged in sewing, pressing, and inspecting garments in one department of manufacturing establishment: Inspects work for adherence to specifications. Notifies mechanic when machines malfunction. Trains workers in assembly of new style garments. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to department supervised as Supervisor, Finishing Department (garment); Supervisor, Inspection Department (garment); Supervisor, Sewing Room (garment).
GOE: 06.02.01 STRENGTH: L GED: R4 M2 L3 SVP: 6 DLU: 78

786.682-010 APPLIQUER, ZIGZAG (garment)

Operates *zigzag sewing machine* to sew appliques, monograms, embroidery, or lace on designated places of garment to decorate or reinforce garment. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-014 ARMHOLE BASTER, JUMPBASTING (garment)

Operates *jumpbasting sewing machine* to temporarily secure fabric layers in position at armhole seam of coat or jacket. Positions armhole on machine bed and bastes to secure outer fabric, shoulder pad, and canvas interlining at armhole seam. Repositions armhole and bastes on inside of coat to secure lining. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-018 ARMHOLE FELLER, HANDSTITCHING MACHINE (garment)

Operates sewing machine that simulates handstitching to sew sleeve lining to coat lining: Turns knob to adjust machine for depth of needle penetration, depending on type of fabric. Positions armhole of coat lining with partially sewn sleeve lining on bed of machine, folds raw edge of sleeve lining at top of armhole, aligns lining edges, and depresses pedal to sew parts together. Folds edge with fingers and presses knee lever to gather sleeve lining to fit armhole of coat lining. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

786.682-022 ARMHOLE-SEW-AND-TRIM OPERATOR, LOCKSTITCH (garment)

Operates lockstitch sewing machine equipped with edgecutter to sew prebasted layers at armhole seam of coat or jacket and cut away excess fabric. Positions armhole on machine bed and sews through sleevehead, sleeve, canvas, shoulder pad, and outer coat fabric while edgecutter trims excess fabric. Performs other duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-026 BACK MAKER, LOCKSTITCH (garment)

Operates lockstitch sewing machine to make complete back of coat or jacket: Aligns center back edges from shoulder to vent, matching fabric pattern, if any, and guides edges under needle to join. Hems vent edge or attaches rectangular piece of lining fabric or tape, to conceal raw edge of vent. May attach tape to back neckline. May raise (topstitch) center back seam by sewing specified distance from seam line to reinforce, flatten, and decorate back seam and vent. Performs other duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-030 BASTING-MACHINE OPERATOR (garment)

Operates basting machine to temporarily maintain position of garment edges or layers in preparation for pressing or final sewing operation. May attach bridle (length of tape stretched taut) to canvas interlining along bend of coat lapel to maintain roll line. May baste edges on front of coat to maintain sharp edge and be designated Edge Baster (garment). Performs other duties as described under SEWING-MACHINE OPERATOR, REGUALR EQUIPMENT (any industry) Master Title.

GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-034 BINDER, CHAINSTITCH (garment)
Operates chainstitch sewing machine equipped with folder to fold and attach binding material over raw edge of garment to give finished appearance. Performs other duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-038 BINDER, COVERSTITCH (garment)
Operates *coverstitch sewing machine* equipped with folder to fold and attach binding material over raw edge of knit garment to give finished appearance. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-042 BINDER, LOCKSTITCH (garment)
Operates lockstitch sewing machine equipped with folder to fold and attach binding material over raw edge of garment to give finished appearance. Performs other duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-046 BLINDSTITCH-MACHINE OPERATOR (garment)
Operates *blindstitch sewing machine* to join fabric layers, or attach tape or parts to garment, with stitching that does not penetrate to outer surface of garment. Adjusts machine for depth of needle penetration, depending on fabric. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title. May attach one edge of curtain (waistband lining) to pants and be designated Curtain Feller, Blindstitch (garment).
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

786.682-050 CANVAS BASTER, JUMPBASTING (garment)
Operates *jumpbasting sewing machine* to temporarily attach canvas interlining to front of coat. Positions front of coat on canvas interlining and bastes outer surface, allowing fullness as required by style of coat. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-054 CHAINSTITCH SEWING MACHINE OPERATOR (garment)
Operates chainstitch sewing machine to join garment parts, or attach trim to garment. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title. May attach tape or trim, ruffle and attach ruffled trim, or fold and sew stripping, using machine attachments, such as ruffler or folder.
GOE: 06.02.05 STRENGTH: L GED: R3 M1 L2 SVP: 3 DLU: 78

786.682-058 COAT JOINER, LOCKSTITCH (garment)
Operates lockstitch sewing machine to join side panels to back of coat or jacket: Positions edges, joining matching fabric pattern as necessary and guides fabric under needle, manipulating fabric to provide fullness over chest area. May fold edge of coat panel according to marks to form vent. May attach tape around back of armhole, flattening seams, pulling tape taut, and manipulating coat fabric to ease-in fullness. Performs other duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-062 COLLAR BASTER, JUMPBASTING (garment)
Operates *jumpbasting sewing machine* to baste collar to neckline of coat, manipulating fabric to follow curve of neckline and provide fullness at shoulder area. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title. May baste front section of top collar to lapel facing. May baste cuff.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-066 COLLAR FELLER, HANDSTITCHING MACHINE (garment)
Operates sewing machine that simulates handstitching to join undercollar to neckline of garment. Adjusts machine for depth of needle penetration, depending on fabric. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title. May operate machine to join top collar to neckline of garment.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

786.682-070 COLLAR SETTER, LOCKSTITCH (garment)
Operates lockstitch sewing machine to attach collar to neckline of garment: Positions edges of one or more layers of collar on neckline and joins collar to neckline of garment, manipulating fabric to align edges according to markings. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title. On styles requiring separate joining of collar layers, may join unattached edge to neckline and be designated Collar Closer, Lockstitch (garment). May set cuffs instead of collars and be designated Cuff Setter, Lockstitch (garment).
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-074 COLLAR SETTER, OVERLOCK (garment)
Operates *overlock sewing machine* to attach collar to neckline of garment: Positions collar on neckline and joins parts, manipulating fabric to align edges according to markings. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title. May set cuffs instead of collars, with or without intermittent shirring, and be designated Cuff Setter, Overlock (garment).
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-078 COVERSTITCH-MACHINE OPERATOR (garment)
Operates *coverstitch sewing machine* to join parts of knit garments, or to attach narrow fabric, such as tape, lace, or borders, to edges, or to flatten presewn seams. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

786.682-082 CUP SETTER, LOCKSTITCH (garment)
Operates lockstitch sewing machine to set brassiere cups to foundation garment or swim suit. Aligns cup with lining or body of garment, following markings, and joins parts, manipulating fabric to conform to shape of cup. Performs other duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-086 ELASTIC ATTACHER, CHAINSTITCH (garment)
Operates multiple needle chainstitch sewing machine equipped with tension regulator and folder to sew elastic band or stripping to garment parts: Adjusts tension regulator to stretch elastic for specified dimension. Guides garment edge into folder, aligns elastic with folded edge, and sews along edge to attach. Performs other duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-090 ELASTIC ATTACHER, COVERSTITCH (garment)
Operates *coverstitch sewing machine*, equipped with tension regulator, to sew elastic stripping to waistline or other opening of knit garments, such as underwear. Adjusts tension regulator to stretch elastic for specified dimension. Aligns elastic on edge of opening and guides under needles to attach. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-094 ELASTIC ATTACHER, OVERLOCK (garment)
Operates *overlock sewing machine*, equipped with tension regulator, to sew elastic stripping to waistline or other opening of garment: Adjusts tension regulator to stretch elastic for specified dimension. Aligns elastic on garment edge and guides parts under needle to overedge and join them. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-098 ELASTIC ATTACHER, ZIGZAG (garment)
Operates *zigzag sewing machine* to sew elastic strip to edge of garment: Positions elastic strip on garment edge. Stretches elastic with fingers to maintain tension while sewing or operates zigzag machine equipped with tension regulator. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-102 FACING BASTER, JUMPBASTING (garment)
Operates *jumpbasting sewing machine* to baste facing to front of coat, manipulating fabric to provide fullness. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title. May be designated by first or second step in basting of facing as Second Facing Baster (garment); Underbaster (garment).
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-106 FELLED-SEAM OPERATOR, CHAINSTITCH (garment)
alternate titles: felling-machine operator
Operates multiple-needle, chainstitch sewing machine to join edges of garments or garment parts with *felled seam*. Guides edge of garment through folding attachment or folds edge according to style specifications to form seam. Presses knee control to lower machine arm. Positions folded garment edge under needle and releases knee control to raise machine arm. Guides garment edge under needle and against gauge. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-110 FLATLOCK-SEWING-MACHINE OPERATOR (garment)
Operates *flatlock sewing machine* equipped with cutting attachment to join parts of knitwear with flat, nonraveling seams. Places garment part around arm of machine with fabric edges together and operates machine to seam parts and cut excess fabric from seam. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-114 FRONT MAKER, LOCKSTITCH (garment)
Operates lockstitch sewing machine equipped with attachments, such as folding attachment or topstitching guide, to make front of bodice for women's and children's garments. Sets, joins, and attaches parts as specified to complete front or other parts of bodice, according to style. Performs other duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.

GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

786.682-118 FRONT-EDGE-TAPE SEWER, LOCKSTITCH (garment)

Operates lockstitch sewing machine equipped with edgecutter to sew prebasted front edge of coat or jacket: Sews across top edge of lapel. Lowers edgecutter to side of needle, positions tape along front edge of coat, and guides parts under needle to sew tape and cut away excess fabric from coat layers (outer fabric, canvas, and facing). Raises edgecutter and sews tape to bottom front corner of coat, easing in tape at corner. Performs other duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.

GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

786.682-122 FUR-MACHINE OPERATOR (garment) alternate titles: feed-cup-sewing-machine operator

Operates *fur machine* to join bulky or heavy material, such as sheepskin pelts, fake fur, or leather, into garments or garment parts: Depresses pedal to open horizontal *feed cups*, positions edges of material between cups, and releases pedal to close cups. Guides edges of material between feed cups and across path of horizontal needle to join them. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.

GOE: 06.02.05 STRENGTH: L GED: R3 M1 L1 SVP: 7 DLU: 77

786.682-126 HEMMER, BLINDSTITCH (garment) alternate titles: feller

Operates *blindstitch sewing machine* equipped with folder to hem bottom or edges of garment. Adjusts machine for depth of needle penetration depending on fabric. Guides garment edge into folder and under needle to sew folded edge with stitches not visible on outer surface of garment. May book (hem) margins of seams and be designated Bookseamer, Blindstitch (garment). Performs other duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.

GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

786.682-130 HEMMER, CHAINSTITCH (garment)

Operates chainstitch sewing machine equipped with folder and guides edges of garment, such as shirt, into folder to hem garment. Performs other duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.

GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

786.682-134 HEMMER, LOCKSTITCH (garment)

Operates lockstitch sewing machine equipped with folder to hem edges of garment, such as shirt. Performs other duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.

GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

786.682-138 HEMMER, OVERLOCK (garment)

Operates *overlock sewing machine* equipped with S-shaped folder to hem garment edge. Guides garment edge into folder and simultaneously sews over raw edge and over folded-back top of hem to secure hem and cover raw edge with stitching. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.

GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

786.682-142 HEMSTITCHING-MACHINE OPERATOR (garment)

Operates hemstitching sewing machine, equipped with folder, to sew decorative line of stitched perforations. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.

GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

786.682-146 JUMPBASTING-MACHINE OPERATOR (garment)

Operates *jumpbasting sewing machine* to secure parts of coat in position, either permanently or in preparation for permanent sewing. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.

GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

786.682-150 LAPEL PADDER, BLINDSTITCH (garment)

Operates *blindstitch sewing machine* to attach canvas interlining to lapel of coat, manipulating fabric to ease-in fullness so lapel rolls outward. Adjusts machine for depth of needle penetration, depending on fabric, and sews lines of stitching, following contour of lapel. May sew lines of stitching on coat collar instead of lapel and be designated Collar Padder, Blindstitch (garment). Performs other duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.

GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-154 LINING BASTER, JUMPBASTING (garment)

Operates *jumpbasting sewing machine* to baste lining to coat, manipulating fabric to distribute lining fullness, in preparation for permanent attachment. Folds and sews pleats in lining. When basting coat with vent, folds and bastes lining to vent edges. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.

GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

786.682-158 LINING FELLER, BLINDSTITCH (garment)

Operates *blindstitch sewing machine* equipped with vertical guide to join bottom of lining to garment with stitches that are invisible on outer surface of garment: Adjusts stitch-penetration depth, depending on fabric. Folds under edge of lining and positions on outer fabric. Guides edge of lining against vertical guide to maintain fabric position and join undersurfaces. May join lining at cuff. Performs other duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.

GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-162 LINING MAKER, LOCKSTITCH (garment)

Operates lockstitch sewing machine to make garment lining: Seams sides, shoulders, and sleeves of lining and sews darts, if any. Folds and sews pleat in back of lining for extra fullness. Sets sleeve lining to body lining. Performs other duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.

GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

786.682-166 LINING SETTER, LOCKSTITCH (garment) alternate titles: outsewer; sew-out operator

Operates lockstitch sewing machine to set edge of lining to garment edges, either directly or by first joining lining to facing and then setting facing to garment edge. May operate machine equipped with edgecutter to set lining and trim excess fabric. Performs other duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.

GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-170 LOCKSTITCH-MACHINE OPERATOR (garment) alternate titles: single-needle operator

Operates lockstitch sewing machine equipped with guides to perform sewing operations, such as seaming garment parts along similarly shaped edges, attaching narrow fabrics (tape, lace or other trim), or sewing reinforcing fabric. Matches edges or positions tape, trim, or piece of fabric on mark and operates machine to attach to garment. Performs other duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title. May operate machine equipped with ruffling attachment to ruffle material and attach ruffled trim to garment, or operate machine equipped with shirring attachment to shirr while attaching trim. May operate two-needle variation of lockstitch machine to attach tape or trim and be designated Double-Needle Operator, Lockstitch (garment).

GOE: 06.02.05 STRENGTH: L GED: R3 M1 L2 SVP: 3 DLU: 81

786.682-174 LOCKSTITCH-SEWING-MACHINE OPERATOR, COMPLETE GARMENT (garment)

Operates lockstitch sewing machine equipped with various attachments to sew complete garment, exclusive of finishing operations. May make shell of garment (complete garment exclusive of lining) and be designated Shell Maker, Lockstitch (garment). Performs other duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.

GOE: 06.02.05 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

786.682-178 MULTINEEDLE-CHAINSTITCH-MACHINE OPERATOR (garment) alternate titles: multineedle shirrer

Operates multineedle chainstitch sewing machine to shirr garment parts by any of following methods: (1) Guides garment part under shirring presser foot that evenly spaces gathers under needle; (2) guides part under needles of machine threaded with elastic thread; (3) guides parts and elastic cord under needles to shirr fabric. Secures specified number of needles into machine head. Performs duties as defined under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title. May sew multiple rows of flat trim to garment part. May sew decorative threads between rows of shirring, or shirr fabric with decorative stitch and be designated SMOCKING-MACHINE OPERATOR (garment).

GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-182 NECKTIE OPERATOR, POCKETS AND PIECES (garment)

Operates chainstitch sewing machine to join parts of necktie. Aligns edges of tie pieces and joins parts to make face (outer surface) of tie. Seams tie pocket (lining) to tips of tie. Performs other duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.

GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-186 NECKTIE-CENTRALIZING-MACHINE OPERATOR I (garment) alternate titles: necktie stitcher

Operates *necktie-centralizing sewing machine* equipped with hook in front of needle to seam length of necktie and attach reinforcing strip with stretchable one-thread stitch. Folds tie fabric lengthwise, superimposes and aligns reinforcing strip along edge, and stitches through layers to join. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.

GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-190 NECKTIE-CENTRALIZING-MACHINE OPERATOR II (garment) alternate titles: slipstitch-machine operator

Operates *necktie-centralizing machine* equipped with feed track and stationary needle to seam length of necktie and simultaneously attach reinforcing strip with stitch simulating handstitching: Positions reinforcing strip on feed track. Folds tie fabric lengthwise and positions above strip. Operates machine and manipulates edges continuously to align and guide tie fabric into track.

GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-194 OVERLOCK SEWING MACHINE OPERATOR (garment)
Operates *overlock sewing machine*, equipped with edgecutter, to serge, seam, or attach tape or trim to garment and cut away excess material: Overedges one ply of fabric to prevent fraying, or overedges two or more plies to join garment parts. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title. May operate overlock machine equipped with shirring mechanism to shirr and attach trim to garment. May operate overlock machine that sews reinforcing row of stitches while overedging and be designated Safety-Stitch-Machine Operator (garment).
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 80

786.682-198 OVERLOCK-MACHINE OPERATOR, COMPLETE GARMENT (garment)
Operates *overlock sewing machine* equipped with edgecutter to sew complete garment, exclusive of finishing operations. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title. May operate machine equipped with intermittent shirring mechanism to shorten edge of one garment part in order to join edges of dissimilar length.
GOE: 06.02.05 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

786.682-202 PANTS OUTSEAMER, CHAINSTITCH (garment) alternate titles: pants closer
Operates chainstitch sewing machine to sew outside seam of pants, pushing front pants pocket out of way, matching notches, and aligning fabric pattern, if any. Performs other duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-206 PICKED-EDGE SEWING-MACHINE OPERATOR (garment)
Operates picked-edge sewing machine to sew stitchline specified distance from edge on outer surface of garment part, duplicating hand top stitching in appearance: Threads needle with precut lengths of thread, using threading hook attached to frame. Depresses pedal to start machine equipped with double-ended needle that moves between top and bottom chucks to insert thread at preset distances, simulating saddle stitch or short-length stitch. Pulls loop of thread from needle, using pick.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

786.682-210 POCKET SETTER, LOCKSTITCH (garment) alternate titles: pocket maker
Operates lockstitch sewing machine to join cut parts to form pockets and to set pockets into or onto garment, according to style and markings. May topstitch pocket edges or attach welting, piping, or trim to pockets. May cut material for welting, using scissors. May cut pocket openings, match corners, or cut excess fabric from seam, using scissors. Performs other duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

786.682-214 REPAIR OPERATOR (garment)
Operates lockstitch sewing machine to repair or replace damaged or defective parts of garments: Examines repair tags and markings on garment to locate defects or damage, such as irregular stitches or torn or snagged parts. Removes stitches, using scissors or ripper (pointed handtool). Joins replacement parts to garment and sews missing or improperly sewn stitches on garment parts. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R3 M1 L2 SVP: 3 DLU: 77

786.682-218 SEAT JOINER, CHAINSTITCH (garment)
Operates chainstitch sewing machine to join seat seam of pants with curved stitchline from bottom of zipper to waistline at center back, matching inseams and varying seam allowance according to size. Performs other duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-222 SHOULDER JOINER, LOCKSTITCH (garment)
Operates lockstitch sewing machine to sew shoulder seam of coat or jacket. Aligns seam edges, moving canvas and shoulder pad aside, and guides edges under needle to sew shoulder seam, working in fullness of fabric with fingers. Performs other duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-226 SLEEVE MAKER, LOCKSTITCH (garment)
Operates lockstitch sewing machine to make coat sleeve. Seams edges of sleeve parts, following markings and manipulating fabric to provide fullness over elbow area. May attach separate cuffs or fold raw bottom edge of sleeve and sew to make cuff with or without vent. Performs other duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

786.682-230 SLEEVE SETTER, LOCKSTITCH (garment)
Operates lockstitch sewing machine to set sleeve to garment: Aligns edge of sleeve on edge of armhole and manipulates sleeve material under needle to conform to dissimilar shape of opening and to distribute fullness at shoulder. May set either seamed or unseamed sleeve sleeve. May operate machine with edge-cutting attachment, seam guide, or folding attachment. Performs other duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

786.682-234 SLEEVE SETTER, OVERLOCK (garment)
Operates *overlock sewing machine* equipped with edge cutter and intermittent shirring mechanism to set sleeve to garment: Aligns edge of sleeve on edge of armhole and manipulates sleeve material under needle to conform to dissimilar shape of opening. Presses knee lever to engage intermittent shirring mechanism and distributes sleeve fullness at shoulder. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title. May set either seamed or unseamed sleeve. May operate variation of overlock machine that sews separate reinforcing row of stitches while overedging and be designated Sleeve Setter, Safety-Stitch (garment).
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-238 TOPSTITCHER, LOCKSTITCH (garment)
Operates lockstitch sewing machine to sew one or two rows of stitching specified distance from edge or seam of garment part to reinforce seam, prevent edge rolling, or emphasize design. May be designated according to part of garment outlined as Armhole Raiser, Lockstitch (garment); Fly Raiser, Lockstitch (garment). May sew along edges of coat and be designated Edge Stitcher, Lockstitch (garment). Performs other duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-242 TOPSTITCHER, ZIGZAG (garment)
Operates *zigzag sewing machine* to sew row of stitching specified distance from either edge or seam of garment for decorative effect. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-246 TUNNEL-ELASTIC OPERATOR, CHAINSTITCH (garment)
Operates two-needle chainstitch sewing machine equipped with folder to enclose elastic strip inside fold of fabric at garment opening: Inserts end of elastic strip and edge of garment into folder. Guides edge of garment under needles to enclose elastic in hem between two rows of stitching. May operate machine equipped with different type of folder to either enclose elastic in binding or folded tape at garment edge. Performs other duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-250 TUNNEL-ELASTIC OPERATOR, LOCKSTITCH (garment)
Operates lockstitch sewing machine equipped with folder to enclose elastic strip inside fold of fabric at garment opening: Inserts end of elastic strip and edge of garment into folder. Guides edge of garment under needle to hem garment and enclose elastic strip in hem. May operate machine equipped with different type of folder to either enclose elastic in binding or in folded tape at garment edge. Performs other duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-254 TUNNEL-ELASTIC OPERATOR, ZIGZAG (garment)
Operates *zigzag sewing machine* equipped with folder to enclose elastic strip inside fold of fabric at garment opening: Inserts end of elastic strip and edge of garment into folder. Guides edge of garment under needle to hem garment and enclose elastic strip in hem. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title. May operate machine equipped with different type of folder to either enclose elastic in binding or in folded tape at garment edge.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-258 ULTRASONIC-SEAMING-MACHINE OPERATOR (garment)
Operates *ultrasonic seaming machine* to hem, attach garment parts, or join layers by fusing thermoplastic material in simulated stitch pattern: Presses knee lever to raise *horn* and positions garment parts on machine bed. Depresses pedal to start machine and guides material under horn to fuse material. May replace *stitching wheel* under bed of machine to change stitching pattern.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

786.682-262 UTILITY OPERATOR (garment) alternate titles: reserve operator
Operates sewing machines to join garment parts: Guides garment parts under needle or needles to join parts, following markings, aligning edges, and distributing fullness. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title. May substitute for absent workers or assist workers temporarily behind in production.
GOE: 06.02.05 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

786.682-266 WAISTBAND SETTER, LOCKSTITCH (garment)
Operates lockstitch sewing machine to sew waistband to upper edge of pants or skirt. Positions waistband on upper edge of garment, aligning markings, and

guides parts under needle to attach waistband to garment. Performs other duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

786.682-270 WAISTLINE JOINER, LOCKSTITCH (garment)
Operates lockstitch sewing machine to join bodice and skirt of garment: Aligns edges of bodice and skirt, matching seams, notches, or pleats, and guides parts under needle to sew seam. Performs other duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-274 WAISTLINE JOINER, OVERLOCK (garment)
Operates *overlock sewing machine* equipped with edgecutter and shirring mechanism to join bodice and skirt of garment and shirr fabric at waistline: Positions bodice and skirt on machine bed, operates machine to join parts and cut away excess fabric, and presses knee lever to shirr edge of skirt or bodice as needed to match markings and seams. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

786.682-278 ZIGZAG-MACHINE OPERATOR (garment)
Operates *zigzag sewing machine* to join layers of material, seam garment parts, or attach trim to garment. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title. May operate machine equipped with different cams to sew decorative stitches, such as scallops. May operate variation of zigzag machine to join adjacent edges or flatten seams with decorative crisscross stitch and be designated Fagoting-Machine Operator (garment).
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

786.682-282 ZIPPER SETTER, CHAINSTITCH (garment)
Operates chainstitch sewing machine equipped with zipper presser foot to set slide fastener in garment opening: Positions one side of zipper tape along one edge of seam opening matching marks or notches on seam edge and tape. Guides edges under needle and zipper presser foot to sew zipper tape along one side, across bottom, and up other side to set zipper in opening. Performs other duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.682-286 ZIPPER SETTER, LOCKSTITCH (garment)
Operates lockstitch sewing machine equipped with zipper presser foot to set slide fastener in garment opening: Positions one side of zipper tape along one edge of seam opening, matching marks or notches on seam edge and tape. Guides edges under needle and zipper presser foot to sew zipper tape along one side, across bottom, and up other side to set zipper in opening. May assemble fly in pants and set zipper in fly and be designated Fly Setter (garment). Performs other duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

786.685-010 BUTTON-SEWING-MACHINE OPERATOR (garment) alternate titles: fastener-sewing-machine operator
Tends semiautomatic, *short-cycle sewing machine* that sews buttons or other fasteners onto garments: Positions garment or garment part under needle. Pours buttons into hopper for automatic feeding into holding clamp or places button or fastener in clamp and starts machine. Variations are in type of attachment (spot-tack or thread-shank) and in type of button or fastener (flat or shank button; snap or hook-and-eye fastener). May tend same machine to spot-tack when not attaching buttons or fasteners.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

786.685-014 BUTTONHOLE-MACHINE OPERATOR (garment)
Tends semiautomatic, *short-cycle sewing machine* that cuts and stitches buttonholes in garments: Positions garment or garment part under needle, starts machine that automatically stitches and cuts buttonhole, and cuts thread. May adjust stitching and cutting mechanisms of machine to alter size of buttonholes. May tend machine that cuts and stitches gimp-reinforced (eyelet-ended or teardrop) buttonholes in garments, such as coats or jackets, and be designated Gimp-Buttonhole-Machine Operator (garment).
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

786.685-018 EMBROIDERY-MACHINE OPERATOR (garment)
Tends semiautomatic sewing machine with multiple-sewing heads controlled by pattern chain that embroiders designs on garments or garment parts. Positions garment or part over embroidery hoops arranged in hoop frame, following edges or markings on fabric. Places hoop frame on machine bed and turns thumbscrews to secure frame to machine. Presses button to start machine that sews design onto garment or part and stops, or sews one color of multiple-color design and stops. When sewing multiple-color designs, rethreads machine with subsequent colors of thread and starts machine to complete design. Removes hoop frame from machine on completion of design and removes garment or part from hoops.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

786.685-022 PIPED-POCKET-MACHINE OPERATOR (garment) alternate titles: welt-pocket-machine operator
Tends semiautomatic sewing machine that folds, sews, and cuts fabric to make piped or welt pocket openings: Positions garment section, strips of fabric, and reinforcing material in clamp and depresses pedal to lower and close clamp. Presses knee lever to activate machine cycle that automatically folds and attaches strips with two rows of stitching, cuts opening and corner slits, and pushes piping through opening. May adjust stitching and cutting mechanisms and change knives to regulate size of opening. May change needles, thread machine, and adjust thread tension. May operate piped-buttonhole machine and be designated Piped-Buttonhole-Machine Operator (garment).
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

786.685-026 PROFILE-STITCHING-MACHINE OPERATOR (garment) alternate titles: contour stitcher; longseam-machine operator; runstitching-machine operator
Tends semiautomatic machine that sews stitching along contour to join, attach, serge, topstitch, or hem garment parts: Positions fabric layers or garment part under needle, against guide, or in clamp or template, and starts machine that performs preset sewing cycle to make garment part (such as collar), attach garment part (such as patch pocket), or automatically sew along fabric edge to serge, seam, hem, or topstitch. When tending machine equipped with template, removes garment part from template at end of sewing cycle.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

786.685-030 SEWING-MACHINE OPERATOR, SEMIAUTOMATIC (garment)
Tends one or more semiautomatic sewing machines that attach, join, reinforce, or decorate garments or garment parts, or perform other preset cycle operations, such as buttonhole making: Threads machine and adjusts thread tensions. Positions fabric layers, garment, or garment part in holding device on machine bed or according to guides, edges, or markings, and starts machine. Notifies SUPERVISOR, GARMENT MANUFACTURING (garment) 786.132-010 if machine malfunctions. May select supplies, such as fasteners and thread, according to specifications or color of fabric. May change needles and oil machine.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 81

786.685-034 TACKING-MACHINE OPERATOR (garment)
Tends semiautomatic, *short-cycle sewing machine* that sews concentration of stitches, such as bar, spot, or triangle, to attach or secure part, such as strap, garter, label, belt loop, or cuff, or reinforce stress point, such as pocket corner or bottom of fly.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

786.685-038 ULTRASONIC-SEAMING-MACHINE OPERATOR, SEMIAUTOMATIC (garment)
Tends semiautomatic, *ultrasonic seaming machine* to seal dart edges, cut and seal edges of buttonholes, or cut tubing (or belt lengths) and seal ends by heat fusion. Positions garment or garment part under horn of machine, following markings. Depresses pedal to activate machine that heat-fuses garment parts with or without stitch pattern and with or without cutting.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 1 DLU: 77

786.685-042 BUTTONHOLE-AND-BUTTON-SEWING-MACHINE OPERATOR (garment)
Tends semiautomatic sewing machines that cut and stitch buttonholes and sew buttons and other fasteners to garments: Pours buttons into hopper for automatic feeding into holding clamp of sewing machine or places buttons and fasteners in clamp. Turns knobs to adjust stitching and cutting mechanisms of machine to set size of buttonholes according to garment styles. Positions garment, garment parts, buttons, or fasteners under needle, and starts short-cycle sewing machine that cuts and stitches buttonholes in garment or parts or sews buttons and fasteners to garment. Cuts threads, using scissors.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 86

787 SEWING MACHINE OPERATORS, NONGARMENT

This group includes occupations concerned with machine-sewing textile, leather, fur, and related products, except garments as defined in GARMENT INDUSTRY.

787.132-010 SEWING SUPERVISOR (any industry)
Supervises and coordinates activities of workers engaged in operating sewing machines to assemble articles, such as curtains and drapes, fabric camping equipment, and stuffed toy shells: Examines articles to ensure adherence to quality standards. Trains workers by demonstrating work methods and machine operation. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to activity supervised as Curtain Supervisor (tex. prod., nec); Drapery Supervisor (tex. prod., nec); Embroidery Supervisor (tex. prod., nec); Supervisor, Camp Department (tex. prod., nec); Supervisor, Sleeping-Bag Department (tex. prod., nec); Supervisor, Stuffed-Toy Shells (toy-sport equip.).
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

787.132-014 SUPERVISOR, SEWING ROOM (fabrication, nec)
Supervises and coordinates activities of workers engaged in preparing casket linings, and pillows: Measures and cuts cloth according to size, color, and style of lining, using hand shears. Inspects seams, shirring, embroidering, and crushing for conformance to company standards. Demonstrates sewing and crushing techniques to train new employees. May operate shirring machine to gather ma-

terial. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M2 L3 SVP: 5 DLU: 77

787.132-018 SUPERVISOR, STITCHING DEPARTMENT (tex. prod., nec)

Supervises and coordinates activities of workers engaged in operating sewing machines to produce decorative trimming or stitching, such as tucking, shirring, and embroidering. Directs workers in techniques or procedures in sewing new designs. Assigns new designs and materials to workers to ensure continuous workflow. Records number of pieces processed by worker for production cost records. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M2 L2 SVP: 7 DLU: 77

787.381-010 LAMP-SHADE SEWER (fabrication, nec)

Fabricates lampshades from material, such as silk, following patterns and using scissors, needle and thread, and sewing machine: Places specified material on table and marks cutting lines on materials, following pattern. Cuts shade sections from material, using scissors. Sews sections together to form shade covering, using single needle sewing machine. Winds tape around upper and lower rings of frame. Draws shade covering over frame and bastes covering to tape on rings. Sews material to frame and trims material with scissors. Sews trimming around top and bottom of shade. Sews wire to edge of shade to reinforce edge and retain shape.
GOE: 06.02.27 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

787.682-010 BINDER (any industry) alternate titles: binding-end stitcher; binding-machine operator; taper

Operates sewing machine equipped with folding attachment to sew binding material over edges or seams of articles, such as camping equipment, linens, parachutes, gloves and mittens, or hats and caps, to reinforce, prevent raveling, and give finished appearance: Places roll of binding on holder and draws end through folding attachment. Positions edge of article between folds of binding material and guides article and material under needle. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title. When binding blankets, folds binding material at end of seam to form corners and sews over folded corner. When binding fitted sheets, matches curved edges of sheet and guides edges under needle to form sheet corners. May operate sewing machine equipped with shirring mechanism to gather binding as binding is attached to article. May be designated according to article or part bound as Band-Lining Bander (hat & cap); Blanket Binder (tex. prod., nec); Ear-Flap Binder (hat & cap); Fitted Sheet Binder (tex. prod., nec); Flap-Lining Binder (hat & cap); Helmet Binder (hat & cap). May be designated: Parachute Taper (tex. prod., nec); Pot-Holder Binder (tex. prod., nec); Screen-Vent Binder (hat & cap); Soft-Hat Binder (hat & cap). May bind rug samples and be designated Sample Processor (carpet & rug).
GOE: 06.02.05 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 78

787.682-014 CARPET SEWER (carpet & rug; retail trade) alternate titles: fringe-binder operator; leno sewer; sewing-machine operator, carpet and rugs

Operates sewing machine to join carpet sections or braided yarn strips to form rug and finish edges, performing any combination of following duties: Joins sections of carpeting to form rug of desired size or continuous length (runner). Sews decorative trimmings on rugs, borders on runners, or binding to prevent edges from raveling. Operates sewing machine that loops yarn into fringe and stitches fringe to edge of rug. Joins braided strips of yarn to form round or oval rug of desired size. Joins widths of leno cloth used on backing of rugs. May join sections of carpet together, using seaming tape and liquid cement. Performs other duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 77

787.682-018 DRAPERY OPERATOR (retail trade) alternate titles: drapery worker

Operates sewing machine to join precut pieces of material to form finished draperies: Folds edges of material by hand and guides them under machine needle to form hems. Determines number of pleats required, according to width of finished drapery. Gathers pleats by hand and guides material under machine needle to tack pleats [TACKING-MACHINE OPERATOR (any industry)]. May measure and cut material according to specifications, using rule and scissors. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

787.682-022 EMBROIDERY-MACHINE OPERATOR (any industry) alternate titles: monogram-machine operator

Operates sewing machine to embroider name, initial, or decorative designs on garments, household articles, material, or uniforms and to stitch cording, braid, or emblems on material or garments, following stamped design or working freehand without guide or markings: Reads work order to determine type and location of embroidery. Selects size and color thread and draws it through machine guides and bobbin. Turns setscrews to regulate machine settings. Positions article under presser foot and presses pedal or knee control to start machine and control speed of sewing. Guides fabric under needle with left hand or turns handcrank under feed bed to guide material, following stamped pattern or by freehand. Observes sewing operation to detect defects in stitching that indicate machine malfunction and notifies supervisor of malfunction. May draw guide freehand on fabric. May pin tissue paper pattern on fabric to be used as guide. May use embroidery hoops to hold fabric taut. May smooth embroidered area, using hand iron. May repair defective embroidery or fill in blanks left by embroidery machine. May operate automatic embroidery machines with multiple sewing heads controlled by perforated pattern tape. May be designated according to type of work done as Cloth Numberer (tex. prod., nec); Letterer (garment). When operating embroidery machine to sew tape or braiding to garment to form embroidery design, may be designated Corder (garment; tex. prod., nec).
GOE: 06.02.05 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

787.682-026 HEMMER (any industry) alternate titles: plain-goods hemmer

Operates sewing machine equipped with folding attachment to hem articles, such as curtains and draperies, gloves and mittens, sheets, towels, and pillowcases: Guides edge of material through folding attachment and under machine needle. Inserts and sews labels into hem. May reinforce hem by backstitching at ends of seam. May fold hem manually. When operating machine to hem curtains and draperies to form rod inserts, is designated HEADER (tex. prod., nec). May be designated according to article or part hemmed as Pillowcase Sewer (tex. prod., nec); Sheet Sewer (tex. prod., nec); Towel Sewer (tex. prod., nec); Window-Shade-Cloth Sewer (furniture); Wrist Hemmer (glove & mit.). Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

787.682-030 MENDER (any industry)

Operates sewing machine to repair defects, such as tears and holes in garments, linens, curtains, draperies, and blankets: Patches, darns, or reweaves holes or tears in garments, curtains, or linens, and resews ripped seams. Sews fringe, tassels, and ruffles onto drapes and curtains. Sews buttons and trimming on garments after they have been cleaned. Operates sewing machine to restitch or replace binding ribbon on edge of blankets. May cut curtains to specified measurements and hem edges. May shorten or lengthen hems to alter size of garments. May replace pockets in coats or trousers. May sew identifying labels and emblems on uniforms, linens, or diapers for linen supply or diaper service. May repair defective stitching on articles. May be designated according to type of article sewn as Sewer, Linen Room (hotel & rest.) or machine used as Darning-Machine Operator (any industry). May examine lace webbing for defects and be designated Examiner-Mender (tex. prod., nec). Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 78

787.682-034 OVEREDGE SEWER (any industry)

Operates sewing machine equipped with rotary cutter to trim raw edges from articles and sew edges with overedge stitch to decorate and reinforce them and prevent raveling. Guides edges under needle and through trimming attachment. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

787.682-038 ROLL-OR-TAPE-EDGE-MACHINE OPERATOR (furniture)

Operates sewing machine to stitch rolled edges of filled and tufted mattresses to reinforce their boxlike shape, or to stitch padding and fabric covering around innersprings used in mattress: Positions mattress on table and adjusts machine according to thickness of mattress. Rolls and inserts mattress edge under machine needle, starts machine, and guides edge under needle as machine travels slowly around table. Places innersprings on table and spreads felt or foam rubber padding and covering over springs. Inserts edges of covering and border panel under needle and tape feed of machine and guides tape and edges under needle to join them as machine travels slowly around table. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

787.682-046 SEWING-MACHINE OPERATOR (any industry)

Operates sewing machine to join, gather, hem, reinforce, or decorate articles. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

787.682-050 SEWING-MACHINE OPERATOR (knitting; protective dev.)

Operates sewing machine to join parts of surgical appliances and garments and orthopedic supports. May position filling material and springs in truss pads and braces. May guide leather parts, such as covers under machine needle to join them. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.
GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 81

787.682-054 SEWING-MACHINE OPERATOR (toy-sport equip.)

Operates sewing machine to join parts of stuffed toys: Fits together parts, such as ear, head, or body assembly, prior to sewing. Stitches assembly inside out and combines individual assemblies into completed toys. Adjusts thread tension guides. May stitch opening closed after filling and be designated Closer (toy-sport equip.). Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.

GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

787.682-058 SEWING-MACHINE OPERATOR II (tex. prod., nec)

Operates sewing machine to join parts of fabricated textile products, canvas products, and trimmed and stamped art goods: May insert wire or draw-string cord under edge of material to fabricate articles, such as clothes pin bags, laundry bags, or ironing board covers. May be designated according to function performed as Core-Covering Sewer (tex. prod., nec); Filter-Cloth Maker (tex. prod., nec); Finger-Buff Sewer (tex. prod., nec); Parachute-Accessories Attacher (tex. prod., nec); Parachute-Crown Sewer (tex. prod., nec); Parachute-Cushion Installer (tex. prod., nec); Parachute-Panel Joiner (tex. prod., nec). May stitch binding tape or zippers to exposed edges of canvas products. May stamp grommets into edges of canvas products, using mallet and punch or eyelet machine. May be designated according to type of article joined or type of stitch sewn as Awning Assembler (tex. prod., nec); Cloth Joiner, Tents (tex. prod., nec); Sail Finisher, Machine (tex. prod., nec); Tent Assembler (tex. prod., nec). May operate double-needle machine to trim or reinforce fabric used for stamped art goods (decorative cloth) or products, such as coat, dress, and millinery trimming and be designated according to operation performed as Hemstitching-Machine Operator (tex. prod., nec); Mender (tex. prod., nec). May fold bag material so that edges meet prior to sewing, sew mailing tags into seams, or close seams missed during assembly of textile bags. May be designated according to type of bag or material sewn as Burlap-Bag Sewer (tex. prod., nec); Canvas-Bag Maker (tex. prod., nec); Charge-Bag Sewer (tex. prod., nec); Cotton-Bag Sewer (tex. prod., nec); Jute-Bag Sewer (tex. prod., nec); Waterproof-Bag Sewer (tex. prod., nec). Performs other duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.

GOE: 06.02.05 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 78

787.682-066 SEWING MACHINE OPERATOR I (tex. prod., nec) alternate titles: joiner; seamer

Operates sewing machine to join, reinforce, or decorate parts of household articles, such as bedspreads, curtains, drapes, bed linens, mopheads and quilts: Guides parts under machine needle to sew stiffening material to tops of drapery panels, or elastic to fitted articles, or to stitch ruffles to curtains and chair pads, or to sew tape, fringe, or welt to seams or edges of articles to decorate or reinforce them. May oil machine, change needles, and secure modifying attachments to machine. May be designated according to article or parts of articles assembled as Bedspread Seamer (tex. prod., nec); Buckram Sewer (tex. prod., nec); Cover Assembler (tex. prod., nec); Elastic Sewer (tex. prod., nec); Fringer (tex. prod., nec); Lining Sewer (tex. prod., nec). May be designated: Mophead Sewer (tex. prod., nec); Panel Sewer (tex. prod., nec); Quilt Sewer (tex. prod., nec); Taping Machine Operator (tex. prod., nec). May mark patterns on articles with chalk and sew along markings to decorate articles. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.

GOE: 06.02.05 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 78

787.682-074 SEWING-MACHINE OPERATOR (knitting)

Operates sewing machine to join parts of socks or stockings: Guides parts under machine needle or between feed cups to stitch open edges of foot, leg, and welt of full-fashioned hose; or to join ends of elastic bands and attach bands to tops of seamless hose and tights; or to close toes in seamless hose or socks; or aligns edge or slit of leg, panty, and crotch part to sew pantyhose. May record number of hose sewn. May be designated according to part sewn or operation performed as Seamer (knitting); Seamer, Elastic Band (knitting); Seamer, Pantyhose (knitting); Tacker, Elastic Band (knitting); Toe Sewer (knitting). When operating machine that slits and sews crotch portions of hose together to form pantyhose, may be designated Pantyhose-Crotch-Closing-Machine Operator (knitting). Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.

GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 81

787.682-078 SHIRRING-MACHINE OPERATOR (any industry) alternate titles: gatherer; ruffler

Operates sewing machine equipped with shirring attachment to shorten or decorate edges of material with gathers or puckers for use in fabricating articles, such as buffing wheels, curtains and tie-backs, casket interiors, hats and caps, and decorative folds in fabrics for garment trimmings: Turns screws to adjust tension of thread, length of stitch, and spacing and width of shirred runnings. Presses knee control to raise gathering device, positions edge of material beneath needle, and lowers gathering device onto material. Trims excess thread and material from shirred material, using scissors or knife-blade attachment. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.

GOE: 06.02.05 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 78

787.682-082 TUCKING-MACHINE OPERATOR (any industry) alternate titles: corder; cording-machine operator; graduate tucker; pleater; ruching-machine operator

Operates sewing machine equipped with tucking attachment to fold and sew uniform or graduated decorative tucks in products, such as decorative cloth fabrics and hats and caps: Turns screws to adjust tension of thread, length of stitch, and spacing and width of tucks. Places material over adjustable guide blade and swings blade into position against needle or moves lever to lower presser foot with attached tucking device and folds material over tucking device and against guide beneath needle. Moves lever to lock presser foot and tucking device onto material. Trims excess material and thread from tucked article, using blade attached to machine or scissors. When sewing graduated tucks, attaches specified cam to machine to control progressive size change in tucks. May sew lace or braid into seam of tuck. When operating machine with attachment that feeds gimp under fabric to form round, puffed tucks, is designated Air Tucker (tex. prod., nec). Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.

GOE: 06.02.05 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

787.682-086 ZIPPER SETTER (any industry)

Operates sewing machine equipped with guides that prevent needle from contacting metal to sew slide fasteners in openings or on parts of articles, such as mattresses, blankets, cushions, upholsteries, sleeping bags and other camping equipment, and quilt covers: Places roll of zippers on holder, or selects zipper of specified length, and draws end of zipper through guides. Cuts zippers from roll after sewing, using scissors. Attaches zipper slide to zipper and opens zipper before sewing stops on each end of zipper opening. When sewing zippers on plastic material, operates machine equipped with folding attachment to sew binding material over seam. Performs duties as described under SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) Master Title.

GOE: 06.02.05 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

787.685-010 FASTENER-SEWING-MACHINE OPERATOR (any industry) alternate titles: hook-and-eye-sewing-machine operator

Tends one or more machines that automatically sew fasteners, such as hooks and eyes, to continuous strips of binding tape. Fills hopper of machine with fasteners. May measure hook and eye spacing, using ruler, and examine tape for defects, such as misplaced stitching or discoloration. May tend machine equipped with button se...ng adaptor to stitch metal tips to corners of umbrella covers and be designated Tipping-Machine Operator (fabrication, nec). Performs duties as described under SEWING-MACHINE OPERATOR, AUTOMATIC (any industry) Master Title.

GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

787.685-014 FOLDER-SEAMER, AUTOMATIC (any industry)

Tends machine that folds, stitches, and cuts cloth into lengths to form articles, such as bags, finger-buffs, pillowcases, straps, or tie-backs. May turn handwheel or thumbscrew to adjust tension on roll of cloth. May tend machine that sews string into hem of draw-string bag and be designated Sheet Cutter (tex. prod., nec) II. May be designated according to article fabricated as Bag-Making-Machine Tender (tex. prod., nec); Belt-Loop Maker (garment); Pillowcase Sewer, Automatic (tex. prod., nec); Sewer-And-Cutter, Finger-Buff Material (tex. prod., nec); Strap-Machine Operator, Automatic (garment); Tie-Back-Sewer, Automatic (tex. prod., nec). Performs duties as described under SEWING-MACHINE OPERATOR, AUTOMATIC (any industry) Master Title.

GOE: 06.04.05 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

787.685-018 HEMMER, AUTOMATIC (tex. prod., nec) alternate titles: side hemmer

Tends one or more automatic sewing machines that hem continuous lengths of material: Threads material through feed rollers, machine guides, and hem-folding attachment. Starts machine that sews continuous hem and stops as material runs out or thread breaks. When tending machine that sews hemstitch, may be designated Gang-Hemstitching-Machine Operator (tex. prod., nec). May be designated according to product hemmed as Curtain Hemmer, Automatic (tex. prod., nec); Drapery Hemmer, Automatic (tex. prod., nec); Ruffling Hemmer, Automatic (tex. prod., nec). Performs duties as described under SEWING-MACHINE OPERATOR, AUTOMATIC (any industry) Master Title.

GOE: 06.04.05 STRENGTH: L GED: R3 M1 L1 SVP: 3 DLU: 77

787.685-022 HEMMING-AND-TACKING-MACHINE OPERATOR (furniture) alternate titles: border-machine operator; padded-box sewer

Tends automatic sewing machine that tacks padding to prequilted fabric and hems fabric to form quilted border panels for mattresses and box springs: Inserts rolls of fabric and padding into machine brackets and threads them through guides. May tend automatic machine that only sews hem on fabric to form border panel. May sew cloth handles to border panels, using sewing machine. May insert ventilating eyelets and attach handles to border panels, using punching and crimping machine. Performs duties as described under SEWING-MACHINE OPERATOR, AUTOMATIC (any industry) Master Title.

GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

787.685-026 PLEATER (tex. prod., nec) alternate titles: l-tacker

Tends machine that sews pleats in drapery panels: Folds top of panel at designated places to form pleat. Positions folded pleat under presser foot and starts machine that stitches L-pattern to secure pleat. May tend machine equipped with jig that forms pleat prior to sewing. May tend machine that stitches pleat and sews ring to drapery panel at pleat and be designated Ring Attacher (tex. prod., nec). Performs duties as described under SEWING-MACHINE OPERATOR, AUTOMATIC (any industry) Master Title.

GOE: 06.04.05 STRENGTH: L GED: R3 M1 L1 SVP: 3 DLU: 77

787.685-030 SERGING-MACHINE OPERATOR, AUTOMATIC (any industry)

Tends machine that automatically binds edges of articles with serging stitch to reinforce edges, prevent raveling, or give finished appearance. May tend ma-

chine with blade attachment to trim raw edges. Performs duties as described under SEWING-MACHINE OPERATOR, AUTOMATIC (any industry) Master Title.
GOE: 06.04.05 STRENGTH: L GED: R3 M1 L2 SVP: 3 DLU: 77

787.685-034 SEWING-MACHINE OPERATOR, ZIPPER (button & notion)

Tends one or more automatic sewing machines that stitch cord to edge of continuous length of tape to reinforce it for attachment to zipper chain: Mounts cheeses, cones, or bobbins of cord on holders of machines. Threads cord and tape through guides and tension bars. Starts machine that automatically stitches cords to tape. Observes machine for automatic stopping which indicates defective feed or broken thread. Tapes together broken ends of cord or thread. Examines sewn tape for loose cords or dropped stitching. Adjusts cord tensions and guide positions, using screwdriver and pliers. May tend machines that sew spiral or ladder-shaped filament between layers of tape to form side of zipper and be designated Sewing-Machine Operator, Plastic Zipper (button & notion). Performs duties as described under SEWING-MACHINE OPERATOR, AUTOMATIC (any industry) Master Title.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

787.685-038 SHIRRING-MACHINE OPERATOR, AUTOMATIC (tex. prod., nec) alternate titles: ruffler

Tends one or more automatic sewing machines that gather continuous lengths of material used for ruffles or valances. Turns thumbscrew or lever to change number of gathers per inch according to specifications. May be designated according to article shirred as Valance Shirrer (tex. prod., nec). Performs duties as described under SEWING-MACHINE OPERATOR, AUTOMATIC (any industry) Master Title.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

787.685-042 TACKING-MACHINE OPERATOR (any industry)

Tends machine that sews pattern of stitches, such as circles or rectangles, to attach parts, such as labels or straps, reinforce seam ends, or decorate articles. May be designated according to parts tacked as Band Tacker (any industry); Bow Tacker (hat & cap) II; Label Tacker (tex. prod., nec); or according to stitches sewn as Bar Tacker (any industry). May attach reinforcing pieces to finger tips of gloves and be designated Tip Sewer (glove & mit.). May tend machine that tacks lead wire, thermostats, and line cord onto fabric body and be designated Tacker (elec. equip.). Performs duties as described under SEWING-MACHINE OPERATOR, AUTOMATIC (any industry) Master Title.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 78

787.685-046 TOE-CLOSING-MACHINE TENDER (knitting)

Tends machine that automatically closes toe of sock: Presses pedal to start machine and guides edges of open toe of sock onto feed guide that automatically feeds edges onto revolving dial of machine and through sewing mechanism to close toe. Performs duties as described under SEWING-MACHINE OPERATOR, AUTOMATIC (any industry) Master Title.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

787.685-050 TRIMMING SEWER, AUTOMATIC (garment; tex. prod., nec)

Tends battery of automatic sewing machines to assemble several widths of trimming material, such as lace, ribbon, or braid. Changes cloth guides on machine according to width of material. Threads ends of material through guides according to sequence of assembly. May tend machine to join trimming material to articles, such as garments, lingerie, or valances. Performs duties as described under SEWING-MACHINE OPERATOR, AUTOMATIC (any industry) Master Title.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

787.685-054 SEWING-MACHINE OPERATOR, PAPER BAGS (paper goods)

Tends automatic sewing machines that stitch folded and glued bottoms of multiwall paper bags to provide additional bag strength: Presses buttons to start machines and observes automatic operation of machines to detect malfunctions. Performs duties as described under SEWING-MACHINE OPERATOR, AUTOMATIC (any industry) Master Title.
GOE: 06.04.04 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 86

787.686-010 BAG SEWER (paper goods) alternate titles: bag-end sewer

Feeds paper tubes into machine that stitches ends or sews glued tape to one or both ends to seal bags or to form overlap for self-sealing paper bags: Depresses pedal to start machine conveyor. Lifts tubes from load table and positions tubes individually on conveyor leading to machine mechanism that stitches ends and cuts strings and tape. May be designated according to number of ends sewed as Double-End Sewer (paper goods); Single-End Sewer (paper goods).
GOE: 06.04.04 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

788 OCCUPATIONS IN FABRICATION AND REPAIR OF FOOTWEAR

This group includes occupations concerned with fabricating leather, fabric, and plastic footwear, including house slippers and indoor or outdoor athletic shoes. Occupations concerned with fabricating and repairing molded rubber and plastic footwear are included in Group 753.

788.131-010 SUPERVISOR (boot & shoe)

Supervises and coordinates activities of workers in cutting, *lasting*, fitting, bottoming, and heeling departments of shoe manufacturing plant: Instructs workers in determining hide areas from which to cut shoe parts and in selecting cutting dies. Examines shoe parts to verify efficient utilization of hides. Requisitions supplies, such as cement, nails, heels, and dowel lifts. Instructs workers in operation of machinery and techniques used in application of dressings and colorings. Repairs malfunctioning equipment, such as cutting machine, stitcher, buffer, and bed laster by adjusting or replacing defective parts. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to department supervised as Bottoming-Room Supervisor (boot & shoe); Cutting-Room Supervisor (boot & shoe); Fitting-Room Supervisor (boot & shoe); Heel-Room Supervisor (boot & shoe); Lasting-Room Supervisor (boot & shoe).
GOE: 06.02.01 STRENGTH: L GED: R4 M4 L3 SVP: 7 DLU: 78

788.137-010 SUPERVISOR, PACKING (boot & shoe)

Supervises and coordinates activites of workers engaged in finishing and packing shoes: Examines shoes for specified coloring, dressing, and polishing, for defects, such as cuts, nicks, and scratches, and for pairing of shoes according to style and size. May train workers in operation of machinery and techniques used in application of dressings and colorings. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

788.222-010 INSTRUCTOR (boot & shoe)

Instructs workers to tend or operate machines used to manufacture boots and shoes, utilizing knowledge of machine function and process: Teaches workers to tend or operate machines used to stitch, fold, skive, stamp, crease, perforate, or staple shoe parts. Identifies and describes functions of machine parts, and explains adjustment and maintenance requirements. Demonstrates steps required to prepare machines for operation. Examines work of trainees and instructs workers to detect and correct defective work. Assists experienced workers to improve work techniques.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L4 SVP: 6 DLU: 78

788.261-010 ORTHOPEDIC-BOOT-AND-SHOE DESIGNER AND MAKER (boot & shoe; protective dev.)

Fabricates boots and shoes for deformed feet according to prescription and patient's measurements: Studies prescription to determine degree of deformity and type of correction to be built into shoe. Measures foot, using calipers, tape measure, rule, and other measuring devices and instruments, and applying knowledge of foot anatomy and orthopedic shoe-making techniques. Discusses boot and shoe styles available with customer to determine customer's desires. Makes plaster cast of foot when exact measurements are required. Designs paper patterns for shoe parts and cuts out leather from pattern, using knives. Marks and punches out eyelets, and inserts and clinches metal rings in holes, using eyelet riveter. Tacks insole on last and draws upper over last with pliers, tacking upper in place. Inserts foam cushioning or arch support material, such as steel, leather, or cork, under insole to support or cushion foot. Sews sole and upper together, using sewing machine. Glues cork, leather, wood, or rubber material to build up extension of outer sole to specified height. Buffs surface of sole and curves sole upward to provide stable walking surface. May fabricate arch supports which can be inserted in regular shoes.
GOE: 05.05.15 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

788.281-010 DESIGNER AND PATTERNMAKER (boot & shoe) alternate titles: master-pattern maker; model maker

Prepares master pattern of shoe upper design and cuts pattern into individual parts preparatory to making template: Pencils markings, such as cone, back seam, or shank edge onto sized wooden last. Positions kraft paper on last and trims paper along markings, using knife or scissors. Traces outline onto manila paper, cardboard, or pressboard, using cut form or last mold as pattern. Draws details, such as stitching or ornamentation according to design specifications, using drafting instruments. Cuts traced design into individual patterns of shoe parts, such as quarters, saddles, and vamps, using scissors or knife. May compile manufacturing data from design specifications. May prepare pattern template.
GOE: 05.05.15 STRENGTH: L GED: R4 M4 L3 SVP: 7 DLU: 77

788.381-010 COBBLER (boot & shoe) alternate titles: shoe repairer; shoe stitcher, odd

Repairs shoes damaged in manufacturing process: Inspects shoe or reads ticket to determine defects. Removes damaged parts, using handtools, such as knife, hammer, *lasting tool*, prying tool, and tack puller. Operates stitching machine or stitches by hand to repair broken or missed stitches and to replace parts. Relasts shoe to remove defects, such as wrinkles from outer parts, bunching of inner parts, and crooked seams. Aligns and cements parts, such as edges, bindings, heels, soles, and uppers of shoe by hand. May fill holes and cracks in shoes, using colored wax filler. May be designated according to part of shoe repaired as Cobbler, Sole (boot & shoe); Cobbler, Upper (boot & shoe); Lining Repairer (boot & shoe); or according to method of shoe construction as Cobbler, McKay (boot & shoe).
GOE: 06.02.27 STRENGTH: M GED: R3 M1 L2 SVP: 5 DLU: 77

788.381-014 SHOEMAKER, CUSTOM (boot & shoe)

Makes boots and shoes, using hand and machine tools: Makes patterns, using form of foot and pattern paper, and outlines patterns on leather. Cuts out parts

with shears and knife, and sews them together on machine to form uppers. Marks eyelets, punches them out, and inserts metal rings and clinches them on machine. Assembles last and attaches it to stand. Tacks insole on last and draws upper over last, tacking it in place. Trims upper with knife and sews on welt. Attaches outer sole to lasted upper by sewing it on or by roughening surface of sole with rasp and wire brush, coating it with cement and hammering it. Tacks on rand, leather lifts to build heel base, and heel. Trims and buffs edges of sole and heel, using knife and buffing wheel. Brushes dressing dye on shoe and polishes it by holding it against rotating brush. May roughen outsole and cement rubber or fiber sole to it. May design and make women's fashion or custom shoes of materials, such as leather, fabric, and straw and be designated Custom-Shoe Designer And Maker (boot & shoe).
GOE: 05.05.15 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

788.384-010 INSPECTOR (boot & shoe)
Inspects finished and partially finished shoes and shoe parts for imperfections and repairs less extensive damages: Examines parts or shoes for defects, such as uneven or broken stitching, lining wrinkles, or excess cement. Marks extensively damaged parts or shoes with chalk or attaches repair tag and routes them to departments for repair. Cuts out defective stitching, using scissors or knife, and tends stitching machine to repair defect, or brushes on adhesive to replace defective stitching or part. Removes wrinkles from material, using moistening mixture and brush, and portable electric hot air blower. May be designated according to part or kind of shoe inspected or to department as Bottoming-Room Inspector (boot & shoe); Casual-Shoe Inspector (boot & shoe); Dress-Shoe Inspector (boot & shoe); Fitting-Room Inspector (boot & shoe); Lining Inspector (boot & shoe); Packing-Room Inspector (boot & shoe). May be designated: Quarter Inspector (boot & shoe); Sock-Lining Examiner (boot & shoe); Upper Inspector (boot & shoe); White-Shoe Examiner (boot & shoe).
GOE: 06.03.01 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 78

788.387-010 UPPER-LEATHER SORTER (boot & shoe) alternate titles: leather grader
Receives, stores, sorts, and issues upper shoe leather for cutting operations: Verifies contents of bundles of leather against delivery form. Stores bundles in bins or on shelves according to code, color, or supplier's designation. Sorts leather according to quality, thickness, and color. Compares pieces of leather to match color and grain. Inspects leather for defects, such as open grains, scars, and undercuts. Fills orders for upper leather from stock. Bundles leather and attaches work order for issuance to workers. May carry or handtruck bundles to workers. May sort and store other shoe upper material, such as synthetics and cloth.
GOE: 06.03.01 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

788.584-010 HEEL SORTER (boot & shoe)
Sorts and grades leather heels: Sorts right and left heels into groups. Examines groups for defects, such as nicks, scars, brittleness, and texture, to grade heels. Records information on grading sheet. Places heels in containers for discard, reprocessing, shipment, or storage.
GOE: 06.03.02 STRENGTH: S GED: R3 M2 L2 SVP: 4 DLU: 77

788.584-014 MARKER, HAND (boot & shoe) alternate titles: cut-out marker; upper marker
Marks lines or numbers that serve as guides for subsequent operations on shoe parts: Selects pattern, following specifications. Places and aligns pattern on part. Marks lines with crayon, pencil, or pen, following slots in pattern. When marking location of heel seat, positions heel and scratches line on sole in front of heel, using knife point. Pencils in identifying numbers according to job ticket. May attach identifying tags. May be designated according to part marked as Heel Marker (boot & shoe); Lining Marker (boot & shoe); or according to guidelines marked as Eyelet-Row Marker (boot & shoe); Fancy-Stitch Marker (boot & shoe).
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

788.587-010 JOB PUTTER-UP AND TICKET PREPARER (boot & shoe)
Gathers and prepares hides and schedules leather cutting operations for shoe production, according to standard procedures: Gathers bundled hides from storage bins according to work ticket. Records quantity and length of hides from tag on bundle. Scrapes paper labels from hides with knife to prepare hides for cutting. Sorts work tickets according to number of shoes, stock number, type of hide, and shoe widths required to arrange daily work for CLICKING-MACHINE OPERATOR (boot & shoe; glove & mit.; leather prod.) Bundles sorted tickets for distribution by another worker.
GOE: 05.09.02 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 77

788.667-010 ODD-SHOE EXAMINER (boot & shoe) alternate titles: back-shoe operator
Examines shoe uppers for defective leather parts and distributes replacement parts to processing area: Cuts stitching in shoe upper with knife or scissors and rips out defective parts. Writes specifications for replacement parts on work order and delivers it to initial processing area. Carries replacement parts to and from various departments to accomplish specified processing, such as cutting, marking, and stitching. Delivers replacement parts to fitting department for assembly to upper of shoe. Converses with department supervisors to correct irregular flow of replacement parts.
GOE: 06.03.02 STRENGTH: L GED: R3 M1 L1 SVP: 3 DLU: 77

788.684-010 ASSEMBLER FOR PULLER-OVER, HAND (boot & shoe) alternate titles: back tacker; hand assembler; laster, hand
Inserts cement covered counter between lining and shoe upper to prepare upper for further lasting operations: Places counter on wire screen, dips screen in liquid cement, and drains excess cement from counter. Positions last on *pin jack*. Inserts counter between lining and upper. Pulls shoe upper onto last and aligns back seam of upper with guide marks on last. Tacks upper to last, using *lasting tool*.
GOE: 06.04.27 STRENGTH: L GED: R3 M1 L1 SVP: 3 DLU: 77

788.684-014 ASSEMBLER, SANDAL PARTS (boot & shoe)
Joins precemented sandal parts: Places pattern on outsole as guide for positioning vamp and quarter straps. Places vamp and quarter strap ends in pattern slots on outsole. Loops vamp straps to form weave pattern. Removes pattern from outsole. Hammers strap ends to join onto outsole. Presses insole onto inner side of outsole. Positions joined parts on machine under heated presser head and depresses pedal to apply heat and pressure to parts.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

788.684-018 BINDING FOLDER, MACHINE (boot & shoe) alternate titles: braid folder
Folds presewn binding over edge of shoe uppers to smooth and finish edge, using folding machine: Guides upper under heating element to soften cement on unfolded binding. Positions upper on machine and depresses pedal to fold binding over raw edge of upper and cement it to side of upper. Bends or folds corners of bindings to lie smoothly and pounds them with handtool. May be designated according to type of binding used as French-Binding Folder (boot & shoe).
GOE: 06.04.27 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

788.684-022 BLEMISH REMOVER (boot & shoe) alternate titles: color repairer; dull shoe repairer; filler; leather repairer; shoe repairer
Removes color blemishes and fills in cracks or scratches on shoes: Applies prepared colors with cloth, hand spray, or crayon to obtain or restore specified color. Applies prepared filler, using cloth or hand spray, to fill cracks and scratches. May blend prepared pigments to match shoe color, using spatula. May cement or rub cut or nicked areas of shoe. May be designated according to type or color of shoe as Russet Repairer (boot & shoe).
GOE: 06.04.33 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

788.684-026 BOTTOM FILLER (boot & shoe) alternate titles: cushion cementer; insole-bottom filler; insole filler
Fills insole depression with compound to provide cushion for ball of foot and even surface for attachment of outsole: Spreads heated compound on insole, using spatula. Positions shoe on machine and depresses pedal to lower heated plate that presses and smooths compound. May press and smooth compound by hand, using spatula. May fill heated reservoir with compound.
GOE: 06.04.32 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

788.684-030 BOTTOM WHEELER (boot & shoe)
Imprints designs, lines, or notches on bottom of outsole to decorate, finish, or mark shoe sole: Presses and guides heated scoring (seat wheeling) tool, notching tool (branding iron), or inked rod (striping rod) on sole to imprint design. Loads processed shoes on wheeled rack and pushes rack to storage area.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

788.684-034 BOW MAKER (boot & shoe)
Assembles bows to be used as ornamental shoe parts: Selects precut strips of material, such as leather, plastic, or fabric, following ticket specifications. Ties strips into bows by hand. Joins bow parts, using hand stapler. May sew bow parts together by hand. May brush cement onto parts and press parts together.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

788.684-038 BUTTONHOLE MAKER (boot & shoe)
Makes buttonholes for shoes: Sets button fly of quarter against gauge of machine. Depresses lever which brings down knife to cut buttonhole and stitcher to automatically stitch all around buttonhole.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

788.684-042 CRIPPLE WORKER (boot & shoe)
Cuts or pulls defective leather or fabric parts from shoe uppers and cements replacement parts: Cuts stitching with knife or scissors and pulls defective part, such as vamp, box-toe, or lining from upper. Tags and routes defective parts to cutting department to obtain replacement parts. Cements replacement parts to upper. May cut and pull defective stitching from upper to permit restitching.
GOE: 06.02.27 STRENGTH: L GED: R3 M1 L1 SVP: 3 DLU: 77

788.684-046 FINGER COBBLER (boot & shoe)
Repairs damaged outer surface of leather shoes: Examines shoe for defects, such as scuffs, cracks, and blemishes. Spreads glue on defects and presses leather with heated iron rod to seal. Buffs defective area with sandpaper or by holding shoe against buffing wheel. Wipes defective area with rag to remove foreign material. Mixes waxes to obtain matching color or selects matching crayon stick. Spreads wax on defective surface. Rubs repaired area with rag to polish and blend surfaces.
GOE: 06.02.27 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

788.684-050 FLAMER (boot & shoe) alternate titles: shoe singer; singeing-torch operator; singer and unloader
Singes surplus threads from shoe uppers, using gas flame or torch, or cuts excess threads, using knife or scissors.
GOE: 06.04.27 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

788.684-054 HAND SEWER, SHOES (boot & shoe) alternate titles: hand lacer; hand trimmer; moccasin sewer

Sews shoe parts, such as heel ends, plugs, and quarters, to vamp or raises decorative stitches (kicker) in backstay of casual shoes: Soaks skived or nonskived parts in water to soften them. Positions lasted shoe on pin jack and pulls and tacks parts to last with lasting tool. Punches stitch openings in parts with awl. Inserts waxed thread through punched openings to join skived shoe parts to vamp or raise decorative stitching in backstay. Removes tacks and shapes seam, using lasting tool. May hold unskived shoe parts in hand and insert metal tipped lace through perforations to join parts to vamp. Smooths and polishes seams, using rubbing stick. May join parts of unlasted shoes, pulling needle and waxed thread through perforated stitch openings.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

788.684-058 HEEL ATTACHER, WOOD (boot & shoe) alternate titles: wood-heel cementer

Glues wood heels to lasted shoes: Brushes liquid cement on heel seat. Positions heel on heel seat of shoe and pushes pedal to lock shoe in holding fixture. Inserts drill bit through guide hole in last and drills hole in top of heel for temporary holding screw, using hand drill or portable electric drill. Turns screw through heel seat into heel with pneumatic screwdriver to hold heel against outsole of shoe until glue dries.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

788.684-062 HEEL-SEAT FITTER, HAND (boot & shoe)

Trims, tacks, and pounds heel seat to prepare shoes for heel attachment: Selects heels according to specified size and style. Positions lasted shoe on stationary pin jack. Positions heel on heel seat and scratches line to indicate area to be trimmed. Trims heel seat to fit heel, using knife. Tacks heel seat to insole and pounds seat to conform leather to contour of heel, using hammer. Repositions heel on heel seat to verify fit.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

788.684-066 INKER (boot & shoe)

Applies ink, stain, color, glaze, or dope to edges, along seams, or to shoe parts to color, clean, or protect parts, using brush, cloth, or spray gun. May clean shoes or shoe parts, using dry sponge or cloth and cleaning fluids. May be designated according to part treated as Edge Inker (boot & shoe); Edge Inker, Heels (boot & shoe); Edge Inker, Uppers (boot & shoe); or according to coating substance as Dope Edger (boot & shoe); or according to type of finish as Antiquer (boot & shoe).
GOE: 06.04.33 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

788.684-070 INTERLACER (boot & shoe) alternate titles: weaver

Weaves decorative designs in shoe uppers. Draws strips of material, such as fabric or leather, between slits in shoe upper to weave decorative design.
GOE: 06.04.27 STRENGTH: S GED: R2 M1 L2 SVP: 3 DLU: 77

788.684-074 LASTER, HAND (boot & shoe)

Pulls and secures linings and uppers over last to form leather shoes of designated size: Pulls cloth or leather lining tightly and smoothly over wooden last and secures to insole with cement. Trims away excess material with knife. Pulls assembled upper onto last and draws upper over last and insole. Drives temporary tacks into insole to secure upper until welt stitching or cementing is completed, or drives permanent lasting tacks through upper, lining, insole, and against steel bottom of last to clinch tacks into insole and permanently secure upper to insole. May tack sole to upper in preparation for final soling operations.
GOE: 06.04.27 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

788.684-078 LASTING-MACHINE OPERATOR, HAND METHOD (boot & shoe) alternate titles: counter tacker

Tacks counters and lining to shoe insole: Removes last from rack and positions it on spindle of machine. Tightens and smooths lining, counter, and upper on left side of shoe, using hand pincers. Removes last from spindle and positions it under tacking hammer of machine. Presses pedal to start machine and guides left side of shoe through tacking mechanism. Repeats operation on right side.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

788.684-082 OUTSIDE CUTTER, HAND (boot & shoe) alternate titles: carver; hand shoe cutter; modeler; sample cutter; shoe cutter; upper cutter-out; upper-leather cutter; vamp-and-whole-shoe cutter, hand

Cuts upper shoe parts from leather or other material, using hand knife: Selects material and cutting pattern according to specifications. Marks defects, such as brands, cuts, and scars, using chalk, and cuts leather against grain to minimize stretch. Positions pattern over material on cutting board. Draws knife along edge of pattern to cut parts. Bundles cut parts. Marks size on top part, using pencil.
GOE: 06.02.24 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

788.684-086 PULLER AND LASTER, MACHINE (boot & shoe)

Pulls shoe upper over last and shapes toe and forepart sections of shoe, using lasting machine: Places upper in steamer to soften leather. Presses last against jack lever that closes pincers on upper edges and lifts heel of last to stretch upper. Positions toe of last on machine toe plate and depresses pedal to raise toe plate and cause pincers to grip upper edges. Depresses pedal to move heated wipers across toe and forepart sections of upper and press precemented edges onto insole. Turns knobs to adjust wiper position or pressure.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

788.684-090 PULLER OVER, MACHINE (boot & shoe)

Stretches toe, vamp, and quarters of shoe upper over sides of last and tacks upper onto insole and bottom of last, using pull-over machine: Positions lasted upper on machine. Pulls lever to stretch upper over last. Pushes second lever to clamp upper in position and depresses pedal to start tacking operation.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

788.684-094 RASPER (boot & shoe)

Files insoles and nails that protrude through insoles, using rasping machine: Cuts protruding nail ends, using wire cutters. Presses and holds shoe against revolving shaft of rasping machine to file nails and smooth insole. May hold shoe under air nozzle and depress pedal to blow filings from inside of shoe. May pound nails and tacks that protrude through insoles, using hammer, to smooth insoles. May pull tacks with tack remover. May be designated according to part rasped as Forepart Rasper (boot & shoe); Heel-Nail Rasper (boot & shoe); Insole Rasper (boot & shoe).
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

788.684-098 SAMPLE SHOE INSPECTOR AND REWORKER (boot & shoe)

Inspects sample and nonsample uppers and shoes and removes imperfections: Examines sample uppers for blemishes, such as wrinkles, rough seams, and bulges. Removes blemishes with handtools, such as electric irons, hammers, and knives. Disassembles blemished nonsample shoes received from packing inspectors and sample uppers having defects, such as broken stitches, torn parts, and discolored materials, for reassembly by other workers.
GOE: 06.03.02 STRENGTH: L GED: R3 M1 L2 SVP: 5 DLU: 77

788.684-102 SCREW REMOVER (boot & shoe)

Pushes hook-eye of screw, used temporarily to hold heel to shoe, into chuck of screw-remover machine to loosen and remove screw from heel, heel-seat, and last. Pushes pedal to start machine.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

788.684-106 SLIP LASTER (boot & shoe) alternate titles: last inserter; relaster

Replaces last in shoe upper prior to bottoming, using one of following methods: (1) Places broken last (open at hinge) on stationary *pin jack*. Positions shoe upper on last and pulls heel section of last down to stretch upper. (2) Places toe of upper onto last. Inserts shoe horn device in heel section of upper and depresses pedal to pull upper onto last. May align sock lining between last and insole. May tack upper parts, such as vamp strap or wrapper onto last, using *lasting tool*. May immerse uppers in softening solution to prevent seams from splitting. May remove upper from last.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

788.684-110 SOLE SEWER, HAND (boot & shoe) alternate titles: sole stitcher, hand

Sews outsoles to custom-made shoe by hand: Attaches pig bristle to end of cord to make point that will enter awl holes easily. Waxes cord by drawing it through ball of wax. Marks guideline around welt of shoe. Softens sole with water-soaked sponge. Cuts groove, using grooving tool, along line of marking on sole to make channel stitch. Cuts groove in welt along marked line to make invisible stitch. Makes hole through welt and sole with awl. Inserts one end of cord through hole and draws it about halfway through. Punches another hole and inserts both ends of cord through hole from opposite sides to form lock stitch. Continues punching and stitching operations in straight line, locking threads each time. Pounds down sole, using shoemaker's hammer, and levels off sole by rolling round piece of wood forward and backward over sole until surface is smooth and even. Smooths stitching (straight stitch) with piece of flat bone if stitching shows on welt.
GOE: 06.02.27 STRENGTH: L GED: R3 M1 L3 SVP: 6 DLU: 77

788.684-114 THREAD LASTER (boot & shoe) alternate titles: stitchdown-thread laster; stitchdown-thread-lasting-machine operator

Attaches shoe upper to insole, using stitchdown-thread-lasting machine: Sets last, with insole attached, on table and pulls upper over last by setting toe and end of upper in jaws of machine. Holds upper against insole on shoe rest. Depresses lever which lowers feeder onto upper edge. Pushes lever to start machine and guides shoe into feeding mechanism that sews upper to insole.
GOE: 06.04.05 STRENGTH: L GED: R3 M1 L2 SVP: 3 DLU: 77

788.684-118 TREE DRILLER (boot & shoe)

Presses last (tree) against power drill bit at specified point to drill hole through last into heel seat of women's shoes to receive retaining screw which secures wooden heel to shoes.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

788.684-122 UPPER-AND-BOTTOM LACER, HAND (boot & shoe)

Assembles parts of novelty shoes by lacing parts together with braided cloth or leather strips: Fashions upper portion of shoe by lacing quarters to vamp. Aligns perforated upper and sole, inserts tipped lacer, and draws parts together by lacing backward around shoe on either side. Ties lacer at top of heel. Smooths outside of shoe sole and heel stitches by pounding with hammer.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

788.684-126 WOOD-HEEL FINISHER (boot & shoe) alternate titles: breast finisher; heel finisher

Trims and smooths leather that covers breast and shank of wood heels, performing any of following duties: Trims and splits projecting edges of breast

flap with knife or scissors. Brushes cement onto shank and lodge. Inserts heel flap against heel breast and under top lift. Bevels and smooths edges of breast flap with beveling stick. Smooths wrinkles from heel covering with heated iron or hot air. May be designated according to task performed as Wood-Heel Cementer (boot & shoe); Wood-Heel-Flap Inserter (boot & shoe); Wood-Heel-Flap Rubber (boot & shoe); Wood-Heel-Flap Trimmer (boot & shoe).
GOE: 06.04.27 STRENGTH: S GED: R2 M1 L1 SVP: 3 DLU: 77

788.684-130 WRINKLE CHASER (boot & shoe) alternate titles: flamer, after lasting; ironer; presser

Irons wrinkles from shoes or shoe parts: Inspects shoes or parts for inside or outside wrinkles. Removes wrinkles, using heated hand or stationary iron, or hot air blower and awl-shaped handtool. May be designated according to part of shoe smoothed or ironed as Lining Ironer (boot & shoe); Wood-Heel-Cover Ironer (boot & shoe).
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

788.685-010 FLARE BREAKER (boot & shoe) alternate titles: cookie breaker

Tends machine that bends flare to conform to shape of arch: Wets flare to make it pliable. Holds lasted insole against hexagon-shaped roller that beats flare against arch contour of last.
GOE: 06.04.05 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

788.685-014 FOLDING-MACHINE TENDER (boot & shoe) alternate titles: fold skiver; tip cementer; topline-beading-machine tender

Tends bench-mounted machine to fold and press precemented edges of shoe parts together: Positions parts on bed of machine and depresses pedal to lower presser foot to fold part and press edges together.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

788.685-018 STOCK FITTER (boot & shoe) alternate titles: fitting room operator; insole-and-outsole preparer; sole cutter

Cuts and shapes leather insoles and outsoles for further processing, performing any combination of following duties: Tends machine to stamp out insole or outsole blanks. Trims blanks to pattern size by feeding through sole-rounding machine. Sorts blanks according to designated quality standards. Feeds blanks into splitting machine to cut to desired thickness. Shaves edges of soles at shank to improve appearance and to increase flexibility. Roughens band around edge of outsole. Applies bank of cement around edge of outsole. May cement cord platforms, staple wedgies to platforms, and cut and turn channels for welt shoes. May cement filler to ball of insole to prevent squeaking of finished shoe.
GOE: 06.02.27 STRENGTH: L GED: R3 M1 L1 SVP: 6 DLU: 77

788.685-022 TONGUE PRESSER (boot & shoe)

Tends machine that shapes and removes wrinkles from tongue of leather shoes. Presses foot switch to close upper and lower halves of heated forming die that shapes and removes wrinkles from tongue.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

788.685-026 TOP FORMER (boot & shoe) alternate titles: top ironer; upper shaper

Tends machine that shapes shoe uppers on heated forming die: Positions shoe upper on heated forming die and pulls lever to bring padded pressing arm against shoe to shape back part of upper. Releases lever after specified time and removes shoe upper from die.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

788.685-030 WRAP TURNER (boot & shoe)

Tends machine that turns wrap on platformed shoe to prepare for cementing: Brushes liquid leather softener on wrap to prevent tearing. Holds toe of shoe upside down so that wrap fits over stationary U-shaped horn of machine. Depresses pedal that lowers flat, toe-shaped piece against bottom of shoe at toe, pressing shoe downward below walls of horn, to reverse wrap. Performs same operation at heel of shoe. Turns wrap on sides by hand.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

788.687-010 ANTISQUEAK FILLER (boot & shoe) alternate titles: antisqueak applier; antisqueak chalker; chalker, soles; flare chalker; outsole paraffiner

Applies liquid coating to shoe parts, or cements cushioning material between parts, to prevent squeaking due to friction or wear. Brushes coating of liquid chalk, paraffin, or wax on parts, such as heel bases, flares, and outsoles.
GOE: 06.04.33 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

788.687-014 BOTTOM BLEACHER (boot & shoe) alternate titles: bleacher; bottom scrubber

Applies bleaching liquid to bottom of leather outsoles of lasted shoes, using brush or cloth, to lighten color of outsoles. May apply stain, using cloth or sponge. May apply cleaning fluid to remove foreign matter.
GOE: 06.04.33 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

788.687-018 BRUSHER (boot & shoe)

Holds and turns shoes against revolving brushes to clean and polish them: Coats revolving wheel with wax, using wax black. Holds shoe against wheel to apply wax, then against revolving bristle and cloth wheels to polish shoe. May clean, wax, and polish shoe heels and soles and be designated Edge Polisher (boot & shoe). May be designated according to part of shoe worked on as Bottom Brusher (boot & shoe); Heel Brusher (boot & shoe).
GOE: 06.04.33 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

788.687-022 BUCKLER AND LACER (boot & shoe)

Threads laces through eyelets and buckles straps on finished shoes in preparation for shipping.
GOE: 06.04.27 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

788.687-026 CASER, SHOE PARTS (boot & shoe) alternate titles: caser; counter caser

Gathers and sorts shoe parts for delivery to other departments or workers: Collects parts, such as heels, quarters, linings, and outsoles from baskets, bins, or racks, following quality, quantity, size, and style specifications. Sorts parts according to identifying numbers and bundles or places them in containers for delivery. Receives and stores parts. May examine parts for defects, such as cracks or rough finishes. May copy identifying numbers from order ticket onto shoe parts or containers, using crayon or pencil. May stamp container number onto order ticket, using ink stamp.
GOE: 06.03.02 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 78

788.687-030 CEMENTER, HAND (boot & shoe) alternate titles: gluer; gummer; material combiner; paster

Joins precemented shoe parts, or applies cement to join parts, using any of following methods: (1) Brushes cement onto parts. (2) Sprays cement onto parts, using spray gun. (3) Rubs parts over cement-covered roller. (4) Feeds and pulls parts between cement-covered rollers. May align precemented parts, following seams or edges, markings on parts, or template guides, and press parts together by hand or using handtools. May trim excess material from cemented parts. May mark position of heel seat, using pencil. May roughen shoe parts in preparation for cementing. May brush solvent on parts to activate cemented surface. May hammer holding nail through stacked lifts and place heels in press to dry and be designated Heel Builder, Hand (boot & shoe). May be designated according to parts cemented as Arch-Pad Cementer (boot & shoe); Bottom Cementer (boot & shoe) II; Box-Toe Cementer (boot & shoe); Heel Cementer (boot & shoe); Heel Coverer (boot & shoe). May be designated: Heel Padder (boot & shoe); Shank Cementer, Hand (boot & shoe); Sock Liner (boot & shoe); Sole Layer, Hand (boot & shoe); Upper Doubler (boot & shoe).
GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 78

788.687-034 COLOR MATCHER (boot & shoe) alternate titles: heel sprayer, first; uniformer

Inspects shoes for color uniformity and rectifies defects: Examines outer surface of finished shoes for spots of light or irregular coloring. Mixes coloring solutions until matching color is obtained. Sprays solution on defective area of shoe with spray gun or applies solution by hand, using rag or finger. Polishes repaired area with rag to blend with other shoe surface.
GOE: 06.03.02 STRENGTH: S GED: R2 M2 L1 SVP: 4 DLU: 77

788.687-038 DRESSER (boot & shoe) alternate titles: luster repairer; quarter doper; shoe dresser

Applies liquid dressing or dye on shoes to produce glossy finish, using brush, sponge, or spray gun: Applies dressing by method specified for particular style of shoe. May apply hot water and alcohol to back of shoe to soften leather and prevent splitting of back seam when last is removed. May apply filler to prepare leather for dressing operation.
GOE: 06.04.33 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

788.687-042 FINISHING TRIMMER (boot & shoe) alternate titles: cover cutter; cover remover; goring cutter; gusset ripper

Cuts and removes temporary protective plastic covers, *gore* reinforcing tape, or stitches from closed gussets from shoes prior to dressing and packing operations: Presses shoe against friction-heated trimming wheel or inserts knife or other handtool between upper of shoe and cover, cutting cover at welt. Removes material by hand and places shoe on rack.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

788.687-046 FLOORWORKER, LASTING (boot & shoe)

Marks shoe parts rejected in lasting inspection, distributes rejected parts for repair, and locates repaired parts: Marks or tags damaged uppers. Pulls last from damaged upper and returns upper to department of origin or to worker for repair. Locates and gathers repaired parts. Procures replacements for damaged lasts.
GOE: 05.09.03 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

788.687-050 FOLDER, HAND (boot & shoe) alternate titles: flat folder

Folds precemented edges of shoe parts that cannot be folded by machine to form finished edges, and tamps edges with hammer to crease and cleave material. May apply cement with brush or finger under nonadhesive edges. May hammer prefolded edge of insole cover over arch pad to flatten cover edge and be designated Hammerer, Tab (boot & shoe).
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

788.687-054 GOLF-SHOE-SPIKE ASSEMBLER (boot & shoe) alternate titles: golf-stud riveter

Attaches studs or spikes to golf shoe soles and heels by one of following methods: (1) Sets leather sole right side up on anvil. Depresses pedal causing magnetized driver to push rivet end of stud through sole and clinch it into bottom of sole or heel. (2) Threads spikes into metal inserts that have been molded into plastic soles and heels of completed shoes. Holds shoe against bench-mounted air wrench, inserts spike head into socket, and presses shoe against

revolving wrench until spike is threaded securely. Repeats operation until each spike in sole and heel is assembled to shoe.
GOE: 06.04.27 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

788.687-058 HEEL DIPPER (boot & shoe)
Dips heels in cement prior to heel covering operation: Places heels in wire basket. Immerses basket in cement solution to coat heels. Raises basket, allowing excess cement to drain. Places heels on drying rack. May attach heels to bar used to hold heels for dipping in cement.
GOE: 06.04.33 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 78

788.687-062 INSOLE-AND-HEEL-STIFFENER (boot & shoe) alternate titles: channel-lip stiffener, insoles; rib-stiffener and heel-dipper
Applies stiffening solution to insoles in preparation for *lasting* by dipping toe and heel of insole in tank, and guiding channel of insole under roller of machine onto which stiffening solution is automatically fed. May dip heel sections into solution and place them on drying rack and be designated Heel Dipper, Insole (boot & shoe).
GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

788.687-066 LABORER, BOOT AND SHOE (boot & shoe)
Performs any combination of following tasks in shoe factory: Removes lasts from assembled shoes by hand. Sorts lasts according to size and stores them in bins. Gathers leather scraps for salvage. Stacks and stores leather parts according to size and shape. Transfers shoes in various stages of completion to workers for further processing. Sweeps floors and cleans work benches. May off bear products of leather cutting and shaping machines. May sand heels on sanding machine, and burnish work boots.
GOE: 06.04.40 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

788.687-070 LACER I (boot & shoe)
Inserts permanent laces through two lower eyelets of shoes and ties them to prevent loss. May attach descriptive tag to shoe.
GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

788.687-074 LACING-STRING CUTTER (boot & shoe) alternate titles: string cutter
Cuts and removes temporary lacing strings that hold shoe uppers together during *lasting* operations, using knife.
GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

788.687-078 LAST CHALKER (boot & shoe) alternate titles: last dipper; last greaser; last waxer
Treats lasts (shoe molds) to prevent lining from sticking at box toe and counter when shoe is lasted. Paints toe and heel of last with paste or chalky preparation.
GOE: 06.04.33 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

788.687-082 LAST CLEANER (boot & shoe)
Cleans wooden shoe lasts by pressing them against rotating abrasive wheel to remove dried cement. Stacks cleaned lasts according to size on rack.
GOE: 06.04.39 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

788.687-086 LAST PULLER (boot & shoe)
Removes lasts from shoes by either of following methods: (1) Places shoe on *pin jack* and pulls sharply on heel seam, causing hinge of last to open and release shoe. (2) Places shoe on pin jack and depresses pedal to force shoe against vertically moving rubber belt that lifts heel section from last. Removes shoe from last by hand.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

788.687-090 LEATHER SOFTENER (boot & shoe)
Softens leather shoe parts by one of following methods: (1) Places shoe parts, by case lots, on rack and pushes rack into humidifier. Turns valves to control heat and moisture in humidifier. Records rack number and time or date of placement in humidifier. Pushes rack of softened parts to other workers. (2) Dips bundles of welt strips into water and places bundles in humidifying room to maintain moisture in strips. (3) Places outsoles on rack, places rack on dipping frame, and lowers frame into trough of softener solution, using power hoist. Pushes rack of softened outsoles into humidifying room. (4) Sprays softening solution on shoe parts, using spray gun. (5) Pulls shoe part along roller that applies softening solution to part. (6) Wipes flesh side of leather with dampened rag or sponge to maintain pliability. May place sheets of fiberboard or leatherboard in softening solution, place softened board on skid, and cover stack of boards with plastic sheet to retain moisture. May be designated according to part treated as Heel-Cover Softener (boot & shoe); Sole Wetter (boot & shoe); Upper Muller (boot & shoe); Vamp Wetter (boot & shoe); Welt Treater (boot & shoe).
GOE: 06.04.27 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

788.687-094 MOLDER, SHOE PARTS (boot & shoe) alternate titles: conformal pad former; plastic insert molder
Molds preshaped piece of plastic to form shoe parts, such as arch supports and counters: Softens plastic piece in oven and positions it in mold. Pulls lever that lowers die to press and shape part. Removes shaped part from mold. May mark part to indicate size, using marking pencil.
GOE: 06.04.32 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

788.687-098 PAINTER, BOTTOM (boot & shoe) alternate titles: bottom stainer; sole stainer
Applies ink or stain onto bottoms of leather outsoles and heels, using brush, sponge, or spray gun, to color bottoms and prepare surface for polishing. May press shoe bottom against machine bristle rollers that remove excess stain and impart preliminary finish.
GOE: 06.04.33 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

788.687-102 PEGGER (boot & shoe)
Hammers wooden pegs into heel and arch of boots to strengthen shank and keep boot waterproof: Places boot on *pin jack* and shapes edge of sole, using hammer. Marks row for pegs around heel and arch, using marking tool. Punches holes for pegs, using awl and hammer. Selects length of peg according to thickness of boot, places peg in hole, and hammers peg into boot. Repeats operation for each side of shank.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

788.687-106 SCRAP SORTER (boot & shoe)
Sorts and bags scrap leather to salvage usable pieces for further processing: Gathers scrap leather from cutting operations. Sorts trimmed material according to kind and use. Places sorted scrap in bags.
GOE: 06.03.02 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

788.687-110 SHANK INSPECTOR (boot & shoe) alternate titles: shank picker; shank sorter
Examines steel arch shanks for imperfections, such as burrs or excess metal, and packs them in container. Discards defective shanks.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

788.687-114 SHANK TAPER (boot & shoe) alternate titles: shank paperer
Presses strips of gummed paper tape on shoe upper to protect it during sanding of outsole.
GOE: 06.04.27 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

788.687-118 SHANK-PIECE TACKER (boot & shoe) alternate titles: shanker; shank tacker
Positions and affixes metal shank piece to shank of shoes to support arch, using hammer and tacks or stapler.
GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

788.687-122 SHOE CLEANER (boot & shoe) alternate titles: treer
Removes foreign matter, such as grease and cement from finished shoes, using art gum, knife, and cleaning fluids. Applies dressing to cleaned area to restore color and finish, using brush or spray gun and dressing or colored paint. May wrap shoe ornaments with paper for protection during packing and shipping. May spray disinfectant on inside of shoes to sanitize them and be designated Sanitizer (boot & shoe).
GOE: 06.04.39 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

788.687-126 SHOE COVERER (boot & shoe)
Places canvas, paper, or plastic covers over partially assembled shoes to protect uppers during processing. Inserts toe of shoe into end of cover, pulls cover over heel, and secures cover with rubberband or tacks edges of cover to insole.
GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

788.687-130 SHOE TURNER (boot & shoe)
Turns inverted shoe-vamp strap right side out: Pulls tubular strap down over vertical rod. Depresses pedal to lower second rod onto folded end of strap. Pulls up on bottom part of vamp strap to turn strap right side out. Releases pedal and removes strap. Bundles parts for delivery to other workers. May press adhesive cloth tape to inside of perforated leather uppers to prepare them for stitching. May pull boot upper onto turning rod frame, clamp top of upper to turning bar, and pull bar forward to turn boot upper right side out and be designated Boot Turner (boot & shoe).
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

788.687-134 SOLE SCRAPER (boot & shoe)
Scrapes excess ink dressing from edge of shoe soles with metal scraper or knife to minimize clogging of sandpaper when sanding edges of sole.
GOE: 06.04.27 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

788.687-138 STEEL-BOX-TOE INSERTER (boot & shoe)
Inserts steel box toe into forepart of safety shoe: Places toe of lasted shoe in steam box to soften leather and positions steamed shoe on *pin jack*. Pulls tacks and upper-holding wire from toe area of shoe, using *lasting tool*. Draws upper leather back from toe area by hand and inserts steel box toe over lining. Brushes cement onto vamp edge of box toe and covers edge with felt strip to prevent friction between metal and upper leather. Pulls upper leather back over toe area, using lasting tool. Tacks edges of shoe upper to last, using hammer.
GOE: 06.04.27 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

788.687-142 TABLE WORKER (boot & shoe)
Performs any combination of following tasks in stitching room, using handtools: Cements doubles (cloth backing) together. Brushes cement on shoe parts. Counts number of parts and verifies total against work ticket. Sorts parts. Cuts and ties threads.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

788.687-146 TACK PULLER (boot & shoe) alternate titles: anchor-tack puller; insole-tack-puller, hand
Pulls temporary holding tacks from insole and upper of lasted shoe, using tack-pulling tool or pincers. May remove toe-wire and tacks from lasted shoes, using tack puller and pincers.
GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

788.687-150 TRIMMER, HAND (boot & shoe)
Trims excess material from edges or decorative openings of shoe parts, using handtools, such as knife and shears, and following specifications, markings, or template outline.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

788.687-154 VAMP CREASER (boot & shoe) alternate titles: crimper
Tends crimping machine that creases shoe vamps (part of shoe over instep) by one of following methods: (1) Positions leather model of vamp on vamp to be creased and places them under heated machine head. Depresses pedal to lower head and crimp vamp and model against parallel walls. (2) Places assembled shoe over die in machine head and stamps crease into vamp where foot bends. May place vamp over steamer to soften leather prior to crimping.
GOE: 06.04.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

788.687-158 VAMP-STRAP IRONER (boot & shoe) alternate titles: shoe ironer
Creases turn-stitched seams of lined vamp strap: Pushes steel insert into open end of strap to hold seams flat. Moistens strap with sponge and places strap on ironing bed. Depresses pedal to lower hot-iron plate and iron strap. Releases pedal, removes strap from ironing bed, and withdraws insert.
GOE: 06.04.27 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

788.687-162 WELT-BUTTER, HAND (boot & shoe)
Cuts off excess welt at heel seat of lasted shoe, using knife.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

788.687-166 WHITE-SHOE RAGGER (boot & shoe)
Brushes liquid polish on white leather shoes and rubs shoes with rag to give glossy and finished appearance. May apply polish to white leather of multicolored shoes, using artist's brush.
GOE: 06.04.33 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

789 OCCUPATIONS IN FABRICATION AND REPAIR OF TEXTILE, LEATHER, AND RELATED PRODUCTS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with fabricating and repairing textile, leather, fur, and related products.

789.132-010 SUPERVISOR IV (tex. prod., nec)
Supervises and coordinates activities of workers engaged in laying out, cutting, and sewing material for household articles, such as bed linens, curtains, drapes, or slipcovers: Examines finished articles for defects, such as uneven seams and missed stitches, to maintain qualitative standards. Trains workers in laying out and cutting material and in sewing machine operation. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to article fabricated or department as Cutting-And-Sewing Supervisor (tex. prod., nec); Drapery Room Supervisor (retail trade; tex. prod., nec); Pillow-And-Cushion-Department Supervisor (tex. prod., nec).
GOE: 06.02.01 STRENGTH: L GED: R3 M3 L2 SVP: 6 DLU: 78

789.132-014 SUPERVISOR I (tex. prod., nec)
Supervises and coordinates activities of workers engaged in cutting, sewing, inspecting, and turning textile bags: Measures and examines bags at various stages of processing to verify conformance to specifications. Informs workers when variations in size and defects in sewing, stringing, and turning are detected. Orders machine adjustments or changes in work procedure to restore production to specifications or to introduce changes in bag styles. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to department as Cutting-Department Supervisor (tex. prod., nec).
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

789.132-018 SUPERVISOR III (tex. prod., nec)
Supervises and coordinates activities of workers engaged in fabricating and repairing awnings, boat covers, drop and ground cloths, sails, tarpaulins, and tents made from canvas, synthetic, and vinyl material: Directs workers in cutting, assembling, and sewing material. Examines parts and finished or repaired articles for defects, such as holes and missed stitches, to maintain qualitative standards. Estimates cost of repairing damaged or worn articles. Trains employees in work procedures and machine operation. May interpret blueprints and draw layouts or patterns for workers. Performs other duties as described under SUPERVISOR (any industry) Master Title. May supervise workers engaged in fabricating and repairing canvas products and be designated Supervisor, Canvas Products (tex. prod., nec).
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 78

789.132-022 SUPERVISOR, NET MAKING (toy-sport equip.)
Supervises and coordinates activities of workers engaged in making nets from purchased netting for games, such as badminton, basketball, tennis, or volleyball: Directs workers in measuring, cutting, and sewing netting and tape and in crimping grommets into tape for support ropes and cables. Inspects nets for conformance to specifications. Trains workers in job duties and machine operation. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

789.132-026 SUPERVISOR, PARACHUTE MANUFACTURING (tex. prod., nec)
Supervises and coordinates activities of workers engaged in marking, cutting, sewing, inspecting, and folding parachutes. Trains workers in sewing machine operation and in method of inserting suspension lines. Inspects parachutes during fabrication to detect defects, such as missing stitches, underlap or overlap in seams, pleats or puckers in cloth, and unsewn suspension lines. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 77

789.134-010 SUPERVISOR II (tex. prod., nec)
Supervises and coordinates activities of workers engaged in fabricating and decorating products, such as armbands, banners, and emblems. Requisitions supplies, such as bobbins, fabric, needles, and thread. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 77

789.134-014 SUPERVISOR II (protective dev.)
Supervises and coordinates activities of workers engaged in assembling locking devices and splicing safety ropes and nets: Requisitions materials needed to process customer orders. Trains and directs workers in assembly techniques. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R4 M3 L4 SVP: 7 DLU: 86

789.137-010 BOXING-AND-PRESSING SUPERVISOR (knitting)
Supervises and coordinates activities of workers engaged in inspecting and sorting bundles of knitted garments according to style preparatory to shipment. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

789.137-014 SUPERVISOR, WEBBING (tex. prod., nec)
Supervises and coordinates activities of workers engaged in fabricating and repairing fish nets. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

789.222-010 INSTRUCTOR, APPAREL MANUFACTURE (textile) alternate titles: instructor; overseer
Instructs workers to tend or operate knitting, looping, and sewing machines, using knowledge of machine function and process: Plans training schedule to ensure workers achieve standard production in specified time. Demonstrates methods of cleaning, threading, replacing needles, changing guides, lubricating, tension adjusting, and operating machines. Examines work of trainees to detect defects and instructs worker in methods to detect and correct defective work. Records production of worker to determine progress according to training schedule. Recommends transfer of worker from one operation to another based on progress made. May sew or loop sample articles to determine steps in assembly for new styles. May teach hand knitting, looping, and sewing to workers.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

789.261-010 BOAT-CANVAS MAKER-INSTALLER (tex. prod., nec)
Lays out, assembles, and installs custom and production model convertible tops, cockpit covers, and side curtains for boats according to customer specifications: Sketches design according to customer's description of item desired. Measures boat for part to be made, using tape. Makes pattern from measurements, and lays out and cuts material, using hand shears. Sews material according to markings, using power sewing machine [SEWING-MACHINE OPERATOR (tex. prod., nec) II]. Cuts and bends aluminum tubing to form framework, using metal-cutting saw and pipe-bending jig. Assembles framework, attaches material, and installs finished product on boat, using handtools, electric drill, and nuts and bolts.
GOE: 05.05.15 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 77

789.381-010 BEADWORKER (fabrication, nec)
Sews beads and other ornaments to leather articles, such as belts, purses, and moccasins, to form decorative designs: Draws original design on paper or executes design by threading beads together on hand loom. Stitches beads individually or in clumps onto leather article to transfer from drawing or loom. May prepare deerskin or other hide for beading by rubbing with stones to soften leather. May stitch materials, such as bird claws, feathers, and animal teeth, to leather to form contrasting design. May prepare dyes for coloring materials from berries or other natural substances, according to shade desired and knowledge of dye properties of available materials. May prepare thread from leather sinews for attaching ornaments.
GOE: 01.06.03 STRENGTH: L GED: R3 M1 L2 SVP: 6 DLU: 77

789.381-014 PATTERN CHART-WRITER (paper goods)
Makes scale drawings of dresses and their parts for use in reproducing commercial patterns and to illustrate style of garment and manner in which parts should be assembled, working from sample dresses or designer's sketches: Draws completed pattern and its separate parts, identifying counterparts of completed pattern with letters or numbers. Writes instructions for arranging pattern parts on material preliminary to cutting, and for assembling parts into garment.
GOE: 05.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

789.381-018 TRAWL NET MAKER (tex. prod., nec)
Lays out and cuts pattern, and fabricates trawl nets, using handtools and prefabricated net materials: Draws diagram to lay out parts for net, computing di-

mensions in number of meshes required along each seam. Lays out patterns for net parts on paper, using rule and pencil or marking crayon. Cuts patterns with scissors. Stretches netting materials on table or floor and cuts net parts with scissors, following patterns. Hangs net parts on pins along wall, over frames, or holds seams together with hands and toes to align seams. Threads twine, wound on shuttles (needles), through adjacent meshes of parts and ties half-hitch knots around knots of mesh to secure seam. Hangs net to metering lines. Similarly attaches prefabricated bag (used as trap to release fish onto deck from suspended net) to truncated end of net.
GOE: 06.01.04 STRENGTH: M GED: R3 M2 L3 SVP: 6 DLU: 77

789.382-010 CLICKING-MACHINE OPERATOR (boot & shoe; glove & mit.; leather prod.)

Operates clicking machine (die cutter) to cut out parts from leather or similar materials for articles, such as gloves, shoes, and small leather products, according to finish, grain, and pattern of material: Selects material and cutting dies according to specifications on work ticket. Turns handwheel to adjust depth of cut of clicking machine ram according to thickness of material and die. Lays material on cutting block and positions dies on material to match grain and weave of adjacent parts and to obtain desired cuts. Pulls horizontally swinging ram over dies to cut out parts. Counts parts to verify quantity against work ticket. May bundle parts and mark identification data on top part, using pencil. May smooth wooden cutting block, using hand plane or rasp. May cut out parts, using knife. May cut out shoe parts to repair shoes damaged in processing and be designated Cripple Cutter (boot & shoe). May be designated according to material or article as Leather Cutter (glove & mit.; leather prod.).
GOE: 06.02.05 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 80

789.387-010 QUALITY-CONTROL CHECKER (garment)

Inspects garments, such as men's shirts, during manufacturing operations to determine number of defects per worker and reasons for rejects by examiners: Cuts swatches from bolts of fabric to determine variations in dye lot shades. Counts number of pattern parts and lays of cloth prior to cutting to ensure accuracy of cutting operation with minimum waste. Counts number of stitches per inch during sewing operation to detect inconsistencies in sewing machine settings. Tests strength of collar-stay fusion, using tensiometer. Folds collars in half to detect unevenness of attachment. Examines garment and parts for defects, such as unfinished raw edges, broken buttons or hooks, uneven stripes or plaids, puckers in seams, loose threads or stitches, or incorrect packaging assortment. Records number and type of defects for each worker. Returns rejected part or garment to department to be reworked.
GOE: 06.03.01 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

789.387-014 SAMPLE SELECTOR (tex. prod., nec)

Selects materials, such as buckram, metal bars, and ribbon, and joins parts to form sample fabric badge or selects sample fabric badges from files, according to customer order. May wrap badges in tissue paper and pack them in boxes for shipment.
GOE: 06.02.27 STRENGTH: S GED: R2 M1 L1 SVP: 4 DLU: 77

789.484-010 DIAGRAMMER AND SEAMER (carpet & rug)

Cuts sections from rugs and joins sections together to form special size or shape rug, following diagrammed instructions: Reads instructions to determine rugs to be cut and obtains rugs from storage. Compares diagram with rugs spread on floor to estimate shape of required rug, lines along which to cut sections from rugs, and to visualize order in which sections can be joined to obtain required pattern. Computes area surface of sections needed to determine cutting lines. Measures and marks cutting guidelines, using tape measure, chalk, and yardstick. Guides portable electric cutter along chalkline to cut sections from rugs. Places cut sections upside down, matching edges, and nails sections to floor. Positions webbing tape over chutting edges, and spreads glue, using putty knife, onto tape so that glue seeps through webbing, adhering tape to backing material to seam sections together. Removes nails when glue dries, turns rug over, and clips uneven pile yarn along seams, using electric clippers, to make seams invisible.
GOE: 06.02.31 STRENGTH: M GED: R4 M4 L3 SVP: 5 DLU: 77

789.484-014 FINISHER, HAND (tex. prod., nec)

Fastens grommets, and hand sews reinforcing patches, ropes, rings, and snaps to such canvas products as awnings, sails, and tents: Sews reinforcing patches, ropes, snaps, eyelets, and rings to specified areas of canvas, using thread, palm, and needle. Measures and draws grommet holes on canvas with ruler and pencil. Cuts holes and fastens grommet to canvas using hammer, punch, and wooden block, or operates grommet machine to fasten grommets to canvas [EYELET-MACHINE OPERATOR (any industry)]. Splices rope and wire to metal fittings, seizes (binds) ends and sews to canvas. Threads ropes through grommets or ties to canvas. May taper rope by shaving it with knife, and sew rope to canvas. May repair defective canvas by patching or replacing ropes or grommets. May be designated according to type of article finished as Awning Finisher (tex. prod., nec); Sail Finisher, Hand (tex. prod., nec); Tent Finisher (tex. prod., nec).
GOE: 06.02.27 STRENGTH: M GED: R3 M1 L2 SVP: 5 DLU: 77

789.487-010 PLEAT TAPER (tex. prod., nec)

Measures unhemmed edge of pleated material for conformance to size specifications, using ruler. Tapes pleats in place, using masking tape. Folds material and stacks it on table according to size and color.
GOE: 06.03.01 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

789.587-010 BOXING INSPECTOR (garment)

Examines garments after folding or boxing to detect imperfections, such as shaded parts, holes, twisted straps, loose buttons, or open seams and to determine if garments are folded and boxed according to specifications. Refolds disarranged garments. Records type and number of imperfections detected.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

789.587-014 INSPECTOR, FABRIC (any industry) alternate titles: folder inspector; inspector and clipper

Examines articles made from fabric, such as bags, bed linens, canvas products, or house furnishings, to detect soil and assembly defects: Measures length or width of article to detect variation from customer or plant specifications, using tape or rule. Spreads article over table or rack and scans article to detect defective stitching, loose threads, color variations between thread and fabric, and uneven seams, corners, pleats, or hems. Cuts excess threads with scissors. Marks defects with gummed label or chalk. Stacks articles that fail to meet specifications on handtruck or table. Records number and type of defects. Folds articles according to customer or plant specifications. May examine paired articles, comparing designs to detect irregular alignment. May inspect tufted articles, scanning article to detect uneven or ragged tufts. May work as member of team to examine large articles, such as blankets, bedspreads, and draperies. May be designated according to article inspected as Bag Inspector (tex. prod., nec); Bedspread Inspector (tex. prod., nec); Blanket Inspector (tex. prod., nec); Curtain Inspector (tex. prod., nec); Dish-Cloth Inspector (tex. prod., nec); Drapery Inspector (tex. prod., nec). May be designated: Inspector, Canvas Products (tex. prod., nec); Returned-Goods Inspector (tex. prod., nec); Sheet Inspector (tex. prod., nec); Towel Inspector (tex. prod., nec).
GOE: 06.03.02 STRENGTH: L GED: R3 M1 L2 SVP: 3 DLU: 77

789.587-018 PARACHUTE MARKER (tex. prod., nec)

Folds rectangular signal-flare parachutes in four and marks corner representing center of parachute with pencil prior to further processing. Records number of parachutes folded on production sheet.
GOE: 06.04.27 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

789.587-022 RUG INSPECTOR II (carpet & rug)

Inspects carpets and rugs to detect defects in weaving, tufting, or hooking, soil spots, uncut pile, and loose threads: Spreads rug on table or examines rug spread on floor to detect soil spots, missing stitches, holes, loose threads, uncut pile, defectively bound edges, and faulty shearing, and to determine that color, design, and fabrication meet specifications. Measures pile height and rug dimensions, using ruler and tapeline. Marks defect on rug. Cuts uncut pile, loose yarn ends, and long fringe yarn, using scissors. Selects yarn of color to match rug, threads hooked needle, and hooks yarn to backing in blank areas of rug to fill in missing pile or yarn. May rub soil spots with cloth and cleaning solution to remove soil and restore natural color to rug pile. May glue backing strip around back edge of rug. May attach tassels to edge of rug, using plunger needle and yarn. May affix gummed label to rug, using heated iron. May work as member of two-worker team when inspecting large rugs.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

789.587-026 SAMPLE CLERK (textile)

Cuts cloth into swatches and attaches them to cards for production records or distribution to salesmen and customers: Compares cloth for color and style with standard sample which meets design specifications. Examines cloth for defects in weave, shade, finish, and dimensions, and rejects imperfect cloth. Stacks cloth according to style and cuts to specified size, using pinking machine. Spaces samples on card and attaches them to card, using paste and brush or hand stapling machine. Prints style number and color on sample card, using rubber stamps [TICKETER (textile)]. Records and files description of orders filled.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

789.684-010 BOW MAKER (any industry)

Forms ornamental bows for hair or dress wear, by hand: Winds length of ribbon on rack to form bows. Cuts ribbon into sections with scissors and ties folds together at middle with twine to form bow. Inserts bobby pin or safety pin through twine, and removes bows from rack. Arranges artificial flower or lace medallion on bow as specified, and ties them together with twine or ribbon. May sew comb attachment to middle section of underside of bow, using needle and thread.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

789.684-014 BUFFING-WHEEL FORMER, HAND (tex. prod., nec)

Folds and gathers cloth within metal ring to form buffing wheels, using hand-actuated forming and pressing device: Lifts roll of cloth onto holder or draws end from box and threads end through guides and over steam pipes. Positions front section of forming drum on rod at specified distance from rear section. Pulls material over drum and centers it over space between drum sections. Secures cloth edges over pins across drum. Turns valve or depresses pedal to admit steam to pipes to soften material. Turns crank to wind specified amount of material around drum. Pushes lever to close jaws of pressing device that forces cloth between drum sections, folding and gathering cloth in center. Removes front section of drum. Pulls half of gathered cloth forward from pressing jaws, slides ring over cloth to secure gathers in center, and turns cloth over ring to cover it. Raises lever to open jaws of pressing device and removes buffing wheel.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

789.684-018 CANOPY STRINGER (tex. prod., nec)

Threads shroud lines through perpendicular seams of parachute canopy for connecting canopy to parachute harness: Spreads canopy on table and places vent over holders. Secures end of line in barbs of insertion needle and working from interior dome of canopy outward, inserts shroud lines through holes in opposite panel seams so that center of line lays in semicircle around top hem. Threads and pulls line down through panel seam, drawing it out just above reinforcements attached to bottom hem of canopy. Pins shroud lines at hem and vent, according to markings on line, to facilitate stitching of lines to canopy. Braids lines to prevent tangling, cooperating with co-worker so that each advances one panel seam in same circular direction as stringing progresses. May thread shroud lines through horizontal seams of aerial recovery parachutes. May insert line into itself, using insertion needle, to form endless vent line.
GOE: 06.02.27 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

789.684-022 HAIR CLIPPER, POWER (leather mfg.)

Clips hair from cattle or horse tails, using electric clippers, so that hair falls into container or onto conveyor. Throws sheared tail into separate container.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

789.684-026 MOLDER, SHOULDER PAD (garment)

Shapes fabric shoulder pads over steam-heated metal molds: Positions and shapes precut fabric over heated mold. Allows fabric to remain on mold until sufficiently heated to retain shape of mold. Removes shaped pad from mold and places pad in basket for further processing.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

789.684-030 NET MAKER (tex. prod., nec) alternate titles: knotter, hand; knotter

Interlaces and knots twine to form nets. Selects gauge and twine according to size specified on work ticket. Wraps twine around needle (twine holder) that facilitates interlacing and knotting of twine. Extends and ties ends of foundation line to poles. Ties twine to end of line with clove hitch and positions gauge against line. Loops twine around gauge and knots twine onto foundation line, forming half mesh. Removes gauge and repeats operation to form row of half meshes. Holds gauge against half-mesh, pulls twine around gauge, and ties sheep bend knot onto half-mesh, forming mesh. Repeats operation with succeeding half meshes to form net. Unties foundation line and pulls line from net. May be designated according to type of net made as Safety-Net Maker (tex. prod., nec); Tennis-Net Maker (tex. prod., nec).
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

789.684-034 PARACHUTE FOLDER (tex. prod., nec)

Folds circular or rectangular parachutes preparatory to further processing, using any of following methods: (1) Hangs circular parachute canopy on wall hook, prior to attachment of shroud lines, and folds canopy lengthwise along seams, one panel over another. Removes canopy from hook and rolls canopy from top to bottom. (2) Spreads circular canopy on table, after shroud lines are attached, and straightens canopy and lines to eliminate wrinkles, tangles, or coils. Clamps shroud lines to table edge with vise, loops lines through hook in wall, and pulls lines taut. Splices loops in ends of shroud lines, using cotton twine. Folds canopy lengthwise along seams, one panel over another. Rolls canopy from top to bottom, removes shroud lines from hook, wraps lines around rolled canopy, and secures bundle with rubber bands. (3) Folds rectangular canopy in half lengthwise and spreads canopy on table with shroud lines hanging over table edge. Folds canopy fanwise so that shroud lines are grouped together. Straightens lines to eliminate coils and tangles, and ties lines and flare suspension cords together. Cuts off excess line and cord ends, using scissors. Rolls canopy from top to bottom and wraps lines and cords around canopy.
GOE: 06.04.27 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

789.684-038 PARACHUTE MENDER (tex. prod., nec) alternate titles: mender

Patches damaged parachute canopies, using needle and thread and sewing machine. Replaces defective shrouds and splices connections between shrouds and harness, using handtools.
GOE: 05.10.04 STRENGTH: L GED: R3 M1 L1 SVP: 3 DLU: 77

789.684-042 RAWHIDE-BONE ROLLER (leather prod.)

Cuts, rolls, and ties strips of rawhide to form toy bones for dogs. Cuts strips of specified size from sheets of wet, processed rawhide, using knife. Rolls strips and ties knots in ends to form bone shaped toy.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

789.684-046 RIGGER (tex. prod., nec)

Fits finished canvas to metal frame to prepare awning for installation: Inserts metal frame and roller into pockets at lower end and sides of awning cloth. Drills holes in aluminum roller, using portable electric drill, and screws in spring roller, using screwdriver. Threads rope through grommets, blocks, and pockets and ties rope to awning cloth and frame. May bundle awnings into lots and attach work ticket.
GOE: 06.04.34 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

789.684-050 THREAD CUTTER (any industry) alternate titles: trimming-machine operator

Trims loose threads from edges or seams of articles, such as garments, hats, linens, and surgical appliances, using either of following methods: (1) Moves edges or seams of article over stationary cutting head equipped with vacuum attachment that draws threads between reciprocal blades to cut threads. (2) Spreads article on table or pulls article over form and guides electric hand clippers equipped with vacuum hose along edges or seams of article to cut threads. When trimming knitted garments, pulls loose threads through several stitches with latch needle or ties threads from converging seams to secure stitching. May cut short or thick threads unsuitable for machine cutting, using scissors.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

789.684-054 ELECTRIC BLANKET WIRER (tex. prod., nec) alternate titles: shuttler

Installs wire and safety thermostats in electric blankets, using shuttle devices, worktable, and wire shears, working as member of two-person team: Places electric blanket shell on worktable that contains illuminated surface panels. Observes prewoven channels in blanket shell, made visible by light passing through blanket shell, to identify channel openings. Threads heater element wire through channels of blanket shell, using shuttle device and working with team member at opposite side of table. Inserts thermostats with attached connecting wires into thermostat channels of blanket shell, using shuttle device. Cuts installed heater element wire at specified points, using wire shears, and fastens cut ends to connecting wires of thermostats to align and secure assembly for subsequent processing, using clamps. May inspect blankets to detect defects, such as closed channels or excessive blanket length. May cut out faulty wires and rewire blanket.
GOE: 06.02.27 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 86

789.685-010 ORNAMENT SETTER (garment; tex. prod., nec) alternate titles: nailhead puncher; stud setter

Tends kick press that attaches ornaments, such as nailheads, rhinestones, and pearls, to cloth, leather, or plastic materials or to finished garments: Selects dies, according to specification, and positions dies in ram and bed of machine. Turns setscrews to secure dies. Selects ornaments according to specifications. Places self-fastening ornament in die of ram, or places ornament and metal fastener in upper and lower dies of machine. Positions material or garment on bed and under ram of machine, following markings on material or garment. Depresses pedal to lower ram that clinches metal fasteners, attaching ornament. May operate machine equipped with vacuum mechanism that holds ornament in die on ram of machine in preparation for attachment. May be designated according to type of ornamentation fastened to garments as Nailhead Setter (garment; tex. prod., nec); Rhinestone Setter (garment; tex. prod., nec).
GOE: 06.04.34 STRENGTH: S GED: R2 M1 L2 SVP: 3 DLU: 77

789.687-010 BAG CUTTER (tex. prod., nec) alternate titles: textile-scrap salvager

Reclaims usable material from used or defective textile bags: Cuts or pulls stitches from seam to open bag. Inspects material to locate defects and cuts usable material into largest possible bag dimension, using electric rotary cutter. Sorts and stacks reclaimed material according to specified bag sizes.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

789.687-014 BAG LINER (tex. prod., nec)

Places cotton bag on form and pulls burlap bag down over it to line burlap bag.
GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

789.687-018 BONER (garment; protective dev.) alternate titles: stayer; stripper

Inserts stays (bones or steels) into prepared pockets of women's foundation garments, such as corsets or brassiers, or into casings of surgical appliances: Selects number and size stays to be inserted and pushes stays into pockets or casings by hand or using metal punch. May mark dot on support appliance, using pencil and template. May cut excess leather, cloth, and threads from appliance, using scissors, and inspect appliance for sewing defects.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

789.687-022 BUFFING TURNER-AND-COUNTER (tex. prod., nec)

Assembles cloth disks to be used to make fabric buffing wheels: Inserts rod in center hole of stack of disks. Turns disks so woven threads in cloth layers are at angle to those in adjoining layers to reduce fraying of edges in finished product. Counts specified number of disks to make one wheel while turning them. Removes turned and counted disks from rod and stacks them in tray. Lays paper strip on stack to separate each group of disks required to make one wheel.
GOE: 06.04.23 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

789.687-026 BUFFING-WHEEL INSPECTOR (tex. prod., nec)

Inspects fabric buffing wheels to detect defective stitching, frayed edges, loose strings, or other defects. Trims edges or strings, using hand shears, and stacks wheels with defective stitching for resewing. Counts inspected buffing wheels of same quality and style to fill orders or replace stock.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

789.687-030 CLIPPER (any industry)

Separates chain-sewn or knitted articles, such as garment parts, textile bags, or curtains, prior to assembly into completed article: Clips connecting threads or material between articles, using scissors or knife, or guides connecting thread or material under rotary cutter to separate articles. Pulls ends of thread from knitted part and twists threads around revolving wheel to separate individual parts from chain-knitted strip. May sort, count, and store separated articles in bins according to style, color, and size. May be designated according to article separated as Collarette Separator (knitting); Collar Separator (knitting); Cotton-

Bag Clipper (tex. prod., nec); Cuff Separator (knitting); Jute-Bag Clipper (tex. prod., nec); Rib-Trim Separator (knitting). May be designated: Sleeve Separator (knitting).
GOE: 06.03.02 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

789.687-034 CLOTH-STOCK SORTER (tex. prod., nec; textile)
Sorts finished articles or cloth by style and color for subsequent processing, according to ticket attached to cloth. Stores article or cloth or conveys it on handtruck to various departments. Records data on article or cloth stored and distributed.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

789.687-038 COVER INSPECTOR (furniture)
Inspects sewed parts of cushion and upholstery covers for stitching defects and conformity to specifications: Marks defects with chalk and rips out faulty seams. Measures skirts with yardstick. Records number of defects found. May carry defective covers to sewing department and identify defects to be repaired. May be designated according to type of cover inspected as Cushion-Cover Inspector (furniture; tex. prod., nec); Sofa-Cover Inspector (furniture).
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 78

789.687-042 EXAMINER (glove & mit.) alternate titles: inspector trimmer
Inspects gloves and mittens for material flaws and variations in colors, and pulls seams to detect defective stitching. Grades gloves and mittens according to specifications. Separates gloves with stitching defects for resewing. May pair gloves of same grade, size, style, and color, and stack gloves in lots. May pull threads from outside to inside with hook, knot threads, and cut them, using scissors [PULLER-THROUGH (glove & mit.)]. May pack gloves in boxes.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

789.687-046 FINAL ASSEMBLER (garment)
Assembles garments, such as skirts, blouses, and jackets, for final inspection: Ties bows, draws belts through belt loops, closes slide fasteners, and buttons, snaps, or buckles garment openings. Trims long ends of thread or loose threads from garments, using scissors. Attaches specified tag denoting size of completed ensemble.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

789.687-050 FINISHER (tex. prod., nec) alternate titles: examiner; trimmer
Inspects, finishes, and counts embroidered or trimmed fabrics preparatory to shipping: Examines fabric for broken threads, skipped stitches, cuts in material, stains, or other imperfections. Trims loose or hanging threads, using scissors. Brushes or sponges out soiled spots with cleaning fluid. Counts pieces of fabric to verify work ticket. Bundles damaged and imperfect materials for repairing.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

789.687-054 FLOCKER (tex. prod., nec)
Cements flock onto fabric articles, such as banners and flags to give them velvety or woolly appearance: Brushes sizing onto article to stiffen article and to hold flock. Spreads flock over sized material and places article on tray. Presses button to start vibrating rollers on machine. Positions and holds tray on vibrating rollers that fluffs flock to give article velvety or woolly appearance.
GOE: 06.04.33 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

789.687-058 FOLDER (tex. prod., nec) alternate titles: waterproof-material folder
Folds pieces of waterproofed or padded bag material preparatory to sewing so that ends match evenly and burlap is to outside. Creases fold with hand and places pieces on handtruck.
GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

789.687-062 FRINGER (carpet & rug; tex. prod., nec)
Pulls out specified number of warp and filling threads or selvage yarns to form fringe on woven tablecloths or rugs. Trims excess threads from fringe, using scissors.
GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

789.687-066 GARMENT FOLDER (garment; knitting)
Folds garments for bagging or boxing, following guide marks on table or using folding board (cardboard or metal form). Secures folds with metal clips. May insert tissue paper between folds. May make final inspection of garment. May pack garments in bags and boxes [PACKAGER, HAND (any industry)]. May be designated according to garment folded as Shirt Folder (garment; knitting).
GOE: 06.04.38 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

789.687-070 GARMENT INSPECTOR (any industry) alternate titles: trimmer
Inspects garments for defects in sewing, knitting, or finishing: Spreads garment on table or draws garment over inspection form. Scans garment to detect defects, such as faulty seaming, incorrect sleeve or collar setting, misaligned fasteners or trim, and variations in color of fabric. Examines fabric for mispicks, slubs, runs, dropped stitches, holes, or stains. Marks defects, using chalk, thread, tags, tape, or pins. Measures garment at designated places, using tape measure or following markings on table, to determine that garments conform to standard size. Trims excess material and thread ends from garment, using scissors, or tends trimming machine to remove excess material and loose threads [THREAD CUTTER (any industry) 789.684-050]. Folds garment or hangs it on hanger or rack. May remove spots and stains from garments [SPOT CLEANER (garment; knitting) 582.684-014]. May inspect surgical garments and appliances, such as belts, hosiery, or knee and ankle braces, and be designated Inspector (protective dev.).May examine cut garment parts to detect inaccuracies in cutting and be designated Cutting Inspector (garment). May be designated according to production stage as Finished-Garment Inspector (garment; knitting); Greige-Goods Inspector (knitting); Seconds Inspector (garment; knitting).
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 78

789.687-074 GARMENT TURNER (garment; knitting)
Turns garments right side out preparatory to folding: Turns garments by hand or pulls garment over shaped form to reverse garment. Turns closed portion of garment, such as foot of child's sleeper, by pulling garment over suction tube, pressing closed portion in mouth of tube, and turning garment from tube onto form. Pulls garment over form and depresses pedal to activate air suction that turns garment right side out. May button garment. May be designated according to type of garment or garment part turned as Shirt Turner (garment; knitting); Sleeve Turner (garment; knitting).
GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

789.687-078 GARMENT-ALTERATION EXAMINER (retail trade) alternate titles: alteration inspector; outgoing inspector
Examines altered garments to ensure compliance with standards: Removes lint and loose threads from garment. Examines garment to ascertain that it is pressed, that buttons are sewed on, and that alterations have been completed. Matches suit jacket, pants, or other parts to see that customer receives complete garment. May verify cost of alterations with sales check. May place garment in protective bag.
GOE: 05.05.15 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

789.687-082 HARNESS RIGGER (tex. prod., nec) alternate titles: parachute-harness rigger
Threads breast shields, buckles, snaps, and other hardware devices on straps of parachute harness to position them for stiching into place: Clamps harness onto table with wire clamps. Slides canvas breast shield fitted with snap onto one harness strap and slides shield fitted with buckle ring onto other strap. Attaches pair of backstraps to harness and slides snap onto one strap and buckle ring onto other strap. Crosses backstraps and pulls them through buckles mounted on opposite harness straps. Places assembled harness in bin.
GOE: 06.04.27 STRENGTH: L GED: R2 M2 L1 SVP: 2 DLU: 77

789.687-086 HARNESS-AND-BAG INSPECTOR (tex. prod., nec)
Inspects parachute deployment bags and harnesses to detect defects in assembly, stitching, or webbing, using checklist: Unfolds back pad, seat pack, or accessory, such as protector flap, cone panel, ripcord pocket, or riser pocket, and examines them for flaws, such as defective material and stitching or loose eyelets. Determines if accessories are at specified location, using straightedge, and pulls accessories to ensure that they are securely attached to seat pack. Lays harness on table and checks measurements of straps and assembly points, using ruler or measurements marked on table. Inspects harness for defects, such as damaged webbing, poor stitching, smears in silk-screen printing, and attachment of component parts. Marks defects with pins. Lifts stitches with point of scissors to determine whether correct tension was used, and trims loose threads with scissors. May be designated according to part or parts inspected as Back-Pad Inspector (tex. prod., nec); Harness Inspector (tex. prod., nec); Seat-Pack Inspector (tex. prod., nec).
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

789.687-090 LABORER, CANVAS SHOP (tex. prod., nec)
Performs any of following tasks in laying out, cutting, sewing, fabricating, and assembling canvas products, such as awnings, tents, and tarpaulins: Carries or handtrucks supplies to work stations. Unrolls cloth from bolt, cuts cloth to specified length with hand shears, and spreads cloth on table for pattern layout and cutting. Stacks and marks cut cloth according to work order. Rolls cloths into bundles. Ties and tags bundles. Inspects finished products for defects, such as tears, missing rope, or hardware, defective sewing, dirt, or stains. Folds, ties, and packs finished products. Trims threads from machine-sewed items with shears to prepare them for finishing. Sews rings, snaps, or ropes to canvas by hand, using palm and needle. May tend grommet machine to attach grommets to canvas. May assist in installing awnings. May be designated according to work performed as Awning Spreader (tex. prod., nec); Ring Sewer (tex. prod., nec).
GOE: 06.04.27 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

789.687-094 LACER (protective dev.)
Threads laces through eyelets and adjustment buckles of surgical supports to provide adjustments for fitting support to wearer: Selects laces according to type of support. Threads laces through eyelets of support and buckles eyelets in specified sequence. Adjusts laces and places straps in buckles. May tack ends of laces to reinforce them, using tacking machine. May place support on frame to hold support in position.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

789.687-098 MIXER II (tex. prod., nec)
Mixes, by hand, various grades and quantities of cotton and wool waste, or waste thread, according to specifications, for use as wiping, rubbing, and polishing or packing material.

GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

789.687-102 MONOGRAM-AND-LETTER PASTER (tex. prod., nec) alternate titles: paster

Cements cardboard letters or monograms onto fabric articles, such as armbands, banners, and shirts to prepare article for embroidering: Marks position of letter or monogram on article, according to specifications, using chalk and ruler. Brushes cement onto letter or monogram and positions it on marked area of article. Presses letter or monogram onto article.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

789.687-106 MOPHEAD TRIMMER-AND-WRAPPER (tex. prod., nec)

Trims uneven strands of yarn from mopheads, using shears, wraps mopheads with paper or inserts mopheads into bags, and packs mopheads into carton: May separate chain-sewn mopheads [CLIPPER (any industry)]. May glue labels or stamp identifying data on bundles. May compress mopheads preparatory to wrapping, using handpress.
GOE: 06.04.38 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

789.687-110 PAIRER (tex. prod., nec)

Places hemmed drapery lining over hemmed drapery panel and hangs resulting assembly over rack preparatory to seaming. Works as member of team to prepare assemblies for multiple-paneled draperies.
GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

789.687-114 PARACHUTE INSPECTOR (tex. prod., nec)

Inspects parachutes and lines to detect flaws in materials and fabrication: Spreads parachute or part, such as canopy and shroud webbing, on glass-topped table or over fluorescent light, and examines them for flaws, such as defective material and stitching, crooked hems, and tears. Pulls on shroud lines and suspension cords to ensure tightness of knots. Rips out defective stitching, hems, seams, and taped edges, and trims excess fabric at edges, using scissors. Pins pieces of colored cloth over defective areas. May be designated according to part inspected as Canopy Inspector (tex. prod., nec); Hem Inspector (tex. prod., nec); Shroud-Web Inspector (tex. prod., nec).
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

789.687-118 PARACHUTE-LINE TIER (tex. prod., nec)

Ties shroud lines and suspension cords to signal-flare parachutes: Threads ends of shroud lines through eyelets in edge of parachute and ends of suspension cords through eyes of swivels to which flares are attached. Ties knots in lines and cords to secure them. May cut holes in parachute edge for insertion of shroud lines, using scissors. May verify length of attached suspension cords or shroud lines, using flexible steel tape. May tend machine that attaches eyelets to parachutes. May be designated according to line or cord attached as Shroud-Line Tier (tex. prod., nec); Suspension-Cord Tier (tex. prod., nec).
GOE: 06.04.27 STRENGTH: M GED: R2 M2 L1 SVP: 2 DLU: 77

789.687-122 PILLOW CLEANER (tex. prod., nec) alternate titles: cushion sweeper

Holds pillow against revolving brushes of machine equipped with suction fan to remove dust, lint, and feathers from ticking (cover) of pillow.
GOE: 06.04.39 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

789.687-126 POMPOM MAKER (knitting)

Fabricates pompoms for knitted headwear: Gathers spools of yarn according to type and color specified on work order. Positions and secures winding wheel on workbench. Threads yarn through tension devices and guides of winding wheel. Manually rotates wheel to form skein of yarn. Ties string around yarn, pulls yarn from wheel, and cuts yarn between strings to form pompom, using handsaw or scissors. Fluffs yarn by hand into shape of pompom.
GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

789.687-130 QUILT STUFFER (tex. prod., nec) alternate titles: filler; wool-batting worker

Fills quilt or comforter covers with precut sheets of cotton or wool batting, or synthetic materials, preparatory to sewing and quilting, using one of following methods: (1) Selects filler and places it smoothly between unsewn cover pieces, securing cover together with snap clamps. (2) Spreads filler on inverted cover, sewn on three sides, and turns cover right side out over fillers. (3) Places cover, sewn on three sides, over frame that holds it open, and places filler on movable table to slide filler into cover. May fill sleeping bags and cushions. May tend automatic quilting machines.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

789.687-134 RAG SORTER AND CUTTER (tex. prod., nec) alternate titles: cutter

Scans rags for hardware, such as buttons and snaps, and holds rags against rotating blade that cuts hardware from rags and cuts rags into specified sizes. Sorts rags into bins according to color and fabric.
GOE: 06.03.02 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

789.687-138 RAKER (carpet & rug) alternate titles: rug scratcher

Combs rugs to pull out short yarns, uncut loops, and pull up yarn ends, using *scratching tool*. Pushes tool back and forth across surface of rug and clips uncut loops and long yarn ends, using scissors.
GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

789.687-142 REDYE HAND (knitting)

Sorts and bags hose, panty hose, and tights that are to be redyed, according to style, size, and length: Examines article to locate markings knitted in foot and welt that designate style and size. Measures overall length of article with scale to determine length classification. Records on production sheet quantity, type, size, and style of articles processed and prepares ticket for bag, indicating style number, quantity, and size. Bags hose of identical style, size, and length, attaches ticket to bag, and stores bags in bins.
GOE: 06.03.02 STRENGTH: L GED: R3 M1 L1 SVP: 3 DLU: 77

789.687-146 REMNANT SORTER (textile)

Sorts cloth remnants or seconds according to length and folds and ties them into bundles. May cut defects from cloth or cut cloth into smaller articles, such as pillowcases or washcloths, using scissors. May record identifying information on tag and tie tag to bundle. May sort seconds and be designated Cloth-Seconds Sorter (textile). May measure fabric pieces for use as drop cloths and sort pieces according to size, weight (thickness), fabric type, and color and be designated Sorter (tex. prod., nec).
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

789.687-150 REMNANTS CUTTER (textile)

Cuts defective cloth along markings made by INSPECTOR, FABRIC (any industry), using hand shears. When cutting labels from sheets to be sold as seconds, is known as Label Cutter (textile). May sort remnants according to style and type.
GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

789.687-154 RIVETER, HAND (garment)

Secures rivets in prepunched holes of garment parts, such as overall pockets, to reinforce them: Pushes soft metal rivet through hole in material and rests base of rivet on anvil. Slides rivet burr over upper end of rivet, holds rivet set over upper end of rivet, and strikes top of rivet set with hammer to secure rivet.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

789.687-158 RUG-INSPECTOR HELPER (carpet & rug)

Lifts and carries rugs to inspection rack: Pulls rug onto rack. Tags flaws on repairable rugs and returns rugs to mending department. Staples labels to corner of rugs requiring no further processing. Clips or sews in loose ends, using scissors or needle. Pushes loaded racks to packaging department or to coating department.
GOE: 06.04.40 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

789.687-166 SEAM STEAMER (garment) alternate titles: pipe steamer

Slips knitted woolen garments over aluminum steam pipes adjusted to size of garment being steamed and releases steam which smooths and flattens seams.
GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

789.687-170 STEAMER (tex. prod., nec)

Steams rolled pleat patterns in which fabrics are pleated, so that fabric will retain pleats: Places rolled patterns in upright position in steam cabinet for specified period. Removes steamed patterns and places them on racks to cool.
GOE: 06.04.16 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

789.687-174 THREAD SEPARATOR (tex. prod., nec) alternate titles: thread drawer

Separates webs of lace into smaller pieces preparatory to winding onto cards: Cuts ends of web even with scissors. Counts out prescribed number of sections (bands), pulls thread to separate lace between sections, and folds sections.
GOE: 06.04.27 STRENGTH: S GED: R1 M1 L1 SVP: 2 DLU: 77

789.687-178 TIE PRESSER (knitting)

Removes wrinkles from knitted ties, using cardboard form and steamtable: Opens valve to allow steam to escape through holes in steamtable. Inserts cardboard form in opening of tie to extend it to full width. Passes tie across holes of steamtable to press it. Folds pressed tie.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

789.687-182 TURNER (any industry) alternate titles: clipper and turner

Turns articles, such as clothing, clothing parts, coin purse linings, stuffed toy shells, or textile bags, right side out, according to one of following methods: (1) Pulls article or part downward over lower vertical rod of holding device and folds end of article or part over end of rod. Depresses pedal that closes jaws of holding device and pulls article upward, over upper rod, to reverse it. Releases pedal and removes article from upper rod. (2) Places end or edge of article over rod or form and draws rest of article downward over rod or form to reverse it. (3) Slides article over pipe and pushes end of article through pipe, using rod. (4) Reverses article by hand. May clip loose threads and thread between chain-sewn articles, using scissors. May turn bags over form equipped with blade to cut thread between chain-sewn bags. May insert gathering string into hem of bags, using needle. May turn garments having closed portions, using air-activated suction tube. May be designated according to article or part turned as Belt Turner (garment); Collar Turner (garment); Cuff Turner (knitting); Hose Turner (knitting); Inverter-And-Clipper (leather prod.); Necktie Turner (garment); Reverser (tex. prod., nec).

GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 78

79 BENCHWORK OCCUPATIONS, N.E.C.

This division includes benchwork occupations, not elsewhere classified.

790 OCCUPATIONS IN PREPARATION OF FOOD, TOBACCO, AND RELATED PRODUCTS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with preparing food, tobacco, and related products.

790.134-010 SUPERVISOR, CIGAR MAKING, HAND (tobacco)

Supervises and coordinates activities of workers engaged in inspecting wrappers, rolling bunches, and wrapping bunches with wrapper leaves to produce handmade cigars. Confers with other department supervisors to coordinate flow of filler, binder, and wrapper tobacco into department. Reads production schedule to determine style, length, diameter, and color wrapper required for daily cigar production. Measures length, diameter, and weight of cigars, using gauge and scales, and examines wrapper leaves and bundles to ensure company standards are met. Trains new workers and maintains production records. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.04.01 STRENGTH: L GED: R3 M2 L3 SVP: 6 DLU: 77

790.381-010 TOBACCO BLENDER (retail trade)

Blends various kinds of tobacco to customers' orders or for sale in retail establishment, using formulas: Pours tobaccos on table or into mixing box. Removes sticks and off-colored grains. Kneads tobaccos or shakes tobaccos in mixing box to effect blend. Squeezes handful of tobacco into wad and observes it unraveling or through magnifying lens to determine moisture content. Sprays tobacco with oils, cloves, and other spices and kneads tobacco to blend in flavoring. Pours blend into can and seals it. Records method of packing and contents of can on tag and attaches to can. Weighs and packs tobacco in canister or pocket-sized cans, boxes, and bags.
GOE: 05.10.08 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

790.684-010 BUNCH MAKER, HAND (tobacco) alternate titles: binder roller; binder; bunch breaker; buncher, hand

Rolls cigar filler and binder leaves into bunches preparatory to wrapping: Tears or cuts section of binder leaf to specified size. Rolls filler between palms and binder around filler to form bunch. Applies glue or twists end of binder to secure binder. Places bunches in molds and secures top on molds to compress bunches to specific size and shape.
GOE: 06.04.28 STRENGTH: L GED: R2 M2 L1 SVP: 4 DLU: 77

790.684-014 CIGAR MAKER (tobacco) alternate titles: finished-cigar maker; out-and-out cigar maker, hand; stogie maker, hand

Rolls cigars by hand: Rolls filler, wraps filler with binder [BUNCH MAKER, HAND (tobacco)], and wraps bunch with wrapper leaf [ROLLER, HAND (tobacco)]. Presses cigars in molds to obtain finished shape [MOLD PRESSER (tobacco)].
GOE: 06.04.28 STRENGTH: L GED: R2 M2 L2 SVP: 5 DLU: 77

790.684-018 PATCH WORKER (tobacco) alternate titles: cigar patcher; patcher; reroller, hand

Repairs defective or damaged cigars: Examines rejected cigars for defects, such as holes, loose seams, color spots, and loose tucks. Cuts out color spots. Pastes piece of wrapper leaf of matching color on cigar to patch holes. Pastes loose seams together. Discards unrepairable cigars. May open rejected cigars to salvage tobacco [REJECT OPENER (tobacco)].
GOE: 06.04.28 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

790.684-022 ROLLER, HAND (tobacco) alternate titles: cigar roller; suction-plate roller, hand; suction roller; wrapper, hand

Rolls wrapper tobacco leaves around bunches to make cigars: Smooths wrapper leaf on table and cuts leaf to specified shapes, using template and knife. Lays bunches on wrapper and rolls them together. Secures end of wrapper with glue and trims cigar to specified length, using knife or cigar cutter. Places cigars in rack.
GOE: 06.04.28 STRENGTH: L GED: R2 M2 L2 SVP: 5 DLU: 77

790.687-010 CANDY CUTTER, HAND (sugar & conf.)

Cuts candy into squares, using knife consisting of series of disk blades evenly spaced on shaft with handle at each end. Dips knife in water periodically to prevent candy from adhering to knife. May separate pieces of candy and arrange them on trays. May be designated according to candy cut as Caramel Cutter, Hand (sugar & conf.).
GOE: 06.04.28 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

790.687-014 CIGAR PACKER (tobacco) alternate titles: cigar packer and grader; cigar packer and picker; cigar packer and shader; cigar packer and sorter; cigar sorter

Sorts cigars according to color and loads cigars in handpress prior to wrapping in cellophane and banding: Examines cigars to detect variations in color and lays them in separate piles. Places cigars of same color in press box, placing paper strip and board or cardboard between successive layers. Places board over top row of cigars and sets box in press. Turns handwheel of press to apply pressure to box. May inspect cigars for imperfections. May keep record of cigars received. May be designated by type of cigar packed as Stogie Packer (tobacco).
GOE: 06.04.28 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

790.687-018 LUMP INSPECTOR (tobacco) alternate titles: lump receiver

Inspects lumps of tobacco for defects in wrapper leaf, such as holes and rough spots. Repairs tears or holes in wrapper leaf, using glue and piece of wrapper leaf. May stack lumps on handtruck.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

790.687-022 MOLD PRESSER (tobacco) alternate titles: mold carrier

Distributes scrap tobacco to BUNCH MAKER, HAND (tobacco) or BUNCH MAKER, MACHINE (tobacco) and presses bunches in molds, using handpress: Pushes cases of tobacco to machine and scoops tobacco into machine hopper. Carries press molds to worker and removes molds filled with bunches. Positions filled molds in handpress and turns handle of press to compress bunches into uniform cigar shape. Loads compressed bunches onto handtruck for BUNCH TRIMMER, MOLD (tobacco).
GOE: 06.04.28 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

790.687-026 REJECT OPENER (tobacco) alternate titles: reject opener and filler

Opens rejected cigars to reclaim tobacco: Opens wrapper and examines bunch to determine whether bunch can be rewrapped. Places bunches that can be rewrapped in box. Opens defective bunches and places filler and binder tobacco in separate boxes for reuse.
GOE: 06.04.28 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

790.687-030 TWISTER, HAND (tobacco) alternate titles: hand roller; tobacco roller; twist maker

Rolls leaves of tobacco together to form twists of chewing tobacco: Overlaps leaves of tobacco on table and rolls leaves together or places filler tobacco on leaves and rolls leaves over filler to form roll, using fingers and palms of hands. Folds roll in middle and rolls again to form twist. Periodically weighs twists to determine whether weight is within prescribed limits.
GOE: 06.04.28 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

794 OCCUPATIONS IN FABRICATION OF PAPER PRODUCTS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with such activities as assembling boxes and envelopes from precut blanks and assembling party favors.

794.684-010 BAG REPAIRER (paper goods)

Repairs defective paper bags and tubes by sewing, gluing, valving, and sleeving: Inspects and sorts bags according to type of repair needed to remedy defect. Removes and replaces defective sleeves, repastes seams with handbrush, or resews seams with sewing machine. Sets aside repaired articles and discards bags and tubes that cannot be repaired.
GOE: 06.04.26 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

794.684-014 BOX MAKER, PAPERBOARD (any industry)

Fabricates cartons, boxes, and other paper products from laminated, corrugated, or plain paperboard materials: Measures and marks or traces outline of carton on paperboard sheet, using template, pattern, ruler, and marking pencil. Cuts sheets along markings to form carton blanks, using bandsaw or papercutter. Feeds blanks or paperboard sheets into machines that slit, score, slot, form, or glue them, or folds blanks along scored lines and tapes or stitches (staples) edges together to form cartons. Assembles and fits slotted pieces together to form partitions for cartons. Glues strips of cellophane on carton to form windows in container. Counts specified number of cartons and ties them into bundles for shipment, using twine or wire. May glue linen strips to tops and backs of boxes to form hinges. May paste or glue paper edgings or linings to boxes to form trimmings.
GOE: 06.04.26 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

794.684-018 EXPANSION ENVELOPE MAKER, HAND (paper goods)

Scores, folds, glues, and assembles precut cardboard blanks and cloth tape to make expanding envelopes, performing any combination of following tasks: Glues cloth tape to edges of strips of cardboard to reinforce expanding side pieces (gussets) of envelopes. Scores cardboard strips, using hand operated scoring machine or handtool, and bends gussets along scored lines to make accordion fold and attachment flaps. Scores and folds cardboard lining blanks along edges to make surface for attachment of gussets. Feeds lining blanks into machine that gums edges or spreads glue on edges with brush. Positions gummed lining edges and gusset flaps together on forming block and places them in screw press or feeds them under roller press to seal them together. Feeds envelope front and back sections into glue spreading machine to coat edges with glue and assembles sections with gussets and linings on wood form to complete expanding envelope. May be designated according to part produced as Gusset Maker (paper goods); or according to type of envelope as Five-Piece-Expansion Maker, Hand (paper goods); One-Piece-Expansion Maker, Hand (paper goods).
GOE: 06.04.26 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

794.684-022 PAPER-NOVELTY MAKER (paper goods) alternate titles: copyist; novelty maker

Makes paper candy and nut cups and miscellaneous paper novelties, such as hats, placecards, and party favors: Cuts out paper with scissors, using samples

or patterns as guides. Folds and pleats paper by hand. Pastes parts together. May use sewing machine to pleat and stitch parts together to form completed item. May originate new designs.
GOE: 06.02.26 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

794.684-026 PAPIER MACHE MOLDER (fabrication, nec) alternate titles: paper layer

Builds up display forms of papier mache sheets: Greases inside of form-mold halves with brush. Coats one side of papier mache sheets with paste and tears sheets into pieces to fit mold. Lays unpasted side of sheet against inside of mold and presses it in place by hand, leaving lap projections at side of mold. Builds up form to desired thickness, fitting and smoothing each sheet to mold. Places halves of mold together, pastes and presses lap projections of each half of form together, and removes completed form from molds. Pastes and papers neck and skirt openings of form to smooth edges.
GOE: 06.02.26 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

794.684-030 SAMPLE MAKER, HAND (paper goods)

Fabricates sample paper or polyethylene bags by hand for use by sales department: Cuts, folds, and fastens bags, adds eyelets, and attaches handles, according to specifications, using rules, scissors, and paste brushes.
GOE: 06.04.26 STRENGTH: S GED: R2 M1 L2 SVP: 3 DLU: 77

794.687-010 ASSEMBLER, PRINTED PRODUCTS (print. & pub.)

Assembles printed products, such as cards, programs, menus, wedding and business invitations, and calendars, performing any combination of following tasks: Assembles and folds printed sheets or cards into various shapes or designs. Attaches seals, lace, sachet bags, ribbon, or other paper or metallic inserts on specified products, using glue, plastic tape, or staples. Applies glue to folded edges of product with brush. Glues and inserts sheets on specified products by machine. Examines finished products for defects. May trim products to specified size, using trimming machine. May insert envelope into fold of card. May box and wrap cards and other products. May be classified according to products assembled and be classified Assembler, Cards and Announcements (print. & pub.). May be classified according to method of assembly and be designated Hand Worker (print. & pub.).
GOE: 06.04.26 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 86

794.687-014 COLOR-CARD MAKER (paint & varnish)

Cuts cards from colored sheets, using paper cutter, and mounts cards on color-advertising folders: Cuts sheets into cards of specified dimensions, using paper cutter. Sorts cards into stacks according to color. Positions cards in handpress according to color section-number on card folder. Brushes glue on back of cards. Positions card folder over cards and pulls lever to close press and glue cards to folder. Removes folder from press and stacks it on table.
GOE: 06.04.26 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

794.687-018 COUNTER, HAND (paper goods)

Counts sheets of paper, using fingers to separate fanned edges into groups of threes, fours, or fives, to facilitate counting. Separates sheets into units of specified quantity and stacks units on pallets or conveyors. May collate covers with filler sheets to facilitate fabrication of tablets.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

794.687-022 FOLDER, HAND (paper goods) alternate titles: envelope folder; hand folder; table worker

Folds, gums, and finishes by hand die-cut blanks to make envelopes: Scores blank, using spatula or scoring tool. Folds envelope blanks according to pattern and creases folds by hand or with spatula. Applies gum to edges of flaps with brush or stick and seals flaps before gum dries. Applies gum to open flap with stick and allows it to dry. Folds down open flaps and packs completed envelopes in specified boxes. May attach cellophane strips or other decorations to envelopes by hand.
GOE: 06.04.26 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

794.687-026 FORWARDER (print. & pub.)

Trims and rounds sewed signatures and pastes covers on signatures to form books: Trims edges of sewed signatures. Rounds back of sewed signatures by working outer signatures forward toward fore-edge with fingers and pounding back into required curvature with hammer. Pastes end papers on book covers and pastes covers on sewed signatures to form finished books. May be designated according to type of book completed as Blankbook Forwarder (print. & pub.).
GOE: 06.04.26 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

794.687-030 GLUER AND SLICER, HAND (paper goods)

Glues one end of stack of paper and slices stack into sections for making such products as legal tablets, notebooks, and scratch pads: Brushes coat of glue on end of stack, covers end with cheesecloth and brushes glue over cheesecloth. Pushes stack along conveyor into drying chamber. Slices sections from stack, using slicing knife and stacks them on skids. May not cover end of stack with cheesecloth when gluing such items as scratch pads.
GOE: 06.04.26 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

794.687-034 PAPER-PATTERN FOLDER (paper goods)

Folds pattern pieces for complete garment and inserts them into envelope for shipment.
GOE: 06.04.26 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

794.687-038 PATTERN RULER (tex. prod., nec)

Scores and folds crease lines on pleat patterns: Positions straightedge along punched holes in pattern and scores pattern with scriber. Folds pattern at crease lines to form pleats.
GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

794.687-042 PUNCHBOARD ASSEMBLER I (paper goods) alternate titles: punchboard inserter; punchboard stuffer

Inserts numbered pieces of creased paper into holes of cardboard punchboards, and tokens or coins in holes at top of boards and covers tokens or coins with transparent material. Staples wooden punch to base of card.
GOE: 06.04.23 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

794.687-046 PUNCHBOARD ASSEMBLER II (paper goods)

Combines perforated cardboard sheets to make punchboards by inserting sheets, to which glue has been applied, over pins of metal plate to align them and pressing sheets together, using piece of metal.
GOE: 06.04.23 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

794.687-050 SCRAPPER (paper goods) alternate titles: air-hammer stripper; breaker; knocker-off; peeler

Removes excess material from prescored cardboard carton blanks, performing any combination of following duties: Strips waste from blanks stacked on pallet, using airhammer and chisel. Places edge of chisel on cutting mark at top of stack and pushes hammer down through stack to remove excess material. Places stack of precut blanks on worktable and strikes edge with hammer to knock out scored corners or edges. Places stack of trimmed blanks on worktable and brushes edges of stack with steel brush or sandpaper. Removes damaged or defective blanks. Strikes flap edges with hammer to bend flaps. Piles smoothed blanks on pallet and removes to storage area, using handtruck.
GOE: 06.04.39 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

794.687-054 STRINGER (paper goods) alternate titles: hand worker

Adds wire tie or binding string to paper tags by tying or twisting precut lengths of string or wire through holes in ends of tag. May count tags and tie them into bundles of prescribed number. May be designated according to type of tag as Garment-Tag Stringer (paper goods).
GOE: 06.04.23 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

794.687-058 TABBER (paper goods) alternate titles: inserter; tagger

Inserts paper identification tabs into slots of guide devices attached to index filecards.
GOE: 06.04.23 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

794.687-062 TRIMMER, HAND (paper goods)

Pulls or cuts with scissors excess paper from edges of paper doilies as they are ejected from fabricating machine. Counts and bundles trimmed doilies.
GOE: 06.04.26 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

795 GLUING OCCUPATIONS, N.E.C.

This group includes occupations concerned with fastening together assorted materials by the application of viscid (sticky) substances such as glue, paste, or gum and the positioning of these materials together. Occupations concerned with assembling complete products, such as furniture, plywood, and fiberglass are not included here but are listed under their respective groups.

795.684-014 EDGE STRIPPER (paper goods; wood, container) alternate titles: edger

Glues strips of printed paper trim onto box edges: Lays paper edging strips on table, printed side down, and brushes on paste or glue. Aligns strip on edge of box so that edge bisects strip, smooths strip down on either side of edge, folds strip at corners, and continues applying strip until all edges of box and lid are trimmed.
GOE: 06.04.26 STRENGTH: S GED: R2 M1 L2 SVP: 4 DLU: 77

795.684-018 GLOBE MOUNTER (print. & pub.)

Pastes segments of world map over spherical forms to make globes delineating surface of earth: Mixes prescribed amounts of flour and water to make paste. Spreads paste on glass plate with handbrush, and places gores (segments) of printed map on glass plate to soak and absorb paste. Mounts gores on marked globe and smooths gores with burnishing iron. Sponges excess paste from finished globe with water and sets it aside to dry.
GOE: 06.04.26 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

795.684-022 TIPPER (print. & pub.) alternate titles: gluer; hand gluer

Glues together edges of printed business forms, using glueboard and gluepot applicator: Adjusts slots in glueboard to accommodate width of sheets to be glued. Positions applicator pins in gluepot to apply glue to edges of forms at specified points. Inserts paper sheets singly into slot at top of gluepot and moves lever, causing spreading pins to apply glue to edge of sheet. Positions sheet in slot of glueboard and presses it against preceding sheet until specified number of forms are assembled in numerical sequence. Removes completed forms and places on rack. Counts out assembled forms into round lots for shipment. Records number and kind of forms assembled during shift.
GOE: 06.04.26 STRENGTH: L GED: R2 M2 L1 SVP: 3 DLU: 77

795.684-026 WADER-BOOT-TOP ASSEMBLER (rubber goods) alternate titles: boot-liner maker; suit maker

Cements precut rubber and rubberized fabric parts to fabricate wader boot tops and boot liners for rubber boots: Selects parts according to worksheet and lays them on workbench for cementing. Brushes rubber cement on edges to be joined or brushes benzine over previously applied adhesive to restore tackiness.

and assembles cemented parts in specified sequence to form complete article. Pulls boot liner over last and cements on sole piece. Trims excess material, using scissors. Places strip of gum rubber over joined seam and rolls it to make firm bond, using handroller. Attaches eyelets and snap buttons at designated points, using grommeting machine. Hangs completed article on rack for cement to dry. Marks around template on spare stock and cuts out needed parts, such as straps or reinforcement tabs, using scissors.
GOE: 06.04.29 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

795.687-010 COVERER, LOOSELEAF BINDER (print. & pub.)
Glues simulated leather, plastic, or other material over cardboard fillers to make covers for looseleaf binders, using automatic gluing machine and handtools: Fills glue reservoir, starts machine, and feeds precut sheets of material through rollers to spread glue over surface. Removes glued sheets and arranges them on worktable. Places center angle iron at specified position on glued cover sheet and presses it down on glue. Positions cardboard filler over cover sheet and folds protruding margins back over edges of filler. Presses ends of cover with flat handtool and taps corner folds with hammer to flatten and smooth them. Presses glued cover down over inside ends of angle iron. May apply paper or fabric lining over inside of covers.
GOE: 06.04.27 STRENGTH: L GED: R2 M2 L1 SVP: 4 DLU: 77

795.687-014 GLUER (any industry) alternate titles: cementer
Glues material such as paper, cloth, leather, wood, metal, glass, rubber, or plastic together, following specified procedures: Applies adhesive to surface of material by brushing, spraying, dipping, rolling, holding material against rotating saturated brush, or feeding part between saturated rollers. Presses glued materials together manually, presses material with hand roller, or clamps materials in fixture to bond material together and set glue. May perform limited assembly of preglued material. May trim excess material from cemented parts. May wipe surplus adhesive from seams, using cloth or sponge. May visually inspect completed work. May be designated according to article glued as Arrow-Point Attacher (toy-sport equip.); Gasket Attacher (machinery mfg.); Nock Applier (toy-sport equip.); Pad Attacher (any industry); Sample Mounter (any industry); or according to gluing method used as Adhesive Sprayer (any industry). May be designated: Box Coverer, Hand (paper goods); Glue Spreader (furniture); Paper-Cone Maker (electron. comp.); Rubber Attacher (toy-sport equip.).
GOE: 06.04.34 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 89

795.687-018 GLUER, WET SUIT (plastic prod.)
Glues together precut pieces of rubberized plastic to assemble skindiving outfits, such as wet suits, hoods, and jackets, forming watertight, bonded seams after subsequent curing.
GOE: 06.04.29 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

795.687-022 LINING CEMENTER (hat & cap)
Cements lining to caps and hats, performing any combination of following tasks: Brushes cement onto base of crown or underside of sweatband, positions lining in crown of hat, and presses with fingers to smooth and join lining to crown. Applies paste to linings of cap visors, using brush, and applies lacquered cloth covering to linings to complete visor assembly. Pours glue onto glass plate, presses dowel pins of spotting jig onto plate, presses jig against cardboard, and positions lining tip on cardboard to affix lining to cardboard. Applies paste to cardboard squares and manually presses silk hat lining to squares.
GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 78

795.687-026 TENNIS-BALL COVERER, HAND (toy-sport equip.) alternate titles: felt coverer; felter, tennis balls
Cements felt covers to molded rubber balls to produce tennis balls: Aligns and smooths pieces of previously glued and cut felt over molded ball to cover ball. Rolls ball between palm and workbench or strokes cover with dull implement to secure felt to ball.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

795.687-030 TENNIS-BALL-COVER CEMENTER (toy-sport equip.) alternate titles: felt cementer
Spreads cement on rolls of felt used to cover tennis balls: Unrolls roll of felt on steamtable, securing edges to table with hooks to keep it straight and uniform. Applies cement to felt with leather strap, spreading cement over surface with handbrush. Allows first coat to set, applies second, and rerolls felt. May thin cement with gasoline or benzol. Wears gas mask when fumes become too objectionable.
GOE: 06.04.34 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

8 STRUCTURAL WORK OCCUPATIONS

This category includes occupations concerned with fabricating, erecting, installing, paving, painting, repairing, and similarly working structures or structural parts, such as bridges, buildings, roads, transportation equipment frames and structures, cables, girders, plates, and frames. The work generally occurs outside a factory or shop environment, except for factory production line occupations concerned with fabricating, installing, erecting, or repairing structures. Tools used are handtools or portable power tools, and such materials as wood, metal, concrete, glass, and clay are involved. Stationary machines are frequently used in structural work occupations, but the worker's relationship to machines is usually secondary in importance as compared to use of handtools and portable power tools. Workers are frequently required to have a knowledge of the materials with which they work, e.g., stresses, strains, durability, and resistance to weather.

80 OCCUPATIONS IN METAL FABRICATING, N.E.C.

This division includes occupations concerned with fabricating, erecting, and repairing building frames and ornamental metalwork, bridges, trestles, marine craft and structures, boilers, storage tanks, drilling rigs, towers, and other structures generally assembled from heavy structural plates, beams, and castings; fitting and assembling vehicle bodies, airframes, prefabricated door casings and window frames, air ducts, and other structural units assembled from stock or preformed sheet metal and structural shapes; and assembling or repairing boats, automobile bodies, and other structural units partially or entirely constructed of rigid plastics or fiberglass.

800 RIVETERS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with joining structural shapes and members with rivets.

800.662-010 RIVETER, HYDRAULIC (any industry) alternate titles: bull riveter; hydraulic-bull-riveter operator; multiple-pressure-riveter operator

Operates hydraulic riveting machine to rivet steel plate sections together: Selects dies according to size of rivet and type of head to be formed and installs dies in machine, using wrench. Signals RIVETER HELPER (any industry) to hoist plates into position, line up rivet holes with rivet die, insert hot rivets in holes, and hold metal bar or die against rivet head. Starts machine and adjusts valve to regulate pressure according to size of rivet. Moves lever to force piston and die against rivet shank to form head. May operate portable machine and be designated Riveter, Portable Machine (any industry).
GOE: 06.02.02 STRENGTH: M GED: R3 M1 L1 SVP: 5 DLU: 77

800.682-010 RIVETER, PORTABLE PINCH (any industry)

Operates pinch riveting machine to rivet together plates, castings, and structures, such as bars, beams, and rounds: Pulls and clamps pulley rope to position pinch riveter, suspended from monorail, at work level. Installs specified dies in bed and ram of rivet press, and turns bolt to set specified gap between dies, using wrench. Slides press along monorail to position dies over rivets. Starts press to lower ram that spreads and shapes rivet shank.
GOE: 06.02.02 STRENGTH: M GED: R3 M1 L1 SVP: 4 DLU: 77

800.684-010 RIVETER (railroad equip.)

Rivets structural members, assemblies, and parts of railroad cars, using portable riveting, dimpling, and drilling machines and handtools: Reads work orders, blueprints, and operation sheets to determine sequence of operations and type size and hole pattern of rivets. Removes temporary bolts or fasteners and inserts rivets in predrilled holes. Places drive head of rivet gun against rivet shank and pulls trigger to actuate hammer that spreds rivet, or spreads rivet, using rivet set and hammer. Rivets together adjoining edges of parts and assemblies, using portable rivet squeezer. Places two dies of rivet squeezer over head and shank of rivet, and presses trigger to activate dies that flatten shank of rivet. Drills and reams rivet holes and drills out defective rivets. Forms dimples around rivet holes, using portable dimpling gun or stationary dimpling machine. May align and assemble parts to be riveted, using jigs, holding fixtures, pins, clamps, and fasteners. May buck rivets.
GOE: 05.10.01 STRENGTH: M GED: R3 M1 L1 SVP: 4 DLU: 77

800.684-014 RIVETER, PNEUMATIC (any industry)

Rivets together parts, such as structures, plates, and castings, using pneumatic hammer: Inserts die, corresponding to size of rivet head, in head of hammer. Places die against shank of rivet held in hole by RIVETER HELPER (any industry) or by clamping fixture, and presses trigger to pound and shape head on rivet shank. May place rivet set (steel bar with cup-shaped end) over shank and strike set with sledge to shape rivet. May clean or align rivet holes, using metal dowel in pneumatic hammer. May bolt parts together, using wrench and nut runner. May remove and replace defective rivets, using cutting torch, power tools, and riveting equipment.
GOE: 05.10.01 STRENGTH: H GED: R3 M1 L1 SVP: 4 DLU: 77

800.687-010 RIVETER HELPER (any industry) alternate titles: rivet bucker; rivet catcher; rivet sticker

Performs any combination of following tasks to assist in riveting structural parts or assemblies together: Lifts structural parts into position for riveting, using hoist. Aligns rivet holes, using clamps, duft pins, and hammer. Bolts parts together to temporarily secure structure for riveting, using impact wrench. Pushes riveting machine along monorail to position machine over rivet. Reams misaligned rivet holes, using portable drill and hand reamer. Positions rivets in rivet holes or catches hot rivets thrown by RIVET HEATER (heat treating), using bucket, and inserts rivets into holes, using tongs. Presses metal bucking bar or die against rivet head to maintain position of rivet in hole. Heats bucking bar, using gas torch, and shapes bar according to specifications, using handtools. Removes temporary fitting bolts and unsatisfactory rivets, using cutting torch and handtools. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.12 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

801 FITTING, BOLTING, SCREWING, AND RELATED OCCUPATIONS

This group includes occupations concerned with joining structural parts and components with bolts, screws, and related fasteners, or by fitting (placing) reinforcing steel or iron in forms to strengthen concrete. Fitting, bolting, screwing, and related occupations concerned with the assembly of transportation equipment only are included in Group 806.

801.131-010 SUPERVISOR, CHIMNEY CONSTRUCTION (construction)

Supervises and coordinates activities of workers engaged in constructing reinforced concrete chimneys and similar structures: Reads blueprints and measures distances to lay out chimney. Directs workers in setting forms, erecting and wiring reinforcing steel, pouring and puddling concrete, and advancing scaffolding as erection of chimney progresses. Observes progress of work to ensure safety of installations and conformance of work to specifications. Verifies dimensions, using rule and spirit level. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.01 STRENGTH: L GED: R4 M3 L2 SVP: 8 DLU: 77

801.131-014 SUPERVISOR, FITTING (any industry)

Supervises and coordinates activities of workers engaged in aligning and fitting component parts to assemble fabricated metal products, applying knowledge of product design, layout, strength of materials, and properties of metal: Reads blueprint specifications to determine assembly sequence. Requisitions equipment, such as jigs, base blocks, and rigging, and assigns equipment to workers according to work performed. Trains workers in performance of tasks, such as laying out, fitting, and aligning fabricated metal parts. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M4 L3 SVP: 8 DLU: 77

801.131-018 SUPERVISOR, RIDE ASSEMBLY (amuse. & rec.)

Supervises and coordinates activities of circus or carnival workers engaged in assembling and disassembling mechanical rides, such as ferris wheel and merry-go-round: Hooks up electrical connections to power source, lubricates moving parts, and inspects equipment for safety. May operate ride. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.15 STRENGTH: M GED: R4 M2 L2 SVP: 7 DLU: 77

801.134-010 SUPERVISOR, REINFORCED-STEEL-PLACING (construction) alternate titles: supervisor, ironworking; supervisor, metal placing; supervisor, rod placing

Supervises and coordinates activities of workers engaged in placing reinforcing steel in forms to strengthen concrete. Reads blueprints and measures forms to ensure that steel rods or wire mesh are positioned according to specifications. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.06 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

801.137-010 SUPERVISOR, ASSEMBLY (agric. equip.)

Supervises and coordinates activities of workers engaged in assembling balers, combines, motors, tractors, lawn mowers, rotary tillers, and other agri-

cultural and lawn/garden machines and equipment: Coordinates work of production and stock control departments to maintain flow of material to assembly line. Inspects defective parts and directs routing of rejects to salvage or rework department. Investigates and determines causes of assembly defects and orders corrective action. Studies present layout of equipment to effect changeover of assembly line for processing new models. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to component assembled as Motor-Assembly Supervisor (agric. equip.).
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L2 SVP: 7 DLU: 77

801.137-014 SUPERVISOR, INSPECTION (agric. equip.)

Supervises and coordinates activities of workers engaged in inspecting agricultural equipment for defects. Evaluates defective inspected parts to determine disposition, and directs routing of rejects to salvage or rework department. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

801.261-010 ASSEMBLER, MINING MACHINERY (machinery mfg.) alternate titles: assembler, hydraulic backhoe; assembler, portable oil-well drilling rig; hydraulic and mechanical assembler

Assembles mining machinery, such as continuous miners, loading machines, cutting machines, locomotives, hydraulic backhoes, and portable oil well drilling rigs according to blueprints and written specifications, using handtools, power handtools, and other powered equipment: Reads blueprints and written specifications to plan assembly sequence. Operates crane or directs OVERHEAD CRANE OPERATOR (any industry) 921.663-010 to move structural framework and machine parts to assembly area. Studies blueprints to plan logical assembly sequence. Positions specified gears, drive shafts, bearings, clutches, and other component parts in housings on frame of machine, using electric hoist. Aligns and levels parts with spacers and shims, and sets clearance between parts, using micrometers, feeler gauges, calipers, and scale. Bolts cover plates, electric motors, and hydraulic pumps to machine frame in specified locations, using torque wrench. Lays out hydraulic hose on machine, away from moving parts, to facilitate servicing machine and connects hydraulic hose to pumps and specified fittings, using wrench. May measure and cut hydraulic hose for installation in machine. May clean parts preparatory to assembly, using solvent, cleaning cloths, and air gun. May assemble and test subassemblies, such as drive shaft, clutch, and transmission, using acetylene welding, heating, and cutting equipment and test stands. May install electrical wiring in assembled units according to schematic drawings. May drive mobile machinery to test performance.
GOE: 05.05.09 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

801.261-014 FITTER I (any industry) alternate titles: jig fitter; bridge worker; housesmith; iron erector; ironworker; steel erector; structural-iron erector; structural-iron worker; structural-steel erector

Lays out, positions, aligns, and fits together fabricated parts of structural metal products in shop, according to blueprint and layout specifications, preparatory to welding or riveting: Plans sequence of operation, applying knowledge of geometry, effects of heat, and allowances for weld shrinkage, machining, and thickness of metal. Sets up face block, jigs and fixtures. Locates and marks centerlines and reference points onto floor or face block and transposes them to workpiece, using tape, chains, plumb bob, and squares. Moves parts into position, manually or by hoist or crane. Aligns parts, using jack, turnbuckles, wedges, drift pins, pry bars, and hammer. Removes high spots and cuts bevels, using hand files, portable grinders, and cutting torch. Gives directions to WELDER, ARC (welding) to build up low spots or short pieces with weld. Straightens warped or bent parts, using sledge, hand torch, straightening press, or bulldozer. Positions or tightens braces, jacks, clamps, ropes, or bolt straps, or bolts parts in positions for welding or riveting. May use transit to locate reference points and erect ladders and scaffolding to fit together large assemblies. May tack weld and be designated Fitter-Tacker (any industry).
GOE: 05.05.06 STRENGTH: H GED: R4 M4 L2 SVP: 7 DLU: 77

801.261-018 ROTARY-ENGINE ASSEMBLER (engine-turbine)

Assembles and tests industrial rotary engines, following blueprints and using handtools and power tools. Inspects parts and housing to verify conformity to parts list and blueprint specifications, using micrometer, feeler gauges, and dial indicators. Inspects wiring harnesses for defects, rewires defective harnesses, and connects terminals of harness wires as indicated, following schematics. Tests and adjusts magnetos, using timing light. Dips parts into cleaning tank of ultrasonic cleaning equipment to clean part surfaces, and hones cleaned parts to smooth finish, using hand files and emery paper. Aligns housing on fixture, using jib crane and measuring tools, to position housing for insertion of parts, working as member of team. Sizes and finishes holes in housing and parts to specified tolerances, using power drills and reamers. Inserts or attaches and secures holding pins, seals, pipes, and tubing, using measuring instruments and handtools or power tools. Positions engine on test block, aligns engine with brake, and bolts engine to bed of block. Connects piping and attachments, using handtools, to supply engine with water, oil, fuel, and exhaust lines and systems during test operation. Connects test panel lines, starts engine, and observes gauges to verify that parts function according to specifications. May disassemble and repair engines. May fabricate engine parts.
GOE: 06.02.22 STRENGTH: H GED: R4 M3 L4 SVP: 6 DLU: 86

801.361-010 BLOWER AND COMPRESSOR ASSEMBLER (machinery mfg.)

Fits and aligns machined parts, such as bearings, diaphragms, impeller wheels, blower casings, shafts, and *gear cages* to assemble compressors, blowers, and vacuum pumps, according to drawings and specifications, using handtools, power drills, and portable gas heating equipment: Scrapes bearings to fit shafts, using hand scraper, blue chalk, and abrasive paper. Screws and bolts together mechanical parts, such as gears, vanes, needle bearings, and ring gear, to assemble gear cage assembly, using wrenches and screwdrivers. Shrinks impeller wheel, sleeves, spacers, and balance piston onto shaft to form spindle, using portable gas heating equipment. Caulks metal sealing strips into seams of impeller wheels, sleeves, and balance piston to form seal between impeller wheel and diaphragm, using hammer and caulking chisel. Lifts and positions spindle into casing (cylinder) to align diaphragm to spindle and upper and lower blower casing, using *lead wires*, micrometers, and calipers. Levels beams supporting bedplates over test pit, using transit, *master straightedge*, and levels. Aligns and levels blower, induction gear, oil tank, and drive unit on bedplate to mark mounting holes, using gauges, rules, punch, and scribes. Drills, taps, and reams holes for mounting bolts, coupling guards, and dowel pins, using portable drill press. Installs inlet and discharge piping to blower, using handtools, and attaches instruments, such as barometers, thermometers, pressure gauges, thermocouples, and speed indicator to blower. Dismantles unit from test pit and cleans and oils parts prior to shipment. Makes specified tests to determine blower performance, using electrical test equipment, and records instrument readings. May be designated according to equipment assembled as Compressor Assembler (machinery mfg.); Pump Assembler (machinery mfg.).
GOE: 06.02.22 STRENGTH: H GED: R4 M3 L3 SVP: 6 DLU: 77

801.361-014 STRUCTURAL-STEEL WORKER (construction)

Performs any combination of following duties to raise, place, and unite girders, columns, and other structural-steel members to form completed structures or structure frameworks, working as member of crew: Sets up hoisting equipment for raising and placing structural-steel members. Fastens steel members to cable of hoist, using chain, cable, or rope. Signals worker operating hoisting equipment to lift and place steel member. Guides member, using tab line (rope) or rides on member in order to guide it into position. Pulls, pushes, or pries steel members into approximate position while member is supported by hoisting device. Forces members into final position, using turnbuckles, crowbars, jacks, and handtools. Aligns rivet holes in member with corresponding holes in previously placed member by driving drift pins or handle of wrench through holes. Verifies vertical and horizontal alignment of members, using plumb bob and level. Bolts aligned members to keep them in position until they can be permanently riveted, bolted, or welded in place. Catches hot rivets tosssd by RIVET HEATER (heat treating) in bucket and inserts rivets in holes, using tongs. Bucks (holds) rivets while RIVETER, PNEUMATIC (any industry) uses air-hammer to form heads on rivets. Cuts and welds steel members to make alterations, using oxyacetylene welding equipment. May specialize in erecting or repairing specific types of structures and be designated Bridge-Maintenance Worker (construction); Chimney Builder, Reinforced Concrete (construction); Scaffold Builder, Metal (construction); Structural-Steel-Equipment Erector (construction).
GOE: 05.05.06 STRENGTH: H GED: R3 M2 L3 SVP: 7 DLU: 77

801.361-018 STRUCTURAL-STEEL-WORKER APPRENTICE (construction) alternate titles: bridge worker apprentice; ironworker apprentice; steel-erector apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.06 STRENGTH: H GED: R3 M2 L3 SVP: 7 DLU: 77

801.361-022 TANK SETTER (petrol. & gas) alternate titles: tank builder

Erects metal tanks used to store crude oil at oil fields, utilizing knowledge of overall construction techniques and using handtools: Directs helpers in grading area for tank base. Verifies grade, using spirit level. Bolts tank sections together and inserts felt or asbestos sealing strips between joints to assemble and erect tank bottoms, sides, and covers, using wrenches. Bolts attachments, such as ladders, pipe flanges, gauges, and valves, to tank, using wrenches. Directs helpers in erection of scaffolds and assembly of tank sections. May erect wooden tanks [TANK ERECTOR (construction)].
GOE: 05.05.06 STRENGTH: M GED: R4 M2 L2 SVP: 7 DLU: 77

801.381-010 ASSEMBLER, METAL BUILDING (construction)

Assembles prefabricated metal buildings according to blueprint specifications, using handtools, power tools, and hoisting equipment: Erects frame of building, using hoist. Bolts steel frame members together. Attaches wire and insulating materials to framework. Bolts sheet metal panels to framework. Reads blueprint to determine location of items, such as doors, windows, ventilators, and skylights and installs items, using cutting torch, wrenches, and power drill. Trims excess sheet metal, using cutting torch, power saw, and tin snips.
GOE: 05.05.06 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

801.381-014 FITTER (machine shop)

Fits and assembles structural frameworks and housings from materials, such as angle iron, I-beams, and plate steel, using handtools and welding equipment and following blueprint specifications: Examines blueprints and materials list to obtain parts specifications. Lays out parts dimensions on worktable, using square, chalk line, and soapstone. Tack-welds scrap metal to outline to provide

jig for assembly. Positions parts in jig and files, chisels, and grinds parts, as indicated, to fit them together. May heat parts with acetylene torch and bend them in vise, on anvil, or around stakes mounted in table. Tack-welds fitted parts together or directs FITTER HELPER (any industry) to tack-weld parts. May heat parts with acetylene torch and dip parts in cyanide bath to harden. Periodically compares dimensions of assembly to blueprint specifications, using square, rule, and calipers. Works to tolerances of .0625 inch. May anneal parts with acetylene torch to remove stresses of welding. May fasten parts together with acetylene torch and brazing rod.
GOE: 05.05.06 STRENGTH: M GED: R3 M3 L2 SVP: 7 DLU: 77

801.381-018 MAJOR-ASSEMBLY INSPECTOR (agric. equip.) alternate titles: assembly inspector; finished-goods inspector

Inspects parts and component assemblies of agricultural equipment, such as tractors and combines, for compliance with blueprint specifications, using precision measuring instruments: Inspects parts, such as housings, shafts, and gears, before assembly, for location and diameter of threaded holes, shaft diameter, and gear tooth angle and spacing, using micrometers, scales, and templates. Measures completed assemblies for fit and clearance of parts, using micrometers, calipers, height gauges, and rules. Examines parts for rough spots, casting flaws, and scratches. Records number of items rejected and reason for rejection.
GOE: 06.01.05 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

801.384-010 ASSEMBLER, WIRE-MESH GATE (metal prod., nec)

Fabricates frames from pipe stock and special fittings and installs wire mesh fencing to assemble gates, using handtools and power tools: Cuts pipe stock to specified size, using hacksaw, power saw, or pipe-cutting machine. Inserts pipe ends into corner fittings and verifies length of frame, using template. Drills holes through pipe and fittings and bolts them together, using power wrenches. Untwists wire, using pliers, and removes link to cut wire mesh to size, using hand shears. Inserts metal straps into terminal links of wire mesh. Fits clamps around metal straps and pipe. Stretches wire and bends clamp around pipe, using special handtool. Drills holes in frame and bolts scrolls and ornamental castings to gate. Finishes welded pipe joints, using file or hammer and chisel, and paints joints to retard rusting.
GOE: 06.02.22 STRENGTH: M GED: R3 M1 L1 SVP: 4 DLU: 77

801.663-010 ASSEMBLY-INSPECTOR HELPER (agric. equip.)

Assists ASSEMBLY INSPECTOR (agric. equip.) in testing power lawnmowers: Selects lawnmower for test run, according to instructions, and moves mower from assembly line to test area, using hoist. Pours fuel in tank and starts engine. Pushes or drives mower around test area and moves controls, such as gearshift and steering mechanisms on signal from ASSEMBLY INSPECTOR (agric. equip.). Places mower on shipping base, using hoist. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

801.664-010 LINER REPLACER (mine & quarry; smelt. & refin.)

Replaces metal liners in ore processing equipment, such as mills, crushers, chutes, and hoppers, using handtools: Loosens worn liners, using wrenches. Signals OVERHEAD CRANE OPERATOR (any industry) 921.663-010 to remove old liner and position replacement. Adjusts new liner, using sledge, pry bar, and hydraulic jacks. Bolts liner in place, using wrenches. May tend furnace to melt zinc. May pour molten zinc onto inner surfaces of equipment to prepare equipment for new lining.
GOE: 05.12.12 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

801.664-014 UTILITY WORKER, MERCHANT MILL (steel & rel.)

Performs any combination of tasks involved in preparing rolling mill for rolling rods, bars, rounds, and flats: Assembles roll stands, rolls, guides, and rest bars of rolling mill, using hammers and wrenches. Installs repeaters or tables on rolling line, using handtools. Grinds surface of repeater guides to ensure smooth passage of steel through mill, using portable grinder. Sorts and stores guides, tools, and other mill equipment. Cuts scrap to charging box size, using scrap shear or torch, and places scrap in charging box. Hooks crane slings to rolls, mill equipment, scrap, or charging boxes, and signals OVERHEAD CRANE OPERATOR (any industry) 921.663-010 to position load in specified areas. Removes steel piled up in furnace, using rake or tongs and chain.
GOE: 05.12.15 STRENGTH: M GED: R2 M1 L2 SVP: 5 DLU: 77

801.664-018 ROLL BUILDER (steel & rel.)

Assembles roll stands used on rolling mills according to orders, using handtools: Reads orders to ascertain shape and size of structural product to be rolled and to determine procedures for assembling stands. Attaches slings of crane to rolls in racks and signals OVERHEAD CRANE OPERATOR (any industry) 921.663-010 to position rolls in stands. Inserts rolls in housing, installs roll bearings, and bolts rolls in place, using handtools. Installs specified guides on stands, using handtools. Grinds guides, using portable grinder, to ensure smooth passage of steel through mill. Disassembles roll stands removed from line and examines parts to determine need for replacement. Sorts and stores rolling equipment. Records size, quantity, and condition of rolls.
GOE: 05.05.06 STRENGTH: M GED: R3 M2 L3 SVP: 5 DLU: 78

801.667-010 INSPECTOR, SHIPPING (agric. equip.) alternate titles: inspector, finished machines and bundles

Examines agricultural equipment, such as tractors, combines, and balers, for surface defects, prior to shipment: Examines painted surfaces for scratches, surfaces of parts, such as hydraulic shafts and chains for specified protective coating, and grills, ports, and vents for required sealing against entrance of dust, dirt, and foreign material. Reads labels, tags, identification plates, and stenciled markings to ensure that items, such as serial and part numbers, correspond. Compares unit with shipping order to determine if correct accessories, such as boxes of spare parts and tools, are present. Examines unit to ensure that accessories and parts are securely mounted and that parts, such as radiator and transmission, do not leak. Notifies supervisor of defects.
GOE: 06.03.02 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

801.684-010 JIG FITTER (machinery mfg.)

Assembles frames, bases, and other component parts of industrial machines and equipment in jigs preparatory to welding, using electric crane and handtools: Verifies shape of metal parts according to blueprint specifications, using templates. Examines metal parts to detect defects, such as rough spots and burrs, and removes defects, using hand file and portable powered grinder. Lifts and fits parts in jig according to blueprint, using electric crane and handtools. Clamps parts in position in jig, using wrench. Tack-welds parts together [WELDER, TACK (welding) 810.684-010] in preparation for final welding. Lifts and moves assembly from jig to welding area using electric crane.
GOE: 06.02.24 STRENGTH: M GED: R3 M2 L1 SVP: 5 DLU: 77

801.684-014 PATTERN GATER (foundry)

Fastens two or more metal patterns to metal match plate, using screws: Cuts metal strips from stock, using hacksaw, for use as gates and risers, and fastens strips to match plate, using screws. Applies solder or other compound to joints to achieve smooth finish. May fabricate pattern parts, using tools, such as disc sander, joiner, planer, and router. May shellac finished pattern, using brush.
GOE: 06.04.24 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

801.684-018 PLAYGROUND-EQUIPMENT ERECTOR (retail trade)

Erects prefabricated playground equipment for schools, recreational centers, and institutions: Assembles parts, such as swings, horizontal ladders, basketball standards, slides, and other equipment, using wrenches, stocks and dies, and other tools to join parts with flanges, and sleeve and elbow joints. Mixes and places cement around bases of standards. Performs necessary carpentry work.
GOE: 05.12.12 STRENGTH: H GED: R3 M1 L1 SVP: 3 DLU: 77

801.684-022 PROGRESSIVE ASSEMBLER AND FITTER (agric. equip.) alternate titles: assembler, lawn-and-garden machinery; assembler, tractor; case assembler; main-line assembler

Assembles farm or lawn-and-garden machinery, such as tractors, harvesters, plow disks, rakes, roto-tillers, and snow throwers at one station of progressive assembly line, using handtools and power tools: Files edges and reams holes to align parts, such as chains, gears, housings, transmissions, radiators, fuel lines, and wheels with main assembly. Bolts or clips parts to assembly, using tools, such as prys, hammers, and pneumatic wrenches and drills. Sets clearance between parts to prescribed tolerances, using fixed gauges and tools, such as torque wrenches and screwdriver. Positions parts, such as control mechanisms, and connecting rods in housing and secures parts with bolts, rivets, cotter pins, and keys, using hammer, wrench, and pliers. Pours lubricating oil into housing and fastens housing cover plates, using wrench. Mounts assembled units in test fixture, connects unit to electric motor, and starts motor to test performance of unit. May work from blueprints or sketches.
GOE: 06.04.22 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

801.684-026 REINFORCING-METAL WORKER (construction) alternate titles: reinforcing-bar setter; reinforcing-iron worker; reinforcing-steel erector; reinforcing-steel placer; reinforcing-steel setter; reinforcing-steel worker

Positions and secures steel bars in concrete forms to reinforce concrete: Determines number, sizes, shapes, and locations of reinforcing rods from blueprints, sketches, or oral instructions. Selects and places rods in forms, spacing and fastening them together, using wire and pliers. Cuts bars to required lengths, using hacksaw, bar cutters, or acetylene torch. May bend steel rods with handtools or rodbending machine. May reinforce concrete with wire mesh. May weld reinforcing bars together, using arc-welding equipment.
GOE: 05.05.06 STRENGTH: H GED: R3 M1 L1 SVP: 6 DLU: 77

801.687-010 ASSEMBLER HELPER, INTERNAL COMBUSTION ENGINE (engine-turbine)

Prepares internal combustion engines for final assembly and testing, performing any of following duties: Pushes or pulls motor aside, using hook, or pushes engine on casters between assembly stations. Pulls masking tape from engine to permit further assembly and adjustment. Removes temporary holding screws to permit attachment of permanent assemblies, using handtools. Lubricates engine, using grease guns, grease fittings, brushes, and oilcans. Wipes oil and dirt from outside surface of engine, using rags. Clamps engine to carrying frame and raises it to overhead conveyor line, using power hoist.
GOE: 06.04.40 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

801.687-014 FITTER HELPER (any industry) alternate titles: plate-worker helper; welder-fitter helper

Assists FITTER (any industry) I or WELDER-FITTER (welding) to position, align, and fit together fabricated plates, structural shapes, and weldments preparatory to assembly into structural fabricated products, performing following tasks: Holds, positions, and reads tape or rods to assist in layout. Places and moves blocking, braces, and jigs to hold parts. Hammers wedges and drift pins, and turns turnbuckles, using lever. Pulls pry bars to align parts. Grinds or chips

rough edges, surplus weld, or scale, using portable grinder or airhammer. Positions and turns clamps, and bolts together butt straps or parts, using hand or power wrench. Performs any combination of incidental tasks, such as transporting tools, fixtures, and parts, assisting welders, bucking rivets, reaming holes, and sweeping area. May be known according to task performed as Lay-Out Helper (any industry). Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.12 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

801.687-018 TANK-SETTER HELPER (petrol. & gas) alternate titles: tank-builder helper

Assists TANK SETTER (petrol. & gas) in erecting metal tanks used to store crude oil, performing following tasks: Shovels and spreads dirt over designated area and pulls straightedge (plank) over surface to tank base. Brushes sealing compound on felt or asbestos strips used to seal tank joints. Bolts tank sections together to assemble tanks and inserts sealing strips in joints. Erects scaffolds. Carries tools and materials. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.12 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

804 TINSMITHS, COPPERSMITHS, AND SHEET METAL WORKERS

This group includes occupations concerned with laying out, cutting to size, bending or shaping, and soldering, brazing, riveting, or crimping sheet metal, such as copper, steel, aluminum, galvanized iron, and tinplate, to fabricate or repair sheet metal items, such as gutters, hot and cold air vents, cabinets, and light tanks.

804.281-010 SHEET-METAL WORKER (any industry) alternate titles: sheet-metal mechanic

Plans, lays out, fabricates, assembles, installs, and repairs sheet metal parts, equipment, and products, utilizing knowledge of working characteristics of metallic and nonmetallic materials, machining, and layout techniques, using handtools, power tools, machines, and equipment: Reads and interprets blueprints, sketches, or product specifications to determine sequence and methods of fabricating, assembling, and installing sheet metal products. Selects gauge and type of sheet metal, such as galvanized iron, copper, steel, or aluminum, or nonmetallic material, such as plastics or fiberglass, according to product specifications. Lays out and marks dimensions and reference lines on material, using scribers, dividers, squares, and rulers, applying knowledge of shop mathematics and layout techniques to develop and trace patterns of product or parts [SHEET-METAL LAY-OUT WORKER (any industry) 809.281-010] or using templates. Sets up and operates fabricating machines, such as shears, brakes, presses, forming rolls, and routers, to cut, bend, block and form, or straighten materials. Shapes metal material over anvil, block, or other form, using handtools. Trims, files, grinds, deburrs, buffs, and smooths surfaces, using handtools and portable power tools. Welds, solders, bolts, rivets, screws, clips, caulks, or bonds component parts to assemble products, using handtools, power tools, and equipment. Installs assemblies in supportive framework according to blueprints, using handtools, power tools, and lifting and handling devices. Inspects assemblies and installation for conformance to specifications, using measuring instruments, such as calipers, scales, dial indicators, gauges, and micrometers. Repairs and maintains sheet metal products. May operate computer-aided-drafting (CAD) equipment to develop scale drawings of product or system. May operate laser-beam cutter [LASER-BEAM-MACHINE OPERATOR (welding) 815.682-010] or plasma arc cutter [ARC CUTTER, PLASMA ARC (welding) 816.364-010] to cut patterns from sheet metal. May be designated by type of metal as Coppersmith (any industry); Tinsmith (any industry); or according to type of activity as Fabricator, Special Items (any industry); Model Maker, Sheet-Metal (any industry); Product-Development Worker (any industry); Roofer, Metal (construction); Sheet-Metal Installer (any industry); Sheet-Metal Worker, Maintenance (any industry); Shop Mechanic (any industry).
GOE: 05.05.06 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 88

804.281-014 SHEET-METAL-WORKER APPRENTICE (any industry)

Performs duties as described under APPRENTICE (any industry) Master Title. Frequently specializes, after completing apprenticeship program, in such areas as ventilation and air-conditioning, restaurant equipment, architectural sheet metal work, warm-air heating systems, sheet metal roofing, and electric-sign construction.
GOE: 05.05.06 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

804.481-010 HOOD MAKER (tex. prod., nec)

Fabricates and assembles sheet metal hoods used to protect awnings, using handtools and portable power tools: Selects specified steel sheet from stock. Lays out and marks hood parts on steel sheet, indicating lines for bending, cutting, and drilling according to drawings, sketches, or verbal instructions, using scale, rule, scribe, and punch. Cuts metal pieces to size, using hand or bench shears. Bends metal into specified shapes, using manually operated brake machine or hammers metal to shape, using wooden mallet. Drills holes into metal, using electric hand drill, or punches holes, using hammer and punch. Hammers edges of metal parts to form seams, using mallet. Screws, bolts, or rivets hood together and attaches supports, using handtools. May install hood on building. May fabricate awning frames [AWNING-FRAME MAKER (tex. prod., nec)].
GOE: 05.05.06 STRENGTH: M GED: R4 M3 L3 SVP: 5 DLU: 77

804.684-010 CUTTER, ALUMINUM SHEET (ship-boat mfg.)

Cuts sheet aluminum to specified shape for use as boat hulls and decks, using portable saw: Stacks sheets of aluminum on cutting table and positions pattern on top sheet. Outlines pattern on sheet, using scribe. Guides saw around outline to cut out hull or deck parts. Drills holes along edges of cutout parts at specified points to mark locations for attachment of parts, using portable electric drill.
GOE: 06.04.24 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

804.684-014 EXTRUSION BENDER (ship-boat mfg.)

Cuts and bends aluminum extrusions into specified shapes for use as trim, fasteners, and bumper guards on fiberglass boats, using handtools and portable power tools: Obtains precut extrusions from stock, or cuts extrusions to specified length, using hacksaw. Places blocks in jig and bends extrusions to shape around blocks. Clamps extrusions in position in jig and drills holes through extrusions, using power drill. Bolts extrusions together, using wrench. Releases clamps and removes extrusions from jigs. Tapes inner surface of extrusions to form watertight seal. Bends aluminum trim in jigs, and attaches trim to exposed edges of parts, such as plastic panels and seats. Forces trim into position, using rubber mallet. Crimps edges of trim to fasten trim in position, using crimping tool.
GOE: 06.02.24 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

805 BOILERMAKERS

This group includes occupations concerned with assembling, erecting, and repairing boilers and related equipment, attachments, and accessories. Includes laying out, cutting, fitting and bolting, welding, or riveting heavy metal plates, boiler tubes, and castings.

805.131-010 SUPERVISOR, BOILERMAKING (struct. metal)

Supervises and coordinates activities of workers engaged in assembly, erection, and repair of boilers, tanks, vats, and pressure vessels: Lays out reference points of columns or plates on foundation, following blueprints. Directs workers in selection of type and location of rigging and equipment to lift parts into position. Directs welders to assemble unit. Lays out location and position of drums and *headers* on frame to ensure specified alignment of tubes. Verifies dimensions of accessories, such as chutes, fan stands, uptakes, stacks, and ladders needed to adapt boiler or tank to location. Directs workers in repair of boilers, tanks, vats, and pressure vessels. May construct templates of wood, paper, or sheet metal to facilitate layout tasks. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to work activities or workers supervised as Supervisor, Boilermaking Shop (struct. metal); Supervisor, Field Assembly-And-Erection (struct. metal); Supervisor Mechanic, Boilermaking (struct. metal).
GOE: 05.05.06 STRENGTH: M GED: R4 M4 L3 SVP: 8 DLU: 77

805.137-010 SUPERVISOR, BOILER REPAIR (any industry)

Supervises and coordinates activities of workers engaged in maintenance and repair of stationary steam boilers and boiler house auxiliaries, performing duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.06 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

805.261-010 BOILERMAKER APPRENTICE (struct. metal)

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.06 STRENGTH: H GED: R4 M4 L3 SVP: 7 DLU: 77

805.261-014 BOILERMAKER I (struct. metal) alternate titles: boilermaker, assembly and erection

Assembles, analyzes defects in, and repairs boilers, pressure vessels, tanks, and vats in field, following blueprints and using handtools and portable power tools and equipment: Locates and marks reference points for columns or plates on foundation, using *master straightedge*, squares, transit, and measuring tape, and applying knowledge of geometry. Attaches rigging or signals crane operator to lift parts to specified position. Aligns structures or plate sections to assemble boiler frame, tanks, or vats, using plumb bobs, levels, wedges, dogs, or turnbuckles. Hammers, flame-cuts, files, or grinds irregular edges of sections or structural parts to facilitate fitting edges together. Bolts or arc-welds structures and sections together. Positions drums and *headers* into supports and bolts or welds supports to frame. Aligns water tubes and connects and expands ends to drums and headers, using tube expander. Bells, beads with power hammer, or welds tube ends to ensure leakproof joints. Bolts or welds casing sections, uptakes, stacks, baffles, and such fabricated parts as chutes, air heaters, fan stands, feeding tube, catwalks, ladders, coal hoppers, and safety hatch to frame, using wrench. Installs manholes, handholes, valves, gauges, and feedwater connection in drums to complete assembly of water tube boilers. Assists in testing assembled vessels by pumping water or gas under specified pressure into vessel and observing instruments for evidence of leakage. Repairs boilers or tanks in field by unbolting or flame cutting defective sections or tubes, straightening plates, using torch or jacks, installing new tubes, fitting and welding new sections and replacing worn lugs on bolts. May rivet and caulk sections of vessels, using pneumatic riveting and caulking hammers. May line firebox with refractory brick and asbestos rope and blocks [BRICKLAYER, FIREBRICK AND REFRACTORY TILE (construction)]. May fabricate such parts as stacks, uptakes, and chutes to adapt boiler to premises in which it is installed [BOILERMAKER (struct. metal) II].

GOE: 05.05.06 STRENGTH: H GED: R4 M4 L3 SVP: 7 DLU: 77

805.361-010 BOILER HOUSE MECHANIC (any industry) alternate titles: boiler mechanic; heating-equipment repairer; station mechanic

Maintains and repairs stationary steam boilers and boiler house auxiliaries, using handtools and portable power tools: Cleans or directs other workers to clean boilers and auxiliary equipment, using scrapers, wire brush and cleaning solvent. Inspects and repairs boiler fittings, such as safety valves, regulators, automatic-control mechanisms, and water columns, and auxiliary machines, such as pumps, draft fans, stokers, and burners. Replaces damaged boiler tubes and plates [BOILERMAKER (struct. metal) I]. Repairs or replaces high-pressure piping, using power saw, gas torch, threading die, and welding equipment. May patch boiler insulation with cement. May paint surface of equipment, using brush. May perform water pressure test by pumping water into system to determine location of leaks. May remove and replace defective firebrick, using hammer and chisel. May operate lathe and milling machine to repair or make parts, such as valve stems and pump shafts.
GOE: 05.05.06 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

805.361-014 BOILERMAKER FITTER (struct. metal)

Positions, aligns, and secures structural parts and related assemblies of pressure vessels, such as boilers, tanks, and vats in specified relationship for subsequent permanent assembly by BOILERMAKER (struct. metal) I or WELDER, BOILERMAKER (struct. metal). Locates and marks position of parts, using measuring tape, transit, square, and plumb bob. Signals RIGGER (any industry) to lift parts into position. Aligns parts to specified fit, using dogs, wedges, turnbuckles, jacks, hammers, and *drift pins*. Cuts, files, and grinds seams and joints to attain specified fit, using cutting torch, file, and power grinder. Straightens or reshapes bent plates or structure, using hammer, jacks, and torch. Clamps, bolts, or tack-welds parts in place for final welding or bolting. Climbs framework or ladders to position, fit, or secure parts. May fit plates, structures, or pipes to repair ships.
GOE: 05.05.06 STRENGTH: H GED: R4 M3 L2 SVP: 7 DLU: 77

805.381-010 BOILERMAKER II (struct. metal) alternate titles: boilermaker mechanic

Assembles boilers, tanks, vats, and pressure vessels according to blueprint specifications, using power tools and handtools: Reads blueprint to determine location and relationship of parts. Connects firetubes to heads or watertubes to drums and *headers* of boilers, by expanding and belling ends, using tube expander and beading ends, using power hammer. Drills and taps holes for installation of studs, using portable drill. Tightens bolts to assemble frames, using hand or power wrenches. Mounts casings of watertube boilers, or attaches davit heads, burners, or furnace casing to firetube boilers, using wrenches. Bolts or screws accessories, such as manholes, handholes, fans, gauges, and valves to vessel, using handtools or power wrenches. Replaces defective parts, using power wrenches, prying bars, or handtools. May install and repair refractory brick [BRICKLAYER, FIREBRICK AND REFRACTORY TILE (construction)]. May thread and install stay bolts, using pipe wrench and dies. May remove and replace rivets and caulk seams to repair riveted shells and structures, using pneumatic chisel, riveter, and caulking hammer. May cut out defective parts, using acetylene torch. Distinguish from BOILERMAKER (struct. metal) I who assembles and repairs boilers and related pressure vessels. May be designated according to work setting or location as Boilermaker, Central Steam Plant (struct. metal); Boilermaker, Industrial Boilers (struct. metal); Boilermaker, Ship (struct. metal).
GOE: 05.05.06 STRENGTH: M GED: R3 M2 L2 SVP: 7 DLU: 77

805.664-010 BOILERMAKER HELPER II (struct. metal)

Assists boilermaking personnel in assembling, installing, repairing, and testing steam boilers, pressure vessels, and other removable structures in ships, central steam plants, and in industrial plants. Loads structural parts of boilers, pressure vessels, or tanks on pallets, using hoist. Attaches slings to pallets or onto parts for moving by crane. Assists in positioning parts in jigs and attaches clamps or other holding devices to fit parts together. Grinds welds or seams to fit, using portable grinder. Removes boiler casings, grades, handrails, manhole, and handhole covers to facilitate access to boilers or other vessels for repair, using handtools. Assists in positioning boiler tubes as specified in boiler drums and *headers*. Cleans scale from boiler tubes, using rotary pneumatic brush equipment. Mixes mortar used for laying firebrick in firebox. Replaces and reassembles gratings, ladders, handrails, and other disassembled structures after repairs are completed. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.12 STRENGTH: H GED: R2 M2 L2 SVP: 5 DLU: 77

805.667-010 BOILER HOUSE INSPECTOR (any industry) alternate titles: boiler cleaner, chief

Visually inspects boilers and water and steam connection pipes to locate leaks and defective parts. Notifies work crew of repairs to be made. Visually inspects repaired boilers to ensure completion of repair job and notifies BOILER OPERATOR (any industry) to resume operation of boiler. Inspects cleaning equipment, such as hand and powered wire brushes and chipping tools, and orders replacements.
GOE: 05.07.01 STRENGTH: L GED: R3 M1 L1 SVP: 6 DLU: 77

805.687-010 BOILERMAKER HELPER I (struct. metal)

Performs following tasks to assist BOILERMAKER (struct. metal) I in assembly, erection, and repair of boilers, tanks, vats, and pressure vessels, in field: Conveys tools, equipment, and parts to work area by hand or using handtrucks. Cleans boilers and tanks, using scrapers and steam or water hoses. Cleans work area and places salvageable material in bins. Attaches slings, ropes, or cables to objects, such as plates, tubes, and drums, following signals of RIGGER (any industry). Positions and holds parts for BOILERMAKER (struct. metal) I to fit, clamp, or weld parts in specified alignment. Bolts or unbolts assemblies, using handtools, such as wrenches, screwdrivers, and prying bars. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.12 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

806 TRANSPORTATION EQUIPMENT ASSEMBLERS AND RELATED OCCUPATIONS

This group includes occupations concerned with assembling transportation and related equipment, such as motor vehicles, aircraft, rail equipment, motorcycles and bicycles, boats, and components, parts, and accessories. Body work is included in Group 807, and painting is included in Group 845.

806.130-010 SUPERVISOR, ENGINE ASSEMBLY (engine-turbine)

Supervises and coordinates activities of workers engaged in assembly of internal combustion engines: Reviews routing sheets to determine type of engine to assemble. Examines engine parts at assembly bench or line for agreement with routing sheet. Confers with supervisor to arrange assembly line, supplies, and parts to facilitate assembly of engines. Corrects stoppages on line by reassigning workers, reporting breakdown of machines to maintenance department, or supervising repair of machines. Sets up arbor presses, special jigs, and holding fixtures for assembly of engines. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L2 SVP: 8 DLU: 77

806.131-010 SUPERVISOR, ALUMINUM BOAT ASSEMBLY (ship-boat mfg.)

Supervises and coordinates activities of workers engaged in assembly of aluminum boats: Trains and assists workers in performance of tasks, such as cleaning, drilling, riveting, painting, and inspecting aluminum boats and component parts. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

806.131-014 SUPERVISOR, ASSEMBLY (motor-bicycles)

Supervises and coordinates activities of workers engaged in assembling and repairing forks, frames, transmissions, or other motorcycle components: Trains workers in assembly and repair procedures. Performs duties as described under SUPERVISOR (any industry) Master Title. May be designated according to department as Supervisor, Frame Assembly (motor-bicycles); Supervisor, Motorcycle And Wheel Assembly (motor-bicycles); Supervisor, Transmission And Fork Assembly (motor-bicycles). May supervise and coordinate activities of workers engaged in assembly and repair of bicycles, wheels, and parts.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

806.131-018 SUPERVISOR, BOAT OUTFITTING (ship-boat mfg.)

Supervises and coordinates activities of workers engaged in outfitting and installing engines in fiberglass boats: Trains and assists workers in performance of tasks, such as installing engines and outfitting boats with such fixtures as metal trim, seats, and windshields. Inspects engine placement for conformance to specifications, using rulers and levels. Rubs fingers over boat surfaces to detect rough edges. Confers with other supervisory personnel to coordinate interdepartmental workflow. Coordinates loading and shipping schedules. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L2 SVP: 8 DLU: 77

806.131-022 SUPERVISOR, ERECTION SHOP (railroad equip.)

Supervises and coordinates activities of workers engaged in fitting, welding, and riveting railroad car components, such as beams, center sills, crossbearers, sides, ends, and roofing, to make car framework. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

806.131-026 SUPERVISOR, INSPECTION AND TESTING (motor-bicycles)

Supervises and coordinates activities of workers engaged in inspecting and testing motorcycle parts and assemblies: Examines and measures rejected parts and assemblies to determine type of defect. Notifies engineering personnel of malfunctioning inspecting and testing equipment. Trains workers in inspecting and testing procedures. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

806.131-030 SUPERVISOR, RIGGER (ship-boat mfg.)

Supervises and coordinates activities of workers engaged in installation and repair of rigging, and in hoisting and positioning machinery, equipment, and structural parts aboard ships. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.06 STRENGTH: L GED: R4 M3 L2 SVP: 8 DLU: 77

806.131-034 SUPERVISOR, SHIPFITTERS (ship-boat mfg.)

Supervises and coordinates activities of workers engaged in fabricating and installing metal structural parts, such as bulkheads, plates, and frames in ships.

Inspects installations, such as decks and engine foundations, for conformance with specifications. May supervise workers engaged in repairing structural parts of ships. May direct moving and launching of ships. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.06 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 80

806.131-038 SUPERVISOR, INSPECTION (aircraft mfg.)
Supervises and coordinates activities of workers engaged in inspecting and testing raw materials and manufactured products in accordance with customer and company quality standards. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 87

806.131-042 SUPERVISOR, PRODUCTION DEPARTMENT (aircraft mfg.)
Supervises and coordinates activities of workers engaged in fabricating, assembling, modifying, or repairing parts, assemblies, tooling, and related items used in manufacturing aircraft and space vehicles: Analyzes work orders, schematics, and other specifications to determine parts and assemblies requiring fabrication, modification, or repair. Trains employees in work methods and procedures. Inspects work to ensure adherence to standards and specifications. Requisitions replacement materials, tools, and equipment. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: M GED: R4 M4 L4 SVP: 8 DLU: 87

806.134-010 SUPERVISOR, MOTOR VEHICLE ASSEMBLY (auto. mfg.)
Supervises and coordinates activities of workers engaged in assembling motor vehicles, such as automobiles, trucks, buses, or limousines: Directs workers in welding, assembly, inspection, and repair techniques, utilizing knowledge of assembly procedures and specifications. Confers with other supervisory personnel to coordinate activities of individual departments within plant. Assigns training of new employees to qualified workers or performs training duties. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to component assembled or installed as Supervisor, Engine Assembly (auto. mfg.); Supervisor, Seat Assembly (auto. mfg.); or stage of assembly as Supervisor, Body Assembly (auto. mfg.); Supervisor, Chassis Assembly (auto. mfg.); Supervisor, Final Assembly (auto. mfg.); Supervisor, Trim Assembly (auto. mfg.); Supervisor, Truck-Trailer Assembly (auto. mfg.).
GOE: 06.02.01 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 90

806.134-014 SUPERVISOR, FIBERGLASS BOAT ASSEMBLY (ship-boat mfg.)
Supervises and coordinates activities of workers engaged in laminating fiberglass casts on boat molds and assembling fiberglass boats and component parts: Reads work orders and blueprints to determine materials needed and requisitions materials. Trains and assists workers in performance of tasks, such as laminating, assembling, painting, and inspecting boats and component parts. Visually and tactually inspects component parts of boats to detect air pockets, defects in thickness, or other failures to conform to blueprint specifications. Performs other duties as described under SUPERVISOR (any industry) Master Title. May supervise workers engaged in laminating and assembling ship components made of fiberglass and be designated Supervisor, Fiberglass-Ship-Component Assembly (ship-boat mfg.).
GOE: 06.02.01 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 80

806.137-010 SUPERVISOR, CAR INSTALLATIONS (railroad equip.)
Supervises and coordinates activities of workers engaged in installing doors, walls, flooring, insulation, heaters, ventilators, generators, and other equipment and materials in exteriors and interiors of railroad cars. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L2 SVP: 7 DLU: 77

806.137-014 SUPERVISOR, ORDNANCE TRUCK INSTALLATION (ordnance)
Supervises and coordinates activities of workers engaged in assembly and installation of tools, equipment, and materials in ordnance mobile shop trucks: Directs assembly and installation in truck bodies, of benches, tools, and machinery according to diagrams and blueprints. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

806.137-018 SUPERVISOR, SHIPPING TRACK (railroad equip.)
Supervises and coordinates activities of workers engaged in final assembly and preparation of railroad cars for shipment to customers: Trains new workers in performance of tasks, such as installing exterior fixtures, touching up stenciled letters and designs, sandblasting to clean exterior surfaces, caulking to waterproof, and testing and adjusting air brake systems of railroad cars. Monitors performance of tasks, machinery and equipment, and condition of work areas to ensure adherence to company standards. Reports machinery and equipment malfunctions to maintenance personnel. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

806.137-022 QUALITY ASSURANCE SUPERVISOR (auto. mfg.)
Supervises and coordinates activities of workers engaged in inspecting and testing assembled motor vehicles, components, and parts, as vehicles and subassemblies proceed through stages of assembly process, applying knowledge of quality assurance standards and procedures: Reviews quality assurance instructions, assembly specifications, and production schedules to determine method of conducting inspections and tests, sequence of operations, and work assignments. Directs workers in quality assurance inspection and testing, to assure that establishment and regulatory standards are met. Assigns training of new workers to qualified workers. Reviews reports and confers with quality assurance, production, management, and engineering personnel to solve work-related problems. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to stage of assembly as Quality Assurance Supervisor, Body (auto. mfg.); Quality Assurance Supervisor, Trim (auto. mfg.); Quality Assurance Supervisor, Chassis (auto. mfg.); Quality Assurance Supervisor, Final (auto. mfg.).
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 88

806.261-010 INTERNAL-COMBUSTION-ENGINE INSPECTOR (engine-turbine) alternate titles: inspector and tester; inspector; erector
Inspects internal combustion engines after test for conformance to blueprints and specifications, using measuring instruments and handtools: Reviews performance test report and compares log data, such as temperature, lubrication compression, horsepower, fuel consumption, and manifold pressure with specifications. Signs inspection tag to release engines from test floor or analyzes data to locate assemblies and parts not functioning according to specifications. Measures dimensions of disassembled parts and assemblies, such as pistons, cylinder liners, valves, bearings, shafts, governors, injectors, or carburetors, and clearances between moving and stationary parts, using scale, micrometers, special tools, and gauging setups. Compares measurements with specifications to locate faulty parts. Records findings and notifies supervisor of results of inspection. May inspect incoming materials for conformance with specifications. May disassemble engines during inspection process. May supervise crating and shipping of engines to consignees. May be designated according to type of engine inspected as Diesel-Engine Inspector (engine-turbine); Gasoline-Engine Inspector (engine-turbine).
GOE: 06.01.05 STRENGTH: M GED: R4 M3 L4 SVP: 7 DLU: 77

806.261-014 RIGGER (ship-boat mfg.) alternate titles: loft rigger; outside rigger
Fabricates, installs, and repairs rigging and weight-handling gear on ships and attaches hoists and pulling gear to rigging to lift, move, and position machinery, equipment, structural parts, and other heavy loads aboard ship: Forms slings and towing bridles by looping and splicing cable or by crimping metal sleeve around cable end and body of cable, using crimping tool. Splices and ties rope to form nets, ladders, and other rigging. Installs hooks, swivels, and turnbuckles in rigging. Reeves lines through blocks and pulleys. Sews canvas or leather covers on rigging at friction points, using sail twine and sailmaker's palm and needle. Selects and attaches gear, braces, and cushions, according to weight and distribution of load, availability of hoisting machinery, and presence of obstacles, such as ship's structural members and jutting buildings, which might interfere with maneuverability of incorrectly rigged hoisting gear. Signals workers operating cranes or other equipment to move load. Installs beam clamps, pad eyes, gallows frames, and other supporting structures for rigging gear. Controls movement of heavy equipment through narrow openings or in confined spaces, using jacks, pulley blocks, chainfalls, and rollers. Lays out and handles lines, snubs lines on cleats or bollards, or hauls in lines with capstans to assist SHIPWRIGHT (ship-boat mfg.) in ship drydocking operations. Installs or repairs ship's rigging, such as mast or antenna rigs, small boat handling gear, and winch or windlass rigging. Installs masts, booms, yardarms, and gaffs, working aloft as required. Rigs and hangs scaffolds and stages that require blocks and pulleys.
GOE: 05.05.06 STRENGTH: H GED: R4 M2 L2 SVP: 7 DLU: 77

806.261-018 RIGGER APPRENTICE (ship-boat mfg.) alternate titles: erector appentice
Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.06 STRENGTH: H GED: R4 M2 L2 SVP: 7 DLU: 77

806.261-022 TESTER, ROCKET MOTOR (aircraft mfg.) alternate titles: tester, rocket engine
Test fires rocket motor or rocket engine to determine performance characteristics, using testing, measuring, and recording instruments and equipment, and mathematical formulas: Positions, or directs other workers to position, motor or engine on test stand, using hoist or overhead crane. Attaches measuring and testing instruments, controls, and computerized data acquisition equipment, using handtools. Test operates motor or engine for specified test periods under varying operational conditions to determine performance characteristics, such as motor thrust, chamber pressure, and burn rate. Calculates performance data using computer, calculator, and standard formulas. Records and interprets test results for analysis by engineers or others.
GOE: 06.01.05 STRENGTH: M GED: R4 M4 L4 SVP: 8 DLU: 88

806.261-026 MARINE-SERVICES TECHNICIAN (ship-boat mfg.)
Repairs and maintains boats and similar vessels in marine service facility: Examines repair or installation orders, drawings, and vessel, utilizing knowledge based on past experience to determine extent of repairs required or modifications necessary for installation of equipment, accessories, and hardware. Consults with supervisor regarding installation or repair problems, sequence of

operations, and time required to complete repair or installation. Removes vessels from water, using movable lift crane or marine railway. Positions and secures blocking at bottom and sides of vessels according to size, weight, and weight distribution of vessels, using fasteners, handtools, and power tools. Removes flaked paint, barnacles, and encrusted debris from hulls of vessel, using scrapers, scrubbers, power washers, and sandblast equipment. Removes damaged or rotted sections from wooden or fiberglass vessels, using drill, saw, and handtools. Fabricates and installs wooden replacement parts, using drawings, measuring instruments, work aids, handtools, power tools, and woodworking machines and equipment, such as saws, drill press, shaper, planer, and steam cabinet. Caulks wooden hulls with cotton to prevent leaks. Grinds and sands edges around removed fiberglass sections. Mixes fiberglass bonding resin and catalyst, cuts fiberglass cloth to size, and impregnates cloth with mixture. Positions layers of impregnated cloth over damaged area, and smooths area to match contour of hull, using rollers, squeegee, and power sander. Mixes and applies paint or gel coat to boats with hand and spray equipment, utilizing knowledge of color mixing, matching techniques, and application procedures. Tests engine, transmission, rigging, propeller, navigational, and related systems to diagnose malfunctions, using various measuring instruments. Replaces or repairs defective components, or fabricates new components. Installs and tests steering gear, sanitation and refrigeration systems, cabinetry, electrical systems and accessories, hardware, trim, and related components, following manufacturer's instructions and drawings.
GOE: 05.05.02 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 86

806.261-030 INSPECTOR, ASSEMBLIES AND INSTALLATIONS (aircraft mfg.) alternate titles: inspector, assembly

Inspects assemblies, such as fuselage, tail, and wings, joining of assemblies into major structure, installation of parts, equipment, and accessories, or complete aircraft for conformance to specifications and quality standards: Reads and interprets blueprints, engineering documents, and inspection manuals and procedures to determine methods and sequence of inspection. Examines parts and assemblies for physical characteristics, such as surface finish, color, and texture, and for defects, such as cracks, scratches, and loose connections. Measures parts and assemblies for dimensional accuracy and adherence to blueprint specifications. Inspects assembly, mating, and installation of parts, assemblies, and equipment for alignment, fit, clearance, tension, throw limits, torque, and related factors, using fixtures, jigs, and precision measuring and checking instruments, such as scales, protractor, tensiometer, and gauges. Conducts or witnesses functional or operational tests of partial or completed units, such as landing gear, auto pilot, engine controls, and rudders, to verify conformance to specifications, using test equipment. Accepts or rejects assemblies or installations, and recommends repair, rework, or replacement of component parts. Confers with engineering, production, and inspection personnel to exchange inspection information. May be designated according to assembly or installation inspected as Inspector, Subassembly (aircraft mfg.); Inspector, Final Assembly (aircraft mfg.); Inspector, Final Assembly, Electrical (aircraft mfg.); Inspector, Final Assembly, Mechanical (aircraft mfg.); Inspector, Structures (aircraft mfg.); Inspector, Engines And Components Assembly (aircraft mfg.); Inspector, Experimental Assembly (aircraft mfg.). Inspector, Electrical And Electronic Installations (aircraft mfg.).
GOE: 06.01.05 STRENGTH: M GED: R4 M4 L4 SVP: 7 DLU: 89

806.261-034 INSPECTOR, MATERIAL DISPOSITION (aircraft mfg.)

Inspects rejected or obsolete aircraft parts, assemblies, or materials to determine disposition, utilizing knowledge of production processes, repair methods, and cost, using precision measuring instruments: Reviews rejection slips to determine method of inspection required. Inspects and measures parts to determine nature and extent of defect, using surface plate or table and precision measuring instruments, such as calipers, gauges, and micrometers. Compares inspection results with specifications and consults with manufacturing, engineering, and other personnel to determine possibility and practicability of salvaging rejected parts, assemblies, or materials. Evaluates inspection data, considering value, costs involved, production delays, quality, appearance, and related factors, and recommends final disposition, such as scrap, return to vendor, salvage, or rework. Records inspection results and recommendations for disposition of parts, assemblies, or materials. May investigate rejections of parts and assemblies to determine corrective action to prevent recurrence and be designated Material Review Board Representative, Quality Control (aircraft mfg.).
GOE: 06.01.05 STRENGTH: M GED: R4 M4 L4 SVP: 7 DLU: 88

806.261-038 INSPECTOR, MISSILE (aircraft mfg.)

Inspects and tests missile components and ground support equipment, according to blueprints and specifications, using precision measuring instruments and test equipment: Examines components of missile systems, such as electrical, electronic, instrumentation, mechanical, propulsion, hydraulic, and pneumatic, for conformance to quality standards. Tests functional performance of system components, using test equipment. Inspects and measures parts and assemblies for alignment, location, dimension, fit, location of bolt and rivet holes, and fastening to ensure conformance to blueprints and specifications, using jigs, fixtures, sight levels, and precision measuring instruments. Inspects ground equipment, such as missile boosters, launch pads, and shelters, for conformance to standards and specifications. Visually and tactilely examines ablative coating on exterior surfaces of missile to ensure uniform application. Conducts or witnesses operational testing to verify that missile systems adhere to specifications. Analyzes inspection and test results and prepares inspection reports indicating acceptance, rejection, or rework required. Confers with customers, engineering, production, and inspection personnel to exchange information, such as test results or proposed modifications to missile system. May inspect and test missile systems prior to flight or delivery to customer and be designated Inspector, Missile Final Assembly (aircraft mfg.); Missile Inspector, Preflight (aircraft mfg.). May inspect space vehicle components during final assembly and be designated Space Vehicle Inspector, Preflight (aircraft mfg.).
GOE: 06.01.05 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 89

806.261-042 INSPECTOR, OUTSIDE PRODUCTION (aircraft mfg.)

Inspects and tests aircraft, space capsule, and missile parts, assemblies, and materials at subcontractor's plant or airline maintenance base for conformance to engineering requirements and specifications, using blueprints, test equipment, and precision measuring instruments: Sets up and adjusts hardness testers to test metal parts for specified hardness. Inspects dimensions, alignment, and assembly of machined parts and tools, such as landing gears, brakes, gear boxes, jigs, and fixtures, using measuring instruments and devices, such as surface plate, height gauges, calipers, and micrometers. Approves or rejects parts, assemblies, and materials, and prepares inspection reports. Consults with vendors and subcontractors regarding interpretation of specifications, rejection, rework, salvage or other disposition of parts, and related issues. May inspect surfaces of metal parts and assemblies subsequent to or following chemical milling, heat treating, and micro-particle cleaning for defects or surface contaminants, using inspection devices. May examine and test ordnance devices and pyrotechnic apparatus, such as ejection seats, under simulated operating conditions to ensure specified operational characteristics. May specialize according to parts inspected, such as machined parts, plastics, sheet metal, and precision assemblies, or according to process involved, such as welding or electroplating.
GOE: 06.01.05 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 88

806.261-046 INSPECTOR, PLASTICS AND COMPOSITES (aircraft mfg.)

Inspects and tests plastic and composite aircraft and aerospace parts, assemblies, and structures for work quality, dimensional accuracy, and conformance to engineering drawings and specifications, using precision measuring and testing instruments and equipment: Reads inspection logs and operation sheets to determine nature and sequence of inspection. Reviews blueprints and production diagrams to visualize layout and assembly procedures, locate critical references, determine parts and materials requirements, dimensions, and finish specifications. Inspects laminated and molded structures during all phases of fabrication and assembly to ensure adherence to specifications. Visually inspects parts and assemblies for fissures, porosity, delaminations, contour, and other physical characteristics. Measures parts and assemblies for dimensional accuracy, using precision measuring instruments, templates, jigs, and fixtures. Verifies location of installed fasteners and hardware. Reads pyrometers, timers, and pressure instruments to verify that operation of curing ovens and other equipment conforms to specifications. Examines assembly surfaces subsequent to curing to ensure specified smoothness and evenness of finish. Sets up and operates test equipment to perform pressure and functional testing of parts and assemblies, and to measure physical properties, such as thickness and hardness. Calculates and records test results. Accepts or rejects parts and assemblies, and prepares documentation to record inspection results, rework required, and disposition of unacceptable products. Confers with production, liaison, inspection, and other personnel to coordinate inspection process and to discuss inspection results. May inspect and test bonding of parts from metal and nonmetallic materials, such as graphite and fiberglass, and be designated Metal Bond Inspector (aircraft mfg.). May be designated by material or process as Inspector, Advanced Composite (aircraft mfg.); Inspector, Plastics Fabrication-Developmental (aircraft mfg.); Inspector, Production Plastic Parts (aircraft mfg.); Inspector, Structural Bonding (aircraft mfg.).
GOE: 06.01.05 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 87

806.261-050 OPERATIONAL TEST MECHANIC (aircraft mfg.) alternate titles: systems checkout mechanic

Conducts final operational testing and troubleshooting of entire electrical, hydraulic, oxygen, pneumatic, fuel, surface control and rigging systems, and component parts installed in aircraft, under simulated flight conditions, according to blueprints, diagrams, engineering documents, and specifications, using precision instruments and test equipment: Locates and disassembles structural, mechanical, electrical, or other parts and assemblies to facilitate testing, using blueprints, diagrams, handtools, and power tools. Attaches fittings, clamps, lines, and hoses to test equipment, such as hydraulic test bench, pressure or vacuum test cart, and fuel quantity calibration equipment, and connects test equipment to system components to be tested. Operates test consoles, test equipment, and aircraft controls, or observes operation of system components, such as control surfaces and landing gear, being operated by other workers to determine system performance under simulated flight conditions. Communicates with other workers during system checkout, using radio headset or other communication device. Operates steering cart or aircraft controls to move aircraft. Interprets and analyzes test results to diagnose malfunctions. Adjusts, replaces, or repairs defective components, or documents rework to be completed by others. Records operational test and rework information. Fabricates test aids as required. May perform operational testing of specific electrical, mechanical, or other aircraft system and be designated Checkout Mechanic, Hydraulic And Rigging (aircraft mfg.); Electrical Checkout Mechanic (aircraft mfg.); Mechanic, Electrical Operational Test (aircraft mfg.); Mechanic, General Operational Test (aircraft mfg.).

GOE: 06.01.05 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 88

806.264-010 HULL INSPECTOR (ship-boat mfg.)

Inspects construction of hulls, compartments, tanks, and decks of ships for conformance to plans and specifications: Examines hulls, hull fittings, and riveting for defects, and alignment of plating and framing. Inspects painted surfaces and caulked edges and seams. Observes testing of tanks, decks, and compartments for strength of material and watertightness. Opens and closes doors, manhole covers, hatches, and hull valves, by hand or remote controls, to verify fit and ease of operation. Inspects heating and ventilation systems to verify size of vent ducts, and to ensure that installation meets specifications. Starts blowers, and measures volume and velocity of air in system, using measuring devices, such as meters and gauges. Inspects piping and valves of ship's service system during pressure test for leakage and strength of material. Records inspection data. May inspect commissioned vessels, afloat or in drydock, for corrosion or deterioration in outer hull, double bottoms, sea chests, and other structural parts.
GOE: 05.07.01 STRENGTH: L GED: R4 M2 L2 SVP: 8 DLU: 77

806.264-014 INSPECTOR, AIRCRAFT LAUNCHING AND ARRESTING SYSTEMS (government ser.)

Inspects mechanical and structural construction and installation, and monitors operational testing of aircraft catapults and arresting gear systems used on aircraft carriers, according to contract specifications: Examines system components, such as pumps, valves, cables, and air and steam lines for defects and faulty installation. Compares operational functioning with contract specifications to ensure serviceability and safety. Tests questionable components, using standard instruments and gauges. Monitors operational testing of equipment and assists in determining causes of malfunctioning equipment. Prepares reports of findings to facilitate modifications.
GOE: 05.07.01 STRENGTH: M GED: R4 M4 L4 V[illegible]: 6 DLU: 77

806.281-010 DYNAMOMETER TESTER, ENGINE (auto. mfg.) alternate titles: engine tester

Tests completed motor vehicle engines prior to mounting in chassis, using conventional or computerized dynamometer, and adjusts and repairs engines to ensure performance conforms to specifications: Lifts engine onto stand, using hoist, and aligns and bolts engine in place. Bolts coupling to dynamometer and engine shaft and attaches fuel and coolant lines, using handtools. Starts engine to drive dynamometer. Reads gauges on instrument panel to determine that power developed at specified speeds, timing, and other engine specifications meet standards. Screws gauge into spark plug opening of successive cylinders while engine is running to verify compression ratios. Reverses drive by cutting off engine and moving switches, causing dynamometer to drive engine. Reads gauges to determine power necessary to turn engine. Adjusts carburetor, sets clearances between tappets and valves, and regulates timing, using feeler gauge, timing light, and handtools. Listens for internal noise, such as piston slap, knocks, taps, and gear noises that indicate irregularities in engine operation, using stethoscope-like instrument, and determines location and cause of malfunctions. Repairs or replaces carburetor, spark plugs, and fuel pump, or fills out report for repairs involving disassembly of engine. May test engine mounted on chassis and be designated Dynamometer Tester, Chassis (auto. mfg.).
GOE: 06.01.05 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 89

806.281-014 EXPERIMENTAL MECHANIC, ELECTRICAL (motor-bicycles)

Builds, modifies, and tests electrical parts to improve motorcycle performance, using handtools, metal fabricating machines, and testing equipment: Positions and clamps parts in fixtures on test bench. Attaches oscilloscope, pyrometer, voltmeter, spark tester, or other test equipment to armature coil, generator, spark plugs, voltage regulator, or other electrical parts. Reads dials and meters to determine amperage, voltage, electrical output and input at specified operating temperature, and to detect open circuits, short circuits, or other electrical malfunctions. Analyzes performance of parts tested to determine deviation from specifications. Disassembles and examines parts to determine cause of malfunction, using handtools. Operates drill press, grinders, engine lathe, or other machines to modify parts tested or to fabricate experimental parts for testing. Compiles and submits reports of test results to engineering department and recommends design or material changes.
GOE: 05.05.10 STRENGTH: L GED: R4 M4 L3 SVP: 7 DLU: 77

806.281-018 FINAL INSPECTOR, MOTORCYLES (motor-bicycles)

Inspects and tests new motorcycles prior to shipment to ensure conformance with specified standards, using mechanic's handtools and specification sheets: Turns screws and bolts to adjust brake, carburetor, clutch, or timing of motor to attain specified performance, using handtools. Activates motor and runs stationary motorcycle at various speeds, and records unusual sounds or vibration in motor, rear end, or transmission. Drives motorcycle over test area to detect malfunctions in engine and defects in body assembly. Observes instrument dials and gauges on dashboard and records deviations from standards, such as performance vibration, low oil pressure, discharging battery, or stiff action. Compiles written report approving unit for shipment or specifies reason for disapproval. When test riding only, may be designated Test Rider (motor-bicycles).
GOE: 06.01.05 STRENGTH: L GED: R4 M2 L2 SVP: 7 DLU: 77

806.281-026 INSPECTOR, PRECISION ASSEMBLY (aircraft mfg.)

Inspects and tests precision parts and assemblies, such as landing gear, control columns, boosters, and impellers, used in manufacturing aircraft and aircraft engines, for conformance to blueprints, drawings, and other specifications, using precision measuring instruments and testing equipment: Visually examines parts for completeness, relationship of component parts, quality, and obvious defects. Measures clearances, dimensions, alignment, mesh, and fit of component parts, using precision measuring instruments, such as boroscope, micrometers, calipers, and gauges. Compares measurements to blueprints, drawings, and specifications to determine if parts conform to acceptable tolerances. Connects assemblies to bench test equipment, and conducts functional and continuity tests to determine if working mechanisms adhere to established standards. Records inspection results to document acceptance, rejection, or rework required of inspected parts and assemblies. May plan method and sequence of inspection and testing when written information is not provided.
GOE: 06.01.05 STRENGTH: L GED: R4 M4 L3 SVP: 7 DLU: 88

806.281-058 CARPENTER, PROTOTYPE (ship-boat mfg.)

Fits and installs bulkheads, sole, and cabinets in prototype fiberglass boats, and cuts pattern for production sailboats: Reads preliminary blueprints to determine bulkhead dimensions and position. Transfers dimensions to marine plywood, using tape measure, square, and marking devices. Cuts wood to specified dimensions, using portable electric saw. Lifts and carries wood and climbs scaffolds to position plywood in hull. Pushes and pulls to position bulkhead in accordance with specifications. Marks and trims bulkhead to remove excess material and ensure bulkhead matches hull contour. Attaches bulkhead to pawl with clamps to immobilize bulkhead. Applies liquid adhesive to back of trim fabric and surface to be covered, using brush. Lays fabric on adhesive-coated area and smooths material with hands to remove wrinkles. Slides and shoves prebuilt cabinets into specified position. Transfers measurements of fitted parts to plywood, using tape measure, square, and marking devices. Cuts wood, using portable electric saw, to make pattern for production sailboat.
GOE: 05.05.02 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 86

806.283-010 TEST DRIVER II (auto. mfg.)

Drives prototype or experimental vehicles, such as automobiles, trucks, motor homes, or buses, under test conditions to obtain performance data: Drives vehicle over test tracks, city streets, or highways to perform specified tests. Gathers data on vehicle performance, such as braking action, stability, and maneuverability. Listens for unusual noises from engine, transmission, differential, and body parts, indicating possible defects. Copies readings from special test equipment. Records information, such as miles traveled and gas, oil, or water consumed, brake operation, noises detected, and general performance on standard form. May install special testing equipment specified for tests. May perform maintenance duties, such as gassing car, changing oil, or lubricating car.
GOE: 05.07.02 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 90

806.283-014 TEST DRIVER I (auto. mfg.) alternate titles: car tester; chassis driver; overland driver; road tester

Drives completed motor vehicle, as vehicle comes from assembly line, on proving ground under simulated road conditions, and observes performance to detect mechanical and structural defects: Examines vehicle before road testing to ensure that equipment, such as electrical wiring, hydraulic lines, and fan belts are installed as specified, and verifies that vehicle has been serviced with oil, gas, and water. Drives vehicle to simulate actual driving conditions. Listens for rattles and excessive mechanical noise, and moves controls to test functioning of equipment, such as horn, heater, wipers, and power windows. Writes inspection report on standardized form indicating defects or malfunctions.
GOE: 06.03.01 STRENGTH: L GED: R3 M2 L3 SVP: 6 DLU: 90

806.361-014 ASSEMBLER-INSTALLER, GENERAL (aircraft mfg.) alternate titles: line assembler, aircraft

Builds up and joins structural assemblies, such as wing, tail, and fuselage, and installs functional units, parts, or equipment, such as landing gear, control surfaces, doors, stowage units, fuel and oil tanks, wire harnesses, and floorboards, according to specifications, using handtools and power tools: Locates and marks reference points and holes for installation operations, using jigs and templates, or measures from previously established or marked station lines or index points, using measuring instruments, such as scales, micrometer, and square. Cuts, trims, files, drills, reams, cements, or solders assembled units prior to installation, using handtools and power tools. Bolts, screws, or rivets accessories, such as brackets, pulleys, and clips to fasten, support, or hang components and installations. Aligns and fits structural assemblies manually or signals OVERHEAD CRANE OPERATOR (any industry) 921.663-010 to position assemblies for joining. Bolts, clamps, and rivets assemblies to fuselage. Installs functional units, parts, or equipment in structural assembly according to blueprints and specifications, using handtools and power tools. Inspects and tests installed units, parts, and equipment to ensure that fit, clearance, alignment, and functional performance comply with standards, using measuring instruments and test equipment.
GOE: 06.02.22 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 87

806.361-018 FINAL INSPECTOR, TRUCK TRAILER (auto. mfg.)

Examines assembled truck trailers for conformance to manufacturing specifications: Measures parts and compares dimensions with work orders and blueprints, using steel tape, fixed gauges, and micrometers. Inspects electrical wiring, following wiring diagrams and color codes. Compares part numbers with assembled units to determine that undercarriage, braking system, wheels, tires, and latching support meet specifications. Examines welded and painted surfaces for flaws. Records type of items examined and defects found. Stamps items that meet specifications.

GOE: 06.01.05 STRENGTH: L GED: R4 M3 L4 SVP: 8 DLU: 89

806.361-022 INSPECTOR, FABRICATION (aircraft mfg.)

Inspects metallic and nonmetallic aircraft parts, such as extrusions, tubing, skins, access doors, fuel and oil tank sections, and air ducts, for conformance to standards and specifications: Reads and interprets inspection manuals, blueprints, engineering drawings, and specifications to determine inspection method and procedures and allowable tolerances. Examines parts for defects, such as cracks, corrosion, pits, and stress and fatigue marks. Measures dimensions, contours, trim lines, angles, radii, and coordination of parts for conformance to blueprints and specifications, using precision measuring instruments and devices, such as surface plate, surface table, micrometers, calipers, protractor, and contour templates. Calculates allowable dimensional deviations, utilizing knowledge of shop math. Verifies configuration of component parts and location of fastener holes, using check fixtures and measuring instruments. Inspects welding, heat treating, bonding, brazing, and machining of parts for conformance to specifications. Observes or conducts testing of parts to ensure that functional performance and physical characteristics conform to fabrication standards and specifications, using testing and measuring equipment. Accepts or rejects parts and records inspection results. Discusses inspection and test results with quality assurance, production, and engineering personnel. May review inspection results prepared by other inspectors. May be designated according to fabrication process involved as Inspector, Machined Parts (aircraft mfg.); Inspector, Sheet Metal Parts (aircraft mfg.); Inspector, Welded Parts (aircraft mfg.).
GOE: 06.01.05 STRENGTH: M GED: R4 M4 L3 SVP: 6 DLU: 88

806.361-026 NEW-CAR GET-READY MECHANIC (automotive ser.; retail trade) alternate titles: car checker; make-ready mechanic

Inspects and services new automobiles on delivery to dealer or customer, and makes minor repairs or adjustments to place vehicle in salable condition, using handtools, portable power tools, and specification sheets: Inspects vehicle for obvious damage and missing major components. Records discrepancies and signs acceptance slip for each vehicle delivered. Inspects vehicle for loose or misaligned items, such as trim, doors, and hardware, and positions defective items according to specifications, using handtools. Starts engine and drives automobile to test steering, brakes, transmission, and engine operation. Activates power equipment, such as electric windows, seats, radio, horn, lights, and directional signals to ensure specified operating standards. Washes car and vacuums interior. Inspects surfaces to detect minor chips and scratches in paint and touches up imperfections, using brush applicator and factory-supplied matching paint. Installs optional equipment specified by customer or dealer, such as outside mirrors, rugs, and seat covers, using handtools. Installs standard components, such as hubcaps and wiper blades, using handtools. Pours antifreeze into radiator according to seasonal requirements. Polishes car to remove preservative coating and road film accumulated during transit. May spray undercoating material on vehicle, using spray gun. May tune engine, using mechanic's tools and test equipment. May install or repair major mechanical, hydraulic, or electromechanical equipment, such as radios, air-conditioners, power steering units, and power brakes, using mechanic's handtools.
GOE: 05.10.02 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 87

806.361-030 AIRCRAFT MECHANIC, ARMAMENT (aircraft mfg.) alternate titles: armament assembler; armament installer

Assembles, installs, and adjusts aircraft armament parts, assemblies, and accessories, according to specifications, using handtools, power tools, and measuring instruments: Cleans and oils armament parts, units, and accessories. Attaches armament mounts to aircraft, using handtools and power tools. Assembles armament system components, such as guns, gun cameras, bomb racks, missile pods, and firing devices, using measuring instruments, handtools, and power tools. Installs parts, assemblies, and accessories in specified location on aircraft, using handtools, power tools, and lifting devices. Installs and connects control cables to electronically controlled units, using handtools, ring locks, cotter keys, threaded connectors, turnbuckles, and related devices, and adjusts cables to specified tolerances. Aligns, adjusts, and synchronizes aircraft armament, using sighting devices and handtools. Tests functional performance of installed units and adjusts, repairs, or replaces malfunctioning units. Prepares and loads live ammunition, missiles, and bombs onto aircraft, according to established procedure. May assist in operational checkout of entire armament system, including test firing, on ground or during test flight.
GOE: 06.01.04 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 89

806.364-010 INSPECTOR, EXHAUST EMISSIONS (auto. mfg.)

Inspects and tests motor vehicle emission control systems, using handtools and computerized testing equipment: Attaches test circuit leads to vehicle ignition system and inserts exhaust probe in tail pipe. Starts and accelerates engine to specified speed. Observes dials and meters of testing equipment to determine exhaust emission content and records readings on chart. Compares computer printout to exhaust emissions chart to detect variations. Examines emission control systems to determine cause of faulty operation. Adjusts and replaces defective parts, using handtools. Records incidence of recurring defects and consults with department heads or plant engineers to initiate corrective measures.
GOE: 06.03.01 STRENGTH: L GED: R3 M3 L3 SVP: 5 DLU: 90

806.367-010 UTILITY WORKER, LINE ASSEMBLY (auto. mfg.) alternate titles: group leader; team coordinator

Determines conditions impeding flow of work on motor vehicle assembly line and notifies responsible personnel that corrective action is necessary: Informs workers of supervisor's instructions. Notifies supervisor of substandard assembly work and defective parts, tools, equipment, and material, or other conditions which hinder assembly process. Notifies supervisor of excessive number of damaged or defective parts, and requests replacement supply of standard parts to expedite work flow. Discusses methods of resolving recurring production problems with workers and supervisors, utilizing knowledge of assembly process. Observes material stock along assembly line and notifies materials-handling personnel or supervisor of impending shortages. Serves temporarily as ASSEMBLER, MOTOR VEHICLE (auto. mfg.) 806.684-010 in work-congested areas. Instructs new workers and demonstrates new or changed operations. May substitute for workers at moving-line assembly operation. May work as member of assembly group (team) and be assigned to different stages of production process. May participate in group meetings to exchange job related information.
GOE: 06.04.01 STRENGTH: M GED: R3 M2 L3 SVP: 4 DLU: 90

806.367-014 QUALITY ASSURANCE GROUP LEADER (auto. mfg.) alternate titles: team coordinator; team leader

Assists QUALITY ASSURANCE SUPERVISOR (auto. mfg.) 806.137-022 in coordinating and monitoring activities of workers engaged in inspecting and testing assembled motor vehicles, components, and parts, as vehicles and subassemblies proceed through stages of assembly process, applying knowledge of quality assurance standards and procedures: Confers with supervisor and reviews assembly specifications and production schedules. Assigns workers to work stations and monitors department activities. Interprets standards and procedures, and assists workers in resolving technical problems. Reports unresolved problems to supervisor. Demonstrates tools, equipment, and work aids used in performing quality assurance tasks. May attend management meetings to represent work group and record minutes of meeting. May conduct work group (team) meetings to relay management information to workers, and solicit response to work-related problems. May perform duties of absent workers to maintain work schedules.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 87

806.367-018 QUALITY ASSURANCE MONITOR (auto. mfg.)

Inspects and tests assembled motor vehicle, components, and parts as vehicle and subassemblies proceed through stages of assembly process, performing any combination of following tasks, to assure that assembly work and materials meet establishment and regulatory standards, using conventional and electronic test equipment and machines: Pries welded surfaces of vehicle body apart to observe welded seams and compare characteristics of spot welds with standards. Conducts nondestructive ultrasonic tests on unpainted vehicle body to assure that production welding standards have been met. Inspects vehicle subassemblies and parts received from suppliers to detect substandard materials prior to distribution to assembly line. Inspects painted vehicle to detect defects in painted surfaces. Measures gaps between vehicle doors, deck lid, hood, and body, and flushness of parts to vehicle body. Measures force required to close vehicle doors and deck lids, operate door-opening buttons, and turn key in doors and deck lid locks. Verifies predetermined torque settings on bolts and nuts used to assemble parts, subassemblies and vehicle body. Verifies and calibrates setting of pneumatic powered and hand torque wrenches. Inspects trim parts and components of vehicle body, such as molding, instrument control panel, wire harnesses, and seat belts. Inspects and tests chassis parts and components, such as engine and transmission, and suspension, brake, and exhaust systems. Functionally tests electrical and mechanical systems of completed motor vehicle. Drives completed vehicle on test track to determine origin of wind noise, squeaks, and rattles. Records results of individual observations and tests, using printed graphic and written forms, electronic data collecting equipment, or keyboard of central computer system. Reviews overall quality of vehicle leaving one stage of production prior to entering next or final stage. Observes assembly and quality assurance process to trace cause of production defects, and confers with production and quality assurance workers and supervisors, and engineering personnel to resolve problems. Attends meetings to obtain and discuss report of production defects observed and recorded by quality audit personnel (centralized auditing unit), for later discussion with department workers and supervisor. Corrects substandard work or replaces defective parts, using handtools and power tools. May work as member of quality assurance group (team) and be assigned different work stations as monitoring needs require. May be designated according to stage of assembly process as Quality Assurance Monitor, Body (auto. mfg.); Quality Assurance Monitor, Chassis (auto. mfg.); Quality Assurance Monitor, Final (auto. mfg.); Quality Assurance Monitor, Trim (auto. mfg.).
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 87

806.380-010 RIVETING MACHINE OPERATOR, AUTOMATIC (aircraft mfg.)

Sets up and operates riveting machines that automatically drill, countersink, and rivet aircraft assemblies, such as wing panels and fuselage sections: Reads and interprets blueprints, engineering drawings, and specifications to determine setup and operating procedures. Positions, aligns, and levels parts to be assembled in machine locating tools, or loads part in automatic work positioner installed on machine, using hoist or overhead crane. Selects and installs tools, such as drills, countersinks, rams, rivet injector, and chamfer tools in machine spindles, using handtools. Loads control media, such as tape or disk, in machine. Adjusts controls to synchronize control media, parts, and machine, and to regulate depth of countersink, air pressure, and ram stroke. Fills hopper with

rivets or other fasteners. Starts machine, observes operation, monitors displays, and readjusts machine to ensure riveted assemblies conform to specifications. Operates machine manually or from automatic settings. Replaces defective cutting tools. May assemble parts prior to loading parts on machine, using rivet gun and bucking bar. May be designated by type of media controlling machine as Riveting Machine Operator, Programmed Control (aircraft mfg.); Riveting Machine Operator, Tape Control (aircraft mfg.).
GOE: 06.01.03 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 88

806.381-014 AIRCRAFT MECHANIC, ENVIRONMENTAL CONTROL SYSTEM (aircraft mfg.)

Lays out, assembles, installs, tests, and adjusts aircraft environmental control systems according to specifications, using handtools, power tools, machines, and test equipment: Lays out location of assemblies and parts, such as turbines, heat exchanges, valves, cylinders, struts, pumps, instruments, lines, and fittings on aircraft, using layout tools, such as scribers, rules, steel tape, and center punches. Measures, cuts, and bends tubing and other materials, using machines, such as saws, brakes, and tube bending equipment. Assembles, installs, and hooks up system components, using handtools, power tools, and fasteners, such as bolts, screws, rivets, and clamps. Tests functional performance of installed systems and portions of systems for malfunctions or leaks, using test equipment.
GOE: 06.01.04 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 88

806.381-018 AIRCRAFT MECHANIC, RIGGING AND CONTROLS (aircraft mfg.) alternate titles: aircraft mechanic, rigger; assembler-installer, cable controlled systems

Assembles and installs rigging and control assemblies and systems that actuate aircraft structures, such as rudder, elevator, canopy, and wing surfaces, according to specifications, using handtools, power tools, and equipment: Reads and interprets blueprints, production illustrations, and other specifications to determine location, identity, and relationship of parts. Assembles, hangs, connects, and installs rigging and control assemblies and systems, including cables, cylinders, components of ailerons and flaps, pulleys, mountings, and brackets, working from established station lines and index points, using templates, jigs, fixtures, handtools, and power tools. Sets, adjusts, and synchronizes rigging and control system components to established tolerances and requirements. Verifies specified tension of cables, using tensionmeter. Operates rigging and control systems to determine functional performance, and reworks or adjusts system components accordingly. May install mechanical linkages and actuators.
GOE: 06.01.04 STRENGTH: M GED: R4 M4 L3 SVP: 6 DLU: 88

806.381-022 ASSEMBLER, AIRCRAFT POWER PLANT (aircraft mfg.) alternate titles: engine buildup mechanic

Builds up aircraft power plant according to blueprints and specifications, using handtools, power tools, and equipment: Positions and secures engine on assembly fixture, using hoist. Connects auxiliary component parts, wiring, cables, lines, and accessory units to engine according to blueprints and assembly procedures, using handtools and power tools. Fits, trims, aligns, and adjusts parts and components, using handtools, power tools, and measuring instruments. Solders, lugs, routes, and ties electrical components. Tests installed parts and accessories for leakage, continuity, and functionality, using test equipment. Reworks, repairs, or replaces faulty components. May install engine in nacelle or other structural assembly. May assemble and install propeller components. May remove engine from crate or packing container.
GOE: 06.02.22 STRENGTH: M GED: R3 M2 L3 SVP: 6 DLU: 88

806.381-026 ASSEMBLER, AIRCRAFT, STRUCTURES AND SURFACES (aircraft mfg.) alternate titles: aircraft mechanic, structures; assembler-installer, sturctures; structures assembler

Assembles tail, wing, fuselage, or other structural section of aircraft, space vehicles, and missiles from parts, subassemblies, and components, such as frames, bulkheads, doors, stabilizers, and landing gear, following blueprints and specifications, using handtools, power tools, and measuring instruments: Positions and aligns subassemblies in jigs or fixtures, using measuring instruments, such as protractors and dividers, following blueprint station lines and index points. Trims and files parts to fit, and verifies fitting tolerances, using measuring instruments, such as gauges and calipers. Drills, reams, and countersinks holes in subassemblies, and bolts, rivets, or otherwise fastens subassemblies into structural assembly, using handtools and power tools. Locates holes to be drilled in structural assembly for installation of parts and components, using jigs, templates, and measuring instruments. Drills holes in structure and attaches brackets, hinges, braces, and clips to secure installations. Installs parts and components, such as incidental plumbing, electrical, rigging, or other functional items, in main structure, using handtools and power tools. May specialize in assembling and installing parts, structural components, and subassemblies to build wing assemblies and be designated Assembler-Installer, Wing Structures (aircraft mfg.).
GOE: 06.01.04 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 88

806.381-034 ASSEMBLER, TUBING (aircraft mfg.) alternate titles: tube bender-assembler

Fabricates and assembles tubing components for air, fuel, oil, hydraulic, and related systems of aircraft and spacecraft, according to specifications, using handtools, power tools, machines, equipment, and measuring instruments: Reads work order, blueprints, sketches, and bend data charts, or works from master tubing templates to determine tubing dimensions, configuration, and finish specifications. Establishes location of cutouts, holes, and trim lines of parts and relationship of parts to each other, using measuring instruments, such as rule, scales, and dividers. Sets up and operates variety of manual and power machines to cut, bend, form, swage, flare, bead, and burr tubing according to specifications. Attaches fittings, such as nuts, sleeves, collars, and caps, to tubing components, using handtools. Aligns, fits, and assembles tubing components in jigs and fixtures for subsequent welding. Modifies holding fixtures and jigs to conform to configuration of tubing samples by placing and fastening guides, stops, cradles, clamps, and rotation holders, using handtools. Measures and inspects tubing components for conformance to master tube data, using master template or measuring instruments. Tests tubing assemblies for leaks and other defects, using pressure testing equipment. Marks identifying information on tubing, using electro-chemical etching device, label, rubber stamp, or other method. Cleans and lubricates tubing and assemblies. May weld tubing and fittings, using tack-welder, induction brazing chamber, or other equipment. May operate tube-straightening machine. May operate oven to form nylon, plastic, and shrink tubing. May set up and operate computer-controlled tube bending systems to bend and check tubing.
GOE: 06.01.04 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 88

806.381-042 CABLE ASSEMBLER AND SWAGER (aircraft mfg.) alternate titles: cable assembler; cable cutter and swager

Fabricates and tests aircraft cable assemblies, such as control cables, tow-target cables, and engine slings, following blueprints and specifications, using measuring instruments, handtools, and machines: Reads and interprets blueprints, work orders, and specifications to determine sequence of operations, type and size of cable and fittings required, quantity, and finished dimensions. Measures and cuts cable to required length, considering cable stretch and metal flow resulting from swaging operations, using cable cutter or saw. Selects and installs dies, jigs, shims, or other accessories in swaging machine, using handtools. Assembles fittings onto cable in specified location. Positions fitting and cable between dies of swaging machine, and depresses pedal to activate machine that swages fittings onto cable, turning cable assembly by hand as fitting is swaged onto cable. Verifies dimensions of cable assembly and position of fittings, using measuring instruments. Tests holding capacity of cable assembly, using proofloading machines. Repairs and reworks cable assemblies as required. May form loops or splices in cables, using clamps and fittings, or by reweaving cable strands. May solder cable ends. May apply lubricants and protective coatings to cable assemblies. May operate crimping machine. May mark identifying information on cable assemblies. May fabricate cable templates.
GOE: 06.02.22 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 88

806.381-046 SHIPFITTER (ship-boat mfg.) alternate titles: fitter

Lays out and fabricates metal structural parts, such as plates, bulkheads, and frames, and braces them in position within hull of ship for riveting or welding: Lays out position of parts on metal, working from blueprints or templates and using scribe and handtools. Locates and marks reference lines, such as center, buttock, and frame lines. Positions parts in hull of ship, assisted by RIGGER (ship-boat mfg.). Aligns parts in relation to each other, using jacks, turnbuckles, clips, wedges, and mauls. Marks location of holes to be drilled and installs temporary fasteners to hold part in place for welding or riveting. Installs packing, gaskets, liners, and structural accessories and members, such as doors, hatches, brackets, and clips. May prepare molds and templates for fabrication of nonstandard parts. May tack weld clips and brackets in place prior to permanent welding. May roll, bend, flange, cut, and shape plates, beams, and other heavy metal parts, using shop machinery, such as plate rolls, presses, bending brakes, and joggle machines.
GOE: 05.05.06 STRENGTH: H GED: R4 M3 L2 SVP: 8 DLU: 77

806.381-050 SHIPFITTER APPRENTICE (ship-boat mfg.)

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.06 STRENGTH: H GED: R4 M3 L2 SVP: 8 DLU: 77

806.381-058 TRAILER ASSEMBLER I (auto. mfg.) alternate titles: assembler, truck-trailer

Assembles prefabricated parts to build metal and wood truck trailers, following blueprints, performing any combination of following tasks: Lays out, fits, drills, screws, bolts, and rivets together metal sheeting, upright frames, bottom and top bars, and angle clips, using pneumatic and hydraulic handtools and machines, and templates. Assembles and fastens together preassembled trailer side and top sections to trailer frame. Marks and cuts openings in sheeting, installs support framing around openings, and installs preassembled doors, handles, hinges, and catches. Fits, drills, bolts, and rivets metal frame posts, headers, and buckplates together to make rear trailer body section, verifying tolerances with square and rule. Assembles and bolts undercarriage in position and mounts tires on wheels. Drills, bolts, and rivets frames, metal and plywood sheeting, lock assemblies, hinges, and bracket angles to assemble doors for trailer bodies. Installs insulating material between framing and outer plates of doors. Screws holding brackets in place and strings wiring for lighting system. Applies sealant to assembled sections. Welds parts. May be designated according to part assembled as Custom-Frame Assembler (auto. mfg.); Trailer-Body Assembler (auto. mfg.).
GOE: 06.02.22 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 89

806.381-062 INSTALLER, ELECTRICAL, PLUMBING, MECHANICAL (ship-boat mfg.)

Installs electrical circuitry and fixtures, plumbing and plumbing fixtures, and engines in sailboats, using power and handtools: Reads blueprints and work diagrams to determine length and size of wire needed. Measures and cuts wire to specified length, using tape measure and electrician's pliers. Strips insulation from ends of wire, using electrician's knife, and connects wire to terminals, using screwdriver. Strings wire harness beneath hull flange to secure harness with nylon strap. Pulls length of wire from harness at specified points to complete branch circuits. Drills holes in bulkhead and cabin and mounts panels and fixtures, using electric drill and screwdriver. Places toilet in prescribed location on toilet pedestal and secures toilet with bolts, using hand-held wrench. Places sink in countertop cutout, applies sealant around edge of sink, using caulking gun, and secures sink with fasteners, using wrench. Forces ends of prescribed, precut hoses over intake and discharge fittings to provide water for plumbing system and engine cooling. Installs and tightens hose clamps to form watertight seal, using wrench and screwdriver. Operates saw to cut holes for valves, outlets, and propellor drive shaft. Inserts valve and outlet fittings through hole to provide watertight fit. Operates overhead hoist controls to position engine in boat. Pushes and pulls engine to position engine over mount rails. Inserts stub shaft in engine drive coupling to aid in aligning engine on mount rails and to locate position for shaft gland on stern post. Drills holes in engine mount rails, using portable electric drill, inserts bolts, and tightens bolts, using wrench, to secure engine to boat. May lead and give directions to other workers performing same duties.
GOE: 05.05.05 STRENGTH: M GED: R3 M3 L3 SVP: 7 DLU: 86

806.381-066 AIRCRAFT MECHANIC, PLUMBING AND HYDRAULICS (aircraft mfg.) alternate titles: assembler, aircraft, plumbing and hydraulics; hydraulic and plumbing installer

Lays out, assembles, installs, and tests plumbing and hydraulic systems and components in aircraft, following blueprints and production illustrations, using handtools, power tools, and test equipment: Lays out location of parts and assemblies, such as surface control boosters, landing gears, vacuum units, and fuel, oil, oxygen, and water systems, according to specifications, using measuring and marking instruments. Assembles and installs parts and assemblies, using handtools and power tools. Adjusts working mechanisms of installed parts and assemblies to blueprint specifications. Conducts pressure, leak, and functional tests of installed systems, using test equipment. Repairs or replaces malfunctioning system components. May fabricate parts incidental to assembly and installation, using shop equipment.
GOE: 06.02.22 STRENGTH: M GED: R3 M3 L3 SVP: 7 DLU: 88

806.381-070 CUSTOM VAN CONVERTER (auto. mfg.; automotive ser.)

Performs any combination of following duties to customize vans according to specifications and work orders, using handtools, power tools and welding equipment: Measures interior of van to determine area to be modified. Fabricates and installs walls, cabinets, and supports. Cuts wall and floor sections of vehicle body for installation of customized interior components and specialized equipment, according to specifications. Installs new top on vehicle body to increase headroom. Installs electrical systems, such as wire harnesses, electrical outlets, and electrical/electronic controls for specialized equipment. Tests electrical systems, using ohmmeter and voltmeter. Positions and installs appliances in vehicle according to specifications. Installs customized interior components, such as carpet, linoleum, wall covering and preassembled windows, according to customer orders. Prepares and paints vehicle surfaces and parts, using spray paint equipment. Installs specialized equipment, such as wheelchair lift, steering and braking systems, for use by handicapped persons.
GOE: 05.05.02 STRENGTH: M GED: R4 M3 L3 SVP: 5 DLU: 88

806.381-074 INSPECTOR, PROCESSING (aircraft mfg.)

Inspects aircraft and space vehicle parts, assemblies, and materials for results or effects of manufacturing processes or operations, such as anodizing, painting, etching, passivating, sandblasting, and chemical milling, for conformance to specifications, using precision measuring instruments and equipment: Examines surfaces of processed parts, assemblies, and materials for uniformity of finish, color, and area covered, and to detect defects, such as corrosion, blistering, pinholes, and dents. Measures dimensions of parts, assemblies, and materials before, during, and after processing cycles for conformance to blueprints, engineering data, shop orders, and other specifications, using precision measuring instruments, such as micrometers and gauges, and equipment. Verifies that temperature ranges and density of processing mixtures and solutions adhere to specifications. Approves or rejects parts, assemblies, and materials, and prepares documentation indicating reason for rejection, rework required, and disposition of parts. May inspect parts and materials for soundness, hardness [HARDNESS INSPECTOR (heat treating) 504.387-010], and for effects of heat-treating [HEAT-TREAT INSPECTOR (heat treating) 504.281-010], using testing equipment.
GOE: 06.01.05 STRENGTH: L GED: R3 M3 L3 SVP: 5 DLU: 88

806.381-078 INSTALLER, INTERIOR ASSEMBLIES (aircraft mfg.) alternate titles: cabin furnishings installer

Installs aircraft interior furnishings, trim, and accessories, such as carpeting, sidewalls, doors, windows, seats, partitions, galleys, and passenger service units, according to specifications, using handtools and power tools: Reads and interprets blueprints, drawings, and production procedures to determine measurements and installation procedures. Measures and marks installation areas in aircraft interior, using measuring and marking instruments and templates. Drills, reams, countersinks, rivets, trims, and files parts and assemblies, using handtools and power tools. Fits and installs items in aircraft, using handtools, power tools, and fasteners, such as screws, rivets, bolts, and speednuts. Fabricates and installs supporting structural devices, such as clips, brackets, angles, gussets, and doublers, using shop equipment. Tests functional performance of installed items. Reworks installations as required.
GOE: 06.01.04 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 87

806.381-082 PRECISION ASSEMBLER (aircraft mfg.)

Assembles, tests, and repairs aircraft and space vehicle precision hydraulic and structural subassemblies, assemblies, and incidental mechanical units, such as landing gear, elevator, and control stands, according to blueprints and specifications, using handtools, power tools, precision instruments, and test equipment: Reads and interprets blueprints, specifications, and related documents to determine methods and sequence of operations. Examines component parts for defects. Measures parts to ensure conformance to specified dimensions and lays out reference points for holes, trim lines, and part locations, using precision measuring instruments. Drills, reams, trims, shims, files, and smooths parts, using handtools and power tools, to ensure fit and clearance of component parts. Aligns, fits, and assembles hydraulic, structural, and mechanical components into completed assembly, using jigs, fixtures, measuring instruments, handtools, and power tools. Tests functional performance of completed assemblies, such as booster units and aircraft heaters, using test equipment. Reworks, replaces, and realigns parts, adjusts valves, retorques fittings, and retests units to ensure conformance to specifications.
GOE: 06.01.04 STRENGTH: M GED: R4 M4 L4 SVP: 7 DLU: 89

806.383-010 ROADABILITY-MACHINE OPERATOR (auto. mfg.)

Drives completed motor vehicle onto roller drums of computerized roadability machine that tests mechanical and electrical systems of vehicle: Drives vehicle onto roller drums of test machine, and connects computer cables of machine to terminals of vehicle instrument control panel. Moves shift lever through range of gears, to run rear wheels of rear-wheel drive vehicles and front wheels of front-wheel drive vehicles at specified speeds for computer testing of vehicle components, such as transmission, cruise control, and brake system. Observes computer video display screen of test machine to verify that vehicle performance conforms to specifications. Attaches computer printout of test results to inspection document in vehicle. Disconnects test cables, and drives vehicle to repair or shipping area.
GOE: 06.01.05 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 90

806.384-014 INSPECTOR, RETURNED MATERIALS (auto. mfg.) alternate titles: salvage inspector; service-claims inspector; service dismantler

Tests, dismantles, and inspects motor vehicle parts returned as defective to determine cause of defects: Examines unit for cracked or missing components. Tests unit under simulated operating conditions to determine nature of defect, using computerized testing equipment. Dismantles unit and inspects components for conformance to specifications, using instruments, such as micrometers, indicator gauges, hardness testers, calipers, and sine bars. Determines cause of defect and prepares report of findings. Routes unit to department for replacement, repair, or salvage. May judge validity of customer's claim of defective parts or work. May specialize according to type of product inspected.
GOE: 06.03.01 STRENGTH: M GED: R3 M2 L3 SVP: 5 DLU: 90

806.384-022 ROCKET-TEST-FIRE WORKER (ordnance)

Prepares rocket-motor cases for test firing and cleans cases subsequent to firing: Conveys rocket-motor case to test area, using forklift truck. Positions case in heat-conditioning chamber, using lift truck, and turns dial on control panel to heat case to specified temperature. Positions case on test stand, using hoist, and attaches thermocouples from test stand to case preparatory to test-firing. Removes case from stand subsequent to firing and immerses case in chemical bath to remove liner and propellant residue, using hoist.
GOE: 05.11.04 STRENGTH: M GED: R3 M1 L1 SVP: 5 DLU: 77

806.384-030 ASSEMBLER, METAL BONDING (aircraft mfg.) alternate titles: assembler, bonding

Bonds aircraft and space vehicle parts and assemblies, such as sheet metal skins to honeycomb core, according to blueprints and specifications, using handtools, power tools, and equipment: Reads process charts, work orders, and specifications to determine sequence of bonding operations, amount of bonding agent to be applied, and areas to be bonded. Examines parts to verify that prior processes have been completed and that identifying information corresponds with specifications. Measures, trims, fits, forms, and shapes mating surfaces of parts to ensure required contact can be accomplished, using measuring instruments, handtools, and power tools. Cleans dust, dirt, oil, and other foreign matter from contact surfaces, using cleaning solutions and rags. Positions, aligns, fits, and assembles parts, materials, and incidental functional items on jigs, fixtures, platen or project plates, using handtools, power tools, and fasteners. Applies primer and metal bonding film, foam, or other adhesives to bonding surfaces. Dries and cures parts and assemblies, using vacuum fixtures or presses with heated platens. Adjusts curing oven controls to regulate pressure, time, and heating temperature. Loads and unloads assemblies from oven, manually or using equipment. May mix adhesives.
GOE: 06.02.24 STRENGTH: M GED: R3 M2 L3 SVP: 5 DLU: 88

806.384-034 ASSEMBLER, SUBASSEMBLY (aircraft mfg.) alternate titles: detail assembler

Assembles parts, such as spars, ribs, and braces, to form structural subassemblies of aircraft, such as airfoils, control surfaces, fuselage tops and bulkheads, doors, and windows, according to specifications, using handtools and power tools: Reads and interprets blueprints and specifications to determine assembly sequence, tooling requirements, measurements, and allowable tolerances. Marks reference lines and points on parts, using templates, or by measuring from blueprint index points and station lines, using rule, protractor, and divider. Cuts, trims, files, and deburrs parts, using handtools or power tools. Measures parts to verify dimensions, using precision instruments, such as micrometers and calipers. Fits and assembles parts and fittings, such as braces, hinges, brackets, keyways, and nut plates, in jigs and fixtures, using clamps. Drills, reams, and countersinks holes, using power tools. Deburrs keyways, holes, and cable grooves, using burring tool. Marks reference symbols on parts for subsequent riveting. Installs bolts, screws, rivets, and other fasteners to join parts, using power tools. Cements, tapes, and glues parts as required. May install electric and hydraulic components. May bend tubing. May make temporary assembly fixtures. May buck rivets.
GOE: 06.02.22 STRENGTH: M GED: R3 M2 L3 SVP: 5 DLU: 87

806.384-038 PRESSURE SEALER-AND-TESTER (aircraft mfg.) alternate titles: sealer, aircraft

Cleans, seals, and tests aircraft pressurized sections and cavities, according to blueprints and specifications, using handtools, power tools, and pressure testing equipment: Reads and interprets blueprints and process specifications to determine area to be sealed, volume of pressure to be applied, and allowable tolerances. Applies cleaning solvent or other solution to interior and exterior surfaces of section to be sealed, such as fuel and water tanks, integral wings, and fuselage, using brushes, rags, spray guns, liquid vacuum cleaners, and air hoses. Applies sealing compounds to surfaces, using fillet guns, brushes, and similar equipment. Dries sealant, using heat lamps and compressed hot air. Bolts access doors and hatches, disconnects plumbing lines, electrical cable and rigging, and caps connections with plugs and threaded fixtures to make section airtight. Sets up and operates pressure-testing equipment to detect leakage. Visually and audibly checks for leakage of areas under pressure, and applies sealing tape, cement, liquid rubber, grommets, and other aids to eliminate leakage. Reinstalls accessories disconnected prior to test. May repair structural defects, using tools and equipment. May seal and test integral wing sections serving as fuel cells, working within closed or difficult areas to access, and be designated Fuel Tank Sealer And Tester (aircraft mfg.) or Integral Tank Sealer (aircraft mfg.). May seal and pressurize aircraft fuselage sections and be designated Pressurization Mechanic (aircraft mfg.) or Pressurizer (aircraft mfg.). May set up and operate air pressure cabinet located outside section being tested by others to maintain constant internal pressure and be designated Pressurization Mechanic, Air Control (aircraft mfg.).
GOE: 06.02.24 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 88

806.387-014 WHEEL INSPECTOR (r.r. trans.)

Inspects railroad wheels for defects and measures wheel flange for wear, using gauges, micrometer, and similar measuring instruments: Examines and feels surface of wheels for cracks and wear. Marks defective area with chalk or paint. Strikes wheel with hammer and listens to sound to detect flaws in metal. Measures wheel flange for wear and gauge (distance) between wheels, using micrometer and similar measuring instruments. Prepares reports describing defects in wheels and amount of wear in wheel flange, with recommendations for repair, replacement, or scrapping.
GOE: 05.07.01 STRENGTH: L GED: R3 M2 L2 SVP: 8 DLU: 77

806.464-010 BOAT RIGGER (retail trade; ship-boat mfg.) alternate titles: boat accessories installer; outboard-motorboat rigger

Installs accessories in outboard or inboard motorboats: Drills holes, attaches brackets, and installs accessories, such as lights, batteries, ignition switches, fuel tanks, and guide pulleys, using handtools and power tools. May change propellors and adjust motors to obtain maximum performance. May install outboard and inboard motors and controls, using handtools. May load boats on trailers and make deliveries to customers.
GOE: 05.10.01 STRENGTH: M GED: R3 M2 L1 SVP: 4 DLU: 77

806.481-010 ASSEMBLER, ALUMINUM BOATS (ship-boat mfg.)

Assembles aluminum boats, performing any combination of following tasks: Bends edges of precut hull bottom, using roller-bending device and hammer. Positions hull sides along bottom and clamps them in place. Drills holes through hull sides, using portable electric drill. Rivets hull bottom and sides together, using pneumatic rivet gun. Bolts wooden gunnel strips and transom in place to stiffen hull. Positions parts, such as ribs, stringers, seats, and flotation tanks in hull, using rule and template and following blueprints. Clamps parts in place, drills holes, and bolts or rivets parts to hull. Drills holes in hull, following layout marks and installs accessories, such as cleats, lights, and windshields. Seals seams with aluminum caulking compound to prevent hull leakage. Files rough edges with hand file.
GOE: 06.02.22 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

806.481-014 ASSEMBLER, INTERNAL COMBUSTION ENGINE (engine-turbine) alternate titles: engine assembler

Assembles internal combustion engines according to standard procedures, using handtools, power wrenches, and gauges, performing any of following operations on assembly line: Positions and bolts crankcase, block, and trunion support together to form basic unit of engine, using wrenches, hammer, and power hoist. Mounts crankshaft and camshaft to bearings and tightens bearing caps, using power wrench. Presses gears, sheave, flywheel, or sprocket to shafts, using hand or hydraulic press, and locks them with keys and pins. Inserts cylinder sleeves into engine block or casing and fits piston and connecting rod assembly into cylinder and bolts it to crankshaft. Aligns engine parts, such as camshaft and crankshaft gears, and sets timing and clearances between fixed or moving parts, using aligning gauges, dial indicator, feeler gauges, and timing light. Examines parts or observes movement of completed assemblies to detect malfunction, and discards or replaces defective parts or assemblies. Bolts subassemblies, such as cylinder head, camshaft assembly, fuel pump, carburetor, governor, and water pump, to engine, using torque wrench and other handtools. Flares and connects copper or brass tubing for lubricating and cooling systems, using flaring tools and wrenches. May cut and bend tubing to conform to curvature of engine, using bending fixtures and tubing cutters. May lap cylinder counterbore and valve seats to seat cylinder sleeves and valves, using hand lapping tool and compound. May disassemble, polish, buff, and reassemble motors for demonstration purposes and be designated Assembler, Show Motor (engine-turbine). May be designated according to type of engine assembled as Diesel-Engine Assembler (engine-turbine); Gasoline-Engine Assembler (engine-turbine); Motorcycle-Engine Assembler (engine-turbine); Outboard-Motor Assembler (engine-turbine).
GOE: 06.02.22 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

806.667-010 HELPER, METAL HANGING (mfd. bldgs.)

Assists METAL HANGER (mfd. bldgs.; vehicles, nec) in installation of sheet metal panels, molding, and exterior parts, using handtools and portable power tools: Secures bottom edge of siding to frame, and attaches accessories, such as reflectors and light covers, using screwdriver. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 06.04.22 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

806.684-010 ASSEMBLER, MOTOR VEHICLE (auto. mfg.) alternate titles: quality worker; team member

Assembles motor vehicles, such as automobiles, trucks, buses, or limousines, at assigned work stations on moving assembly line, performing any combination of following repetitive tasks according to specifications and using handtools, power tools, welding equipment, and production fixtures: Loads stamped metal body components into automated welding equipment that welds together components to form body subassemblies. Positions and fastens together body subassemblies, such as side frames, underbodies, doors, hoods, and trunk lids, to assemble vehicle bodies and truck cabs preparatory to body welding process. Bolts, screws, clips, or otherwise fastens together parts to form subassemblies, such as doors, seats, instrument control panels, steering columns, and axle units. Installs mechanical and electrical components and systems, such as engine, transmission, and axle units; pumps; wire harnesses; instrument control panels; and exhaust, brake, and air-conditioning systems. Fits and adjusts doors, hoods, and trunk lids. Seals joints and seams, using caulking gun. Fastens seats, door paneling, headliners, carpeting, molding, and other trim into position. Fills vehicle systems with brake and transmission fluids, engine coolant, and oil. May apply precut and adhesive coated vinyl tops and pads to vehicle roofs. May verify quality of own work and write description of defects observed on documents attached to vehicle bodies. May enter and retrieve production data, using computer terminals. May work as member of assembly group (team) and be assigned different work stations as production needs require or shift from one station to another to reduce fatigue factor. May participate in group meetings to exchange job related information. May be designated according to component assembled or installed as Assembler, Engine (auto. mfg.); Assembler, Seat (auto. mfg.); or stage of assembly as Assembler, Body (auto. mfg.); Assembler, Chassis (auto. mfg.); Assembler, Final (auto. mfg.); Assembler, Trim (auto. mfg.).
GOE: 06.04.22 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 90

806.684-014 ASSEMBLER, BICYCLE I (motor-bicycles)

Assembles bicycles, using handtools and portable power tools: Positions *head* of frame in drill press and pulls lever to drill holes for name plate. Fastens name plate to frame, using brads and hammer. Positions frame in hydraulic press and pulls lever to press bushings in head and *hanger* of frame. Positions frame on post and attaches kickstand to frame, using retaining pin and pliers. Slides sprocket and cone onto crank and inserts crank assembly in frame. Turns locknut to secure crank assembly in frame, using wrench. Positions and secures drive chain, using snap-on tool. Installs front fork assembly, using air wrench and lock pliers. Positions fender and brace in riveting machine and depresses pedal to rivet brace to fender. Bolts fender assembly to frame, using air wrench. Positions wheels in front and rear fork assemblies and secures wheels to frame, using air wrench. Fingers spokes to verify tension and tightens or loosens spokes, using nipple wrench. Bolts seat post to frame, using air wrench. May examine finished bicycle for defects in paint finish and assembly [INSPECTOR, BICYCLE (motor-bicycles)].
GOE: 06.04.22 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

806.684-018 ASSEMBLER, CAMPER (vehicles, nec)

Assembles camper bodies and installs interior units according to diagrams and written specifications, performing any combination of following tasks: Assembles and secures floor to camper frame, using power screwdriver. Fastens side and end sections to frame, using hammer and screwdriver. Spreads mastic

on floor and lays linoleum tile, using trowel and tile roller. Installs interior paneling and prefabricated cabinets, using staple gun. Uncrates refrigerator, stove, and water container, and inspects exterior surfaces to detect dents and scratches. Connects water supply and drainage lines to sink, using wrenches. Slides appliances into specified cabinets and glues molding around edges of cabinets to secure appliances, using glue gun. Attaches hinges to cabinet doors and installs doors on cabinets, using screwdriver. May be designated according to part assembled or unit installed as Appliance Installer (vehicles, nec); Cabinet-And-Trim Installer (vehicles, nec); Floor Finisher (vehicles, nec); Floor Framer (vehicles, nec); Side Framer (vehicles, nec).
GOE: 06.04.22 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 77

806.684-022 ASSEMBLER, DECK AND HULL (ship-boat mfg.) alternate titles: deck and hull assembler

Joins deck and hull sections of fiberglass boats, using handtools and portable power tools: Positions deck on hull and seals seam with caulking compound, using caulking gun. Lays aluminum gunwale strip along deck and hull seam and hammers it into place with mallet. Places drilling template along gunwale strip and drills rivet holes through strip with portable electric drill. Rivets or bolts deck and hull together, using rivet gun or impact wrench. Forces rubber bumper rail into gunwale strip with special roller and cuts off surplus strip with hacksaw. Hammers protective and decorative aluminum channel trim around deck and cabin edges with mallet. May trim edges of transom opening with saw prior to installing protective trim. May sand edges and interior of decks and hull, using power sander. May install miscellaneous hardware, such as mooring cleats, toerails, bulkhead panels, and pulpits, using handtools [BOAT OUTFITTER (ship-boat mfg.)].
GOE: 06.02.22 STRENGTH: H GED: R3 M1 L1 SVP: 3 DLU: 77

806.684-026 ASSEMBLER, INSULATION AND FLOORING (ship-boat mfg.)

Sprays fiberglass foam insulation in boat bottoms and installs boat flooring, using pneumatic spray gun, handtools, and portable power tools: Turns valve to open air line of spray gun, secures spray gun hose to foam barrel, and attaches nozzle to spray gun. Reads gauges to ensure specified air pressure, temperature, and chemical mixture of foam. Squeezes spray gun trigger to start flow of foam to boat bottom. Selects precut stringers, used to reinforce motor-mount areas, according to model number of boat. Positions and secures stringers to specified area of boat bottom, using fiberglass mats, resin, and squeegee. Selects prefabricated flooring according to type and size of boat and positions flooring over solidified foam insulation. Drills holes in flooring and insulation, using portable power drill, and fastens flooring to boat bottom, using screwdriver. Spreads wood putty over screwheads and caulks edges of flooring to make boat waterproof, using caulking gun and putty knife. Pushes boat to next station in assembly line.
GOE: 06.04.34 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

806.684-038 AUTOMOBILE-ACCESSORIES INSTALLER (automotive ser.)

Installs automobile accessories, such as heaters, radios, antennas, safety seat belts, seat covers, or special clamps, and mirrors: Drills and taps holes, assembles and fits accessories to automobile, and tightens bolts and clamps. May be designated according to specialty as Radio Installer, Automobile (automotive ser.).
GOE: 05.10.02 STRENGTH: M GED: R2 M1 L2 SVP: 4 DLU: 77

806.684-046 CAR TRIMMER (railroad equip.)

Installs interior fixtures in railroad cars, using handtools and portable power tools: Positions and bolts seats in place, using wrench. Bolts door tracks and posts to side of car, using impact wrench. Guides door into tracks, using hoist. Positions and fastens windows in casings, using screwdrivers. Rubs paraffin over window guides to ensure smooth operation. Installs and aligns steps and ladders, using wrenches, jacks, hoist, and sledge. Measures to determine location of other fixtures, such as curtains, handles, signal cords, and door hardware, using gauges, and secures fixtures in place, using screwdrivers and portable power tools.
GOE: 06.04.22 STRENGTH: H GED: R3 M2 L1 SVP: 3 DLU: 77

806.684-050 DOOR ASSEMBLER (mfd. bldgs.; vehicles, nec)

Fabricates parts and assembles precut wood and metal doors for use in mobile homes, trailers, or prefabricated buildings: Positions specified wood frame members in jig and nails or staples members together to form doorframe. Packs insulation between frame members. Marks and cuts sheet metal to conform to dimensions of doorframe, using ruler and powered shear. Bends sheet metal to fit over doorframe, using handbrake. Attaches metal panels to doorframe, using handtools or rivet gun. Marks locations of window and lock on door, using templates, and cuts openings in door, using electric router or power shears. Installs lock assembly and prefabricated window assembly in door, using handtools. Marks positions of hinges on door, using template, and screws hinges to doors, using screwdriver. May attach metal and rubber weather stripping for exterior doors.
GOE: 06.02.22 STRENGTH: M GED: R3 M2 L1 SVP: 3 DLU: 77

806.684-054 FIBERGLASS LAMINATOR (ship-boat mfg.; vehicles, nec) alternate titles: laminator

Laminates layers of fiberglass on molds to form boat decks and hulls, or fiberglass bodies of golf carts: Selects precut fiberglass mat, cloth, and woodbracing materials, according to model number of boat or golf cart. Places layers of mat and cloth in mold and smooths out wrinkles by hand. Trims excess material from mold, using hand shears. Mixes catalyst into resin and saturates cloth and mat with mixture, using brush. Works saturated mat and cloth into shape of mold with hands and squeegee, to remove air bubbles and smooth surfaces. Bonds wood reinforcing strips to deck and cabin structures, using resin-saturated fiberglass. Cuts hardened fiberglass from mold with trimming knife. May specialize in molding part of boat and be designated Deck Molder (ship-boat mfg.); Hull Molder (ship-boat mfg.). May install stringers and flooring in hull [OVERLAY PLASTICIAN (ship-boat mfg.) 806.684-106]. May spray chopped fiberglass, resin, and catalyst on mold, using pneumatic spray gun with chopper attachment. May remove hulls and decks from mold [HULL AND DECK REMOVER (ship-boat mfg.) 809.667-010]. May inspect, clean, and assemble molds prior to start of work. May apply wax to surface of mold to facilitate assembly and removal of laminated parts. May apply resin to surfaces of mold prior to placement of fiberglass mats.
GOE: 06.02.32 STRENGTH: M GED: R3 M2 L1 SVP: 4 DLU: 80

806.684-066 INSTALLER-INSPECTOR, FINAL (vehicles, nec)

Installs attachment in fold-out-top campers and inspects campers preparatory to shipment, using handtools and portable power tools: Fits mattress and pad in specified location in camper. Spreads canvas fold-out top over camper body and attaches top to body, using staple gun and pop-rivet tool. Zips prefabricated door into fold-out top. Opens and closes top to test ease of movement and folds top into camper body. Hooks up water system hose to outlet and reads gauges to detect leaks in system. Turns faucet to test operation of camper water system. Connects electrical cord to camper outlet and tests lights, outlets, and refrigerator to ensure conformance to standards. Examines interior paneling, cabinets, linoleum flooring, and fixtures to determine that components meet company specifications and have been installed according to work orders. Attaches inspection tag to camper, listing any defects in unit. Routes defective unit to repair department and pushes completed unit to shipping area.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

806.684-070 INSTALLER, METAL FLOORING (railroad equip.)

Installs prefabricated metal flooring in railroad cars preparatory to welding, using handtools and portable power tools: Measures transverse centerline of car to determine location of flooring, using location fixtures. Positions flooring sections in specified relationship to side sill or longitudinal centerline, using rule, gauge, and pry bars. Secures flooring to underframe of car in preparation for welding, using wedges and jacks.
GOE: 05.12.12 STRENGTH: H GED: R2 M1 L1 SVP: 4 DLU: 77

806.684-074 INSTALLER, MOVABLE BULKHEAD (railroad equip.)

Installs movable bulkheads and bulkhead trolley in railroad cars, using handtools and portable power tools: Measures and marks centerline on roof and floor of car, using chalkline and gauges. Positions and secures overhead rail assembly in car according to marked centerlines, using cotter pins, wedges, and clamps. Positions and secures trolley-beam assembly to rail assembly, using wire. Guides bulkhead onto trolley, using hoist, and bolts bulkhead to trolley, using impact wrench. Pushes bulkhead along overhead trolley-and-rail assembly to end of car and depresses lever to lock bulkhead in place. Installs and bolts bottom bulkhead track to underframe of car, using power drill and impact wrench. Grinds track surfaces to remove burrs and rough edges, using portable grinder.
GOE: 05.10.01 STRENGTH: H GED: R3 M1 L1 SVP: 4 DLU: 77

806.684-082 TRAILER ASSEMBLER II (auto. mfg.) alternate titles: trailer assembler, paneling; trailer-sections assembler

Assembles sections of trailer bodies, following diagrams, using jigs and fixtures, handtools, and power tools: Positions and aligns metal rails, frames, and sheeting in jigs and fixtures, using measuring tape and square to verify alignment of parts. Drills holes in parts at designated points, using power hand drill and drill template. Rivets parts together to form fabricated sides, top, front, and rear sections, using power rivet gun. Installs plywood panels, insulation, and flooring in interiors of trailer bodies. May cut structural truck body parts or trim excess metal from parts, using power saws. May weld steel door frames. May seal riveted seams, using caulking compound. May paint truck body parts. May work as member of assembly team.
GOE: 06.02.22 STRENGTH: H GED: R3 M2 L2 SVP: 3 DLU: 89

806.684-086 MOLD LAMINATOR (concrete prod.; ship-boat mfg.) alternate titles: plug-and-mold finisher

Builds up layers of fiberglass and resin over plug (wooden or plaster pattern) to form molds for plastic product sections or to be used in casting concrete products, using handtools and portable power tools: Fills cracks, depressions, and holes on plug surface with plastic filler material and sandpapers plug to smooth surface. Applies and buffs wax on plug to obtain glossy surface. Brushes surface of plug with water-soluble parting agent to facilitate removal of mold. Covers plug with fiberglass cloth and trims off excess cloth with shears. Mixes specified proportions of resin and catalyst and brushes mixture on cloth. Works mixture into cloth with hands and squeegee to remove air bubbles and to smooth surface. Examines layer of fiberglass and resin after hardening for rough spots and air bubbles and sandpapers defective areas. Laminates additional layers of fiberglass to initial layer to obtain mold of specified thickness. Removes plug from mold, using wooden tool and airhose. Trims excess fiberglass from edge of mold with knife. Inspects completed mold for surface defects. May bond mold to tubular holding device with resin-saturated fiberglass strips. May repair and modify fiberglass molds, using handtools.

GOE: 06.02.32 STRENGTH: M GED: R3 M1 L1 SVP: 4 DLU: 77

806.684-090 MOTORCYCLE ASSEMBLER (motor-bicycles)

Assembles complete motorcycles, performing any combination of following tasks: Positions and clamps frame in fixture on conveyor line. Bolts fork, motor, transmission, rear and front wheels, chain drives, handlebars, lights, seats, and other parts to frame, using handtools or power tools. Turns gas or spark handle controls, and adjustment screws on distributor and carburetor to set spark and gas feed. Turns screws to adjust chain drive and clutch to specified tension. Focuses headlight on testing board and turns adjustment screws to align beam of light. Lubricates motorcycle with grease gun. Records motor and sales numbers. May relieve assemblers and be known as Utility Assembler (motor-bicycles).
GOE: 06.02.22 STRENGTH: H GED: R3 M1 L1 SVP: 5 DLU: 77

806.684-094 MOTORCYCLE SUBASSEMBLER (motor-bicycles)

Assembles forks, frames, transmissions, or other subassemblies of motorcycles, using handtools or power tools: Positions parts or components in holding fixture on bench. Drills, taps, and reams holes in parts, using handtools, power tools, or single-spindle drill press. Bolts, screws, fits, or presses parts together, using screwdriver, wrench, arbor press, or flexible power press. Aligns and adjusts movement of parts or sets clearance between parts, using dial indicators, feeler gauges, or snap gauges. Examines parts or observes their operation in subassembly to detect defective parts. Replaces defective parts, using handtools. May test assembled units, such as transmissions, under simulated operating conditions. May be designated according to component assembled as Brake Assembler (motor-bicycles); Clutch Assembler (motor-bicycles); Fork Assembler (motor-bicycles); Frame Assembler (motor-bicycles); Handle-Bar Assembler (motor-bicycles); Transmission Assembler (motor-bicycles).
GOE: 06.04.22 STRENGTH: H GED: R3 M2 L1 SVP: 5 DLU: 77

806.684-098 ORDNANCE TRUCK INSTALLATION MECHANIC (ordnance)

Assembles and installs ordnance equipment in mobile repair vehicles according to standard procedures, performing one or combination of following duties: Assembles sheet metal workbenches for installation into trucks, using handtools. Mounts and secures workbenches in trucks, using handtools. Measures to determine locations for installations in truck and installs bench grinders, lathes, milling machines, and other mechanical equipment, using power hoist, handtools, and measuring instruments. Stocks truck with handtools, spare parts, and auxiliary equipment, such as oilcans, hand grinders, and flashlights. Compares contents of truck against equipment checklist to ensure completeness of installations.
GOE: 06.02.22 STRENGTH: M GED: R3 M2 L1 SVP: 3 DLU: 77

806.684-102 OUTFITTER, CABIN (ship-boat mfg.)

Installs fixtures and appliances in cabin of fiberglass or metal boat, using handtools and portable power tools: Measures and marks location of fixtures, such as windows, doors, and trim, using carpenter's square and rule. Cuts and drills fastening holes, using portable power saw and drill. Inserts fasteners and secures fixtures and appliances to superstructure, using power screwdriver. Installs prefabricated bulkheads to separate cabin compartments, using carpenter's tools. Applies adhesive wall covering to specified sections, using handbrush. Installs wall paneling in specified locations, using carpenter's tools. May perform duties as described under GROUP LEADER (any industry) Term Title.
GOE: 06.04.22 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

806.684-106 OVERLAY PLASTICIAN (ship-boat mfg.) alternate titles: boat bottomer

Installs wooden stringers and precut plywood sheets in molded fiberglass boat hulls to strengthen boat bottoms, using fiberglass bonding agent and handtools: Obtains precut stringers and plywood sheets according to model number of boat. Mixes catalyst into resin to control setting rate of bonding agent and saturates strips of fiberglass mat with mixture, using brush. Lays strips between stringer and hull and clamps stringers in place with special holding device. Lays strips of material along seams of stringers to reinforce bond and smooths out air bubbles by hand. Covers hull bottom interior and tops of stringers with saturated strips. Positions plywood flooring on bottom of boat and places clamps or weights on flooring to press it against hull and stringers. May install precut wood flotation tanks, seat supports, and bulkheads. May install plastic blocks of flotation material, fiberglass gasoline tanks, and other fiberglass fixtures.
GOE: 06.02.24 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

806.684-114 RAILROAD-CAR-TRUCK BUILDER (railroad equip.)

Assembles frames, beams, brakes, and springs to form railroad car truck and wheel units, using handtools: Positions bolster on erection block and lowers side frames and brake beams into bolster slots, grooves, and recesses, using hoist. Slips brakeshoes into receptacles and secures brakeshoes with pin, using hammer. Assembles brake parts, such as bottom rods, traverse plates, fulcrum, and levers and secures unit to brake beams and shoes, using bolts and cotter pins. Sets springs on studs in spring housing and places adapters in grooves on axle wheel bearings. Lifts complete truck unit over truck wheel assemblies, using hoist, and lowers it onto adapters. Pushes truck and wheel assembly along track for next operation.
GOE: 06.04.22 STRENGTH: H GED: R3 M1 L1 SVP: 3 DLU: 77

806.684-118 REPAIRER, GENERAL (auto. mfg.)

Installs, replaces, or repairs parts on motor vehicle bodies, using handtools and power tools and following specifications and inspection reports: Reads specifications and inspection reports to determine incorrectly installed, missing, or defective parts. Installs, replaces, or repairs parts, such as wheels, doors, interior and exterior trim, and vinyl tops. Installs or tightens missing or loose screws, bolts, and fasteners, using power tool. Applies sealant to window seams, using caulking gun, and removes excess sealant, using handtool. Indicates items repaired on repair sheet. May drive vehicle from assembly line or holding area to work station. May work as member of team and be assigned to different work stations as production needs require.
GOE: 06.04.22 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 90

806.684-122 RIGGER HELPER (ship-boat mfg.)

Assists RIGGER (ship-boat mfg.) in moving, lifting, and positioning machinery and structural members of ships under repair or construction: Positions chain falls or hoists, air pullers, and block and tackle as directed by RIGGER (ship-boat mfg.). Pulls or slacks off on rigging, following hand signals, to maneuver equipment in close quarters, lay keel and bilge blocks in drydock, and position ship in drydock. May issue and maintain rigging gear in rigging loft and be designated Rigging-Loft Repairer (ship-boat mfg.). Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.05.06 STRENGTH: H GED: R3 M1 L1 SVP: 5 DLU: 77

806.684-126 ROOF FITTER (railroad equip.)

Aligns, fits, and secures roof onto railroad cars, using handtools and portable power tools: Positions spreading device and chain jack inside car, using hoist. Manipulates controls on spreading device or chain jack to push out or pull in sides of car to specified width. Attaches holding device between sides of car to retain specified width. Erects scaffolding in car to facilitate climbing to roof area, using carpenter's tools. Climbs scaffolding and brushes sealing compound on top plates of car. Signals crane operator to lower prefabricated roof onto top plates of car. Aligns and fastens roof onto car, using impact wrench. Bends roof flanges over sides of car, using hammer or mallet. Reams holes in roof and top plate of car and inserts drift pins preparatory to riveting. Disassembles and removes spreading device, jack, and scaffolding, using handtools.
GOE: 06.02.22 STRENGTH: H GED: R3 M2 L1 SVP: 4 DLU: 77

806.684-130 SKIN-LAP BONDER (aircraft mfg.)

Seals aircraft fuselage skin-laps preparatory to riveting, using handtools and sealing compound: Reads blueprints, work orders, and specifications to determine skin-lap to be sealed and type of sealant to be used. Cleans skin-lap area, using solvent, cloth, and brush. Applies specified sealing compound to skin-lap area, using fairing tools, roller, and sealing gun. Cleans bonded area to remove excess sealant subsequent to riveting, using solvent and cloth. May mix adhesives, cements, and similar sealing compounds.
GOE: 06.04.24 STRENGTH: M GED: R3 M2 L3 SVP: 3 DLU: 87

806.684-134 TRANSMISSION TESTER (auto. mfg.) alternate titles: gear tester

Tests assembled motor vehicle transmissions under simulated operating conditions to detect malfunctioning: Lifts transmission onto testing fixture, using hoist. Flushes gears with oil. Attaches transmission shaft to engine. Starts engine and depresses pedal to engage gears in transmission. Varies engine speeds and shifts gears to test each gear combination. Listens to sounds of gears meshing at different speeds and feels smoothness of gears shifting to detect malfunction. Prepares reports of test results.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 77

806.684-142 RUNNING RIGGER (ship-boat mfg.)

Splices wire and nylon rope to fabricate items, such as halyards, outhaul assemblies, reef lines, lazy jacks, and lifelines: Selects size and type of rope specified on work order and pulls rope through length meter to measure rope. Wraps masking tape around rope to mark points where rope is to be spliced and cuts rope, using soldering iron with rope cutting attachment. Wraps nylon thread around ends of rope or burns end of rope, using soldering iron, to seize ends and prevent fraying. Pushes marlinspike through rope to separate strands and passes fid through casing of rope to interweave strands and splice ropes to join unlike ropes into one continuous length or to form eyes for attaching hardware. Coils rope and ties end of rope around center of coil to secure rope for storage or transport. Threads lifeline rope through stanchions on boat decks and splices shackle to end of rope to install lifelines.
GOE: 06.02.32 STRENGTH: M GED: R3 M3 L2 SVP: 4 DLU: 86

806.684-146 BOAT OUTFITTER (ship-boat mfg.) alternate titles: assembler, plastic boat; boat garnisher; final assembler, boat

Installs parts, such as hatches, marine hardware, metal trim, seats, cabinets, and windshields on fiberglass, aluminum, or wooden boats, using handtools and portable power tools: Locates and marks position of hardware, seats, and other parts according to specifications, using rule, template, and marking device. Cuts or grinds mounting bases or brackets, using portable electric saws and grinders, and bolts or screws them in place. Drills holes and bolts hardware, hatches, and other parts in place, using handtools. Applies caulking compound under spray rails, windshields, and around windows, using caulking gun. Saws aluminum trim to specified lengths and cements, crimps, screws, or pounds trim into place, using hacksaw, crimping device, adhesives, screwdriver, and mallet. Inspects completed boat for defects and writes report of appraisal. May grind interior and exterior contours of hull to remove burrs and rough edges, using portable grinder. May paint pinstriping and lettering on boat, using stencil and brush. May measure, cut and install insulation in designated sections of boats, using handtools. May be designated according to part installed as Plastic Out-

fitter (ship-boat mfg.); Trim Installer (ship-boat mfg.) Windshield Installer (ship-boat mfg.); Window Installer (ship-boat mfg.); Wood And Hardware Outfitter (ship-boat mfg.).
GOE: 05.10.01 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 80

806.684-150 ROUTER OPERATOR, HAND (aircraft mfg.; railroad equip.)

Routs and trims metallic and nonmetallic parts and materials to provide cutouts for windows, air vents, and tubing runs, used in manufacturing transportation equipment, such as aircraft and railroad cars, using portable router and handtools: Selects and installs specified type and size bit and collar combinations in hand router, guided by template, jig, or fixture markings or information obtained from blueprints and specifications. Positions and secures parts or materials to be routed, template, and router guide on router board, jig, or fixture, using bolts, screws, clamps, handtools, and power tools. Moves router along guide to cut openings in parts and materials or to trim excess material. Grinds, smooths, or deburrs parts, using handtools or power tools. May drill coordinating holes in parts or materials, using drill motor.
GOE: 06.02.24 STRENGTH: M GED: R3 M1 L2 SVP: 4 DLU: 88

806.687-010 ASSEMBLER, BICYCLE II (motor-bicycles)

Assembles bicycles on assembly line, performing one or a combination of tasks as described under ASSEMBLER, BICYCLE (motor-bicycles) I, using handtools and portable power tools. May assemble and package bicycle subassemblies, such as shift levers, axles, and reflectors and be designated Bicycle Subassembler (motor-bicycles).
GOE: 06.04.22 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

806.687-018 FINAL INSPECTOR (auto. mfg.) alternate titles: checker

Inspects completed motor vehicle for conformance to specifications: Examines vehicle for installation of specified accessories, such as radio, heater, and defroster. Tests operation of windows, doors, lights, and controls on instrument panel. Examines seats, headlining, and door paneling for spots or tears in upholstery, and car exterior for chips and scratches on painted surfaces. Records defects on checklist. May inspect components of vehicle and be designated Chassis Inspector (auto. mfg.); Trim Inspector (auto. mfg.).
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 90

806.687-022 HELPER, METAL BONDING (aircraft mfg.) alternate titles: metal-bonding worker

Performs variety of tasks to assist ASSEMBLER, METAL BONDING (aircraft mfg.) 806.384-030 and METAL-BONDING PRESS OPERATOR (aircraft mfg.) 553.382-026 in fabricating bonded aircraft and space vehicle parts and assemblies. Performs duties as described under HELPER (any industry) Master Title.
GOE: 06.04.24 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 88

806.687-026 INSPECTOR, ALUMINUM BOAT (ship-boat mfg.)

Inspects aluminum boats and canoes to detect leaks, using water-test tank: Lifts and places boat in test tank with aid of other workers. Positions bow and stern of boat under hydraulic ram. Presses lever to activate ram that pushes and holds boat down in water of tank. Inspects rivets to detect leaks and marks leaking areas, using crayon. Tightens or replaces leaking rivets, using rivet gun. Records number of boats inspected and repairs required on worksheet.
GOE: 06.03.02 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

806.687-030 INSPECTOR, BICYCLE (motor-bicycles)

Inspects bicycles for defects in assembly and finish: Examines bicycle to detect missing equipment, flaws in paint, and alignment of frame, sprockets, and wheels. Turns pedals, spins wheels, and moves parts to verify specified adjustment. Informs bicycle repairer of defects. May perform assembly line duties [ASSEMBLER, BICYCLE (motor-bicycles) II].
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

806.687-034 INSTALLER, DOOR FURRING (railroad equip.)

Installs prefabricated furring strips and insulation material into metal railroad car doors, using handtools: Positions and aligns door frame on assembly rails, using hoist. Removes paint from studs in door frame, using paint remover and brush. Applies sealing compound to designated points in frame, using caulking gun. Positions furring strips over sealing compound and bolts furring to frame, using impact wrench. Fits prescribed amounts of insulation material between furring strips.
GOE: 06.04.22 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

806.687-042 OUTBOARD-MOTOR INSPECTOR (engine-turbine)

Inspects outboard motors at end of assembly line for conformance to factory standards, preparatory to shipment: Examines motor for missing parts, dents, scratches, and paint imperfections, such as runs and spots. Moves shifting lever into drive positions, pulls starter rope, opens cover latches and doors, moves tilt lever, release lever, starter lock, and reverse lock, to verify operation of parts. Records defects on inspection tag.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

806.687-046 ROLLER (ship-boat mfg.)

Positions, smooths, and compresses layers of fiberglass on boat hulls to strengthen weak spots and eliminate air pockets, using metal or fiber rollers: Positions fiberglass cloth on stress points of boat hull according to specifications. Sprays resin compound over fiberglass, using portable spray gun. Smooths and compresses fiberglass to eliminate air pockets and strengthen hull, using rollers. Cuts excess fiberglass material from hull, using scissors. Cleans rollers, using acetone solution. Pushes boat hull to next work station in assembly line.
GOE: 06.04.27 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

806.687-050 SHIPFITTER HELPER (ship-boat mfg.)

Assists SHIPFITTER (ship-boat mfg.) in fabricating, assembling, and installing bulkheads, plates, frames, stanchions, and other heavy steel structural parts within hull of ship by performing following tasks: Obtains tools and materials from storage and carries them or arranges for their transportation to work site. Assists SHIPFITTER (ship-boat mfg.) in establishing reference points on structural member or steel parts to indicate bending, cutting, drilling, and other machining necessary to fabricate steel into ship members. Holds workpieces during welding operations. Cleans slag from welds, using slag hammer and wire brush. Grinds welds smooth, using portable grinder. Measures and cuts metal pieces to specifications, using gas cutting equipment. Tightens bolts, using hand and power wrenches. Assembles and fits gaskets, packing, and liners in place. Tightens turnbuckles of guy wires to hold bulkheads and stanchions in position for welding. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.12 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

807 STRUCTURAL REPAIRERS, TRANSPORTATION EQUIPMENT

This group includes occupations concerned with repairing vehicle bodies, parts, components, and attachments for such transportation equipment as automobiles, aircraft, rail equipment, motorcycles, boats, travel trailers, motor homes, and military vehicles.

807.137-010 SUPERVISOR, AUTOMOBILE BODY REPAIR (automotive ser.) alternate titles: automobile-body repair chief

Supervises and coordinates activities of workers engaged in repairing and painting damaged bodies and body parts of automotive vehicles: May examine damaged vehicle and estimate cost of repairs [SHOP ESTIMATOR (automotive ser.)]. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.06 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

807.261-010 AIRCRAFT BODY REPAIRER (air trans.)

Repairs sheet and extruded metal structural parts of aircraft and missiles according to design specifications, using handtools and power tools and metalworking machinery: Reads design specifications or examines sample parts to determine fabrication procedures and machines and tools required. Removes rivets and other fasteners to facilitate removal of defective part, using power drill and punch, or cuts out defective part, using power shears, hacksaw, and file. Locates and marks dimension and reference lines on defective or replacement part, using templates, scribes, compass, and steel rule. Sets up and operates metal fabricating machines, such as saws, brakes, shears, drill press, and grinders, to repair defective part or fabricate new part. Reinstalls repaired or replacement parts for subsequent riveting or welding, using clamps and wrenches. Confers with other workers to expedite heat treating, anodizing, or other specified processing of repair parts. May signal crane operator to fit and align heavy parts. May stretch skin and panel sheets to remove surface tension, using sheet metal hand forming tools.
GOE: 05.05.06 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

807.267-010 SHOP ESTIMATOR (automotive ser.)

Estimates cost of repairing damaged automobile and truck bodies, on basis of visual inspection of vehicle and familiarity with standard parts, costs, and labor rates: Examines damaged vehicle for dents, scratches, broken glass, and other areas requiring repair, replacement, or repainting. Sights along fenders to detect frame damage, or positions vehicle in frame-aligning rig that indicates location and extent of misalignment. Examines interior for evidence of fire or water damage to upholstery and appointments. Determines feasibility of repair or replacement of parts, such as bumpers, fenders, and doors, according to familiarity with relative costs and extent of damage. Computes cost of replacement parts and labor to restore vehicle to condition specified by customer, using standard labor and parts cost manuals. Enters itemized estimate on job order card or estimate form and explains estimate to customer. May estimate cost of mechanical, electrical, or other repairs where shop performs both body work and mechanical servicing of vehicles [AUTOMOBILE-REPAIR-SERVICE ESTIMATOR (automotive ser.) 620.261-018]. May estimate cost of repainting, converting vehicles to special purposes, or customizing undamaged vehicles, depending on specialty of shop.
GOE: 05.07.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 78

807.281-010 TRUCK-BODY BUILDER (auto. mfg.; automotive ser.) alternate titles: body builder

Constructs and repairs metal truck bodies and trailers according to specifications, using handtools and power tools: Lays out dimensions on metal stock, such as sheet metal and angle iron, using square, rule, and punch. Fits and assembles components, using handtools and portable power tools, such as drill, riveter, and welding apparatus [SHEET-METAL WORKER (any industry) 804.281-010]. Welds together body parts and braces [WELDER, COMBINATION (welding) 819.384-010]. Measures and cuts woodstock and installs wood floors, interiors, insulations, and fixtures, using handtools, such as ham-

mer, file, and screwdriver, and power tools, such as bandsaw, sander, and hand drill. Installs electrical wiring for dome lights, taillights, brake lights, and other equipment according to specified procedures. May spray or brush paint, primer, or protective coating on wood and metal surfaces.
GOE: 05.05.06 STRENGTH: M GED: R3 M3 L2 SVP: 5 DLU: 90

807.361-010 AUTOMOBILE-BODY CUSTOMIZER (automotive ser.)
Installs custom equipment to alter appearance of automotive vehicle according to customer specifications, using handtools and power tools: Reads specifications or confers with customer to determine modifications desired. Cuts opening in vehicle body for installation of customized windows, using templates, and power shears or chisel. Measures and marks vinyl material and cuts material to size for roof installation, using rule, straightedge, and hand shears. Cuts and bends metal trim to specified size and configuration, using power shears and chrome-bending die. Fits and secures windows, vinyl roof, and metal trim, using caulking gun, adhesive brush, and mallet.
GOE: 05.05.06 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

807.361-014 BOAT REPAIRER (ship-boat mfg.)
Repairs wooden and fiberglass boats according to blueprints and customer specifications, using handtools and power tools: Confers with customer or supervisory personnel and reads blueprints to determine repairs needed and plan sequence of operations. Examines boat to determine location and extent of defect. Cuts out defective area, using power saw, drills, and handtools. Measures and records dimensions of defective area and lays out dimension lines and reference points on materials, using rules, straightedge, squares, and scribing instruments. Sets up and operates saws, joiners, planers, and shapers to fabricate repair parts. Positions and fits repair part in boat and secures part to boat, using caulking gun, adhesive, or carpenter's handtools. Cuts fiberglass material to specified size and patches defective surfaces [BOAT PATCHER, PLASTIC (ship-boat mfg.)]. Smooths repaired surfaces, using power sander. Installs fittings and equipment according to customer specifications, using handtools and portable power tools. Hand brushes or sprays paint or other finishing solution on repaired areas and waxes and buffs area to specified finish.
GOE: 05.05.02 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

807.381-010 AUTOMOBILE-BODY REPAIRER (automotive ser.) alternate titles: automobile-body worker; body-line finisher; body repairer, bus; dent remover; door repairer, bus; metal bumper; metal shrinker; metal worker; touch-up finisher, metal
Repairs damaged bodies and body parts of automotive vehicles, such as automobiles, buses, and light trucks according to repair manuals, using handtools and power tools: Examines damaged vehicles and estimates cost of repairs [SHOP ESTIMATOR (automotive ser.) 807.267-010]. Removes upholstery, accessories, electrical and hydraulic window-and-seat-operating equipment, and trim to gain access to vehicle body and fenders. Positions dolly block against surface of dented area and beats opposite surface to remove dents, using hammer. Fills depressions with body filler, using putty knife. Removes damaged fenders, panels, and grills, using wrenches and cutting torch, and bolts or welds replacement parts in position, using wrenches or welding equipment. Straightens bent automobile frames, using pneumatic frame straightening machine. Files, grinds, and sands repaired surfaces, using power tools and handtools. Refinishes repaired surface, using paint spray gun and sander. Aims headlights, aligns wheels, and bleeds hydraulic brake system. May paint surfaces after performing body repairs and be designated Automobile-Body Repairer, Combination (automotive ser.). May repair or replace defective mechanical parts [AUTOMOBILE MECHANIC (automotive ser.) 620.261-010].
GOE: 05.05.06 STRENGTH: M GED: R3 M3 L3 SVP: 7 DLU: 81

807.381-014 BONDED STRUCTURES REPAIRER (aircraft mfg.) alternate titles: bonder, rework and repair
Repairs aircraft and space vehicle bonded structures according to blueprints and specifications, using handtools, power tools, and equipment: Reads inspection reports, rework instructions, and blueprints to determine type of repair, tools required, and to plan sequence of operations. Positions and secures bonded structure in fixture or bonding form, or attaches fixture to structure, using clamps and handtools. Examines structure to determine location, nature, and extent of defect or damage. Spreads plastic film over area to be repaired to prevent damage to surrounding area. Drills holes in structure to gain access to internal defect or damage. Scribes around repair area and cuts out defective or damaged section, using power tools and equipment. Laminates variety of metallic and nonmetallic materials, such as aluminum, fiberglass, plastic, and honeycomb, to fabricate replacement section. Trims and shapes replacement section to specified size, using handtools and power tools. Injects adhesive into cutout areas, using injection gun. Fits replacement section into cutout area and secures section in place, using adhesive tape and tack iron. Cures bonded structure, using portable or stationary curing equipment. Cleans, strips, primes, and sands structural surfaces and materials prior to bonding.
GOE: 06.02.32 STRENGTH: M GED: R3 M2 L3 SVP: 6 DLU: 88

807.381-018 FRAME REPAIRER (motor-bicycles)
Repairs motorcycle frames according to written instructions or visual examination, using bandsaw and welding and aligning equipment: Reads work tickets or examines frame to determine extent and type of damage. Cuts bent, broken, or cracked tubular parts from frame, using bandsaw. Measures defective area of frame and selects tubular sections to replace cutout part. Positions and clamps replacement part and frame in welding fixture. Welds replacement part to frame, using arc or acetylene welding equipment [WELDER COMBINATION (welding)] or brazes part to frame, using brazing torch [BRAZER, ASSEMBLER (welding)]. Aligns frames after repairing [FRAME STRAIGHTENER (motor-bicycles)].
GOE: 05.10.01 STRENGTH: H GED: R3 M2 L1 SVP: 7 DLU: 77

807.381-022 SERVICE MECHANIC (auto. mfg.)
Services, repairs, and installs accessories and metal sections on new and used metal trailers: Examines workmanship and tests, adjusts, and repairs wheel alignments, bearings, lights, and brake assemblies of new trailers. Installs, adjusts, and services motor-cooling systems in refrigerated trailers. Replaces and repairs worn and defective parts. Overhauls used and wrecked trailer bodies, following shop orders or specifications. Lays out, fits, drills, screws, rivets, and welds new assemblies to other trailer sections, using pneumatic tools, welding and burning equipment, and handtools. May install metal or wood flooring.
GOE: 05.10.01 STRENGTH: M GED: R3 M2 L3 SVP: 6 DLU: 77

807.381-026 STREETCAR REPAIRER (railroad equip.) alternate titles: car-body inspector
Performs any combination of following tasks to inspect and repair streetcar bodies, following blueprints and wiring diagrams and using handtools, power tools, and electrical test equipment: Examines car roof for wear and damage and repairs defective sections, using specified roofing material, cement, nails, and waterproof paint. Cuts sheet metal strips and bolts strips to sign frame joints, installs glass panes, and trims frayed or torn sign material to repair streetcar route signs, using handtools. Tests current continuity of car wiring, using ammeter. Engages controls to drive streetcar specified distance and pushes light and signal switches to test electrical system of car. Replaces defective wiring and insulation and tightens electrical connections, using handtools. Glues ends of window sash frames together, screws weather stripping and brass channels to frame, and installs glass panes to repair window sashes, using handtools. Unbolts defective slats from frame and front gate of lifeguard, drills boltholes in new slats and bolts slats in place, using power wrench and drill. Removes defective sandbox from beneath platform of car, fills new box with sand, and installs box on car, using handtools. Records condition of car, repairs made, and work to be performed by repair shop. May be designated according to specific activity performed as Car-Roof Repairer (railroad equip.); Destination-Sign Repairer (railroad equip.); Electrical Inspector (railroad equip.); Sash Repairer (railroad equip.); Streetcar Sandbox And Lifeguard-Unit Repairer (railroad equip.).
GOE: 05.10.04 STRENGTH: H GED: R4 M2 L2 SVP: 6 DLU: 77

807.381-030 AUTO-BODY REPAIRER, FIBERGLASS (automotive ser.)
Repairs damaged fiberglass automobile bodies, using pneumatic tools and knowledge of fiberglass repair techniques: Cuts away damaged fiberglass, using air grinder. Smooths edges of painted surface, using sandpaper or air-powered sander. Masks surrounding undamaged surface, using masking tape. Cuts plastic separating film, using shears, and tapes film to outside repair area. Mixes polyester resin and hardener according to specifications and applies mixture to repair area, using brush. Soaks matting in resin mixture and layers matting over repair area to specified thickness. Peels separating film from repair area and washes repair surface with water. Occasionally secures new panel to repair area, using C-clamp. Applies and spreads body filler manually to re-establish surface. Manually files away excess filler to match original contour. Smooths filler, using air sander. Cleans repair area with air gun.
GOE: 05.10.01 STRENGTH: M GED: R3 M2 L2 SVP: 7 DLU: 86

807.484-010 FRAME STRAIGHTENER (motor-bicycles) alternate titles: frame aligner; straightener-and-aligner
Straightens and aligns motorcycle frames according to specifications, using aligning table, jigs, gauges, jack, and handtools: Turns screws to adjust and set gauges and stops on jigs. Positions and clamps frame in fixtures on aligning table. Examines frame to ascertain degree of aligning required, using height and level gauges. Realigns frame, using hammer, pry bar, or jack, and measures frame to verify alignment.
GOE: 05.10.01 STRENGTH: H GED: R3 M2 L2 SVP: 5 DLU: 77

807.664-010 MUFFLER INSTALLER (automotive ser.)
Replaces defective mufflers and pipes on automobiles, buses, trucks, and other automotive vehicles according to factory or customer specifications, using handtools and power tools: Removes defective muffler, using hacksaw, wrenches, air-powered tools, or acetylene torch. Selects replacement muffler according to automotive vehicle model and customer's preference. Bolts or tack welds new muffler in place. Bends and shapes tailpipe sections according to customer specifications, using pipe-bending machine. Welds tailpipe sections to muffler or exhaust pipe, using arc welding equipment. Aligns muffler and tailpipe within frame and bolts hangers to frame to secure muffler.
GOE: 05.10.01 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

807.667-010 FLATCAR WHACKER (saw. & plan.)
Inspects and repairs rail-type logging equipment: Examines rail flatcar attachments, such as stakes, cables, straps, and cross timbers to detect defects. Repairs or replaces attachments, using handtools, such as wrenches, pry bars, and hammers. Inspects frame and wheel assembly of flatcar and notifies maintenance personnel when repairs are needed.
GOE: 05.12.12 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

807.684-010 AUTOMOBILE-BUMPER STRAIGHTENER (automotive ser.) alternate titles: bumper straightener

Repairs damaged automobile bumpers preparatory to replating. Selects specified make and model bumper from storage yard. Positions bumper in hydraulic press and starts press to restore original shape to bumper, using templates to verify contours. Removes smaller dents, using sledgehammer. Positions bumper in bench vise and grinds out hammer marks, dimples, scratches, and rust areas, using portable grinding wheel. May cut and weld sections from several bumpers to form single salvageable unit, using flame cutting and welding equipment.
GOE: 05.12.12 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

807.684-014 BOAT PATCHER, PLASTIC (ship-boat mfg.) alternate titles: assembly detailer; patcher, plastic boat

Repairs and repaints defects in fiberglass boat hulls, decks, and cabins, using handtools and power tools: Examines parts for defects, such as cracks and holes. Drills out defective areas or smooths rough edges, using portable electric drill and grinder. Cuts out patch of fiberglass material, using shears. Mixes resin and catalyst, dips patch in solution, and places patch over defect. Shapes and smooths edges to match contour of patched area. Fills holes with plastic filler material. Smooths repaired surfaces, using sandpaper or power disk sander. Mixes plastic paint with catalyst and sprays repaired surfaces, using spray gun. Cuts out damaged wood bracing strips, using portable electric saw. Replaces and bonds strips in place with saturated fiberglass mat. Touches up flaws, using paintbrush. May polish repainted sections.
GOE: 06.02.24 STRENGTH: M GED: R3 M1 L1 SVP: 4 DLU: 77

807.684-018 AIRCRAFT SKIN BURNISHER (aircraft mfg.)

Burnishes and hand finishes sheet metal stock or fabricated aircraft skins to remove surface defects, such as scratches, mars, and blemishes, and to restore surface to uniform grain, color, and luster, using burnishing tools: Reads work order and burnishing specifications. Lubricates area to be burnished, and rubs burnishing tool over lubricated metal surfaces to remove surface imperfections. Polishes surfaces to restore area to original luster or finish, by hand or using power tools. Brushes solutions onto skin surfaces to remove stains. Examines burnished area and surrounding skin to determine uniformity of grain, color, and finish.
GOE: 06.04.24 STRENGTH: L GED: R3 M1 L2 SVP: 3 DLU: 88

807.684-022 FLOOR SERVICE WORKER, SPRING (automotive ser.)

Removes leaf springs from automotive vehicles to facilitate repair or replacement and replaces springs, using handtools: Raises vehicle, using hydraulic jack or hoist. Places mounting stands under vehicle to decrease leaf spring pressure. Removes shock absorbers, U-bolts, and shackle pins to gain access to springs, using impact wrench and handtools. Removes leaf springs and conveys springs to repair shop. Reinstalls repaired or replacement springs, using handtools.
GOE: 05.12.12 STRENGTH: H GED: R2 M1 L1 SVP: 4 DLU: 77

807.684-026 INSTALLER, SOFT TOP (automotive ser.) alternate titles: assembler, convertible top

Installs convertible top assemblies on automobile bodies: Bolts rubber molding to specified points on bottom of convertible assembly frame. Positions assembly on automobile body and bolts metal frame and rear edge of fabric to body. Trims off excess fabric from rear edge, using shears. Connects hydraulic lift to assembly and raises top. Adjusts bolts and top bows of metal frame to tighten fabric. Turns setscrews to adjust height and movement of side windows. Screws metal caps to frame to protect fabric at points of greatest wear. May install fabric on top assemblies.
GOE: 06.04.22 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 77

807.684-034 WATER LEAK REPAIRER (auto. mfg.)

Detects and seals areas of water leaks on motor vehicle bodies, using ultraviolet light, caulking gun, and handtools: Illuminates areas of inner compartments of vehicle bodies, using ultraviolet light (black light) to detect water inside compartments. Seals areas suspected of water leaks, using caulking gun. Aligns parts, such as hoods, doors, and deck lids (trunks) to fit body contours to correct cause of water leaks, using handtools. May work as part of team.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 90

807.687-010 AUTOMOBILE-BODY-REPAIRER HELPER (automotive ser.)

Performs duties as described under HELPER (any industry) Master Title.
GOE: 05.12.12 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

807.687-014 STREETCAR-REPAIRER HELPER (railroad equip.) alternate titles: car-body-inspector helper

Performs any combination of following tasks to assist STREETCAR REPAIRER (railroad equip.) in repairing streetcar bodies, using handtools: Tightens loose bolts and screws and replaces worn or broken *stirrups*, using handtools. Replaces or tightens worn or loose weather stripping on windows, using handtools. Repairs torn upholstery, using needle and thread. Lubricates car, using oil gun. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.12 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

809 MISCELLANEOUS OCCUPATIONS IN METAL FABRICATING, N.E.C.

This group includes occupations, not elsewhere classified, concerned with fabricating structures from metal and related materials.

809.130-010 SUPERVISOR, ASSEMBLY DEPARTMENT (struct. metal)

Supervises and coordinates activities of workers engaged in assembling metal sash, screen doors, and storm doors and windows. Sets up or supervises setup of machinery, according to work order specifications and instructions from management. May design and fabricate full-sized or miniature screens or storm windows and doors to be used as samples, using handtools and power equipment. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

809.130-014 SUPERVISOR, METAL FABRICATING (any industry) alternate titles: shop supervisor; steel fabricating supervisor

Supervises and coordinates activities of workers engaged in fabrication and assembly of structural, ornamental, or sheet metal products, applying knowledge of layout, product design, machine function, capacities and output, properties of metal, and strength of materials: Analyzes work orders and blueprints to determine information, such as material to be used, type of operations, and sequence of operations required. Requisitions dies, fixtures, and material. Examines defective machinery to determine cause of malfunction and reports need for machine repairs. Trains workers in operation of equipment. Sets up and operates machines to make test runs and experimental products. Inspects work in progress and finished products. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated by product fabricated as Boiler-Shop Supervisor (any industry); Sheet-Metal-Shop Supervisor (any industry); Structural Steel-Shop Supervisor (any industry); Tank-Shop Supervisor (any industry).
GOE: 05.10.01 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 78

809.131-010 SUPERVISOR, FABRICATION AND ASSEMBLY (toy-sport equip.)

Supervises and coordinates activities of workers engaged in fabricating and assembling playground equipment, such as swings, slides, park tables, and benches. Explains and demonstrates duties to new workers. Inspects work in progress and finished product to verify conformance to standards and quality of work. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

809.131-014 SUPERVISOR, ORNAMENTAL IRONWORKING (construction)

Supervises and coordinates activities of workers engaged in installing prefabricated ornamental ironwork, such as window and door frames, elevator fronts, and fences: Examines blueprints and confers with employer to determine location and type ironwork to be installed, plan installation procedures, and resolve problems in securing specified units. Demonstrates and explains work procedures and safety practices to workers. Inspects preparation and installation of ironwork to ensure adherence to building specifications. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.06 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

809.131-018 SUPERVISOR, STRUCTURAL-STEEL ERECTION (construction) alternate titles: iron-and-steel-work supervisor; steel-erecting pusher

Supervises and coordinates activities of work crews engaged in erecting structural steel: Marks locations for new rivet holes to rectify errors. Directs workers to drill and ream new holes. Assists workers in performance of tasks, such as riveting, welding, bolting, and chipping, using portable power tools. Performs other duties as described under SUPERVISOR (any industry) Master Title. May supervise workers engaged in erecting steel power transmission towers and poles and be designated Tower Supervisor (construction). May be designated according to activity of workers supervised as Supervisor, Riveting (construction).
GOE: 05.05.06 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

809.134-010 SUPERVISOR, GRINDING AND SPRAYING (struct. metal)

Supervises and coordinates activities of workers engaged in rough surface grinding and spray painting structural and ornamental metalwork articles: Reads work order specifications to determine supply requirements and coordinates interdepartmental work flow. Trains new workers and demonstrates work procedures and assists workers in performance of tasks. Inspects completed pieces to verify conformance of finish to company standards. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: H GED: R4 M3 L3 SVP: 5 DLU: 77

809.134-014 SUPERVISOR, METAL HANGING (mfd. bldgs.)

Supervises and coordinates activities of workers engaged in installing exterior aluminum siding on manufactured buildings: Reads blueprints and written specifications to determine materials needed and requisitions materials from warehouse. Distributes materials to workers. Assists workers in performance of tasks as described under METAL HANGER (mfd. bldgs.; vehicles, nec). Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 77

809.261-010 ASSEMBLER, GROUND SUPPORT EQUIPMENT (aircraft mfg.) alternate titles: ground equipment mechanic

Lays out, fabricates, and assembles missile ground support equipment and related structures according to blueprints and engineering specifications, using handtools and power tools: Reads and interprets blueprints and engineering

specifications to determine methods and procedures for assembling equipment and structures, such as missile loading systems, storage shelters, and launching equipment. Lays out reference lines on parts, assemblies, and accessories, using measuring and marking instruments. Drills, rivets, reams, taps, countersinks, trims, files, grinds, and forms parts and assemblies, using handtools and power tools. Assembles, aligns, and fits component parts, assemblies, and accessories preparatory to final assembly and welding at missile launch site, using handtools and power tools. Reworks assemblies according to engineering specifications. Verifies symmetry of completed assemblies, using surveying instruments. Discusses assembly sequence, tooling requirements, modifications, and related issues with engineers, liaison personnel and others. May test assembled mechanisms and assemblies following specified testing procedures, using test equipment.
GOE: 05.05.06 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 89

809.281-010 LAY-OUT WORKER I (any industry)

Lays out reference points and dimensions on sheets, plates, tubes, and structural shapes for fabricating, welding, and assembling into structural metal products: Plans and develops layout as outlined on blueprints and templates, applying knowledge of trigonometry, product design, effects of heat, and allowances for curvature and thickness of metal. Details location and sequence of cutting, drilling, bending, rolling, punching, and welding operations, using instruments, such as compass, protractor, dividers, and rule. Marks curves, lines, holes, dimensions, and welding symbols onto workpiece, using scribes, soapstone, and punches. May design and make templates of wood, paper, or metal [TEMPLATE MAKER (any industry)]. May fit and align fabricated parts for welding or assembly operations [FITTER (any industry) II]. May be designated according to type material laid out as Sheet-Metal Lay-Out Worker (any industry); Structural-Steel Lay-Out Worker (any industry).
GOE: 05.05.06 STRENGTH: M GED: R4 M4 L3 SVP: 8 DLU: 77

809.381-010 FABRICATOR-ASSEMBLER, METAL PRODUCTS (any industry)

Fabricates and assembles metal products, such as window sashes, casements, doors, awning frames, shells, cases, and tubular products, such as golf carts or furniture, as specified by work orders, diagrams, and templates, using handtools, power tools, and metalworking machinery: Lays out and marks reference points onto components, using template, rule, square, compass, and scale [LAY-OUT WORKER (any industry) II 809.381-014]. Operates machines, such as shears, cutoff saws, brakes, punch press, form roll and drill press, to cut and shape components to specified dimensions [MACHINE OPERATOR (any industry) II 619.685-062]. Fits [FITTER (any industry) II 706.684-054] and assembles components, using fixtures, handtools, and portable power tools, such as grinders, drills, power wrenches, and riveters. Operates machines, such as arbor presses, riveting press, brazing machine, and resistance-welding machines, to complete assembly. May weld components together. May be designated by specialty as Awning-Frame Maker (fabrication, nec); Metal Screen, Storm Door, And Window Builder (struct. metal); Tubular-Products Fabricator (any industry).
GOE: 06.02.24 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 78

809.381-014 LAY-OUT WORKER II (any industry) alternate titles: duplicator; lay-out maker

Traces patterns and marks specifications for fabricating operations onto sheet metal, metal plates, and structural shapes, using templates, measuring instruments, and handtools: Measures stock, using rule to locate center line for positioning template. Tapes, clamps, bolts, or holds template on workpiece. Marks bending and cutting lines, using scribe, and punches or spot drills location of holes, using center punch or hand drill. May lay out straight lines and location of holes detailed on blueprints.
GOE: 06.02.31 STRENGTH: M GED: R3 M3 L2 SVP: 5 DLU: 77

809.381-018 MILKING-SYSTEM INSTALLER (agric. equip.; retail trade)

Installs and services automatic milking systems in barns and milkhouses, using handtools and power tools: Confers with customer to ascertain needs, sketches layout, and estimates costs for optimum equipment layout. Drills holes and bolts milking equipment, such as control panels, pumps, wash sinks, feed stalls, and gates, in specified locations. Cuts metal pipe to specified length, using hacksaw and vise. Installs and levels piping system, using pipe cutters, wrenches, and spirit level. Starts vacuum pump, calibrates vacuum gauges, and connects test instruments, such as *pulsation recorder and stability gauge*, to monitor system performance. Dismantles and cleans system. Replaces defective or malfunctioning system parts, using wrenches and washing equipment.
GOE: 05.05.09 STRENGTH: H GED: R4 M3 L3 SVP: 6 DLU: 77

809.381-022 ORNAMENTAL-IRON WORKER (construction) alternate titles: housesmith; metal-trim erector; ornamental-iron erector

Installs prefabricated ornamental ironwork, other than structural ironwork, such as metal window and door frames, motor-driven and automatic power doors, metal trim and paneling, and aluminum curtain-wall frames: Measures and marks layout for installation, according to blueprints, using rule, template, square, and compass. Welds brackets to lintels, sills, columns, and other structural framework. Drills holes in metal, concrete, and masonry structure, using portable power drills, airhammer, and handtools. Cuts, miters, and bevels metal trim and cover plates to size, using handsaws or portable power saws. Bolts, clips, welds, or solders ironwork together and to brackets or anchors. Verifies level and plumbness, using level or plumb bob. Bolts newell posts, balusters, and other parts of stairways and stair rails to supports or embeds them in sockets. Fastens cover plates and molding in place with metal screws to finish and trim work. Installs equipment, such as motor-driven or automatic doors, following procedures provided by manufacturer. May locate and mark reference points, dig postholes, mix concrete, and erect ornamental fences, using transit, posthole digger, and handtools. When working with bronze, is designated ORNAMENTAL-BRONZE WORKER (construction). May fabricate frames for mounting glass in ornamental cast stonework. May be designated according to equipment installed as Metal-Sash Setter (construction); Ornamental-Rail Installer (construction); Steel-Door Setter (construction); Steel-Sash Erector (construction).
GOE: 05.05.06 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 77

809.381-026 ORNAMENTAL-IRON-WORKER APPRENTICE (construction) alternate titles: ornamental-metal-erector apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.06 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 77

809.381-030 PNEUMATIC-TOOL OPERATOR (ship-boat mfg.)

Performs any of following duties involved in chipping, caulking, drilling, and riveting steelplates, beams, and other structural parts of ships under construction or repair, using pneumatic tools: Caulks overlapping seams between steelplates to make seams watertight, using caulking tool. Chips, cuts, trims, and bevels metal to various shapes and sizes, using handtools and pneumatic hammer. Drills, reams, and countersinks rivet and bolt holes, pipe openings, or other holes in steelplate, steel beams, and angle iron, using portable drilling machines. Heats rivets in forge to specified temperature. Presses steel bar (dolly) against head of hot rivet while RIVETER, HAND (any industry) hydrostatically tests rivet from opposite side. Tests compartments, tanks, and other watertight parts for leaks, using water and air pressure.
GOE: 05.05.06 STRENGTH: M GED: R3 M2 L2 SVP: 7 DLU: 77

809.381-034 SOLAR-FABRICATION TECHNICIAN (machine shop)

Fabricates and assembles metal solar collectors according to job order specifications, using machine shop tools and equipment: Lays out and marks reference points on metal tubing and sheets according to job order specifications, using rule and scriber. Aligns, cuts, and drills copper tubing to form pipe sections, using jig, bandsaw, and drill press. Smooths edges of pipe sections, using file and T-bar. Inserts other precut pipes into drilled holes of pipe sections according to job order specifications, and brazes joints to form manifold unit. Aligns and bends copper sheeting to form absorber plate, using power brake. Aligns manifold unit with grooves of absorber plate, squirts liquid solder into grooves, and bakes assembly to permanently bond joints, using oven. Sprays black paint on assembly to facilitate solar heat absorption, using paint sprayer. Aligns and bends galvanized sheeting to form enclosure frame parts of solar collector, using power brake. Drills holes into frame parts and screws or rivets parts together, using pneumatic drill and rivet gun. Inserts absorber plate and manifold assembly into enclosure frame, and rivets sections together. Caulks assembly corners to prevent water leaks, using caulk gun. Cuts and inserts insulation into enclosure frame to provide heat retention. Aligns and rivets frame end to assembly. Rivets covering to unit to complete solar collector assembly. Packs solar collectors into cardboard boxes for shipment, using tape, strapping, and crimper. Records product identification information on packed boxes.
GOE: 06.02.24 STRENGTH: H GED: R3 M3 L2 SVP: 4 DLU: 86

809.382-010 BALANCING-MACHINE SET-UP WORKER (any industry) alternate titles: dynamic-balancer set-up worker

Sets up and operates dynamic balancing machine to locate points of imbalance on engine or electric motor parts, such as spindles, impeller wheels, armatures, rotors, and flywheels: Positions bearing pedestals according to size of workpiece, installs bearings and keys on pedestal, and aligns drive motor with belt pulleys or drive adapter of balancing machine, using handtools. Adjusts stroboscope light to specified intensity and focus. Signals crane operator to position workpiece on pedestals and fastens test weight to specified point on workpiece, using hammer, pliers, and welding equipment. Starts machine to rotate workpiece. Moves controls of machine and observes dials, meters, or trace patterns on screen to determine points of imbalance on workpiece.
GOE: 06.03.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

809.484-010 AWNING-FRAME MAKER (tex. prod., nec) alternate titles: frame bender

Fabricates and assembles metal frames for awnings and dock shelters according to sketches, drawings, or verbal instructions, using handtools and portable power tools: Selects specified size and type of pipe or other raw or finished frame material from stock to use in forming frame parts, such as front bars, extension arms, uprights, armlifts, slide rods, and rafters. Measures and marks metal, using tape measure and crayon. Fastens metal in vise and cuts to size, using hand or power hacksaw. Threads pipe ends, using thread cutters. Drills holes in metal, using electric powered drill. Screws and bolts sections together to assemble frame, using tees, unions, screwdriver, and wrenches. May bend metal to specified angle, using hand bending tool. May disassemble frame and pack for transporting to installation site. May assemble canvas to metal frames [RIGGER (tex. prod., nec)]. May hang awnings [AWNING HANGER (construction; retail trade; tex. prod., nec)]. May measure installation site for awning to obtain dimensions.

GOE: 05.10.01 STRENGTH: M GED: R3 M2 L1 SVP: 5 DLU: 77

809.484-014 TEMPLATE MAKER, TRACK (any industry)

Fabricates and assembles track templates for flame-cutting machines from aluminum bar stock and precut plywood board, using handtools and measuring instruments: Positions and tacks or staples template layout onto specified template board, using hammer or staple gun, or draws specified radial shapes onto board, using compass. Measures and cuts aluminum bars to specified length, using hand shears or saw. Bends bar to contour of template design, using hand roll and handtools. Tacks bent bars to template board along layout lines or pattern, using hammer. Changes track sections of template on flame-cutting machine when used for more than one job. Dismantles track templates and straightens bar for reuse, using straightening roll [STRAIGHTENING-ROLL OPERATOR (any industry)].
GOE: 05.10.01 STRENGTH: L GED: R3 M2 L1 SVP: 3 DLU: 77

809.664-010 ALUMINUM-POOL INSTALLER (construction)

Assembles aluminum swimming pool at work site, using handtools and portable power tools: Directs other workers to excavate pool site according to customer specifications. Assembles and installs structural parts, such as underground piping and bottom and side panels of pool, using power drill, rivet gun, spot-welding equipment, and handtools. Erects aluminum fencing around pool, using handtools. Lays precut carpet on deck around pool, using handtools.
GOE: 05.10.01 STRENGTH: M GED: R3 M2 L1 SVP: 4 DLU: 77

809.667-010 HULL AND DECK REMOVER (ship-boat mfg.) alternate titles: boat puller

Removes fiberglass boat decks and hulls from molds, using handtools: Pries edge of hull or deck from mold, using wooden tool, and taps mold, using mallet to loosen cast. Inserts airhose between mold and cast, or in hole in mold, and opens valve to blow cast loose. Grasps and works cast loose from mold. Places cast on dolly with help of other workers or clamps special lifting tool to tabs on hull and pushes hoist lever to fit loosened hull from mold. May assemble and temporarily join structural members, such as hull, deck, and headlines, using hoist, weights, and clamps. May grind edges of decks and hulls preparatory to removing from mold, using disk sander.
GOE: 06.04.34 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 78

809.681-010 ASSEMBLER, UNIT (struct. metal)

Fabricates and assembles custom-built products, such as doors, windows, window screens, and metal awnings according to work orders, diagrams, or layout, using handtools, power tools, and metalworking machinery: Aligns component parts in jig or straightens and squares parts, using measuring instrument and straightedge. Smooths edges to obtain specified fit, using file or grinder. Straightens components, using hammer or straightening press. Traces reference lines to lay out points for screw and rivet holes, using rule and scribe or template. Drills or punches screw and rivet holes, using punch or drillpress or portable power drill. Assembles component parts to form completed unit, using handtools and portable power tools [ASSEMBLER, PRODUCTION LINE (struct. metal)]. Measures panels and lifts and turns latches to inspect and test them for conformance to specifications. May operate riveter, power press, or airhammer to assemble units. May polish surfaces, using portable buffing and polishing tools. May be designated by product assembled as Fireproof-Door Assembler (struct. metal); Metal-Door Assembler (struct. metal); Metal-Window-Screen Assembler (struct. metal).
GOE: 06.02.22 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

809.684-010 ASSEMBLER, PRODUCTION LINE (struct. metal) alternate titles: assembler-fitter; crimper-assembler

Performs any combination of following assembly line tasks to assemble structural parts, such as metal sashes, doors, windows, and window screens, using handtools and portable power tools: Assembles frame components, such as tops, bottoms, sides, panels, and molding in jigs or fixtures. Smooths edges of components to obtain specified fit, using grinder or file. Punches or drills holes for fastening, using hole punch or power drill. Aligns holes and screws or bolts frame components together, using screwdriver or wrench. Positions hardware, such as locks, hinges, catches, and swivels on frame and fastens hardware to frame, using screwdriver, nut runner, and hand riveter. Cuts screens to specified size, using measuring jig and hand shears. Positions screen over frame and secures screen in groove, using disk roller. Spreads glue, putty, or plastic compound on frame and positions precut glass panes into frame. Rolls plastic or metal spline into groove and trims excess spline, using knife, or crimps edges of groove to hold screen or glass in place, using crimping tool. Assembles components of lock, such as bolts, washers, and spring. Inspects workpiece to detect scratches or burs. Positions workpiece in measuring jig to verify dimensions. May lay out reference points for drilling holes in frame members, using template, rule, and square. May cut channels and molding to specified length, using pinch cutter, shears, or cutoff saw. May cut glass to specified size, using glass cutter. May be designated according to part assembled as Channel Installer (struct. metal); Door-Lock Installer (struct. metal); Frame Assembler (struct. metal); Hardware Installer (struct. metal); Kick-Plate Installer (struct. metal); Screen Installer (struct. metal); Spliner (struct. metal). May perform duties as described under GROUP LEADER (any industry) Term Title.
GOE: 06.04.22 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

809.684-014 CASKET ASSEMBLER, METAL (fabrication, nec)

Assembles metal caskets, performing any combination of following tasks, using handtools and welding equipment: Places precut sheet metal sections into jig to form casket body or lid. Solders joints and hand files or machine grinds rough surfaces [SOLDERER-ASSEMBLER (welding)]. Saws and bevels wooden slats to specified dimension, using handsaw and jointer. Inserts slats under flange of casket body or lid and nails slats into place. Fits lid onto casket body and bends flange of casket body by hand to facilitate tight fit. Drills holes in lid, using power drill and bolts hinge to lid, using wrench. Welds hinge to casket body, using spot-welding machine. May weld joints, using arc-welding machine [WELDER, ARC (welding)].
GOE: 06.04.22 STRENGTH: M GED: R3 M1 L1 SVP: 4 DLU: 77

809.684-018 DRILLER, HAND (any industry) alternate titles: driller, portable

Drills rivet or bolt holes in material, such as metal, wood, or plastic, following layout marks and using portable power drill: Punches indentations along layout marks to guide drill bit, using center punch and hammer. Fastens specified drill bit in chuck of drill. Drills holes, replaces drill bit with specified reamer, tap, or countersink, and enlarges, threads, or countersinks holes. Sharpens cutting tools, using power grinder. May align offcenter holes in structural members, using *drift pins*, and bolt members together, using wrench.
GOE: 06.04.34 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

809.684-022 FINISHER, FIBERGLASS BOAT PARTS (ship-boat mfg.) alternate titles: ballaster; grinder

Grinds, repairs, and cleans molded fiberglass parts preparatory to assembly into boats, using handtools and portable power tools: Attaches abrasive disk to grinder and grinds molded parts to remove excess fiberglass and smooth edges. Checks flange of molded parts with thickness gauge to determine if more grinding is necessary. Trims excess fiberglass extending from edge of boat hull, using chisel and mallet. Inspects parts to detect defective areas and cuts out defective areas, using chisel and mallet or portable drill. Applies putty to ground-out areas to repair surfaces, using trowel. Waxes and polishes molded parts, using buffer, paste wax and cloth. May paint repaired areas, using spray gun. May install ballast forms in boat hull, using power hoist and handtools.
GOE: 06.04.34 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 78

809.684-026 GRINDER-CHIPPER II (any industry) alternate titles: grinder, rough

Grinds and chips weld splatter, high spots, burrs, slag, and rust from surface of fabricated metal structures and parts to improve appearance or prepare for painting, using portable or pedestal grinders, chipping hammers, and wire brushes: Positions workpiece on worktable manually or using jib or crane. Inserts specified grinding wheel, wire brush, or cutting chisel into portable grinder or power hammer. Pulls trigger to activate power tool and positions and guides tool along high or defective spots on surface of workpiece. May chip or grind out pits or cracks. Grinds portable pieces, using pedestal grinder. May sharpen chisels and dress grinding wheel, using pedestal grinder or wheel dresser. May paint fabricated parts, using spray gun [PAINTER, SPRAY (any industry) I]. May be designated according to tool used as Chipper (any industry) II; Grinder (any industry) IV.
GOE: 06.04.24 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

809.684-030 METAL HANGER (mfd. bldgs.; vehicles, nec)

Installs sheet metal panels, molding, and exterior parts and accessories on manufactured building and travel trailer frames and bodies, using handtools and power tools: Positions panels on body frame, by hand or using chain hoist. Fastens panels to frame, using hammer, drill, rivet gun, stapler, and screwdriver. Trims panels to shape of coach, using tin snips. Lays out window, door, and vent areas on panels according to blueprints, using pencil, ruler, and template. Cuts opening, using electric router and tin snips. Nails and screws insulation to roof frame. Measures, cuts, and installs molding strips to corners, using rule, hammer, hacksaw, and screwdriver. Applies sealer compound around window edges, vent openings, and roof seams, using putty knife. Sets prefabricated window units, screens, and louvers in openings and fastens them in place with screws or rivets. Installs accessories, such as visors, lights, brackets, and railings, using screwdriver. Fastens metal threshold and door casing on body frame, hangs door, and attaches weather stripping, doorstops, striker plate, and molding, using handtools. May assemble window unit. May tend machines that cut or shape metal panels preparatory to hanging [MACHINE OPERATOR (any industry) I 616.380-018]. May be designated according to part installed as Door Installer (mfd. bldgs.; vehicles, nec) I; Roof-Panel Hanger (mfd. bldgs.; vehicles, nec); Side-Panel Hanger (mfd. bldgs.; vehicles, nec); Window Installer (mfd. bldgs.; vehicles, nec).
GOE: 06.02.22 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

809.684-034 REPAIRER, FINISHED METAL (any industry)

Repairs surface defects, such as dings, dents, and buckles, in finished metal items, such as automobile bodies, refrigerators, or other appliances, using dolly blocks, ding and pick hammers, and other handtools: Visually examines and feels surface of workpiece to determine extent of defect. Holds dolly block against defect and hammers opposite side to smooth surface, being careful not to stretch surface or mar finish. Cleans and polishes repaired area, using buffer and cloth. May file dings to remove burrs and rough spots. Polishes working surfaces of dolly blocks and hammers, using naphtha-soaked emery cloth to prevent scratching or gouging of workpiece.
GOE: 06.02.24 STRENGTH: H GED: R3 M1 L1 SVP: 5 DLU: 77

809.684-038 WHEEL ASSEMBLER (mfd. bldgs.; vehicles, nec)

Mounts wheels and tires on chassis of mobile home: Positions wheel and spring assembly on chassis brackets, using chain hoist. Bolts wheel assembly

to brackets, using hand or power wrench. Mounts tires on wheel assembly, fastening nuts with tire wrench. May bolt front wheel jack to chassis. May attach brake wires to brake housing and thread wires through holes in cross-members to front of chassis. May spray chassis with rust-resistant paint or undercoat material.
GOE: 06.04.22 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

809.684-042 PANEL LAMINATOR (struct. metal)
Laminates precut materials to form doors and portable wall sections used in prefabricated metal buildings: Reads work order to determine materials to be laminated, such as steel, aluminum, urethane, vinyl hardboard, and gypsum, and to determine size and color. Measures materials to verify size. Applies adhesive to materials, using spray gun. Positions and presses materials together on conveyor in prescribed order and aligns materials, using mallet. Pushes button to start conveyor and activate pinch roller that presses sections together and removes air pockets. Removes completed panel from conveyor and places panel on pallet.
GOE: 06.04.22 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 86

809.687-010 DUCT MAKER (construction; mfd. bldgs.)
Cuts and shapes fiberglass sheet to form heating and air-conditioning ducts, using handtools: Places sheet on worktable for cutting. Measures and marks sheet according to specifications, using tape measure and marker. Cuts wedge shaped grooves according to marking to facilitate folding, using straightedge and knife. Folds sheet to form rectangular duct and fastens open edge of duct, using pneumatic stapler. Cuts aluminum tape according to length of duct and tapes edge of duct to make air tight seal. Writes model number on completed sections of duct with felt pen. Moves ducts to designated storage area.
GOE: 06.04.24 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

809.687-014 HELPER, MANUFACTURING (aircraft mfg.) alternate titles: general helper
Assists workers engaged in fabricating, assembling, installing, and processing materials, parts, and assemblies for aircraft and aerospace products, performing any combination of following tasks: Sorts and counts parts and materials. Examines parts and materials for defects. Feeds, loads, or removes parts from machines. Loads and unloads racks, baskets, skids, dollies, and conveyors. Moves or carries parts, materials, and equipment. Files, trims, saws, buffs, drills, and deburrs parts, using handtools and power tools. Wraps and unwraps parts, tools, and equipment. Marks identifying information on parts and materials. Places, positions, clamps, or holds parts and materials during assembly, installation, or machining. Lubricates and cleans parts, assemblies, and equipment. Cleans and sweeps work area. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 06.04.34 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 88

809.687-018 INSPECTOR AND TESTER (struct. metal)
Inspects metal sashes, window screens, windows, and doors for appearance and accuracy of fabrication and assembly: Feels sides of workpiece for burrs, ravelled screening, or defective packing of screening, glass, or splines. Slides panels up and down to ensure specified alignment. Verifies dimensions, using fixed gauge, rule, or square. Returns defective workpiece for repair or performs such minor repairs as tightening screws, adjusting balance, and rolling or hammering out small dents, using handtools. May apply gummed tape around frame, screen, or glass, pack pieces according to size, and insert screens and glass panels into frames to prepare pieces for shipping.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

809.687-022 LABORER, SHIPYARD (ship-boat mfg.)
Performs following tasks in shipyards: Loads vehicles, using handtruck or dolly. Washes trucks and other vehicles. Cleans ships, piers, drydocks, and other working areas, using broom and water hose. Opens shipping crates, using hammer and pinchbar. Sorts lumber, metals, and other scrap materials. Collects and burns trash. Mixes and pours cement on inner bottoms of ships and around joints on decks to prepare surfaces for tile or to make joints watertight. Removes paint and scale from ships' metal surfaces, using hand or powered wire brushes. Conveys materials and tools to work site.
GOE: 05.12.03 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

809.687-026 MOLD PREPARER (ship-boat mfg.) alternate titles: mold finisher
Cleans and waxes fiberglass boat molds preparatory to molding: Washes molds, using sponge. Waxes and polishes interior of mold, using cloth, or electric buffer. Brushes parting agent on mold to facilitate removal of cast after molding.
GOE: 06.04.39 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

81 WELDERS, CUTTERS, AND RELATED OCCUPATIONS

This division includes occupations primarily concerned with joining, surfacing, or otherwise fabricating or repairing structures or parts of metal or other weldable material, such as plastic or glass, applying the following welding or cutting processes: arc; gas; resistance; solid state (friction, ultrasonic, cold, explosion, diffusion); and other processes, such as electroslag, electron beam, induction, thermit, and laser beam. Welders in this division are distinguished from workers using welding equipment in other divisions by their knowledge of and experience in welding technology and in being primarily concerned with the equipment and technology of welding. Workers classified in other divisions may use welding equipment, but their knowledge and experience are primarily in assembly or repair techniques. For example, welders who work on storage batteries can be found in Group 727.

810 ARC WELDERS AND CUTTERS

This group includes occupations concerned with welding processes in which joining is produced by heating with an arc or arcs, with or without the application of pressure and with or without the use of filler metal.

810.382-010 WELDING-MACHINE OPERATOR, ARC (welding)
Sets up and operates arc welding machine that welds together parts of fabricated metal products, as specified by blueprints, layouts, welding procedures, and operating charts: Welds flat, cylindrical, or irregular parts that may be clamped, tack-welded, or otherwise positioned. May position weld line parallel to carriage. Turns cranks or pushes buttons to align electrode on welding head over weld joint to weld linear joints, or adjust length of radial arm to position electrode over weld joint when welding radial joints. Clamps cylindrical workpieces onto turning rolls under stationary head to weld circular joints. Threads specified electrode wire from reel through feed rolls and welding head. Turns welding head to set specified angle of electrode. May fill hopper with specified flux and direct nozzle or gravity feed over weld line, or adjust shielding gas or gas mixture flow rate. Turns knobs to set current, voltage, and slope, and synchronize feed of wire and flux with speed of welding action. May set limit switch which automatically stops machine at end of weld. Starts machine and observes meters and gauges, or observes welding action for compliance with procedures. Visually examines welds for adherence to specifications. May grind welded surfaces for penetrant test. Adjusts machine setup to vary size, location, and penetration of bead. May install track template to weld irregularly shaped seams. May make trial run before welding and record setup and operating data. May layout, fit, and tack workpieces together. May preheat workpiece, using hand torch or heating furnace. May reweld defective joints, using hand-welding equipment. May remove surplus slag, flux, and spatter, using brush, portable grinder, and hand scraper. May operate machine equipped with two or more heads. May be designated according to type of welding machine operated as Welding-Machine Operator, Electro-Gas (welding); Welding Machine Operator, Gas-Metal Arc (welding); Welding-Machine Operator, Gas-Tungsten Arc (welding); Welding-Machine Operator, Plasma Arc (welding); Welding-Machine Operator, Submerged Arc (welding).
GOE: 06.02.19 STRENGTH: M GED: R4 M4 L3 SVP: 6 DLU: 77

810.384-010 WELDER APPRENTICE, ARC (welding)
Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.06 STRENGTH: H GED: R4 M4 L3 SVP: 5 DLU: 77

810.384-014 WELDER, ARC (welding)
Welds together metal components of products, such as pipelines, automobiles, boilers, ships, aircraft, and mobile homes, as specified by layout, blueprints, diagram, work order, welding procedures, or oral instructions, using electric arc-welding equipment: Obtains specified electrode and inserts electrode into portable holder or threads consumable electrode wire through portable welding gun. Connects cables from welding unit to obtain amperage, voltage, slope, and pulse, as specified by WELDING ENGINEER (profess. & kin.) 011.061-026 or WELDING TECHNICIAN (profess. & kin.) 011.261-014. Starts power supply to produce electric current. Strikes (forms) arc which generates heat to melt and deposit metal from electrode to workpiece and join edges of workpiece. Manually guides electrode or gun along weld line, maintaining length of arc and speed of movement to form specified depth of fusion and bead, as judged from color of metal, sound of weld, and size of molten puddle. Welds in flat, horizontal, vertical, or overhead positions. Examines weld for bead size and other specifications. May manually apply filler rod to supply weld metal. May clean or degrease weld joint or workpiece, using wire brush, portable grinder, or chemical bath. May repair broken or cracked parts and fill holes. May prepare broken parts for welding by grooving or scarfing surfaces. May chip off excess weld, slag, and spatter, using hand scraper or power chipper. May preheat workpiece, using hand torch or heating furnace. May position and clamp workpieces together or assemble them in jig or fixture. May tack assemblies together. May cut metal plates or structural shapes [ARC CUTTER (welding) 816.364-010]. May be designated according to type of equipment used as Welder, Carbon Arc (welding); Welder, Flux-Cored Arc (welding); Welder, Gas-Metal Arc (welding); Welder, Gas-Tungsten Arc (welding); Welder, Hand, Submerged Arc (welding); Welder, Plasma Arc (welding); Welder, Shielded-Metal Arc (welding). May operate other machine shop equipment to prepare components for welding. May be designated according to product welded as Welder, Boilermaker (struct. metal). Important variations include types of metals welded, subprocesses used, trade name of equipment used, work site (in-plant, job shop, construction site, shipyard), method of application (manual, semiautomatic), high-production or custom, level of ambidexterity required, type of joints welded (seam, spot, butt). May be required to pass employer performance tests or standard tests to meet certification standards of governmental agencies or professional and technical associations.
GOE: 05.05.06 STRENGTH: H GED: R4 M4 L3 SVP: 5 DLU: 89

810.664-010 WELDER, GUN (welding) alternate titles: spot welder, line; spot welder, body assembly

Welds or tack-welds overlapping edges of positioned components to fabricate sheet metal assemblies, such as panels, refrigerator shells, and automobile bodies, using portable spot-welding gun: Positions and clamps electrode under overlapping edges of workpiece. Presses electrode against workpiece at specified weld points to complete circuit between electrodes and heat metal to joining temperature. Removes electrode after specified period of time. May adjust equipment for automatic timing of current. May periodically attend group meetings to learn new or modified tasks. May position and clamp workpieces together. May examine welded components to detect defects.

GOE: 06.04.31 STRENGTH: M GED: R2 M2 L2 SVP: 2 DLU: 89

810.684-010 WELDER, TACK (welding) alternate titles: tacker

Welds short beads at points specified by layout, welding diagram, or by FITTER (any industry) I 801.261-014, along overlapping edges of metal parts to hold parts in place for final welding. Performs tasks of FITTER HELPER (any industry) 801.687-014. May tack-weld, using hand, submerged, or gas shielded arc welding equipment. May tack-weld, using portable spotwelding gun [WELDER, GUN (welding) 810.664-010].

GOE: 05.10.01 STRENGTH: H GED: R3 M2 L2 SVP: 5 DLU: 80

811 GAS WELDERS

This group includes occupations concerned with welding in which joining is produced by heating with a gas flame or flames, with or without the application of pressure, and with or without the use of filler metal.

811.482-010 WELDING-MACHINE OPERATOR, GAS (welding) alternate titles: welder, gas, automatic

Sets up and operates oxy-fuel-gas-welding machine to weld metal parts, according to work order, blueprints, layout, and operating charts: Clamps workpieces into holding fixture on machine bed, movable carriage, or turntable. Positions and clamps or bolts welding torch onto overhead carriage, radial arm, or into stationary fixture at specified angle and distance from workpiece. Turns cranks to align torch with weld line. Selects torch tip, filler wire, and flux, according to charts or thickness and type of metal. Fills hoppers with flux and positions spout over weld line. Places reel of filler wire onto spindle and threads end through feed rolls to welding seam. Connects hoses from torch to regulator valves and cylinders of oxygen and fuel gas. Turns regulator valves to start flow of gases, lights torch, and adjusts gas mixture and pressure to obtain flame of desired size and color. Turns knobs to synchronize movement of torch or workpiece, feed of flux and filler with welding action, and sets switch to stop machine at end of weld. Starts machine, observes welding action, and examines weld for defects. Adjusts machine setup to vary bead size and other weld characteristics. May record setup and operating data. May reweld defective joints, using handtorch. May preheat workpiece in furnace. May lay out, fit, and tack-weld workpieces together. May operate machine equipped with two or more welding torches. May remove surplus flux, slag, and splatter, using wirebrush, portable grinder, and hand scraper.

GOE: 06.02.19 STRENGTH: M GED: R3 M3 L2 SVP: 6 DLU: 77

811.684-010 WELDER APPRENTICE, GAS (welding)

Performs duties as described under APPRENTICE (any industry) Master Title.

GOE: 05.05.06 STRENGTH: M GED: R3 M3 L3 SVP: 5 DLU: 77

811.684-014 WELDER, GAS (welding)

Welds metal parts, using gas welding equipment as specified by layout, welding diagram, or work order: Positions parts in jigs or fixtures on bench or floor, or clamps parts together along layout marks. Selects torch, torch tip, filler rod and flux, according to welding chart specifications or type and thickness of metal. Connects regulator valves and hoses to oxygen and fuel gas cylinders, and welding torch. Turns regulator valves to activate flow of gases, lights torch and adjusts gas mixture and pressure, to obtain desired flame, based on knowledge of gas-welding techniques. Holds torch at proper angle to metal and guides along weld joint, applying filler rod to molten area to form weld. Examines weld for bead size and other specifications. Repairs broken or cracked metal objects, fills holes, and builds up metal parts. May apply flux to workpiece instead of filler rod. May preheat workpiece in furnace or with torch. May layout, position and tack weld workpieces. May weld along vertical or overhead weld lines. May scarf or groove weld prior to applying filler metal, using gas welding equipment. May chip or grind off excess weld, slag, or spatter [GRINDER-CHIPPER (any industry) II]. May clean or degrease parts, using wire brush, portable grinder, or chemical bath. May cut metal plates or structural shapes using gas torch. May be designated according to type of gases used such as Welder, Acetylene (welding); Welder, Oxyacetylene (welding); Welder, Oxyhydrogen (welding). Important variations include type of metal welded, products, subprocesses, trade name of equipment, worksite (inplant), job shop, construction site, shipyard), high-production or custom, level of ambidexterity required or type of joints welded (seam, spot, butt). May be required to pass employer performance tests or standard tests to meet certification standards of governmental agencies or professional and technical associations.

GOE: 05.05.06 STRENGTH: M GED: R3 M3 L3 SVP: 5 DLU: 77

812 RESISTANCE WELDERS

This group includes occupations concerned with welding processes in which joining is produced by heat obtained from resistance of the base metal to electric current in a circuit of which the workpiece is a part, and by the application of pressure. Machine tenders in this group are included in Group 819 as WELDING-MACHINE TENDER (welding).

812.360-010 WELDER SETTER, RESISTANCE MACHINE (welding)

Sets up resistance welding and brazing machines that join or bond metal components, such as panels, frames, yokes, tubes, and containers, according to specifications and blueprints: Lays out and marks weld points and position of components on workpiece, using rule, square, templates, and scribe. Selects, positions, aligns, and bolts electrodes, jigs, holding fixtures, guides, and stops onto machine, using measuring instruments and handtools. Turns knobs to set and sychronize electric current, pressure, timing cycle, and automatic feed and transfer equipment specified by welding machine chart or record of previous work. Computes and records setting for new work, applying knowledge of metal properties, principles of welding, and shop mathematics. Makes trial weld. Adjusts electrode gap and feed rollers to thickness of metal. Dresses electrodes, using tip dresser, file, emery cloth, or dressing wheel. Devises and builds fixtures. Gives directions to WELDING-MACHINE OPERATOR, RESISTANCE (welding) in operation of machine. May inspect electrical circuits of machine and perform maintenance tasks, such as replacing defective tubes and relays. May set up welding stations on automatic production lines. Important variations include material types, finish required, and types of joints welded (spot, butt, seam).

GOE: 06.01.02 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

812.682-010 WELDING-MACHINE OPERATOR, RESISTANCE (welding)

Sets up and operates resistance welding machine to join metal parts, according to blueprints, work orders, or oral instructions: Turns machine dials to set air and hydraulic pressure, amperage, and joining time, according to specified type of metal, weld, and assembly. May select, install, and adjust electrodes. Aligns workpieces, using square and rule. May hold pieces together manually, fasten into jigs, or secure with clamps to align in specified assembly position. Holds part between electrodes or positions on machine worktable. Depresses pedal or pulls trigger to close electrodes and form weld at point of contact. Releases pedal or trigger after specified welding time. Cleans electrodes, using file, tip dresser, emery cloth. May operate machine which automatically releases electrodes from metal after welding cycle. May devise and build fixtures to hold pieces. May inspect finished work. May operate machine equipped with two or more electrodes which weld at several points simultaneously. Important variations include types of joints welded (seam, spot, butt) and types of materials welded (aluminum, steel). May be designated according to type of resistance-welding machine operated as Flash-Welding-Machine Operator (welding); Percussion-Welding-Machine Operator (welding); Projection-Welding-Machine Operator (welding); Upset-Welding-Machine Operator (welding).

GOE: 06.02.19 STRENGTH: M GED: R4 M4 L3 SVP: 6 DLU: 77

813 BRAZING, BRAZE-WELDING, AND SOLDERING OCCUPATIONS

This group includes occupations concerned with processes in which joining is produced by heating the base metals (metals to be joined) to a suitable temperature and supplying a filler metal to complete the joint. Brazing and braze-welding requires heating the base metals above 800 degrees F. (427 degrees C.) but below their melting point. Soldering requires heating the base metals below 800 degrees F. (427 degrees C.) and below their melting point. Machine tenders in this group are included in Group 819 as WELDING-MACHINE TENDER (welding). SOLDERER (jewelry-silver.) can be found in Group 700.

813.360-010 BRAZING-MACHINE SETTER (welding)

Sets up variety of brazing machines which braze (bond) or solder metal components, according to blueprint, work order, data chart, and layout specifications: Selects, positions, aligns, and bolts holding fixtures, guides, and stops onto machine to position and hold workpieces, using measuring instuments and handtools. Selects or bends tubing and wire to form heating coils, installs coils to electrodes, and turns knobs to set electrical current when setting up induction-brazing machines [BRAZER, INDUCTION (welding)]. Connects hoses from cylinders of oxygen and fuel gas, such as acetylene or natural gas, to regulator valves and one or more welding torches. Selects and installs nozzles to torches. Turns valves and installs gears and cams to set timing devices which shut off electrical current or gas pressure, move workpieces, or fill coils with water to cool workpiece after brazing, and synchronize movement of conveyor or rotary table with brazing action. May install positioning or ejecting fixtures. Makes trial runs, readjusts machine, and records setup data. May set up thermal brazing machines [BRAZING-MACHINE OPERATOR (welding)]. May set up resistance-brazing machines [BRAZER, RESISTANCE (welding)], brazing furnaces [BRAZER, FURNACE (welding)], and gas welding machines [WELDING-MACHINE OPERATOR, GAS (welding)].

GOE: 06.01.02 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

813.360-014 SETTER, INDUCTION-HEATING EQUIPMENT (welding)
Sets up induction heating equipment used to braze, heat-treat, and spot-weld metal parts: Selects induction coil according to heating chart, or bends copper tubing by hand, to form coil, following electrical formulas. Attaches power and coolant li..es to ends of coil, using flaring tool, nuts and washers, and wrenches. Sets dial controls to regulate current, heating-cycle time, and coolant-flow pressure. Turns wheel and reads meter to tune power-supply oscillators for maximum output. Shims coil-holder and work-holding fixture to center parts within coil for heating. Trains workers to braze and solder metals and examines their work for completeness of bonding. Cleans, lubricates, and adjusts equipment to maintain efficient operation using airhose, cleaning fluid, and handtools.
GOE: 06.01.02 STRENGTH: L GED: R3 M3 L3 SVP: 5 DLU: 77

813.382-010 BRAZER, INDUCTION (welding) alternate titles: brazer, electronic; solderer, electronic
Sets up and operates induction heating equipment to braze (bond) together metal components, according to blueprint, work order, or layout specifications: Positions and clamps fixtures and stops into machine, using square, rule, and template. Selects heating coil, or bends copper or alloy tubing or wire into coils, which outline joint to be brazed. Bolts or screws coil to electrode. Turns knobs to adjust electrical current for type and thickness of metal, as computed from data charts. Places wire, strip, or preformed piece of brazing alloy over edges of components and brushes flux along seams to be joined. Assembles and positions workpieces into holding fixture. Starts electric current in coils to heat workpiece and melt alloy. Turns off current and allows workpiece to cool, or directs stream of water or air onto workpiece, or turns handle to fill coil with water to cool workpiece. Removes workpiece, using tongs or tweezer, when brazed metal has solidified, as indicated by color. May connect holding fixture to electrode instead of using heating coil. May set timing control to shut off current automatically after specified period of time. May anneal finished workpiece to relieve internal stress [ANNEALER (heat treating)]. May dip workpiece into chemical bath to remove impurities or flux. May bond workpieces together with soft solder and be known as Solderer, Induction (welding).
GOE: 06.02.10 STRENGTH: M GED: R3 M3 L2 SVP: 5 DLU: 77

813.382-014 BRAZING-MACHINE OPERATOR (welding) alternate titles: brazing-machine operator, automatic; flame-brazing-machine operator; soldering-machine operator, automatic
Sets up and operates thermal brazing machine which bonds components of fabricated metal products as specified by work orders, blueprints, and data charts: Selects torch tips, braze alloy, and flux, according to type and thickness of metal, data charts, or previous brazing record. Screws tips to torches. Positions and clamps torches at specified distance and angle to workpiece. Aligns and clamps holding fixtures to machine bed, table, or conveyor, using rule, square, and handtools. Aligns and clamps workpieces into fixtures. Fills hoppers with flux and positions spout to direct flow, or manually brushes flux onto seams of workpieces. Loads reel of brazing wire onto machine holder and threads end through automatic feed rolls. Positions preformed pieces of braze alloy along seams of workpiece, or manually applies alloy to seams during brazing. Connects hoses from oxygen and fuel gas cylinders to regulator valves and torches. Turns valves to start flow of gases, lights torch, and adjusts mixture to obtain flame of desired size and color. Turns knobs to synchronize movement of conveyor, rotary table, or oscillating carriage with feed of wire, flux, and brazing action. Starts machine which moves workpiece to flame or moves torch to workpiece to melt alloy into seam. Moves workpiece away from machine to cool. Removes and examines finished pieces for defective seams. May dip pieces into water or acid bath to cool and clean them. May operate machine which automatically moves pieces before air jet or into cooling chamber. May manipulate levers or crank to control movement of machine. May bond workpieces with soft solder and be designated Soldering-Machine Operator (welding).
GOE: 06.02.19 STRENGTH: M GED: R3 M3 L2 SVP: 5 DLU: 77

813.482-010 BRAZER, FURNACE (welding) alternate titles: solderer, furnace
Operates electric, gas, or oil-fired furnace to braze (bond) or solder metal components, as specified by work orders, sketches, and charts: Turns knobs and observes recording instruments, gauges, and pyrometer to maintain furnace and cooling chamber temperature specified for type of metal and brazing or soldering alloy used. Aligns and clamps together components or positions components in holding fixtures under specified pressure. Brushes on flux and places wire or preformed pieces of brazing or soldering alloy over joints. Places workpieces into furnace or onto conveyor, or into containers, such as baskets, trays, or retorts. Loads containers into furnace or onto furnace conveyor, manually or by hoist. Transfers workpieces from furnace to cooling chamber, using pole, hook, or by turning cranks. May install fixtures into furnace or onto conveyor, using rule, square , template, and handtools. May operate furnace which drops brazed products into quenching tank. May solder metals, such as tin, zinc, brass, and nickel, to strips of gold or silver preparatory to making jewelry articles and be designated Rolled-Gold Plater (jewelry-silver.).
GOE: 06.02.10 STRENGTH: M GED: R3 M2 L3 SVP: 4 DLU: 77

813.682-010 BRAZER, RESISTANCE (welding)
Operates spot welding machine to braze (bond) metal parts together: Places flux and wire or strip of brazing alloy between workpieces. Adjusts electric current and timing cycle of machine to heat metal to bonding temperature. Removes workpiece, using tongs, and cools workpiece, using air or water. May cut carbon electrodes to specified size and shape, using cutoff saw.
GOE: 06.02.19 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 77

813.684-010 BRAZER, ASSEMBLER (welding) alternate titles: brazer; torch brazer
Brazes (bonds) together components to assemble metal parts as specified by layout, work order, or blueprints, using hand torch: Aligns and clamps workpieces together, using rule, square, or template or sets up and places them in fixtures, jigs, or vise. Cleans joints of workpieces, using wire brush or by dipping them into cleaning solution. Selects torch tip, flux, and brazing alloy from data charts or work order. Connects hoses from torch to regulator valves and cylinders of oxygen and specified fuel gas, acetylene or natural. Turns valves to start flow of gases, lights flame, and adjusts pressure and mixture of gases to obtain desired color and size of flame. Brushes flux onto joint of workpiece or dips braze rod into flux to prevent oxidation of metal. Guides torch and rod along joint or seam of workpiece to heat to brazing temperature and melt braze alloy to bond workpieces together. Examines seam and rebrazes defective joints. May braze together broken parts and cover holes to repair leaks. May specialize in bonding parts with soft solder and be designated Solderer, Torch (welding) II. May melt and separate brazed joints, using hand torch or furnace, remove and straighten components, and rebraze joints to repair misaligned or damaged assemblies and be designated Brazer, Repair And Salvage (welding). May braze together seams of metal sheets, strips, screening, or wire cloth, using torch mounted on manually guided crawler, and be designated Brazer, Crawler Torch (welding).
GOE: 06.02.22 STRENGTH: M GED: R4 M3 L3 SVP: 5 DLU: 77

813.684-014 SOLDERER-ASSEMBLER (welding) alternate titles: production solderer; returned-goods repairer
Solders together components to assemble fabricated metal items, as specified by work orders, diagrams, or layout, using soldering iron: Aligns and clamps parts together, using rule, square, or handtools, or positions items in fixtures, jigs, or vise. Dips parts in cleaning solution, or brushes or sprinkles flux along seams. Heats soldering iron in gas flame or electric induction coil, or plugs iron in electrical outlet. Plunges tip of iron into cleaning compound and rubs tip onto specified tin alloy to clean and tin tip. Guides tip along seam to heat workpiece to bonding temperature and dips bar or wire of specified soft solder in seam to solder joint. May dip workpieces into molten solder or place solder strip between seams and heat seam with iron to sweat items together. May clean workpiece, using file, handbrush, or grinder. May grind, cut, or bend edges to fit fabricated parts together, using power grinder and handtools. May use hand torch to solder joints inaccessible to hand iron. May solder broken parts or cover holes to repair leaks. May melt and separate soldered joints, using hand torch, iron, or furnace, and remove and straighten components and resolder joints to repair misaligned or damaged assemblies and be designated Solderer, Assembly Repair (welding).
GOE: 06.02.22 STRENGTH: M GED: R3 M2 L3 SVP: 4 DLU: 77

813.684-018 SOLDERER-DIPPER (welding)
Dips metal parts into molten solder to bond them together, using any combination of following methods: (1) Twists, crimps, clamps, or holds parts together and dips them into solder for specified time. Removes and holds parts together until color indicates solder has set. (2) Dips parts separately and solders them together with hand iron, heating one part and pressing it against another, or placing clamped parts into furnace. (3) Clamps workpiece into fixture over solder pot and depresses lever to raise level of solder or lower workpiece into solder. May dip units, such as radiator cores, using jib or crane. May place solder bars into container and turn knobs to specified position to melt solder and regulate its temperature.
GOE: 06.04.31 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 77

813.684-022 SOLDERER, PRODUCTION LINE (welding)
Solders together components of metal products on production line, using hand soldering iron and soft solder: Dips workpieces into chemical solution or brushes or powders flux along joints to remove impurities. Places workpieces into fixtures or manually holds them together at designated point. Plunges soldering iron into chemical to clean tip. Positions tip of heated soldering iron and wire or bar of solder to joint until solder melts and seeps into joint. Guides iron and solder along seams. Removes workpiece when color indicates that solder has cooled and bonded workpieces together. May sweat together workpieces coated with solder. May solder with self-fluxing solder. May adjust controls of gas flame or electric induction coils to specified point on dial to heat soldering iron.
GOE: 06.04.31 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 77

813.684-026 SOLDERER, TORCH I (welding)
Fills holes, indentations, and seams of fabricated metal products, using solder and gas torch: Prepares area to be soldered, using hand and powered tools, such as hacksaw, chisel, hammer, grinder, and wire brush. Brushes acid solution onto area to clean area. Moves oxyacetelene torch over area to heat acid and wipes surface, using cloth, to remove dirt and excess acid. Rubs stick of solder on heated area and melts solder, using torch. Smooths soldered area with alternate strokes of paddle and torch, leaving soldered section slightly higher than surrounding area for later filing.
GOE: 06.04.31 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 77

813.684-030 SOLDERER, ULTRASONIC, HAND (welding)
Solders metal components, using electric-ultrasonic soldering equipment: Positions component in fixture. Preheats joint area to temperature above solder

melting point, using oxy-fuel torch. Turns dials to set intensity and duration of ultrasonic impulse, according to work order specifications. Pushes button to turn on electric-ultrasonic equipment. Fills joint with solder and positions *ultrasonic horn* on outside of joint to transfer energy impulse from equipment to workpiece, to bond solder and base metal.
GOE: 06.04.31 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

813.685-010 BRAZER, CONTROLLED ATMOSPHERIC FURNACE (welding) alternate titles: hydrogen braze-furnace operator

Tends brazing furnace equipped to introduce mixture of gases, which removes oxides from, and prevents oxidation of metal and braze alloy during brazing. Turns handle and knobs and observes gauges to start pump or gas generator and to maintain specified flow of gas into combustion and cooling chamber. Visually inspects brazed metal components periodically and discards defective parts.
GOE: 06.02.19 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 77

814 SOLID STATE WELDERS

This group includes occupations concerned with a group of welding processes in which joining is produced essentially at temperatures below the melting point of the base metals being joined without the addition of a filler metal. Pressure may or may not be used. Processes included are cold welding, explosion welding, diffusion welding, ultrasonic welding, and friction welding. Machine tenders in this group are included in Group 819 as WELDING-MACHINE TENDER (welding). Forge welding occupations are included in Division 61.

814.382-010 WELDING-MACHINE OPERATOR, FRICTION (welding)

Operates friction-welding machine to join metal components, according to work orders, specification tables, and diagrams: Installs, aligns, and adjusts fixtures and stops, using handtools and precision measuring devices, such as micrometers, calipers, verniers, and gauges. Positions parts to be welded into rotating and stationary cylinders of machine holding devices and aligns cylinders in parallel position, using wrench. Turns knobs to regulate speed and timing of rotating cycle and pressure force of stationary cylinder. Presses button to activate machine motor and depresses pedal to start friction-welding cycle to perform trial run. Removes welded parts from machine, using wrench. Periodically inspects workpieces, using precision measuring devices. May perform maintenance operations before and after machine functioning, such as greasing machine, adjusting tension of drive belts, and maintaining specified level of hydraulic fluids and coolants.
GOE: 06.02.19 STRENGTH: L GED: R3 M3 L2 SVP: 5 DLU: 77

814.682-010 WELDING-MACHINE OPERATOR, ULTRASONIC (welding)

Operates welding machine and related equipment to convert ultrasonic vibrations into heat energy to fuse metal components: Observes activity meter for specific amount of power drawn from generator or power supply, according to charts. Turns controls to set clamping pressure, force-amplitude ratio, and velocity, according to work order specifications. Presses buttons to adjust controls for automatic timing of weld and hold cycles. Places workpiece in holding fixture on conveyor and pushes button or depresses pedal to start automatic weld cycle. Observes machine in operation and reports malfunctions to supervisor. Removes welded workpiece from fixture. Removes and replaces worn or damaged *ultrasonic horn*. Important variations include fabrication requirements and type of ultrasonic welding (spot, ring, line, continuous-seam/scan).
GOE: 06.02.19 STRENGTH: M GED: R3 M3 L3 SVP: 4 DLU: 77

814.684-010 WELDER, EXPLOSION (welding)

Welds fabricated metal products within firing chamber of explosion welding equipment, applying knowledge of metal characteristics and explosives: Spreads buffer material in base part of holding device and spreads explosive powder material in upper part of holding device. Positions workpieces in holding device and adjusts to form acute angle. Positions device with contents in firing chamber, closes door of chamber, and turns handle to lock door. Presses detonator button on firing chamber to trigger explosion that forces holding device to close, locking and joining metal workpieces. Unlocks and opens chamber door and removes holding device. Opens holding device, removes welded metal workpiece, and places workpiece in receptacle for further processing.
GOE: 06.02.24 STRENGTH: M GED: R3 M3 L2 SVP: 5 DLU: 77

815 ELECTRON-BEAM; ELECTROSLAG; THERMIT; INDUCTION; AND LASER-BEAM WELDERS

This group includes occupations concerned with the following processes: Electron-beam welding; thermit welding; electroslag welding; induction welding; and laser-beam welding. Machine tenders in this group are included in Group 819 as WELDING-MACHINE TENDER (welding).

815.380-010 WELDER SETTER, ELECTRON-BEAM MACHINE (welding)

Sets up electron-beam welding machine to join together metal components through emission of electrons in vacuum chamber onto workpiece, according to welding charts and specifications: Turns knobs to set voltage and welding speed according to specifications. Turns knobs to set focus of electron beam, beam current, vacuum level and deflection, according to welding charts of parameter settings and equipment setup experience. Turns controls to start air-pumping and water-cooling systems. Positions metal components into present fixture. Pushes cycle button to automatically start power supply and to weld component. Inspects welded component for defects according to knowledge of metal characteristics and electron-beam welding equipment. Cleans gun cartridge, using cleaning solution, and replaces damaged filament, using handtools. Replaces worn seal in vacuum chamber, using wrench.
GOE: 06.01.02 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

815.382-010 WELDING-MACHINE OPERATOR, ELECTRON BEAM (welding)

Sets up and operates electron beam welding machine to join metal workpieces according to specifications, applying knowledge of electron-beam welding: Cleans and assembles part, using solvents, degreasing equipment, and press or oven. Checks part for magnetic field, using Gauss meter, and places part on automatic demagnetizer. Selects holding fixture according to size and type of workpiece and installs fixture into welding position. Selects *target block* and fastens block to fixture to make beam adjustments and prevent damage to equipment. Turns on power supply and water cooling and air pumping systems. Closes chamber door and activates pumping stages to create vacuum. Reviews specifications or examines sample parts to determine equipment settings, applying knowledge of electron-beam welding and metal characteristics. Adjusts current setting to heat filament or cathode and adjusts high voltage setting on anode. Aligns target block in horizontal and lateral directions, using hand and foot controls. Rotates polarized filter to darken image in optical viewing system. Activates beam and adjusts anode voltage and beam current to regulate depth of weld. Adjusts current to magnetic lens to focus beam in specific positions. Moves workpiece under electron beam during welding, using handtools. Turns off beam, opens chamber, and removes target block. Inspects section of workpiece for depth of weld penetration, width of joining cracks, holes, and inclusions, using microscope. Performs mechanical strength tests and records results. Cleans weld chamber and replaces filament, using handtools.
GOE: 06.02.19 STRENGTH: M GED: R4 M3 L3 SVP: 5 DLU: 77

815.382-014 WELDING-MACHINE OPERATOR, ELECTROSLAG (welding)

Operates electroslag welding machine, which uses heat produced by resistance of molten flux to electrical current, to fuse metal components: Places metal components in fixture and tightens holding braces, using wrench. Turns dials to start cooling water supply and to activate power sources and control cabinet. Turns knobs to set voltage, wire feed speed, and welding current, according to welding charts and work orders. Presses automatic cycle button to strike arc and start welding process. Adds premeasured flux to joint to create molten flux pool of specified depth. Turns control to start oscillation. Listens for change in sound of welding process or measures flux pool depth, using steel rod, to determine if additional flux is required. Adds flux throughout welding cycle to maintain stable operation. Observes electrode wire feed to ensure that wire enters and melts in flux. Presses button to stop welding current, power supply, and wire feed. Removes copper weld retaining shoes, using hammer. May remove tabs containing accumulated flux, using oxy fuel or arc cutting equipment. May inspect welded joints for defects, and fills holes, using arc welding equipment. May remove slag, using oxy fuel torch. Important variations are fabrication requirements, weldment design, quality, construction site facilities, and type of electroslag equipment (single-wire nonoscillating, double-wire oscillating, and multiwire oscillating).
GOE: 06.02.19 STRENGTH: H GED: R3 M3 L3 SVP: 4 DLU: 77

815.682-010 LASER-BEAM-MACHINE OPERATOR (welding)

Operates laser-beam machine, which produces heat from concentrated light beam, to weld metal components: Pushes button to open safety enclosure at rear of laser cavity. Positions metal components in fixture and places components on fixture-holding table inside cavity. Pushes button to close safety enclosure. Aligns rear mirror of laser cavity, using micrometer screws, according to chart specifications. Types instructions, using teletype machine, to computer that automatically places fixture-holding table in operative position. Sights reference mark through microscope and turns controls to move fixture to welding position. Teletypes instructions to initiate weld cycle and to return fixture-holding table to unload position. Pushes button to open safety enclosure and removes fixtures containing welded components. Cleans optics, using brush, and replaces used flash tubes. May cut metal components, using laser-beam machine, and be designated Laser-Beam Cutter (welding).
GOE: 06.02.19 STRENGTH: L GED: R3 M3 L3 SVP: 4 DLU: 77

815.682-014 WELDING-MACHINE OPERATOR, THERMIT (welding)

Operates thermit welding machine to join metal components, such as crankshafts, ship stern frames, machine parts, and railroad and craneway rails. Aligns and secures parts in holding fixture. Cuts gap in parts parallel to joint, using gas torch. Places wax pattern and mold box around gap. Places gate and riser patterns into specific positions. Pulls plug to automatically pour specified amount of thermit material into mold box. Ignites kerosene preheater to melt wax and dry mold, using gas torch. Places powder on thermit material and ignites compound, using gas torch, to start thermit welding reaction. Breaks mold, using handtools. Cuts off gates and risers, using gas torch.

GOE: 05.10.01 STRENGTH: M GED: R3 M3 L3 SVP: 3 DLU: 77

816 THERMAL CUTTERS AND ARC CUTTERS

This group includes occupations concerned with severing or trimming materials, using thermal or electric-arc cutting equipment.

816.364-010 ARC CUTTER (welding) alternate titles: arc-air operator; burn-out-scarfing operator

Cuts, trims, or scarfs metal objects to dimensions, contour, or bevel specified by blueprints, work order, or layout, using arc-cutting equipment: Positions workpiece onto table or into fixture or with jib or crane. Selects carbon or metal-coated carbon electrode, gas nozzle, electric current, and gas pressure, according to thickness and type of metal, data on charts, or record of previous runs. Inserts electrode and gas nozzle into holder and connects hose from holder to compressed gas supply. Connects cables from power source to electrode and workpiece or fixture, to obtain desired polarity. Turns knobs to select amperage. Turns lever to adjust jet of gas to blow away molten metal. Strikes arc and guides electrode along lines to cut (melt) through metal. May cut off chips or sprues and burn out cracks and holes. May use holder having two electrodes. May cut without using gas jet. May use nonconsumable tungsten electrode and gases, such as helium or carbon dioxide, and be designated Arc Cutter, Gas-Tungsten Arc (welding). May use plasma-arc cutting torch and gases, such as nitrogen and carbon dioxide, and be designated Arc Cutter, Plasma Arc (welding).
GOE: 05.05.06 STRENGTH: M GED: R3 M3 L3 SVP: 5 DLU: 77

816.464-010 THERMAL CUTTER, HAND I (welding) alternate titles: burner, hand; cutter, gas; flame gouger; torch cutter

Cuts, trims, or scarfs metal objects to dimensions, contour, or bevel specified by blueprints, layout, work order, or oral instructions, using thermal-cutting equipment: Lifts and positions workpiece onto table, manually or using jib or crane. Connects hoses from torch to oxygen tank and fuel gas tank, such as acetylene or propane. Selects torch tip, gas pressures, speed of cut, and allows for width of cut, according to thickness and type of metal as computed from charts. Installs torch tip and turns handle to start and adjust pressure of fuel gas. Lights torch and adjusts flow of oxygen to obtain desired mixture, as indicated by color and size of flame. Directs flame on workpiece to heat it to oxidizing temperature, as indicated by color of metal. Squeezes lever or trigger to release additional jet of oxygen which burns path through metal. Guides flame along cutting line, observing cutting to judge angle, distance of torch, and speed of movement. Removes and inspects finished workpiece. Chips or grinds burrs from edges, using power chisel or portable grinder. May lay out cutting lines, using rule, square, compass, or by tracing from template. May cut damaged or worn pieces from metal structure, such as bridge or building frames, ship plates, or pipelines. May install special tip to cut grooves into metal joints preparatory to welding and be designated Flame Scarfer (welding).
GOE: 05.10.01 STRENGTH: H GED: R3 M3 L3 SVP: 5 DLU: 77

816.482-010 THERMAL-CUTTING-MACHINE OPERATOR (welding) alternate titles: burning-machine operator; flame-cutting-machine operator; flame planer; gas-cutting-machine operator; radiagraph operator

Sets up and operates thermal cutting machines which cut metal plates and structural shapes to dimensions, contour, and bevel specified by blueprints, layout, work orders, and templates: Lifts, positions, and clamps metal stock onto bed of machine. Connects hoses from torch to regulator valves and cylinders of oxygen and fuel gas, such as acetylene, hydrogen, or propane. Selects torch tip and computes gas pressure and mixture, and speed of cut, according to type and thickness of metal, data charts, or record of previous cuts. Installs tip to torch. Pushes button to adjust sliding arm from side or overhead carriage to position torch over cutting line, and to adjust height of head over workpiece to make longitudinal cuts. Adjusts length of radial arm to cut out arcs or circles. Tilts angle of torch to cut bevels. Pushes buttons and reads gauges to obtain selected gas pressure and mixture and set speed of cutting action. Pushes button to automatically light torch, preheat metal to oxidizing temperature, and open valve to release additional oxygen to cut through metal. Pushes button to automatically position torch at cutting line and to start machine moving along line. May maintain records of operating data. May lay out cutting lines, using rule, tape, and square. May preheat metal to remove surface impurities, using hand torch. May clamp two or more plates together for simultaneous cutting. May be designated according to equipment used as Electronic-Eye-Thermal-Cutting-Machine Operator (welding); Magnetic-Thermal-Cutting-Machine Operator (welding); Thermal-Cutting-Tracer-Machine Operator (welding); Track-Template-Thermal-Cutting-Machine Operator (welding); Plasma-Cutting-Machine Operator (welding).
GOE: 06.02.19 STRENGTH: M GED: R3 M3 L3 SVP: 5 DLU: 77

816.682-010 SCARFING MACHINE OPERATOR (steel & rel.)

Sets up and operates, from control booth, scarfing machine to cut surface defects from rolled steel slabs: Reads rolling orders to ascertain scarfing instructions and determine machine setup. Selects specified number of torches and installs tips in torches, using handtools. Clamps torches in machine at specified angle and connects hoses from gas and air manifolds onto torches. Opens manifold valves, observes pressure gauges, and turns valve wheels to regulate gas and oxygen pressure. Moves console controls to ignite torches and adjust gas and oxygen mixture to obtain specified color of flame. Moves controls to position machine on rolling line, to activate rolling conveyor, and to ignite torches. Observes operation to ensure defects have been removed from slab and rescarfs slab as needed. Opens water spray valve to flush scale and metal from scarfed slab. Moves controls to move machine away from rolling line. Cleans and changes tips as needed. Prepares production reports and cleans work area. Assists other workers to repair scarfing machine.
GOE: 06.02.02 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 86

816.684-010 THERMAL CUTTER, HAND II (welding) alternate titles: salvage cutter; scrap burner; scrap cutter

Dismantles metal assemblies, such as automobiles, machines, building girders, and pipelines, or cuts scrap metal to size for shipping, using thermal-cutting equipment, such as flame-cutting torch or plasma-arc equipment: Connects hoses from hand torch to cylinders of oxygen and fuel gas, or turns knobs to adjust settings of arc-cutting equipment. Turns handle to open gas valve to specified pressure. Lights torch and adjusts flow of oxygen to obtain desired mixture, as indicated by color and size of flame. Directs flame on workpiece to heat it to oxidizing temperature, as indicated by color of metal. Squeezes lever or trigger to release additional jet of oxygen which cuts path through metal. Guides flame or arc across workpiece and observes cutting action to judge speed of movement. May change cutting tips or adjust gas pressure or arc-welding equipment to cut metal of different types and thickness. May climb ladders or work on scaffolds to disassemble structures.
GOE: 05.12.11 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

819 WELDERS, CUTTERS, AND RELATED OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with welding, brazing, soldering, cutting, and related processes. LEAD BURNER, MACHINE (elec. equip.) and LEAD BURNER (elec. equip.) I are included in Group 727.

819.131-010 LEAD-BURNER SUPERVISOR (welding)

Supervises and coordinates activities of workers engaged in burning (welding) lead and lead alloy parts according to blueprints, specifications, or orders, applying knowledge of melting characteristics of lead: Directs workers and participates in fabricating, installing, and repairing equipment, such as lead pipes, floors, valves and tank linings. Interprets drawings and specifications and orders materials. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.06 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

819.131-014 WELDING SUPERVISOR (welding)

Supervises and coordinates activities of workers engaged in welding and cutting of products and structures, such as auto, aircraft, and ship components, pipes, boilers, and mobile homes, applying knowledge of welding and cutting techniques, materials, and equipment, and fabrication requirements: Analyzes work orders and blueprints to determine need for supplies and sequence of operations required. Requisitions supplies, such as weld rods, gas, flux, and fixtures. Inspects work or confers with WELD INSPECTOR (welding) I 819.281-018 and WELD INSPECTOR (welding) II 819.687-010 to maintain specified standards and quality. Trains workers in operation of equipment. May set up machines or make trial welds to make test runs and experimental products. May supervise brazing and soldering operations. May supervise fitting and assembly of structural frames. May supervise workers engaged in making tubing from flat steel strips by electric-weld process and be designated Welding Supervisor, Electric-Weld Pipe Mill (welding). Important variations include location of workers supervised, such as in-plant, job-shop, construction site, or shipyard. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M4 L3 SVP: 8 DLU: 88

819.132-010 SUPERVISOR, FLAME CUTTING (steel & rel.)

Supervises and coordinates activities of workers engaged in removing defects from and cutting heavy gauge steel plates into specified sizes and shapes, using flame cutting, welding, chipping, and grinding machines and equipment: Reviews orders to ascertain size, shape, and gauge of steel plate ordered and examines plate marked by inspection personnel to plan unit work and sequence of operations. Observes flame cutting and plate conditioning activities to ensure expedient, quality, and maximum production. Trains workers in operation of equipment and performance of assigned duties. Inspects equipment for need of repair and arranges for maintenance. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 86

819.281-010 LEAD BURNER (welding) alternate titles: lead welder

Welds lead or lead alloy, using gas torch or arc welding equipment, to install and repair lead items according to oral instructions or dimensional data from blueprints: Installs or repairs equipment, such as lead pipes, valves, floors, and tank linings. Cuts lead sheets or pipe, using powered saws, hand shears, or chipping knife. Levels and scrapes edges or surfaces, using hand scraper, and positions parts for burning. Ignites torch and adjusts valves to obtain flame of specified size and color or adjusts arc welding equipment to obtain specified arc. Welds in flat, vertical, horizontal, or overhead positions. Melts lead bar or wire to add lead to joint. Bonds lead to steel or copper to produce homo-

geneous lead lining or cover, using flux. Places hand molding irons on heavy joints or corners to hold them in position. Heats forms and dresses lead pipes, elbows, and parts, using handtools, torch, or arc welding equipment. Places asbestos strip under joints to prevent heating of supporting surface. May pour molten lead into permanent or sand molds to cast parts. May melt scrap in kettle and cast or extrude melted scrap into bars or wire for reuse. Important variations include type of joint welded (butt, spot, seam).
GOE: 05.05.06 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

819.281-014 LEAD-BURNER APPRENTICE (welding)
Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.06 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

819.281-018 WELD INSPECTOR I (welding) alternate titles: welding tester
Inspects and tests welded joints of work in progress and of completed units for visible defects, correct dimensions, joint strength, bead formation, weld penetration, and conformance with layout, blueprint, and work order specifications, applying knowledge of welding principles and metallurgical properties. Examines joint to detect flaws, such as cracks, cold weld, spatter, and undercuts, using flashlight and magnifying glass. Inspects joints for hidden cracks and pits, using magnaflux machine and ultrasonic testing equipment. Performs stress tests on joint, using stress testing equipment, or prepares sample for stress testing, and reviews results. Verifies alignment and dimensions of product and setup of machines and fixtures used for work in progress. Observes techniques and performance of welders in shop or at construction site. Marks defective pieces and recommends scrapping or methods for reworking. Records inspection data. Analyzes x-ray photographs of welded joints. May weld, test, and inspect metal samples to determine most effective welding process and technique and be designated Performance-Test Inspector (welding).
GOE: 06.01.05 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

819.281-022 WELDER, EXPERIMENTAL (welding)
Analyzes engineering data and welds experimental parts and assemblies to determine most effective welding processes, using various welding techniques and equipment: Analyzes engineering drawings and specifications to plan welding operations where procedural information is unavailable. Lays out parts and assemblies according to specifications. Develops templates and other work aids to hold and align parts. Determines type of welding to be used, such as metallic arc, inert gas, electrode, and oven treatment, applying knowledge of metals to be joined, contours and angles to be formed, and specified stress tolerances. Welds components in flat, vertical, or overhead positions, and adjusts amperage, voltage, and speed during joining to assure required weld deposit. Inspects grooves, angles, gap allowances, and related aspects of assembly to ensure conformance to specifications, using micrometer, caliper, and related precision measuring instruments. Observes hydrostatic, x ray, dimension tolerance, and other tests on welded surfaces to evaluate quality of weld and conformance to production requirements.
GOE: 05.05.06 STRENGTH: L GED: R4 M4 L3 SVP: 8 DLU: 77

819.361-010 WELDER-FITTER (welding)
Lays out, fits, and welds fabricated, cast, and forged components to assemble structural forms, such as machinery frames, tanks, pressure vessels, furnace shells, and building and bridge parts, according to blueprints and knowledge of welding and metallurgy: Selects equipment and plans layout, assembly, and welding, applying knowledge of geometry, physical properties of metal machining weld skrinkage, and welding techniques. Lays out, positions, aligns, and fits components together. Bolts, clamps, and tack-welds parts to secure in position for welding [WELDER, TACK (welding)]. Sets up equipment and welds parts, using arc, gas-shielded arc, submerged arc, or gas welding equipment [WELDER, COMBINATION (welding)]. May assemble parts by bolting and riveting. May repair products by dismantling, straightening, reshaping, and reassembling parts, using cutting torch, straightening press, and handtools, and be designated Welder, Structural Repair (welding). May specialize in using one welding process and be designated Welder-Fitter, Arc (welding); Welder-Fitter, Gas (welding). May specialize in fitting and welding components of metal tools, dies, and fixtures and be designated Welder, Tool And Die (welding).
GOE: 05.05.06 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

819.361-014 WELDER-FITTER APPRENTICE (welding)
Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.06 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

819.381-010 WELDER-ASSEMBLER (machinery mfg.)
Assembles and tack-welds steel frames and other component parts of machinery and equipment in preparation for final welding: Measures and marks locations for metal components on assembly table, following blueprints. Lifts and positions components on assembly table, using electric crane, jacks, and shims. Verifies position of metal components in assembly, using straightedge, combination square, calipers, and rule. Clamps metal components to assembly table for welding. Removes rough spots from castings, using portable powered grinder and hand file, to fit and assemble parts. Tack-welds parts in preparation for final welding. Moves assembly to storage area, using electric crane.
GOE: 05.05.06 STRENGTH: M GED: R3 M3 L2 SVP: 6 DLU: 77

819.384-010 WELDER, COMBINATION (welding)
Welds metal components together to fabricate or repair products, such as machine parts, plant equipment, mobile homes, motors, and generators, according to layouts, blueprints, or work orders, using brazing and variety of arc and gas welding equipment: Welds metal parts together, using both gas welding [WELDER, GAS (welding)] or brazing [BRAZER, ASSEMBLER (welding)] and any combination of arc welding processes [WELDER, ARC (welding)]. Performs related tasks, such as thermal cutting and grinding. Repairs broken or cracked parts, fills holes, and increases size of metal parts. Positions and clamps together components of fabricated metal products preparatory to welding. May locate and repair cracks in industrial engine cylinder heads, using inspection equipment and gas torch, and be designated Repairer, Cylinder Heads (welding). May perform repairs only and be designated Welder, Repair (welding). May be required to pass employer performance tests or standard tests to meet certification standards of governmental agencies or professional and technical associations.
GOE: 05.05.06 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

819.384-014 WELDER APPRENTICE, COMBINATION (welding)
Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.06 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

819.664-010 PLATE CONDITIONER (steel & rel.)
Removes and repairs surface defects in steel plates, using hammer and chisel, portable power grinder, and arc welding machine. Determines method required for reconditioning plate based upon examination of plate or following instructions of supervisory personnel. Chips out rolled-in scale from plate, using hammer and chisel, or grinds overfills to plate level, using portable electric grinder. Fills in depressions or chipped out areas of plate, using arc welding machine. Brushes welded area to remove flux, using wire brush, and grinds filled in area to remove excess metal and to smooth plate, using portable electric grinder. Reworks plate to meet standards as directed by inspection personnel. Stamps or marks identification on plate, using steel dies, hammer, or chalk. Attaches sling to plate and crane hook and signals worker operating crane to lift and position plate on or remove plate from workbench.
GOE: 06.04.24 STRENGTH: L GED: R2 M2 L2 SVP: 4 DLU: 86

819.666-010 MACHINE HELPER (welding)
Performs any combination of following tasks involved in use of welding, flame cutting, and brazing machines and furnaces: Transfers workpieces, tools, and supplies. Inserts welding rods into holders, screws tips to torches, or places reels of wire onto rack and threads ends through feed rolls to help set up machine. Positions workpieces and fixtures, and clamps or bolts parts into bed of machine or onto conveyor. Removes corrosion, slag, grease, and excess flux from workpieces, using wire brush, scraper, vacuum hose, portable grinder, or chemical solution. Fills hoppers with flux or brushes flux and inserts braze or solder alloy along seams of workpiece. Turns handles or cranks to move workpieces through machine. Bolts portable machines to workpieces, using wrench. Removes finished work from machine with tongs, or hoist. Tags or marks identifying data on work pieces. Oils and cleans machines. May cut scrap to size, using hand torch. May be designated by machine as Brazer Helper, Furnace (welding); Brazer Helper Induction (welding); Brazing-Machine-Operator Helper (welding); Flame-Cutting-Machine-Operator Helper (welding); Soldering-Machine-Operator Helper (welding); Welding-Machine-Operator Helper, Arc (welding); Welding-Machine-Operator, Gas (welding).
GOE: 05.12.11 STRENGTH: H GED: R2 M1 L2 SVP: 2 DLU: 77

819.684-010 WELDER, PRODUCTION LINE (welding)
Welds metal parts on production line, using previously set up gas- or arc-welding equipment: Turns valves to release fuel gas and oxygen and ignites mixture, or inserts specified weld rod into portable holder, clamps cable onto workpiece or jig, and strikes arc. Guides electrodes, or torch and filler rod, along horizontal weld line at specified speed and angle to melt and deposit metal from filler rod or electrode onto workpiece. May skip (tack) weld designated spots to secure workpieces for other welders. May use different equipment and be designated Brazer, Production Line (welding); Welder, Production Line, Arc (welding); Welder, Production Line, Combination (welding); Welder, Production Line, Gas (welding).
GOE: 06.04.31 STRENGTH: M GED: R2 M2 L2 SVP: 2 DLU: 77

819.685-010 WELDING-MACHINE TENDER (welding)
Tends welding, brazing, or soldering equipment that joins metal components of products, such as auto, aircraft, and jewelry parts, brackets, panels, housings, and electric circuit boards: Lifts metal parts and loads in welding, brazing, or soldering machine. Moves lever to lock parts in position. Presses foot controls or pushes buttons to start machine which automatically welds, brazes, or solders, and unloads parts onto conveyor. Observes operation of machine to detect malfunctioning, and reports malfunctions to MACHINE SETTER (any industry) 616.360-022 or supervisor. Inspects joined components for defects. May unload parts from machine and place on conveyor. May clean metal parts, using wire brush. May tend machine that solders tin can bodies and be designated Side-Seam Tender (welding). May tend machine that welds ends of wire together to form continuous coil and be designated Wire-Drawing-Machine Tender (welding). May be designated Spot Welder (welding). Variations are based on type of machine tended, such as resistance-welding machine, cold-welding machine, soldering/brazing machine, diffusion-welding machine, or laser-beam machine.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 88

819.686-010 MACHINE FEEDER (welding) alternate titles: machine helper

Feeds metal components and removes finished assemblies from brazing, soldering, or welding machines or furnaces: Places or clamps workpieces into holding fixtures, or onto heating fixtures, trays, or conveyor in specified order. Positions preformed piece of brazing alloy between edges of parts and brushes flux along seams of workpiece. Removes finished assemblies after they have passed through heated induction coil and furnace, between electrodes, or over gas flame, and through cooling chamber or water. May feed bonding wire and powdered or liquid flux into machine which brushes flux and feeds wire to seams of workpiece. May load components into hopper of machine which automatically positions them into fixtures. May examine finished parts and separate defective pieces. May be designated by machine fed as Brazing-Furnace Feeder (welding); Brazing-Machine Feeder (welding); Soldering-Machine Feeder (welding); Welding-Machine Feeder (welding).
GOE: 06.04.31 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

819.687-010 WELD INSPECTOR II (welding)

Inspects welded or soldered joints and seams for defects, such as cracks, cold weld, spatter, and undercuts: Tests joints or seams, using either of following methods: (1) Connects test-fittings to pipe, turns valve to admit compressed air, and immerses pipe in water, or brushes soapy water onto pipe to locate leaks. (2) Probes soldered joints, using pointed tool, to locate defects. Marks location of defects, using crayon, and routes defective parts to repair area. May use dye penetrants or magna-flux equipment during inspection.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

819.687-014 WELDER HELPER (welding)

Performs any combination of following duties to assist workers in welding, brazing, and thermal and arc cutting activities: Moves workpieces, tools, and supplies, manually or by handtruck. Lifts, moves and holds, or clamps workpieces to table, into jigs, or into position as directed, manually or by using hoist, pry bars, wrenches, hammer, and wedges. Cleans workpieces to remove impurities, such as slag, rust, and grease, using wire brush, portable grinder, hand scraper, or chemical solutions. Connects hoses from hand torch to oxygen and fuel gas cylinders or connects cables from power source to electrode holder and workpiece or fixture. Starts gasoline engine to activate electric generators. Places workpieces into furnace to preheat for specified time. Removes, tags or marks, and moves finished work. May attach grappling equipment to objects preparatory to movement by crane. May be designated according to type of activity as Thermal-Cutter Helper (welding).
GOE: 05.12.11 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

82 ELECTRICAL ASSEMBLING, INSTALLING, AND REPAIRING OCCUPATIONS

This division includes occupations concerned with assembling, installing, erecting, and repairing electrical equipment and related structures designed for electric power generation, transmission, and distribution; communication, signaling, and object detection; process control, fire control, and data processing; transportation and materials-handling; heating, air-conditioning, refrigeration, and illumination; and other industrial, commercial, and domestic electrical applications.

820 OCCUPATIONS IN ASSEMBLY, INSTALLATION, AND REPAIR OF GENERATORS, MOTORS, ACCESSORIES, AND RELATED POWERPLANT EQUIPMENT

This group includes occupations concerned with assembling components and premachined parts; connecting electrical circuits; testing circuitry and operation of generators, motors, accessories, controls, and related equipment; and making on-site repairs to operating equipment.

820.131-010 ELECTRICIAN SUPERVISOR, SUBSTATION (utilities) alternate titles: electric-repair supervisor; special inspecting-and-testing supervisor

Supervises and coordinates activites of ELECTRICIAN, SUBSTATION (utilities) engaged in installing and repairing circuit breakers, transformers, and other electrical equipment in substation of power system: Examines workers' tools and equipment and installed safety devices, such as hoses and blankets. Directs workers to de-energize lines and equipment and to post warning signs. Inspects completed work and directs workers to restore electrical service. Trains workers in installation and repair of electrical equipment. May supervise and coordinate activities of workers engaged in erecting transmission towers and structural framework of substation [LINE SUPERVISOR (utilities)]. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.05 STRENGTH: L GED: R4 M4 L4 SVP: 8 DLU: 77

820.137-010 TRANSFORMER ASSEMBLY SUPERVISOR (elec. equip.)

Supervises workers engaged in assembling electric transformers: Assigns and coordinates either hand or machine operations, such as stacking, brazing, assembly, electrical wiring, and testing. Interprets winding designs to locate malfunctions as indicated by negative test reports. Directs workers or participates in adjusting machines or equipment. Inspects finished or in process parts, visually or using electrical test equipment, such as ohmmeters and wattmeters, to determine conformance to specifications. Records data, such as time and production figures. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 77

820.261-010 ELECTRICIAN APPRENTICE, POWERHOUSE (utilities)

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.05 STRENGTH: M GED: R4 M4 L3 SVP: 8 DLU: 81

820.261-014 ELECTRICIAN, POWERHOUSE (utilities)

Repairs and maintains electrical equipment in generating station or powerhouse: Tests defective equipment to determine cause of malfunction or failure, using voltmeters, ammeters, and related electrical testing apparatus. Notifies plant personnel of necessary equipment downtime requiring changes from normal generating and transmission equipment operation to maintain uninterrupted service. Repairs and replaces equipment, such as relays, switches, supervisory controls, and indicating and recording instruments. Tests and repairs switchboard and equipment circuitry, interpreting wiring diagrams to trace and connect numerous wires carrying current for independent functions. Cleans and repairs brushes, commutators, windings, and bearings of generators, motors, and converters. May test and maintain transmission equipment, performing such duties as oiling circuit breakers and transformers [ELECTRICIAN, SUBSTATION (utilities)].
GOE: 05.05.05 STRENGTH: M GED: R4 M4 L3 SVP: 8 DLU: 77

820.261-018 ELECTRICIAN, SUBSTATION (utilities)

Inspects, tests, and maintains substation electrical equipment, such as oil circuit breakers and transformers: Inspects and tests equipment to detect malfunctioning and determine resistance and load, using voltmeter and ammeter. Tests insulators and bushings of equipment for power leakage by imposing specified voltage on insulation through testing apparatus and calculating insulation loss. Tests oil in circuit breakers and transformers for dielectric strength [TRANSFORMER TESTER (utilities)]. Repairs or rebuilds oil circuit breakers, transformers, and lightning arrestors by replacing worn parts. Disconnects voltage regulators for removal by other workers by loosening bolts and screws and connects replacement regulator to high-voltage line. Periodically replenishes oil in circuit breakers and transformers not needing repair. Inspects switches before repairing or replacing equipment to ensure power cutoffs. Does not repair electrical machinery, such as generators and converters [ELECTRICIAN, POWERHOUSE (utilities)]. May set forms and pour concrete footings for heavy equipment installation. May paint, repair, and maintain substation buildings.
GOE: 05.05.05 STRENGTH: M GED: R4 M4 L3 SVP: 8 DLU: 77

820.361-010 CORROSION-CONTROL FITTER (pipe lines; utilities)

Installs and inspects rectifier stations and anodes used to minimize corrosive effects of static-electricity discharge between gas pipeline and ground: Measures electric current present in ground, using voltmeter, ammeter, and resistivity meter. Compares electrical quantities with written standard to identify ground areas in which electric current exceeds permissible maximum. Buries rectifier or anode near pipe. Welds connector to pipe, using thermite welding device, and connects wire between connector and anode to complete circuit. Installs insulating flanges at pipe joints to isolate sections of pipe protected by rectifier stations. Periodically tests rectifiers to verify efficiency and replaces defective units.
GOE: 05.05.05 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

820.361-014 ELECTRIC-MOTOR-AND-GENERATOR ASSEMBLER (elec. equip.) alternate titles: assembler-erector; motor-and-generator assembler

Fits together parts and subassemblies to build electric motors, generators, and gasoline engine-generator sets, using machinist's tools, precision instruments, and following blueprints and specifications: Files and scrapes burrs from parts and cleans parts with solvent and compressed air. Fits bearings to armature or rotor shafts, using Prussian blue and hand scraper to locate and reduce high spots. Shrinks bushings, couplings, and pinions on shafts, in electric oven. Positions rotors and armatures into stator or field ring and slides heads over shaft and against housing ends manually or with hoist. Secures assembly, using bolts and wrenches. Aligns heads to allow rotor or armature to turn freely and inserts shims under rotor support to adjust airgap between rotor and stator, measuring clearance with precision instruments. Fits carbon brushes to curvature of commutator or collector rings by sand brushing or rotating in seating fixture. Cuts and strips wire leads and crimps or solders connecting lugs to them. Screws leads to brush holders. Packs chamber with grease to lubricate bearings. Assembles external parts, such as fans, covers, exciters, control panels, space heaters, and piping, to build special units. May level and align unit on customer's bedplate or on test base in testing department and couple unit to drive motor or test instruments. May dismantle equipment after testing and examine parts for evidence of wear. May be designated according to power source of unit as Engine-Generator Assembler (engine-turbine).
GOE: 06.01.04 STRENGTH: M GED: R4 M4 L4 SVP: 6 DLU: 77

820.361-018 REGULATOR INSPECTOR (utilities)

Inspects, tests, and maintains voltage regulators and auxiliary equipment that control line voltage within specified range: Tightens connections and replaces defective regulator parts, such as motor controls, fuses, or capacitors. Observes readings and calculates line-drop compensator settings which allow for resist-

ance and reactance voltage drops in primary feeder and main circuits. Adjusts line-drop compensators and reads meters to sustain voltage within specified range. Computes electrical characteristics, such as impedence, power factor, and phase angle. Oils moving parts of regulator and changes oil in motor-bearing housings. Files contact points to remove carbon and provide smooth surface for electrical contact. Clips voltmeter to regulator and records voltage on inspection report. Sends defective motors and parts to repair department. May make voltmeter and ammeter tests on transmission lines and auxiliary equipment. Compiles service report indicating parts replaced and corrections made in voltage range and transformer ratios. May order replacement parts to replenish inventories. May set regulator to deliver specified constant voltage before removing motor for repair to avoid interruption to service.
GOE: 05.05.05 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

820.381-010 BATTERY MAINTAINER, LARGE EMERGENCY STORAGE (utilities)

Services and repairs storage batteries maintained in generating plants and substations as electric power source for lighting purposes and operation of motors, switchgear, and electric appliances during interruptions of normal power supply: Tests condition of electrolyte in each cell, using hydrometer and thermometer, and adds water or acid, according to specifications. Measures electrical energy level of batteries to ensure that potential energy meets minimum requirements. Connects batteries to portable charger and adjusts rheostat to raise energy level of undercharged cells. Replaces deteriorated plates in cells and cleans out sediment that accumulates in bottom of battery case. Compiles operating and maintenance records.
GOE: 05.10.03 STRENGTH: L GED: R3 M3 L3 SVP: 6 DLU: 77

820.381-014 TRANSFORMER ASSEMBLER I (elec. equip.)

Connects coils to terminals and builds up supporting structure of power transformers, according to wiring and structural diagrams. Wraps insulation around coil and secures with adhesive tape. Drives fiber wedges between coil and core, using mallet to hold coil around leg of transformer core. Crimps leads to magnet (coil) wire, using hand or hydraulic crimper and tapes connections. Crimps tags to lead wires to conform with wiring diagram. Assembles support structure, clamping angles, terminals, tanks, or cabinet panels, using gas or electric welding equipment, welding jigs, tie bolts, nut runner, drill press, and power drill. Brazes coil leads to specified tanks of terminal strip. May fabricate coils and assemble component parts to build electric power, distribution, or specialty transformers according to blueprints and wiring or structural diagrams. Winds copper wire around jig, fixture, or spindle to form primary coil. Fabricates secondary coil on copper plate of specified thickness, using drill, calipers, and bandsaw. May be designated according to type of transformer assembled as Distribution-Transformer Assembler (elec. equip.); Power-Transformer Assembler (elec. equip.); Specialty-Transformer Assembler (elec. equip.); or by type of core used as Hypercil-Core-Transformer Assembler (elec. equip.).
GOE: 06.01.04 STRENGTH: M GED: R4 M4 L3 SVP: 6 DLU: 78

820.662-010 MOTOR-ROOM CONTROLLER (utilities)

Controls generation and distribution of electrical power from in-plant power station to plant facilities, such as rolling mills or machine shops, and maintains equipment in efficient and safe operating condition. Operates switchboard controls and monitors indicating and recording instruments to maintain adequate flow of electric power to current-consuming machinery and processes, and to prevent overloading of electrical generating and distribution equipment. Repairs or replaces defective motor-generator sets, transformers, switchgear, circuitry, and driving motors. Compiles power consumption and equipment performance and repair records.
GOE: 05.06.01 STRENGTH: M GED: R4 M4 L3 SVP: 8 DLU: 77

820.684-010 TRANSFORMER ASSEMBLER II (elec. equip.)

Assembles transformers according to specifications, performing any combination of following tasks: Reads work order to determine assembly procedure specified by customer. Cleans coils to remove materials accumulated during production processing. Removes accessories from coils, using screwdriver, and wraps coils with paper and tape, leaving ends of wire leads exposed. Inserts ends of wire leads of cores and coils into wire stripping machine to remove coating from wires. Inspects and twists stripped wires together by hand to join designated colored wires. Disassembles cores to facilitate attachment of coils and attaches cores to coils, using cloth tape and glue. Secures core/coils, using metal strapping, metal cutters, and band clippers. Positions wooden wedges that facilitate further processing of units in designated openings of core/coils, using rubber hammer. Turns knobs to set controls of test machine to verify that core/coils operate within specified range, attaches clips to wire leads of core/coils, and observes machine dials to determine test results. Routes defective core/coils for rework. Places component parts of terminals in press, activates press to join parts, or positions parts in fixture and joins parts, using solder and soldering iron, to fabricate terminals. Attaches terminals to core/coils, according to work order, using handtools, spacers, and soldering iron. Applies adhesive to inside of transformer case side sections. Positions and aligns wires and terminals of core/coils with openings in sections. Positions core/coil and side sections in welding machine, aligns seams of sections for welding, and presses buttons to activate welding machine to weld seams. Attaches clip probes to transformer terminals, and activates test equipment to determine whether units meet specifications. Positions, inserts, and attaches transformer parts, such as insulation panels, front and back metal covers, and base plates to complete assembly of transformers, using handtools. Stamps identification numbers on base of transformer, using metal dies and hammer. Repairs transformers with minor defects.
GOE: 06.02.22 STRENGTH: H GED: R3 M3 L2 SVP: 3 DLU: 87

821 OCCUPATIONS IN ASSEMBLY, INSTALLATION, AND REPAIR OF TRANSMISSION AND DISTRIBUTION LINES AND CIRCUITS

This group includes occupations concerned with erecting and repairing power lines and circuits for transmission and distribution of electricity, and assembling and erecting related equipment and structures.

821.131-010 ELECTRICAL-INSTALLATION SUPERVISOR (utilities) alternate titles: service inspector

Supervises and coordinates activities of ELECTRIC-METER INSTALLER (utilities) I and ELECTRIC-METER REPAIRER (utilities) engaged in installing, testing, adjusting, and repairing meters for recording electric current consumption. Reviews work orders to verify specifications of wire sizes and metering equipment according to National Electric Code and company requirements. Visits installation sites and inspects installed meters and other electrical appliances for conformance to specifications and safety standards. Consults with customers, electric-wiring contractors, and commercial department representatives to determine space requirements, availability of customer-service outlets, and types of metering equipment for special installations. Issues meter test or repair orders to workers. Examines meters, instruments, and phase transformers to verify accuracy of tests and completion of repairs or adjustments. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.05 STRENGTH: L GED: R4 M4 L4 SVP: 8 DLU: 77

821.131-014 LINE SUPERVISOR (utilities)

Supervises and coordinates activities of workers engaged in construction and repair of overhead and underground power lines: Determines and locates cause of current interruptions. Trains workers in repair of power lines. Performs other duties as described under SUPERVISOR (any industry) Master Title. May specialize in supervising workers engaged in erecting poles and power lines and be designated Line-Construction Supervisor (utilities). May specialize in supervising workers engaged in making emergency repairs and be designated Emergency-Crew Supervisor (utilities). May specialize in supervising workers engaged in erecting steel transmission towers and be designated Line Supervisor, Tower (utilities).
GOE: 05.05.05 STRENGTH: L GED: R4 M4 L4 SVP: 8 DLU: 77

821.131-018 SERVICE SUPERVISOR II (utilities)

Supervises and coordinates activities of TROUBLE SHOOTER (utilities) II and VOLTAGE TESTER (utilities) engaged in testing electric power distribution lines for overloads and voltage and current fluctuations, in installing service drops from poles to customers' premises, and in repairing regulators, switchgears, and line installations. Trains workers in job duties. Prepares reports of abnormal line conditions, such as overload, low voltage, and transformer outage conditions. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.05 STRENGTH: L GED: R4 M4 L4 SVP: 8 DLU: 77

821.131-022 STEEL-POST-INSTALLER SUPERVISOR (utilities)

Supervises and coordinates activities of STEEL-POST INSTALLER (utilities) and WIRER, STREET LIGHT (utilities) engaged in installing, removing, and wiring steel-post street lights. Examines poles to verify accuracy of installation and alignment. Trains workers in work procedures. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.05 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 77

821.131-026 WIREWORKER SUPERVISOR (utilities) alternate titles: electrician-constructor supervisor

Supervises and coordinates activities of workers engaged in installing, repairing, and maintaining electrical equipment and wiring in and around generating and distribution stations of power and light company. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.05 STRENGTH: L GED: R4 M4 L4 SVP: 8 DLU: 77

821.261-010 CABLE TELEVISION LINE TECHNICIAN (radio-tv broad.)

Maintains and repairs cable television cables and equipment: Measures signal strength at amplifiers or at customer's terminal boxes, using field strength meter. Repairs or replaces worn components to ensure acceptable signal strength. Climbs utility pole and connects test television set to amplifiers. Observes set to evaluate reception and determine cause of faulty reception. Repairs defective cable systems. Answers customers' inquiries or complaints and explains cost and operation of cable service. May communicate with COMMUNICATIONS ELECTRICIAN SUPERVISOR (any industry) 823.131-010, using two-way radio or telephone, to receive instructions or technical advice. May report unauthorized use of cable system to COMMUNICATIONS ELECTRICIAN SUPERVISOR (any industry). May clean and maintain tools, test equipment, and motor vehicle.
GOE: 05.05.05 STRENGTH: H GED: R3 M3 L3 SVP: 6 DLU: 88

821.261-014 LINE MAINTAINER (any industry)

Installs, maintains, and repairs telephone and telegraph and electrical power lines between installations of industrial plant: Directs workers in setting poles.

Climbs poles and installs hardware, lightning arresters, telephone repeaters, telephone and telegraph wires, and other equipment [LINE INSTALLER-REPAIRER (tel. & tel.)]. Installs electrical power cables and auxiliary equipment [LINE ERECTOR (construction; utilities)]. Makes repairs and replacements to maintain lines. May be designated according to area of operations as Line Maintainer, District (any industry).
GOE: 05.05.05 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

821.261-018 RELAY TECHNICIAN (utilities)

Performs electrical tests and repairs concerned with maintenance and performance evaluation of in-service relays to prevent and remedy abnormal behavior or failure of transmission and distribution lines and equipment: Connects test apparatus to troubled circuit. Analyzes test results and interprets electrical diagrams to locate defective relay. Opens and closes switches to isolate defective relay and makes adjustments or removes relay for repair. Tests circuit and equipment to evaluate such factors as insulation quality, which affect function of relays. Analyzes test data to determine performance characteristics of relays and effect of system modifications on relay performance. Prepares reports of work performed.
GOE: 05.05.05 STRENGTH: L GED: R4 M4 L3 SVP: 8 DLU: 77

821.261-022 SERVICE RESTORER, EMERGENCY (r.r. trans.)

Restores street railway service after power failures, accidents, and equipment breakdowns, working as member of crew: Drives truck equipped with tools and materials to job site. Diagnoses cause of difficulty to facilitate restoration of service. Repairs or replaces parts or materials, such as trolley wire, insulators, conductor-bar assemblies, and lighting fixtures [LINE INSTALLER, STREET RAILWAY (r.r. trans.)]. Repositions derailed cars on tracks with aid of other workers and mechanical hoisting equipment. Erects portable structures at scene of fire to facilitate laying fire hose across street, and to permit streetcars and buses to pass underneath. Raises or disconnects trolley wires to facilitate house-moving operations. May repair malfunctioning streetcar units at scene when towing to repair barn is not feasible. May repair or replace track, switches, and accessories to facilitate temporary service.
GOE: 05.05.05 STRENGTH: H GED: R4 M2 L3 SVP: 7 DLU: 77

821.261-026 TROUBLE SHOOTER II (utilities)

Locates source of electric power line disturbance or failure and replaces or repairs defective equipment and accessories: Proceeds to troubled sector as directed by DISPATCHER, SERVICE OR WORK (utilities) or joins line crew under supervision of LINE SUPERVISOR (utilities). Tests powerlines and auxiliary equipment to identify defective voltage regulators, transformers, switches, and related accessories causing line disturbances, such as voltage fluctuations, using direct reading and recording electrical testing instruments. Climbs poles and towers to repair or replace overhead conductors, switches, transformers, fuses, and related equipment, using precautionary work methods and insulated tools, ladders, and platforms when working on or near energized circuits. Opens switches to deenergize disturbed or fallen lines to facilitate repairs or to remove electrical hazards. May repair street-light circuitry. May locate and correct electrical trouble in building circuits. May install watt-hour meters and connect service drops between power line and consumer. May patrol power lines and periodically telephone dispatcher's office for trouble assignments. May respond to fire alarms to disconnect power from buildings and extinguish fires on power poles or other utility property.
GOE: 05.05.05 STRENGTH: M GED: R4 M4 L3 SVP: 8 DLU: 77

821.281-010 CABLE TELEVISION INSTALLER (radio-tv broad.)

Installs cable television cables and equipment on customer's premise, using electrician's tools and test equipment: Measures television signal strength at utility pole, using electronic test equipment. Computes impedance of wire from pole to house to determine additional resistance needed for reducing signal to desired level. Installs terminal boxes and strings lead-in wires, using electrician's tools. Connects television set to cable system and evaluates incoming signal. Adjusts and repairs cable system to ensure optimum reception. May collect installation fees and explain cable service operation to subscriber. May communicate with COMMUNICATIONS ELECTRICIAN SUPERVISOR (any industry) 823.131-010, using two-way radio or telephone, to receive instructions or technical advice and to report problems to be repaired by CABLE TELEVISION LINE TECHNICIAN (radio-tv broad.) 821.261-010. May report unauthorized use of cable system to COMMUNICATIONS ELECTRICIAN SUPERVISOR (any industry). May clean and maintain tools, test equipment, and motor vehicle.
GOE: 05.10.03 STRENGTH: H GED: R4 M4 L3 SVP: 5 DLU: 88

821.361-010 CABLE INSTALLER-REPAIRER (utilities) alternate titles: electrician, underground

Installs and repairs underground conduit and cable systems used to conduct electrical energy between substations and consumers: Installs and repairs conduits following blueprints. Pulls cables through ducts [CABLE PULLER (construction; utilities)]. Splices cables together or to overhead transmission line, customer service line, or street light line [CABLE SPLICER (construction; tel. & tel.; utilities)]. Installs and repairs transformers, fuse boxes, bus bars, relays, and other electrical equipment in manhole and underground substations [UNDERGROUND REPAIRER (utilities)] according to wiring diagrams and specifications. Reinsulates or replaces worn cables and wires. Tests electric cables and equipment wiring to detect broken circuits or incorrect connections, using test lamp, voltmeter, ammeter, and thermocouple indicator.
GOE: 05.05.05 STRENGTH: M GED: R4 M4 L3 SVP: 8 DLU: 77

821.361-014 ELECTRIC-METER INSTALLER I (utilities)

Installs, disconnects, removes, and reconnects electric power meters used to record current consumption of residential, commercial, and industrial customers: Splices and connects covered insulated cable to bus bar in pull box or on switchboard. Mounts meter, and other electric equipment for high load installations, such as time clocks, transformers, and circuit breakers, on racks or wall, using electrician handtools. Installs and connects cable from pull box to meter socket or transformer. Attaches color-coded wires from current transformer to test blocks and from test blocks to meter terminals for testing purposes. Tests meter for current flow and recording of current consumption. Disconnects and seals meter on cut-off order or removes seal and reconnects meter on cut-in orders. Removes, replaces, and reconnects meters when current consumption is too high for existing installation. Installs temporary service meter for recording current consumption during construction. Splices and connects jumper cables from current transformer onto bus bar on switchboard to provide temporary power for customer during change of meter and cables or when customer's service equipment is defective. Records meter and installation data on meter cards, work orders, and field service orders. Locates, diagnoses, and clears electrical trouble on customers' premises. Performs minor repairs and changes faulty or incorrect wiring on customers' premises. May be designated according to specialty as Meter Installer-And-Remover (utilities).
GOE: 05.05.05 STRENGTH: L GED: R4 M4 L3 SVP: 7 DLU: 77

821.361-018 LINE ERECTOR (construction; utilities)

Erects, maintains, and repairs wood poles and prefabricated light-duty metal towers, cable, and related equipment to construct transmission and distribution power lines used to conduct electrical energy between generating stations, substations, and consumers: Directs and assists GROUND HELPERS (tel. & tel.; utilities) in attaching crossarms, insulators, lightning arresters, switches, wire conductors, and auxiliary equipment to poles preparatory to erection, as instructed by LINE SUPERVISOR (utilities), and assists in erection of poles or towers and adjustment of guy wires. Climbs erected poles or towers and installs equipment, such as transformers, which are ordinarily installed after poles are erected. Strings wire conductors between erected poles with assistance of GROUND HELPERS (tel. & tel.; utilities) and adjusts slack in conductors to compensate for contraction and elongation of conductors due to temperature variations, using winch. Splices, solders, and insulates conductors and related wiring to join sections of power line, and to connect transformers and electrical accessories. May trim trees and brush prior to new construction, during repair of damaged lines, or as part of routine maintenance [TREE TRIMMER (tel. & tel.; utilities)].
GOE: 05.05.05 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 77

821.361-022 LINE INSTALLER, STREET RAILWAY (r.r. trans.) alternate titles: line installer, trolley

Installs, inspects, and maintains street-railway electrical and related equipment, such as poles, feeder cables, trolley wires and supports, and high-tension lines, following blueprints, manuals, and work orders: Replaces worn or broken poles and straightens leaning poles, securing pole in position in ground with guy wires, using block and tackle. Cuts faulty sections from overhead wires and splices in new wire, anchoring severed ends with block and tackle while new wire and splicing fixtures are being installed. Installs clinch ears (clamps) that connect trolley wire to supporting cross cables, and switches that throw trolley pole from one trolley wire to another, using hammer and clinching iron. Installs running boards that carry trolley wires under overhead crossings by clamping boards to beams or girders. Strings cable from pole to pole with assistance of ground crew. Tests electrical installations, using various testing devices.
GOE: 05.05.05 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

821.361-026 LINE REPAIRER (utilities) alternate titles: hiker; line servicer

Repairs and replaces transmission and distribution power lines between generating stations, substations, and consumers, requiring use of precautionary work methods and safety equipment due to electrical hazards present when working on or near energized conductors and electrical accessories: Opens switches or clamps grounding device to energized equipment to deenergize lines or accessories as directed by LINE SUPERVISOR (utilities). Climbs poles or rides in bucket attached to truck-mounted boom to remove broken or defective wires. Secures new wires to crossarm insulators and splices wire to adjoining sections of line to complete circuit. Transfers wires from defective poles to poles erected by GROUND HELPERS (tel. & tel.; utilities). Installs pole hardware and such auxiliary equipment as transformers, lightning arresters, switches, fuses, and insulators, using handtools. Suspends insulated ladders and platforms from pole crossarms and covers energized lines with rubber mats to facilitate safe handling of high-voltage lines without interrupting service by power shutoff, and uses long insulated poles (hot sticks) fitted with mechanically or hydraulically operated grasping and crimping tools. May service streetlight systems [STREET-LIGHT SERVICER (utilities)]. May patrol power lines [ELECTRIC POWER LINE EXAMINER (utilities)]. Qualifications of workers in this classification include work experience in terms of maximum voltage of power lines repaired, such as 120-240 volt secondary circuits, 2,300-4,000 volt distribution lines, or 138 kilovolt transmission lines. Power line repairers experienced in repair of energized or deenergized conductors suspended from electrically conductive metal towers, commonly one-hundred feet or more above ground, may be designated Line Repairer, Tower (utilities).

GOE: 05.05.05 STRENGTH: H GED: R4 M4 L4 SVP: 7 DLU: 77

821.361-030 LINE-ERECTOR APPRENTICE (construction; utilities)
Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.05 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 77

821.361-034 POWER-TRANSFORMER REPAIRER (utilities) alternate titles: transformer assembler
Repairs power transformers used in electric generating stations and substations to step-up voltage of current being fed out over high-voltage power lines or to step-down voltage of incoming current prior to being fed to lower voltage distribution lines or electric equipment. Drains and filters transformer oil. Loosens bolts to free transformer cover, laminations, coils, and other internal and external parts. Signals OVERHEAD CRANE OPERATOR (any industry) 921.663-010 to raise heavy transformer components and subassemblies. Dismantles lamination assembly preparatory to cleaning and inspection. Conveys defective coils to coworker for rewinding. Climbs into transformer case, cleans inner surfaces with scrapers and solvent, and examines case for defects, such as cracked weldments. Reassembles transformer, using new and reconditioned parts as specified. Operates pump to fill reassembled transformer with oil. May work at site of transformer installation. May wind replacement coil.
GOE: 05.05.05 STRENGTH: M GED: R4 M3 L2 SVP: 7 DLU: 77

821.361-038 TOWER ERECTOR (construction; utilities)
Erects structural steel, wood, or aluminum transmission towers and installs electric cables and auxiliary equipment to construct transmission and high-voltage distribution power lines between generating stations and substations. Repairs and performs scheduled maintenance on towers, cables, and auxiliary equipment. Frequently works more than one hundred feet above ground when erecting upper portion of towers, and when installing insulators, cables, and electrical accessories on completed towers. May trim trees and remove brush along right-of-way [TREE TRIMMER (tel. & tel.; utilities)].
GOE: 05.05.05 STRENGTH: H GED: R4 M3 L2 SVP: 7 DLU: 77

821.364-010 UTILITIES SERVICE INVESTIGATOR (utilities) alternate titles: electric-meter inspector
Investigates reports of METER READERS (utilities, waterworks) concerning evidence of tampering with watt-hour meters and related wiring which interferes with correct metering of electric current consumed. Requests permission of customer to examine meter. Examines meter for evidence of tampering. Examines wiring connecting meter to outside power lines and building circuits. Removes unauthorized wires or devices illegally installed to bypass current past meter, or to obstruct normal meter function. Turns on bulb of known wattage and observes movement of meter disk, determining accuracy of disk rotation in relation to current consumed by bulb. Replaces blown fuses and repairs minor defects, such as loose wiring connections or insulators. Removes meters showing evidence of tampering and informs customer of discontinuance of service, pending settlement with company. Compiles inspection report, confirming or denying suspected tampering, and reports needed major repairs. May serve court summons and testify in court as company witness during criminal prosecution.
GOE: 05.10.02 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

821.367-010 CONSTRUCTION CHECKER (utilities) alternate titles: inspector and clerk; power-line inspector
Inspects and prepares reports concerned with construction and maintenance of overhead or underground electric-power line projects or extensions. Inspects pole installations to ensure compliance with work order specifications, and records items requiring correction, such as loose guy wires, hanging wires, defective conduits or vaults, and incorrect location of equipment on pole. Records identification data on installed equipment, such as transformers, wires or cables, poles or vaults, and guys. Checks line and transformer capacities and phase hook-ups to provide data required for adjustment of power load and phase balance. Draws sketches of installation and location of equipment, such as transformers, switches, fuse boxes, lines, and guys so that map records can be corrected. May prepare list of hardware and materials used on specified construction project.
GOE: 05.05.05 STRENGTH: M GED: R4 M4 L3 SVP: 6 DLU: 77

821.367-014 SAFETY INSPECTOR (utilities)
Inspects equipment, tools, and working conditions to ensure safety of workers engaged in construction and maintenance of overhead and underground power lines. Inspects safety belts, ladders, ropes, rubber goods, and tools and replaces those not meeting safety requirements. Observes crews at work and reports laxity in safety precautions, such as failure to use goggles, rubber gloves, and other safety devices. Examines conditions of ditches and tunnels and recommends use of braces to prevent cave-ins endangering workers. Investigates accidents to determine causes and devises preventive measures. May instruct workers in use of safety equipment and safe work methods.
GOE: 05.03.06 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

821.381-010 ELECTRIC-METER TESTER (utilities) alternate titles: meter tester
Tests accuracy of meters used for recording electric current consumption and makes necessary adjustments, using following methods: (1) Connects meter to standard (specially calibrated electric meter mechanism) and adjusts standard's dials to meter being tested. Pushes switch and allows needle on standard to revolve specified number of turns or for clocked period. Compares meter and standard calibrated dials to ascertain accuracy of meter. (2) Connects testing instruments, such as wattmeter, voltmeter, and ammeter, across coils of meter and allows load to pass through meter for clocked period. Computes watt-hours of current consumed, using instrument readings and time factor. Compares watt-hour computations with dial on tested meter to determine meter accuracy. Adjusts meters by loosening or tightening screws, using screwdriver. Inspects wiring of installed meters for improper connections or diversions of current. May make minor repairs and recommend meter removal for major repair. May clean mechanism with solution and small brush. May calculate inaccurate meter variations from standard. May set up auxiliary equipment to route current around installed meter during testing to avoid interruption to service. Does not perform tests on inaccurate meters to diagnose malfunctioning if inaccuracy cannot be corrected by screw adjustment [INSIDE-METER TESTER (utilities) 729.281-034]. May be designated according to types of meters tested as Tester, Demand Meters (utilities); Meter Tester, Polyphase (utilities); Meter Tester, Primary (utilities); Meter Tester, Single Phase (utilities).
GOE: 05.05.10 STRENGTH: L GED: R4 M4 L3 SVP: 7 DLU: 77

821.381-014 VOLTAGE TESTER (utilities) alternate titles: service tester
Tests electric power lines and auxiliary equipment to compile data concerning circuit conditions affecting efficiency of electric service and accuracy of current-consumption meters, using test instruments. Climbs poles or descends into underground vaults to gain access to power line equipment. Connects voltmeters, ammeters, and recording-demand meters to energized circuitry, transformers, and electrical accessories, using insulated pole fitted with grasping device. Records registration of direct-reading instruments. Periodically returns to change charts of recording meters. Tests building circuitry and such current-consuming apparatus as x-ray machines and motors to collect data regarding actual voltage requirements and fluctuations. Submits meter readings and charts to supervisory personnel. Inspects wiring, switchgear, and current-control apparatus for mechanical defects. May adjust voltage regulators.
GOE: 05.05.05 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

821.381-018 WIND-GENERATING-ELECTRIC-POWER INSTALLER (construction; utilities)
Assembles, installs, and maintains electrical and mechanical parts, such as alternators, generators, and rotors of electric power generating windmills, according to production specifications, using tools and equipment. Assembles and adjusts alternator components according to production specifications, using handtools, drill presses, grinders, and micrometers. Welds steel supports to alternator for mounting on windmill tower, using welding equipment. Crates alternator for shipment to installation site. Attaches cables to alternator and pulls lever to activate truck-mounted hoist to position alternator on windmill tower. Secures alternator to tower structure, using bolts and wrenches. Attaches electric cables, windmill motor, and rotor to alternator, according to schematic, using handtools. Replaces bent or defective parts of windmill and lubricates machinery to service equipment, using handtools, oilcan, and grease gun.
GOE: 05.05.05 STRENGTH: H GED: R4 M3 L3 SVP: 8 DLU: 86

821.564-010 LABORATORY HELPER (utilities)
Assists workers engaged in testing, adjusting, and repairing electrical transmission and distribution equipment in laboratory repair shop, performing any combination of following tasks: Cuts lead wires to length and attaches connectors according to requirements of equipment to be tested. Connects lead wires to equipment and test-apparatus as directed. Observes and records, or calls out readings of test-apparatus meters, and turns test-apparatus switches and dials as directed to assist in making tests requiring numerous connection changes, or when testing equipment is in locations not accessible to test-apparatus. Cleans, paints, and removes minor defects from items, such as meter boxes, protective covers, and mounting brackets. Performs other duties as described under HELPER (any industry) Master Title. May be designated according to worker assisted as Electric-Meter-Repairer Helper (utilities); Electric-Meter-Tester Helper (utilities); Relay-Tester Helper (utilities).
GOE: 05.12.16 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 77

821.667-010 HELPER, ELECTRICAL (utilities) alternate titles: electrician helper
Assists electrical workers in installation, maintenance, and repair of electric-power generation and distribution equipment, underground cables, and related facilities, performing any combination of following tasks: Places barricades around open manholes and excavations, and below crewmembers working overhead to protect workers and public from injury. Digs trenches, places shoring, and lowers tools and materials to workers in excavations and vaults. Positions reels of electric cable along side trench or manhole, and guides cable as it is pulled into ducts to prevent damage to lead sheath. Breaks up concrete to facilitate installation or repair of equipment, using airhammer. Rigs scaffolds and hoists, and helps move heavy machine parts to assist in assembly and repair of generators, converters, switchgear, and related equipment at generating station or substation, as directed. May drive truck. May trim trees and clear undergrowth along right-of-way. Performs other duties as described under HELPER (any industry) Master Title. May be designated according to worker assisted as Cable Installer-Repairer Helper (utilities); Duct-Layer Helper (construction; utilities); Electrician Helper, Powerhouse (utilities); Electric-Meter-Installer Helper (utilities); Wirer Helper (utilities).
GOE: 05.12.16 STRENGTH: H GED: R2 M2 L2 SVP: 3 DLU: 77

821.684-010 ELECTRIC-METER INSTALLER II (utilities)

Installs electric watthour meters in preinstalled meter-connection boxes to connect service: Breaks seal on box previously connected to building wiring, using pliers, and tests box for current flow with test lamp. Fits meter onto prongs extending from top of box and turns setscrews to secure prongs to meter, using screwdriver. Fastens meter to wall with screws and seals with sealing device. Connects electric service and tests for specified voltage, phase, and polarity, using handtools and test instruments. Disconnects customer service on request or default in payment of account. Records meter reading before connecting or after disconnecting service, and submits work report to supervisor.
GOE: 05.10.03 STRENGTH: L GED: R3 M3 L2 SVP: 4 DLU: 77

821.684-014 TOWER ERECTOR HELPER (construction; utilities)

Assists TOWER ERECTOR (construction; utilities) in erection of transmission towers, installation of tower hardware, and stringing of transmission lines or cables, working as member of crew: Unloads structural members of tower and electrical hardware from trucks. Bolts members together to form tower assemblies, using handtools. Positions assemblies in place for installation on tower, using block and tackle. Raises or lowers hardware, tools, and other materials to workers on tower, using handline. Assists in stringing transmission cables. Performs other duties as described under HELPER (any industry) Master Title. May be designated according to specialty as Ground Helper (tel. & tel.; utilities); Ground Helper, Street Railway (r.r. trans.).
GOE: 05.10.01 STRENGTH: V GED: R3 M2 L2 SVP: 5 DLU: 77

821.684-018 WIRER, STREET LIGHT (utilities)

Connects electric street lights to power circuit: Pulls wires leading from underground conduit, and wires leading from lamppost light socket, outside opening in lamppost base. Bares ends of wires and connects them together and to proper terminals. Wraps tape around wire connections for insulation. Fastens lamppost lid in place.
GOE: 05.12.16 STRENGTH: L GED: R3 M3 L2 SVP: 3 DLU: 77

821.684-022 TROLLEY-WIRE INSTALLER (mine & quarry)

Installs and maintains electric wire in underground mine to provide power source for mine locomotives: Drives dinkey engine equipped with tools and materials to underground job site. Operates pneumatic drill to bore hanger holes in top of tunnel. Inserts and secures trolley wire hanger in roof holes. Strings transmission cable (trolley wire) from hanger to hanger, using wrench. Repairs damaged wire and hangers. Relocates transmission cables which are no longer used to other areas of mine.
GOE: 05.10.04 STRENGTH: H GED: R3 M2 L2 SVP: 3 DLU: 86

821.687-010 STEEL-POST INSTALLER (utilities) alternate titles: laborer, pole crew; pole setter

Installs steel posts used to support street lights, traffic signals, and power lines: Guides post into position on previously installed base as it is lowered by truck-mounted hoist. Sights post against previously installed post, or uses carpenter's level, and inserts shims under post until post is vertical. Tightens bolts to secure post to base, using wrench.
GOE: 05.12.12 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 77

822 OCCUPATIONS IN ASSEMBLY, INSTALLATION, AND REPAIR OF WIRE COMMUNICATION, DETECTION AND SIGNALING EQUIPMENT

This group includes occupations concerned with erecting, installing, or repairing overhead and underground telephone and telegraph lines and equipment; and installing or repairing wiring and equipment within buildings to provide communication, detection, and signaling services.

822.131-010 CENTRAL-OFFICE-REPAIRER SUPERVISOR (tel. & tel.) alternate titles: installation supervisor; maintenance chief; operations chief; wire chief

Supervises and coordinates activities of workers engaged in construction, installation, testing, maintenance, and repair of electric power equipment, such as powerplants, cables, wiring, and teleprinters in central offices and at outside facilities: Directs placing and removal of cross-connections on wire-distributing frames. Directs installation of traffic trunklines through switchboard and switchroom. Schedules periodic inspections and tests of equipment to prevent service interruptions. Keeps records of trouble reports and repairs made. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to area supervised as Central-Office Supervisor (tel. & tel.); City-Plant Supervisor (tel. & tel.); District-Plant Supervisor (tel. & tel.); Inside-Plant Supervisor (tel. & tel.); Outside-Plant Supervisor (tel. & tel.).
GOE: 05.05.05 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 77

822.131-014 CUSTOMER-FACILITIES SUPERVISOR (tel. & tel.) alternate titles: maintenance supervisor; manager, service; service-center supervisor

Supervises and coordinates activities of workers engaged in installation, repair, and maintenance of telephone facilities, such as private and public telephones, switchboards, teletypewriters, and related electromechanical equipment: Inspects customer's premises to determine location of telephone and installation procedures. Directs installation of telephones and auxiliary equipment, such as brackets, wires, and clamps. Connects wiring to outside cable terminals, tests installed instruments and circuits continuity or to locate malfunctions, using tone and flicker sets. Directs workers in repair or replacement of faulty equipment. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to particular activity supervised as Installation Supervisor (tel. & tel.); Transmission-Maintenance Supervisor (tel. & tel.); or Manager, Prorate (tel. & tel.) when supervising EQUIPMENT INSPECTOR (tel. & tel.) 822.261-014 in rural areas.
GOE: 05.05.05 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 77

822.131-018 LINE SUPERVISOR (tel. & tel.)

Supervises and coordinates activities of telephone or telegraph workers engaged in construction, removal, and rearrangement of open-wire and carrier cable communication equipment: Examines work order and wiring diagrams to determine installation or repair procedures. Inspects connections, fittings, and installed wire and cable sections for conformance to specifications. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.05 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 77

822.131-022 PROTECTIVE-SIGNAL SUPERINTENDENT (business ser.) alternate titles: burglar-alarm superintendent

Supervises and coordinates activities of workers engaged in construction, installation, inspection, and maintenance of electrical protective signaling systems installed on subscribers' premises and central station of protective service organization: Reviews work order and surveys subscriber's premises to plan protective system layout. Estimates labor, material, and construction costs. Consults with architects, builders, and electrical and sprinkler contractors concerning installation of protection devices. Plans circuit layouts and arranges facility rental agreements with wire lessors. Devises work schedules and procedures. Requisitions material and facilities. Verifies progress of work against schedules. Inspects completed installations for conformance to specifications and safety standards, and explains system operating procedures to customer. May contact prospective subscribers to explain services and solicit new business.
GOE: 05.02.02 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 80

822.131-026 SIGNAL SUPERVISOR (r.r. trans.)

Supervises and coordinates activities of workers engaged in installing and repairing railroad signals and signal equipment: Reads work orders stating location and extent of damage to or malfunction of signal equipment to determine number of workers and type of equipment and materials needed for repairs. Inspects signal equipment to determine sequence of repair. Directs and assists workers in installing or repairing signal equipment, such as interlocks, automatic signals, and crossing protections. Inspects completed work for conformance to company specifications. Compiles reports at end of day indicating work completed, location, materials used, and number of worker-hours required for each job. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.05 STRENGTH: L GED: R4 M4 L3 SVP: 7 DLU: 77

822.131-030 TEST-DESK SUPERVISOR (tel. & tel.)

Supervises and coordinates activities of TROUBLE LOCATORS, TEST DESK (tel. & tel.) engaged in locating and clearing trouble on telephone line circuits. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.05 STRENGTH: S GED: R4 M3 L3 SVP: 7 DLU: 77

822.261-010 ELECTRICIAN, OFFICE (tel. & tel.) alternate titles: electrician, station, assistant

Makes operating adjustments in submarine cable repeater and terminal circuits and apparatus, and rearranges connections in cables to maintain continuity of service. Communicates with other cable stations, using manual telegraph.
GOE: 05.05.05 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

822.261-014 EQUIPMENT INSPECTOR (tel. & tel.)

Inspects layout and equipment in telegraph central office to determine extent of construction, replacement, or modification required to maintain or improve efficiency of installation: Inspects plant to determine accuracy of layout specifications for modification or installation of equipment, estimates costs, prepares and submits report. Inspects work being performed during construction or modification to determine compliance with specifications. Examines reports of voltage and load tests on equipment to ensure adequacy of power and circuits.
GOE: 05.07.01 STRENGTH: L GED: R4 M4 L3 SVP: 8 DLU: 77

822.261-018 MAINTENANCE INSPECTOR (tel. & tel.)

Inspects and tests plant and office telegraph equipment: Examines plant equipment and reviews maintenance records to ensure that equipment has been installed and maintained according to prescribed practices. Conducts load and voltage tests for specific line capacities, and operating tests on circuits, relays, repeaters, and terminal equipment, to determine maintenance required. Compares test results with predetermined standards to ensure that equipment is operating at required service level. Prepares report on inspections, indicating repair or replacement needs.
GOE: 05.07.03 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

822.261-022 STATION INSTALLER-AND-REPAIRER (tel. & tel.)

Installs, maintains, and repairs telephone station equipment, such as telephones, coin collectors, telephone booths, and switching-key equipment: Inspects subscriber premises to determine method of installation. Climbs pole to

attach outside (drop) wires. Assembles telephone equipment, mounts brackets, and connects wire leads, using handtools and following installation diagrams or work order. Tests newly installed equipment and repairs or replaces faulty equipment, using test telephone and other testing devices. May be designated according to specific task performed as Station Installer (tel. & tel.); Station Repairer (tel. & tel.). May maintain telephones, lines, and equipment in primarily small rural areas and be designated Section Maintainer (tel. & tel.).
GOE: 05.05.05 STRENGTH: L GED: R4 M4 L3 SVP: 7 DLU: 77

822.261-026 TESTING-AND-REGULATING TECHNICIAN (tel. & tel.) alternate titles: automatic maintainer; repeater attendant; technician, terminal and repeater; tester, equipment; wire-and-repeater technician

Tests and adjusts telegraph repeaters and terminal apparatus to maintain continuity of service: Operates test board (switchboard composed of testing equipment) and other testing devices to trace and diagnose wiring and circuit deficiencies between stations [TROUBLE LOCATOR, TEST DESK (tel. & tel.)]. Replaces or regulates repeaters, relays, switches, and other equipment, using handtools. Communicates with other telegraph offices by teletypewriter equipment concerning operational problems. May be designated according to equipment tested and adjusted as Telegraph-Repeater Technician (tel. & tel.).
GOE: 05.05.05 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

822.267-010 LINE INSPECTOR (tel. & tel.) alternate titles: inspector, line

Inspects telegraph lines, cables, and underground plant to determine extent of construction, replacement, or maintenance work necessary to maintain or improve efficiency of communication system: Estimates costs of improvements and prepares report on findings and recommendations. Consults with field engineering personnel and operations personnel concerning advisability of improvements. May investigate right-of-way for new installations [RIGHT-OF-WAY AGENT (any industry)].
GOE: 05.07.03 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

822.281-010 AUTOMATIC-EQUIPMENT TECHNICIAN (tel. & tel.) alternate titles: technician, automatic; telegraph-equipment maintainer

Analyzes problems and repairs manual and automatic telegraphic transmitting and receiving apparatus, such as teletypewriters, facsimile-recording devices, and switching equipment: Tests and adjusts equipment, using testing devices, such as signal generators and ohmmeters, following blueprints and wiring diagrams, and using handtools. Tests and regulates telegraph repeaters [TESTING-AND-REGULATING TECHNICIAN (tel. & tel.)]. When repairing and maintaining equipment in branch offices, may be designated Operations Technician (tel. & tel.). May be designated according to type of equipment maintained or repaired as Printer Maintainer (tel. & tel.); Telegraphic-Typewriter Repairer (tel. & tel.).
GOE: 05.05.05 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

822.281-014 CENTRAL-OFFICE REPAIRER (tel. & tel.) alternate titles: central-office maintainer

Tests, analyzes defects, and repairs telephone circuits and equipment in central office of telephone company, using test meters and handtools: Locates electrical, electronic, and mechanical failures in telephone switching equipment, using milliammeter boxes, schematic drawings, computer printouts, or trouble tickets. Installs, repairs, and adjusts equipment, such as switches, relays, and amplifiers, using handtools. Removes connections on wire distributing frames and solders or splices wires to terminal lugs, following diagrams [FRAME WIRER (tel. & tel.)]. May maintain telephone switching equipment at private establishments, such as hotels and office buildings [PRIVATE-BRANCH-EXCHANGE REPAIRER (tel. & tel.)]. May diagnose, isolate, and clear electrical faults in circuit [TROUBLE LOCATOR, TEST DESK (tel. & tel.)]. When servicing equipment for intercommunity telephone lines, may be designated Toll Repairer, Central Office (tel. & tel.).
GOE: 05.05.05 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

822.281-018 MAINTENANCE MECHANIC, TELEPHONE (any industry) alternate titles: electrician, telephone

Installs, tests, and repairs communication equipment, such as public address and intercommunication systems, wired burglar alarms, switchboards, telegraphs, telephones, and related apparatus, including coin collectors, telephone booths, and switching keys, using schematic diagrams, testing devices, and handtools: Installs equipment according to layout plans and connects units with inside and outside service wires. Maintains equipment and analyzes operational malfunctioning with testing devices, such as oscilloscopes, generators, meters, and electric bridges, to locate and diagnose nature of defect and ascertain repairs to be made. Examines mechanism and disassembles components to replace, clean, adjust or repair parts, wires, switches, relays, circuits, or signaling units, using handtools. Operates and tests equipment to ensure elimination of malfunction. May climb poles to install or repair outside service lines. May repair cables, lay out plans for new equipment, and estimate material required.
GOE: 05.05.05 STRENGTH: L GED: R4 M4 L3 SVP: 7 DLU: 77

822.281-022 PRIVATE-BRANCH-EXCHANGE REPAIRER (tel. & tel.) alternate titles: pbx repairer; telephone repairer

Analyzes and repairs defects in communication equipment, such as telephone switchboards, teletypewriters, and mobile radiophones on customers' premises: Tests equipment to locate malfunctions, using circuit diagrams, polar probes, meters, and telephone test set. Isolates and analyzes malfunction to determine method of repair, according to knowledge of equipment and test readings. Repairs or replaces defective equipment, using handtools, soldering iron, or wire wrap gun. Retests equipment to verify completeness of repair. May install equipment [PRIVATE-BRANCH-EXCHANGE INSTALLER (tel. & tel.)].
GOE: 05.05.05 STRENGTH: M GED: R4 M2 L3 SVP: 7 DLU: 77

822.281-026 SIGNAL MAINTAINER (r.r. trans.) alternate titles: signal inspector; signal repairer

Inspects, tests, and repairs electric gate crossings, signals, and signal equipment within division of railroad system: Drives truck along track route and stops truck to inspect and test gate crossings, signals, and signal equipment, such as interlocks and hotbox detectors. Inspects batteries to ensure that batteries are filled with battery water or to determine need for replacement. Tests signal circuit connections, using standard electrical testing equipment. Replaces defective wiring, broken lenses, or burned-out light bulbs. Cleans lenses of lamps with cloths and solvent. Lubricates moving parts on gate crossing mechanisms and swinging signals. Inspects electrical units of railroad grade crossing gates to detect loose bolts, defective electrical connections and parts. Tightens loose bolts, using wrench, and tests circuits and connections by opening and closing gate. Compiles reports indicating mileage or track inspected, repairs made, and equipment requiring replacement. May inspect mechanical gate crossings and repair defective cables on hand-operated gates and test air lines and air cylinders on pneumatically operated gates.
GOE: 05.05.05 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

822.281-030 TECHNICIAN, PLANT AND MAINTENANCE (radio-tv broad.)

Repairs and maintains coaxial cables and related equipment for cable-television system: Climbs into underground tunnels and passageways to reach television transmission cables. Determines cause of signal breakdown, using blueprints and schematic diagrams, electrical measuring instruments, and knowledge of communication equipment. Repairs equipment, such as coaxial cables and current amplifiers, and performs regular maintenance on cable system, using measuring instruments and handtools.
GOE: 05.05.05 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

822.281-034 TECHNICIAN, SUBMARINE CABLE EQUIPMENT (tel. & tel.)

Repairs, adjusts, and maintains machines and equipment used in submarine-cable office or station to control cable traffic, using electrical meters and handtools: Examines malfunctioning machines and equipment, such as automatic transmitters, direct writers, perforating machines, printers and relays, and siphon recorders, to determine defects, using meters, such as voltmeter, ohmmeter, and capacity meter. Makes adjustments, or dismantles machines for repairs or replacement of parts, using handtools. May make temporary or emergency repairs with improvised parts or sections. Duties may be performed by CENTRAL-OFFICE REPAIRER (tel. & tel.).
GOE: 05.05.05 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

822.361-010 CABLE TESTER (tel. & tel.)

Tests insulated wires in aerial, underground, or submarine multiple-conductor cables to determine continuity, insulation, and correctness of cable loading, using standard testing procedures and impedance, resistance, and frequency oscillating meters. Listens for sound of escaping insulating gas from hole in cable sheathing to locate defects in cable. Determines continuity, insulation, capacity imbalance, and cable loading, using meters, such as capacity and resistance bridges. Prepares report identifying location and cause of malfunctions. May drive motor vehicle along route of cable, climb poles, and ride in cable car from pole to pole on cable strand to perform tests. May direct CABLE SPLICER (construction; tel. & tel.; utilities) in correction of malfunction.
GOE: 05.05.05 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

822.361-014 CENTRAL-OFFICE INSTALLER (tel. & tel.) alternate titles: equipment installer

Installs equipment used to select, connect, and disconnect telephone lines in telephone company central office, following diagrams and using handtools and power tools: Positions switching and power apparatus according to floor plans, using chain hoist when necessary. Connects outgoing and incoming telephone trunk lines to central office equipment, using handtools and following diagrams. Connects and solders wires, using soldering iron. Tests operation of equipment after installation, using electrical testing equipment, such as electrical pulse repeaters and ohmmeters.
GOE: 05.05.05 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

822.361-018 PROTECTIVE-SIGNAL INSTALLER (business ser.) alternate titles. burglar-alarm installer; installer

Installs electrical protective signaling systems used to notify central office of fire, burglary, or other irregularities on subscribers' premises: Installs wires, conduits, and signaling units, following blueprints of electrical layouts and building plans and using handtools, power tools and soldering iron. May repair signaling systems [PROTECTIVE-SIGNAL REPAIRER (business ser.)]. Usually is required to possess identification card issued by local authorities.
GOE: 05.05.05 STRENGTH: M GED: R4 M3 L2 SVP: 7 DLU: 77

822.361-022 PROTECTIVE-SIGNAL REPAIRER (business ser.) alternate titles: burglar-alarm installer and servicer

Inspects, repairs, and replaces electrical protective-signaling systems, such as burglar alarms: Examines signaling installation to ensure sound connections and

unbroken insulation. Tests circuits, following wiring specifications, using electrical testing devices, such as ohmmeter or voltmeter. Tightens loose connections and disconnects and replaces defective parts and wiring, using electrician's handtools. Adjusts controls to test operation of signaling units on subscriber premises and transmission of signals to central station and police and fire departments. Recommends new installation or modification of existing equipment to meet subscriber needs. May install equipment [PROTECTIVE-SIGNAL INSTALLER (business ser.) 822.361-018]. Usually is required to possess identification card issued by local authorities.
GOE: 05.05.05 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 80

822.361-026 TRANSMISSION TESTER (tel. & tel.)
Tests and operates telephone equipment in telephone office that services lines extending between communities (toll-office): Tests equipment, using voltmeters, ammeters, transmission measuring sets, impedance bridges, vacuum-tube testing sets, and other electrical measuring devices. Records types and results of tests performed on worksheet. Connects broadcasting equipment into telephone circuits in preparation for radio and television transmission service.
GOE: 05.07.03 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

822.361-030 TROUBLE LOCATOR, TEST DESK (tel. & tel.) alternate titles: dispatcher
Locates malfunctions in telephone or telegraph lines, using switchboard composed of electrical testing instruments, and coordinates maintenance crew's work to remove malfunction: Tests lines to find cause and location of malfunction, using switchboard equipped with audible and visual alarms and electrical testing devices, such as voltmeter and resistance meter. Reports nature of trouble to inside and outside maintenance crews and directs and coordinates trouble-clearing activities. May dispatch maintenance crews to malfunctioning area. May contact subscribers to investigate reported trouble.
GOE: 05.06.01 STRENGTH: S GED: R4 M2 L3 SVP: 6 DLU: 77

822.381-010 EQUIPMENT INSTALLER (tel. & tel.)
Installs telegraphic transmitting and receiving equipment in telegraph company offices and on customers' premises, following floor-plan sketches and wiring diagrams: Installs and connects equipment, such as teletypewriters, tickers, facsimile-recording devices, and reperforators, using handtools and soldering iron. Tests equipment for circuit continuity, using testing instruments, such as voltmeter and ohmmeter. May wire and assemble equipment prior to installation [ASSEMBLER (tel. & tel.)]. May be designated according to equipment installed as Call-Box Wirer (tel. & tel.); Telegraphic-Typewriter Installer (tel. & tel.); Telegraph-Repeater Installer (tel. & tel.); Teletype Installer (tel. & tel.); Ticker Installer (tel. & tel.); Time-Signal Wirer (tel. & tel.).
GOE: 05.05.05 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

822.381-014 LINE INSTALLER-REPAIRER (tel. & tel.)
Installs and repairs telephone and telegraph lines, poles, and related equipment, according to diagrams, and using electrician's handtools: Digs holes, using power auger or shovel, hoists poles upright in holes, using truck-mounted winch, and fills and tamps holes, using cement, earth, and tamping device. Ascends poles or enters tunnels and sewers to cut in feeder lines, attach appliances, such as terminal boxes and repeaters, and repair or replace defective lines and auxiliary equipment. Unreels and strings lines from pole to pole and from pole to building, installs hardware, such as conduits and insulators, and attaches appliances on lines. Pulls lines through ducts by hand or with use of winch. When assisting in installation and removal of plant equipment, such as callboxes and clocks, in city locations, may be designated Line Installer-Repairer, City (tel. & tel.). When patrolling telephone lines between communities, may be designated Toll-Line Repairer (tel. & tel.). When patrolling telephone or telegraph lines between two established points or in designated areas, may be designated Line Maintainer, Section (tel. & tel.).
GOE: 05.05.05 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 77

822.381-018 PRIVATE-BRANCH-EXCHANGE INSTALLER (tel. & tel.) alternate titles: pbx installer
Installs telephone switchboards and specialized communication equipment, such as intercommunications systems, telephoto circuits, mobile radiotelephones, and teletypewriters, on customers' premises: Connects telephone or telegraph cable terminals to inside wires and switchboard, following diagrams and using handtools, soldering iron, and wire wrap gun. Tests and adjusts installation, using voltmeter, ammeter, and test telephone set [PRIVATE-BRANCH-EXCHANGE REPAIRER (tel. & tel.)]. May be designated according to type of equipment installed and maintained as Private-Branch-Exchange Installer, Mobile Radio (tel. & tel.); Private-Branch-Exchange Installer, Teletypewriter (tel. & tel.); Radio Installer (tel. & tel.); Telephoto Installer (tel. & tel.); Teleprinter Installer (tel. & tel.); Video Installer (tel. & tel.).
GOE: 05.05.05 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 77

822.381-022 TELEGRAPH-PLANT MAINTAINER (tel. & tel.) alternate titles: equipment installer; maintainer, central office; maintainer, equipment; maintainer, plant
Installs, maintains, and repairs electrical and mechanical equipment (other than automatic or manual transmitting and receiving equipment) in central office of telegraph company, according to written and graphic specifications: Installs and wires equipment, such as clocks, switching apparatus, repeaters, relays, conveyor belts, and pneumatic tubes, using handtools, power tools, soldering equipment, metal fasteners, and brackets. Tests installed equipment for circuit continuity and operational performance, using testing devices, such as ohmmeter and voltmeter.
GOE: 05.05.05 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

822.664-010 PROTECTIVE SIGNAL-INSTALLER HELPER (business ser.)
Assists PROTECTIVE-SIGNAL INSTALLER (business ser.) to install protective signaling systems by erecting conduits, pulling wires, fastening pipe straps, and making soldered connections. Makes small installations independently. Performs other duties as described under HELPER (any industry) Master Title. Usually is required to possess identification card issued by local authorities.
GOE: 05.10.03 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

822.684-010 FRAME WIRER (tel. & tel.)
Connects wires from telephone lines and cables to distributing frames in telephone company central office, using soldering iron and handtools: Solders connections, following diagram or oral instructions. Strings distributing frames with connecting wires. Tests circuit connections, using voltmeter or ammeter. Removes and remakes connections to change circuit layouts. Cleans switches and replaces contact points, using vacuum hose, solvents, and handtools. Lubricates moving switch parts. Assists TROUBLE LOCATOR, TEST DESK (tel. & tel.) in locating and correcting malfunction in wiring on distributing frame.
GOE: 05.10.03 STRENGTH: M GED: R3 M3 L3 SVP: 4 DLU: 77

822.684-014 PROTECTIVE-SIGNAL-REPAIRER HELPER (business ser.) alternate titles: burglar-alarm-repairer helper
Assists PROTECTIVE-SIGNAL REPAIRER (business ser.) to repair electrical protective signaling systems: Examines electrical units for loose connections and broken insulation. Tightens connections, using wrench. Disassembles defective parts of system, using handtools. Removes and replaces defective wiring and solders connections, using soldering iron. Performs other duties as described under HELPER (any industry) Master Title. Usually required to possess identification card issued by local authorities.
GOE: 05.10.03 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

822.684-018 SIGNAL MAINTAINER HELPER (r.r. trans.) alternate titles: assistant signal maintainer
Assists SIGNAL MAINTAINER (r.r. trans.) to install and repair railroad signals and signal equipment, working as member of crew: Loads and unloads equipment and supplies from trucks or flatcars. Digs holes, using post-hole digger, lines holes with wooden forms, and mixes and pours concrete to build concrete foundations. Assists SIGNAL MAINTAINER (r.r. trans.) in installing signals, making electrical connections to units, and performing routine maintenance and repair on equipment. Performs other duties as described under HELPER (any industry) Master Title. May install precast concrete foundations. May climb poles or dig trenches to install wiring, conduit, and related hardware.
GOE: 05.12.16 STRENGTH: H GED: R2 M2 L2 SVP: 3 DLU: 77

823 OCCUPATIONS IN ASSEMBLY, INSTALLATION, AND REPAIR OF ELECTRONIC COMMUNICATION, DETECTION, AND SIGNALING EQUIPMENT

This group includes occupations concerned with assembling equipment components; connecting and testing circuitry; installing equipment to provide electronic communication, detection, signaling, recording, analyzing, and computing services; and making on-site repairs in buildings, ships, trains, and aircraft.

823.131-010 COMMUNICATIONS ELECTRICIAN SUPERVISOR (any industry) alternate titles: chief technician
Supervises and coordinates activities of workers engaged in assembly, installation, maintenance, and repair of electronic communications equipment: Examines premises, plans, and specifications to determine work procedures, estimate costs, and requisition needed materials and equipment. Contacts load dispatching personnel to obtain work clearances on lines and equipment. Assigns duties to workers and requisitions materials, tools, and supplies. Inspects assembled, installed, or repaired equipment, such as transmitters and receivers, power and telephone line carriers, microwave devices, or cable television lines to verify conformance to company standards and government regulations. Tests electronic installations, using testing apparatus. Reviews work orders, trouble reports, and time and equipment records for completeness and accuracy. Prepares daily operating reports summarizing labor, materials, and equipment charges for work performed. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.05 STRENGTH: H GED: R4 M4 L4 SVP: 7 DLU: 88

823.131-014 RIGGER SUPERVISOR (radio-tv broad.; tel. & tel.) alternate titles: rigger, chief
Supervises and coordinates activities of workers engaged in wiring and repairing antenna systems for radio communications and radio and television broadcasting. Performs duties as described under SUPERVISOR (any industry) Master Title. May supervise workers engaged in operation and repair of radio transmitters.
GOE: 05.05.06 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

823.131-018 SUPERVISOR, AVIONICS SHOP (air trans.)
Supervises and coordinates activities of workers engaged in scheduled inspection, servicing, and maintenance of avionics equipment for commercial air-

line: Reviews service schedules to determine work sequence, methods, and crew and equipment requirements. Assigns duties to workers according to abilities and service priorities. Trains new workers and interprets work procedures, company rules, and safety regulations. Inspects avionic equipment and assemblies to verify conformance to specifications. Signs off completed work and initiates certification as airworthy. Develops revisions in service manuals, test panels, and instruments to increase efficiency and up-date service techniques. Keeps production and inventory records. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.10 STRENGTH: L GED: R4 M4 L4 SVP: 8 DLU: 77

823.131-022 SUPERVISOR, RADIO INTERFERENCE (electron. comp.)
Supervises and coordinates activities of RADIO INTERFERENCE INVESTIGATORS (electron. comp.) engaged in locating origin of radio and television interference: Determines, from complaint, location and type of interference caused by electrical power lines or equipment. Assigns workers to investigate complaints and assists in solving more difficult interference problems. Consults with electrical contractors, appliance dealers, and departmental staff to eliminate interference problems. Reviews inspection reports and prepares summary of investigative actions. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.05 STRENGTH: L GED: R4 M4 L4 SVP: 8 DLU: 77

823.131-026 SUPERVISOR, SOUND TECHNICIAN (business ser.)
Supervises and coordinates activities of workers engaged in installing, servicing, and repairing commercial sound systems in businesses, offices, and industrial work places: Reads sales orders to ascertain specifications of units to be installed; to determine components, coaxial cable, fittings, and connectors required; and to prepare installation orders for crew. Scans installation site to determine degree of difficulty of installation and to ascertain equipment needs. Assigns installation tasks to individual workers, according to their skills and experience. Explains and demonstrates tasks to workers to impart knowledge and upgrade skill level. Oversees work in progress to ensure quality of work and professional appearance of installation. Turns volume and tone controls to adjust sound levels to harmonize with room size and ambient noises and to test installation. Prepares checklist to indicate inspection of each step and completion of installation. Writes listing to indicate work performed; components installed; distances wired; coaxial cable, fittings, and connectors used; and hours of work expended. Reads reports of malfunctions to diagnose probable cause and to ascertain make, model, and size of installation. Prepares work order and dispatches SOUND TECHNICIAN (any industry) 829.281-022 to repair and service system components. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.05 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 86

823.261-010 PUBLIC-ADDRESS SERVICER (any industry) alternate titles: electronic-sound technician; public-address-system operator
Installs and repairs sound-amplifying systems used at public and private assemblages, using handtools and electronic test meters: Positions loudspeakers on posts or other supports. Strings cable from loudspeakers to amplifiers. Places microphones in position near speaker, orchestra, or other attraction, and plugs microphone wires into amplifiers. Switches on installation. Listens to sound output and adjusts volume controls or repositions microphones. Tests and repairs equipment in shop, using handtools, soldering iron, and electronic test meters. May test and repair sound recorders, radio and television receivers, and other electronic equipment. May drive sound truck. May install and repair mobile sound-amplifying system in truck and be designated Sound-Truck Operator (any industry).
GOE: 05.05.10 STRENGTH: M GED: R4 M3 L2 SVP: 7 DLU: 77

823.261-014 RADIO INTERFERENCE INVESTIGATOR (electron. comp.) alternate titles: radio-interference trouble shooter
Drives vehicle and operates radio equipped with directional antenna to locate origin of radio and television interference caused by electric power lines and electrical equipment: Drives to area of complaint of interference or power leakage and turns on radio. Directs car toward source of interference, guided by increase in volume of noises on radio as car nears defective line or apparatus. Examines lines and equipment to determine cause of interference or leakage. Initiates order to have defects corrected or recommends to owner of equipment correction of condition causing interference. May make minor repairs or replacement of power lines and equipment, using handtools. May locate interference by entering complainant's home and turning on lights and appliances and noting effect on radio or television reception. May attach special analyzing device to radio which measures and analyzes interference noises. May investigate voltage complaints and make voltage tests [VOLTAGE TESTER (utilities)].
GOE: 05.05.05 STRENGTH: L GED: R4 M4 L3 SVP: 7 DLU: 77

823.261-018 RADIO MECHANIC (any industry)
Tests and repairs radio transmitting and receiving equipment in accordance with diagrams and manufacturer's specifications, using electrical measuring instruments, wiring diagrams, and handtools: Examines equipment for damaged components and loose or broken connections and wires. Attaches test leads or plugs in test equipment to unit being tested, turns knobs on equipment to specified settings, and observes dial readings to test radio circuitry for defects. Tests equipment for factors such as power output, frequency power, noise level, audio quality, and dial calibration, using oscilloscopes, radio frequency and wattmeter, ammeters, and voltmeters. Replaces defective components and parts, such as transistors, coils, and integrated circuits, using soldering iron, wire cutters, and handtools. Removes and replaces defective units that are not repairable. Inserts plugs into receptacles and bolts or screws leads to terminals to connect radios and equipment to power source, using handtools. Turns setscrews to adjust receivers for sensitivity and transmitters for maximum output. Tests batteries with hydrometer and ammeter and charges batteries. Required to have Federal Communications Commission Radiotelephone Operator's license. May install, test, adjust, modify, and repair intercommunication systems. May specialize in testing and repairing radio transmitting and receiving equipment in motor vehicles and commercial and government establishments.
GOE: 05.05.10 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 80

823.261-022 ANTENNA INSTALLER, SATELLITE COMMUNICATIONS (any industry)
Installs, tests, and repairs antennas and related equipment that receive communication satellite signals, following specifications and using handtools and test instruments: Reviews installation specifications, building permit, manufacturer's instructions, and government ordinances to determine installation site for antenna. Measures distance from landmarks to identify exact site location. Visually inspects installation site to identify obstructions, such as trees or buildings, that could distort or block microwave signals from satellite. Discusses site location and construction requirements with customer. Digs hole for footing to support antenna base, using gasoline-powered auger, posthole digger, or shovel. Assembles and installs prefabricated form in hole to cast concrete base, using handtools, plumb rule, and level, following specifications. Mixes, pours, and finishes concrete, using concrete mixer, trowel, and float. Inserts pedestal mounting bolts in wet concrete. Digs trench and lays underground cable to connect antenna base to source of power in customer's building. Attaches antenna base to footing after concrete dries, using handtools. Assembles and attaches electronic and structural components of antenna, with co-worker, applying knowledge of electronics and electricity, following installation guidelines, and using handtools. Attaches antenna to base, using nuts, bolts, and handtools. Climbs ladder to install antenna when area is inaccessible from ground. Orients antenna to direction and altitude of communication satellite, using surveying instruments and following charts of satellite position. Solders connections to electronic controls, using soldering gun and wire cutters. Connects antenna and television set to signal converter control box, using handtools. Tests installed system for conformance to specifications, using test equipment, such as multimeters and oscilloscope. Observes picture on television screen to evaluate reception. Instructs customer in use of equipment. Replaces or repairs defective parts, using handtools and test equipment. May construct pole or roof mounts for antenna base, using carpenter's tools. May reinforce roof of building to provide secure installation site, using carpenter's tools. May install antennas and related equipment to receive satellite signals for such purposes as telephone, telex, facsimile, data, or radio communication.
GOE: 05.05.05 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 86

823.261-026 AVIONICS TECHNICIAN (aircraft mfg.; air trans.) alternate titles: avionics and radar technician; avionics mechanic; radio and radar technician
Inspects, tests, adjusts, and repairs avionics equipment, such as radar, radio, pulse, navigation, auto pilot, and compass systems, installed in aircraft and space vehicles, using handtools and test equipment: Inspects components of avionics equipment for defects, such as loose connections and frayed wire, and for accuracy of assembly and installation. Tests avionics equipment under simulated or actual operating conditions to determine performance and airworthiness, using test equipment, such as oscilloscopes, digital meters and counters, and circuit analyzers. Adjusts, repairs, or replaces defective components based on analysis of test results, following blueprints, schematics, handbooks, and other technical documents, using handtools. Calibrates installed or repaired equipment to prescribed specifications. Adjusts frequencies of radio sets by signaling ground station and turning setscrews. Must possess Radiotelephone License issued by Federal Communications Commission. May accompany flight crew to perform in-flight adjustments and to determine and record required post-flight repair work. May sign overhaul documents for equipment replaced or repaired. May operate ground station for air-to-station check of radar or other equipment.
GOE: 05.05.10 STRENGTH: L GED: R4 M4 L4 SVP: 6 DLU: 88

823.261-030 DATA COMMUNICATIONS TECHNICIAN (any industry)
Installs and repairs data communications lines and equipment for computer system, using handtools and test instruments: Reviews work orders to move, change, install, repair, or remove data communications equipment, such as modems, cables, and wires. Reads technical manuals to learn correct settings for equipment. Measures, cuts, and installs wires and cables. Splices wires or cables, using handtools or soldering iron. Connects microcomputer or terminal to data communication lines, using handtools and following diagrams and manuals. Disassembles equipment and inspects and tests wiring to locate and repair problem. Modifies equipment in accordance with user request. Tests communication lines to ensure that specifications are met, using testing instruments such as voltmeter and data scope. Enters commands into computer to test equipment. Reads messages on computer screen to verify that data is being transmitted between locations according to specifications. May plan layout and installation of data communications equipment. May demonstrate use of equipment.

GOE: 05.05.05 STRENGTH: M GED: R4 M3 L4 SVP: 7 DLU: 90

823.281-014 ELECTRICIAN, RADIO (any industry) alternate titles: radio-communications mechanician; radio mechanic; station mechanic

Adjusts, installs, tests, and repairs high-powered stationary and mobile radio transmitting equipment, using handtools and testing instruments and following wiring diagrams: Adjusts controls and tests frequencies of transmitters, using frequency meter. Listens to radio range station at frequent intervals during broadcasts to detect flaws in transmission and adjusts controls to eliminate flaws. Operates emergency truck transmitter to ensure its readiness for immediate use. Examines equipment and replaces defective condensers, switches, tubes, and transistors. Tests equipment with instruments, such as circuit analyzers, audiometers, and voltmeters. Repairs components of radio transmitting equipment and intercommunication telephone system, using handtools. May be designated according to equipment serviced as Marine-Radio Installer-And-Servicer (any industry); Radiotelegraph Operator-Servicer (any industry).
GOE: 05.05.05 STRENGTH: L GED: R4 M4 L3 SVP: 7 DLU: 77

823.281-018 METEOROLOGICAL-EQUIPMENT REPAIRER (any industry) alternate titles: electronics technician

Installs, maintains, and repairs electronic, mercurial, aneroid, and other types of weather-station equipment, using handtools and electronic testing instruments: Tests meteorological instruments for compliance with printed specifications and schematic diagrams, using voltmeters, oscilloscopes, tube testers, and other test instruments. Replaces defective parts, using handtools and soldering iron. Inspects barometers, thermographs, and hydrographs, including recording mechanisms, and repairs, adjusts, or replaces defective parts. Calibrates graphs and other recording devices. Installs radar and two-way radio systems to detect and communicate weather signals. Adjusts and repairs masts, supporting structures, clearance lights, control panels, control cabling and wiring, and other electrical and mechanical devices and equipment, using handtools.
GOE: 05.05.10 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

823.281-022 RIGGER (radio-tv broad.)

Wires radio-broadcasting and radio-communications antenna systems, wood or steel antenna towers, and supporting catenaries. Repairs antennas by replacing broken or defective wires, insulators, and lamps. Paints antenna towers and otherwise keeps antenna systems in state of good repair.
GOE: 05.05.06 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

823.361-010 TELEVISION INSTALLER (any industry)

Installs and adjusts television receivers and antennas, using handtools: Selects antenna according to type of set and location of transmitting station. Bolts crossarms and dipole elements in position to assemble antenna. Secures antenna in place with bracket and guy wires, observing insurance codes and local ordinances to protect installation from lightning and other hazards. Drills and waterproofs holes in building to make passages for transmission line. Connects line between receiver and antenna and fastens line in place. Tunes receiver on all channels and adjusts screws to obtain desired density, linearity, focus, and size of picture. Orients antenna and installs reflector to obtain optimum signal reception.
GOE: 05.10.03 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 77

823.684-010 ANTENNA INSTALLER (any industry)

Installs antennas for radio or television receiving sets: Sets up wooden or metal mast and secures in place with guy wires and base plate, using handtools. Attaches single dipole antenna to mast for FM radio reception or antenna composed of several directors plus dipole antenna and reflector for television reception. Positions antenna with directors toward station transmitters or toward reflection point to obtain optimum signal. Attaches lead-in wire to dipole antenna and other end to set. May install lightning arrester on lead-in wire.
GOE: 05.12.16 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

824 OCCUPATIONS IN ASSEMBLY, INSTALLATION, AND REPAIR OF LIGHTING EQUIPMENT AND BUILDING WIRING, N.E.C.

This group includes occupations, not elsewhere classified, concerned with wiring buildings and adjacent yards to provide electricity for power and lighting; assembling and installing lighting equipment, conduit switches, junction and fuse boxes, and related accessories and controls; and repairing wiring and components.

824.137-010 ELECTRICIAN, CHIEF (motion picture)

Supervises and coordinates installation, maintenance, and operation of all electrical lighting equipment in motion picture studios and outside locations: Confers with DIRECTOR, MOTION PICTURE (motion picture); ART DIRECTOR (motion picture; radio-tv broad.), and other key personnel regarding lighting specifications for specific sets. Prepares requisitions or issues work orders for purchase or construction of special electrical equipment. Arranges with local utility company for use of power lines or transformers when filming scenes on outside locations. Inspects sets after equipment is installed to ensure conformance with lighting equipment requirements.
GOE: 05.05.05 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

824.137-014 STREET-LIGHT-SERVICER SUPERVISOR (utilities)

Supervises and coordinates activities of STREET-LIGHT SERVICER (utilities) engaged in inspecting, servicing, and repairing street lamps and equipment: Determines material requirements and prepares requisitions. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.05 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

824.261-010 ELECTRICIAN (construction) alternate titles: wirer

Plans layout, installs, and repairs wiring, electrical fixtures, apparatus, and control equipment: Plans new or modified installations to minimize waste of materials, provide access for future maintenance, and avoid unsightly, hazardous, and unreliable wiring, consistent with specifications and local electrical codes. Prepares sketches showing location of wiring and equipment, or follows diagrams or blueprints, ensuring that concealed wiring is installed before completion of future walls, ceilings, and flooring. Measures, cuts, bends, threads, assembles, and installs electrical conduit, using tools, such as hacksaw, pipe threader, and conduit bender. Pulls wiring through conduit, assisted by ELECTRICIAN HELPER (any industry) 829.684-022. Splices wires by stripping insulation from terminal leads, using knife or pliers, twisting or soldering wires together, and applying tape or terminal caps. Connects wiring to lighting fixtures and power equipment, using handtools. Installs control and distribution apparatus, such as switches, relays, and circuit-breaker panels, fastening in place with screws or bolts, using handtools and power tools. Connects power cables to equipment, such as electric range or motor, and installs grounding leads. Tests continuity of circuit to ensure electrical compatibility and safety of components, using testing instruments, such as ohmmeter, battery and buzzer, and oscilloscope. Observes functioning of installed equipment or system to detect hazards and need for adjustments, relocation, or replacement. May repair faulty equipment or systems [ELECTRICIAN, MAINTENANCE (any industry) 829.261-018]. May be required to hold license. May cut and weld steel structural members, using flame-cutting and welding equipment. May be designated according to work location as Mine Electrician (mine & quarry).
GOE: 05.05.05 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 88

824.261-014 ELECTRICIAN APPRENTICE (construction)

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.05 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

824.281-010 AIRPORT ELECTRICIAN (air trans.)

Plans layout, installs, inspects, and maintains lighting systems, lights, and beacons at airport or flying field: Inspects lighting systems and advises MANAGER, AIRPORT (air trans.) of need to repair or upgrade airport lighting systems. Installs lighting systems in compliance with Federal Aviation Administration recommendations. Inspects beacon and lights, such as boundary, runway, obstacle, and airport-control lights, replacing defective lenses or bulbs and cleaning or repairing equipment. May drive and operate floodlight truck at crashes or other emergencies. May place warning flares about airfield during power failure or emergency. May be on constant call to make emergency repairs.
GOE: 05.05.05 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

824.281-014 ELECTRIC-DISTRIBUTION CHECKER (construction; utilities)

Inspects and tests electric distribution equipment and wiring outside and within buildings to verify conformance of installation with construction and building code specifications, or to determine feasibility of increasing electrical load: Examines wires and auxiliary equipment, such as fuses, insulators, and switches to ascertain conformance to specifications on work orders, utilizing thorough knowledge of types, sizes, and styles of equipment. Compares layout and methods of installation to blueprints and sketches and marks differentiations on drawings. Climbs poles to compare printed data on transformers with work orders and to examine wires and auxiliary equipment on poles. Approves installations or records inaccuracies on work orders. Tests lines, transformers, and other distribution equipment, using such devices as ohmmeters, voltmeters, and thermocouple indicators to measure voltage drop between points in circuitry, locate cause of electrical disturbances, and determine actual electrical load on system. Tests for temperature and presence of explosive gases in vicinity of electrified equipment.
GOE: 05.05.05 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

824.281-018 NEON-SIGN SERVICER (fabrication, nec)

Services and repairs plastic, neon and illuminated signs in response to trouble calls: Ascends ladder or operates hydraulic or electric hoist to examine sign and determine cause of malfunction. Performs operations, such as rewiring, removing defective parts, and installing new parts, using electricians' tools. Removes sign or part of sign for shop repairs, such as structural fabrication, scroll repair, or transformer repair.
GOE: 05.05.10 STRENGTH: M GED: R4 M2 L2 SVP: 7 DLU: 77

824.381-010 STREET-LIGHT SERVICER (utilities) alternate titles: street-light repairer

Maintains and repairs mercury-vapor, fluorescent, electric-arc, or incandescent street lights and traffic signals: Climbs ladder or stands in tower-truck bucket to reach lamp. Tests circuits and electric components to locate grounded wires, broken connections, or defective current-control mechanisms, using electrical testing instruments. Replaces blown fuses and bulbs, faulty transformers, photoelectric timers, electrodes, and wires, using electricians' handtools. See LINE REPAIRER (utilities) and TROUBLE SHOOTER (utilities) II for classification of workers also qualified to work on high-voltage power lines. May install and repair traffic signals only and be designated Traffic-Signal Repairer (utilities).

GOE: 05.05.05 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

824.664-010 STREET-LIGHT-SERVICER HELPER (utilities)

Assists STREET-LIGHT SERVICER (utilities) in making emergency or permanent repairs to street lights, working as member of crew: Places warning signs, flags, or barriers at repair site. Opens manholes or vaults to gain access to underground circuits or erects ladders for repairing overhead equipment. Unloads tools, parts, and supplies from truck as directed. Flips switches to energize or de-energize circuits preparatory to repair of equipment. Disassembles, cleans, and reassembles lighting fixtures and equipment, using handtools. Tests transformers and transformer gaskets, using ammeter and air pump. Replenishes service truck supply of replacement parts, tools, and equipment.
GOE: 05.12.16 STRENGTH: M GED: R3 M3 L2 SVP: 4 DLU: 77

824.681-010 ELECTRICIAN (mfd. bldgs.)

Installs and repairs wiring, electrical fixtures, and fuse boxes in prefabricated and modular homes, using handtools: Reads blueprints to determine locations of equipment and conformance to building and safety codes. Measures, cuts, and installs conduit in specified panels, using handtools. Measures for location of receptacles with tape measure and installs receptacles. Cuts and connects wires according to diagrams to install fixtures, such as switches, light fixtures, and fuse boxes. Tests continuity of circuits to ensure safety, using ohmmeter. Repairs faulty systems. May direct workers in boring holes in studs and running wiring. May train new workers in electrical system installation procedures.
GOE: 05.05.05 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 77

824.683-010 NIGHT-PATROL INSPECTOR (fabrication, nec)

Patrols scheduled route to inspect operation of illuminated and animated signs: Drives company car along scheduled route at night. Inspects signs covered by company maintenance contract for specified appearance and operation. Reports faulty operation to service department. May perform minor repairs, such as replacing light bulbs.
GOE: 05.08.03 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

824.684-010 NEON-TUBE PUMPER (fabrication, nec)

Charges illuminated sign tubing with rare (inert) gases: Attaches formed sign tubing to pumping unit through fused tubulations (glass nipples). Removes air from tubing by means of vacuum pump. Bombards tubing with high-voltage electric current to eliminate gaseous impurities. Reduces vacuum in tubing to specified point, using vacuum pump and vacuum gauge. Connects and opens rare gas bottle to admit rare gas, such as neon, argon, helium, krypton, xenon, distilled mercury, or blue gas (depending on color desired) to specified pressure as indicated by pressure gauge. Tests sign by connecting electrodes to secondary winding of transformer and observing color of light. Seals tubing by heating and closing tubulations. Connects tubing to transformer and operates several hours to age tubing (consume gaseous impurities). May paint or tape tubing to separate symbols.
GOE: 05.05.10 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

825 OCCUPATIONS IN ASSEMBLY, INSTALLATION, AND REPAIR OF TRANSPORTATION AND MATERIAL-HANDLING EQUIPMENT, N.E.C.

This group includes occupations, not elsewhere classified, concerned with wiring and repairing electrical power units and controls for transportation and material-handling equipment, and adjusting or repairing electrical components and circuits.

825.131-010 ELECTRICIAN SUPERVISOR (ship-boat mfg.)

Supervises and coordinates activities of workers engaged in installation and repair of wiring and electrical equipment aboard ship and in shipyard facilities, performing duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.05 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

825.131-014 ELEVATOR-CONSTRUCTOR SUPERVISOR (construction)

Supervises and coordinates activities of workers engaged in installation of electric and hydraulic freight and passenger elevators, escalators, and dumbwaiters. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

825.137-010 SUPERVISOR, LINE DEPARTMENT (r.r. trans.)

Supervises and coordinates activities of line crew engaged in installing and maintaining street railway electrical equipment, such as trolley wires, switches, and signals: Assigns crews to jobs and inspects trucks to see that materials are loaded. Inspects work at various sites to ascertain that work is accomplished according to specifications. Plans for future projects, drawing rough sketches in field, and arranges for supplemental services to facilitate departmental activities. Maintains time records for salary purposes. Participates in grievance procedures. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.05 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

825.261-010 ELECTRIC-TRACK-SWITCH MAINTAINER (r.r. trans.)

Installs, inspects, and repairs electric-railway track switches, section lines, and intercommunication systems, following blueprints and work orders: Installs switch-controlling mechanism on trolley wire, using handtools. Connects wiring to switch in track bed, and inspects electrical switch system to ascertain that system functions according to standards. Maintains high tension lines, deenergizing lines for power company as repairs are requested. Installs and maintains section lines and intercommunication systems. May install and maintain mechanical parts of track switch.
GOE: 05.05.05 STRENGTH: M GED: R4 M1 L3 SVP: 7 DLU: 77

825.261-014 ELEVATOR EXAMINER-AND-ADJUSTER (any industry) alternate titles: elevator inspector

Inspects and adjusts installed freight and passenger elevators and escalators to meet factory specifications and safety codes, using handtools and measuring instruments: Inspects door installations for plumbness, lap, and working action. Adjusts mechanism of doors, using handtools. Inspects car hoistway and mechanical installations for alignment and clearance. Tests power consumption and line voltage changes of motors and motor-generator sets under no-load and full-load conditions to detect overload factors, using tachometer, voltmeter, and ammeter. Adjusts counterweights and regulates controls to compensate for power overload. Inspects wiring connections and control panel hookups, and adjusts switches to meet specifications for gap and timing. Tests and adjusts safety controls, such as brakes and governors. Turns valve or pushes switches to adjust pump pressures, fluid levels, and power supply on hydraulic units of elevators. Operates elevator to determine power demands at various car speeds. May compile service reports to verify conformance of each unit to prescribed standards.
GOE: 05.07.03 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

825.261-018 ELECTRICIAN, AIRCRAFT (aircraft mfg.; air trans.) alternate titles: aircraft and engine electrician, field and hangar; aircraft mechanic, electrical

Installs, adjusts, tests, modifies, repairs, and maintains electrical and electronic parts, assemblies, systems, and equipment in prototype, developmental, or production aircraft, engines, and components: Installs electrical and electronic parts, assemblies, systems, and equipment in aircraft, according to blueprints, wiring diagrams, and other specifications, using handtools and power tools. Sets up and operates ground support and test equipment, such as test carts, panels, ground power unit, and ground servicing cart, to perform functional and continuity test of electrical and electronic systems. Interprets test results to diagnose malfunctions, and adjusts, repairs, or replaces defective parts. Modifies components according to blueprint specifications and engineering drawings. Fabricates parts and test aids as required. May accompany aircraft on test flight to perform functional tests or to make in-flight adjustments.
GOE: 05.05.05 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 88

825.281-014 ELECTRICIAN (water trans.)

Repairs and maintains electrical equipment, such as generators, alternators, motors, and intercommunication systems aboard ship: Moves controls at distribution board (switchboard) to maintain electrical load within capacity of generators. Starts standby generator when load nears capacity of operating generator. Performs routine tests to ensure that electric motors are driving pumps, blowers, and refrigerating machinery. Tests wiring for short circuits, using voltmeter and ammeter. Replaces and cleans commutator brushes. Removes and replaces fuses and defective lights. May be classified according to degree of authority held as Electrician, Chief (water trans.); Electrician, Second (water trans.); Electrician, Third (water trans.); or equipment worked on as Electrician, Sound (water trans.); or area of operations as Electrician, Deck (water trans.). Must hold certificate as Electrician issued by U.S. Coast Guard.
GOE: 05.05.05 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

825.281-022 ELECTRICIAN, AUTOMOTIVE (automotive ser.)

Repairs and overhauls electrical systems in automotive vehicles, such as automobiles, buses, and trucks: Confers with customer to determine nature of electrical malfunction. Determines malfunction of electrical system by visual inspection and by use of testing devices, such as oscilloscope, voltmeter, and ammeter. Adjusts ignition timing and measures and adjusts distributor breaker-point gaps, using *dwell meter* or thickness gauge. Tests and repairs starters, generators, and distributors. Repairs or replaces defective wiring in ignition, lighting, air-conditioning, and safety control systems, using electrician's handtools. Rebuilds electrical units, such as starters, generators, and door controls. May estimate cost of repairs based on parts and labor charges. May be designated according to specialty as Electrical Repairer, Internal Combustion Engines (automotive ser.; engine-turbine); Electrical-Unit Rebuilder (automotive ser.); Electrician, Bus (automotive ser.); Ignition-And-Carburetor Mechanic (automotive ser.); Windshield-Wiper Repairer (automotive ser.).
GOE: 05.05.10 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

825.281-026 ELECTRICIAN, LOCOMOTIVE (railroad equip.)

Installs and maintains electrical wiring and equipment, such as motors, generators, air-conditioning units, electrical outlets, and lighting fixtures of railroad locomotives and cars, streetcars, and subway coaches: Measures, cuts, threads, bends, assembles, and installs conduits that connect to control panels and junction boxes, using hacksaw, pipe benders, pipe-threading tools, and other handtools. Splices wires with knife or cutting pliers and solders connections to fixtures, outlets, and equipment. Tests circuit connections, using electrical test equipment. Installs and tests electrical equipment, such as air-conditioning, heating, and ignition systems, generator brushes, and commutators. Installs and repairs headlights in locomotives and streetcars. Repairs electrical equipment,

such as panel lighting, circuit breakers, junction boxes, voltage regulators, and reverse current relays. May recharge storage batteries. May re-wind armatures. May be designated according to specialty as Accessories Repairer (railroad equip.); Electrician, Control Equipment (railroad equip.); Wirer, Passenger Car (railroad equip.).
GOE: 05.05.05 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

825.281-030 ELEVATOR REPAIRER (any industry) alternate titles: electrician, elevator-maintenance; elevator mechanic; elevator-repair mechanic; maintenance mechanic, elevators

Repairs and maintains elevators, escalators, and dumb-waiters to meet safety regulations and building codes, using handtools, power tools, test lamps, ammeters, voltmeters, and other testing devices: Locates and determines causes of trouble in brakes, motors, switches, and signal and control systems, using test lamps, ammeters, and voltmeters. Disassembles defective units and repairs or replaces parts, such as locks, gears, cables, electric wiring, and faulty safety devices, using handtools. Installs push-button controls and other devices to modernize elevators. Lubricates bearings and other parts to minimize friction.
GOE: 05.05.05 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

825.281-034 ELEVATOR-REPAIRER APPRENTICE (any industry) alternate titles: electrician apprentice, elevator maintenance

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.05 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

825.281-038 EXPERIMENTAL-ROCKET-SLED MECHANIC (aircraft mfg.)

Installs, adjusts, and repairs recording and control instruments and structural components in experimental rocket sleds according to blueprints, using handtools, power tools, and test equipment: Mounts instruments, such as telemetering transmitter, strain gauges, and cameras on sled, using portable power drill, handtools, and soldering iron. Inspects firing control circuits, instruments, and recording systems, using test equipment, such as ammeter, voltmeter, and oscilloscope. Adjusts test settings for hydraulic or other braking mechanism. Positions and secures ballast in sled to obtain specified weight distribution and balance. Repairs firing control mechanisms, recording systems, and other structural and mechanical parts and devices after test completion, using handtools, power tools, and welding equipment. May modify rocket motors or related hardware, using metal or composite reforming tools or welding equipment.
GOE: 05.05.05 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 87

825.361-010 ELEVATOR CONSTRUCTOR (construction) alternate titles: elevator builder; elevator erector; elevator installer; elevator mechanic

Assembles and installs electric and hydraulic freight and passenger elevators, escalators, and dumbwaiters, determining layout and electrical connections from blueprints: Studies blueprints and lays out location of framework, counterbalance rails, motor pump, cylinder, and plunger foundations. Drills holes in concrete or structural steel members with portable electric drill. Secures anchor bolts or welds brackets to support rails and framework, and verifies alignment with plumb bob and level. Cuts prefabricated sections of framework, rails, and other elevator components to specified dimensions, using acetylene torch, power saw, and disc grinder. Installs cables, counterweights, pumps, motor foundations, escalator drives, guide rails, elevator cars, and control panels, using handtools. Connects electrical wiring to control panels and electric motors. Installs safety and control devices. Positions electric motor and equipment on top of elevator shaft, using hoists and cable slings. May be designated according to type of equipment installed as Elevator Constructor, Electric (construction); Elevator Constructor, Hydraulic (construction); Escalator Constructor (construction).
GOE: 05.05.06 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 77

825.361-014 VIBRATOR-EQUIPMENT TESTER (machinery mfg.) alternate titles: tester, vibrator equipment; top-lift and automatic-window repairer

Tests electrical and mechanical vibrator feeders and conveyors for conformance to specifications: Clips cable of test board to electric vibrator equipment. Turns dials and observes meters to operate electric vibrator equipment at specified cycle, voltage, and amperage levels. Holds end of scale against vibrator equipment to pick up vibration. Reads scale mark that shows distinct double image and determines vibrating frequency on conversion chart. Starts motor of mechanical vibrator equipment and verifies vibrating frequency. Advises ASSEMBLER (machinery mfg.) to add or remove vibrator bars from electrical vibrator equipment or weights from drive shaft of mechanical vibrator equipment, to correct vibrating deficiencies. May inspect vibrator equipment for loose bearings and bolts, using stethoscope. Records test data.
GOE: 06.01.05 STRENGTH: L GED: R3 M3 L3 SVP: 6 DLU: 77

825.381-010 AIRCRAFT MECHANIC, ELECTRICAL AND RADIO (aircraft mfg.)

Lays out, assembles, installs, and tests radio and electrical systems in aircraft and missiles, according to specifications, using handtools and precision testing equipment: Assembles units, such as switches, electrical controls, and junction boxes, and connects units to major units, such as radio systems, instruments, magnetos, and inverters, using handtools and soldering iron. Lays out installation of major units in aircraft, using scribe, scale, and protractor. Installs and connects units, according to wiring diagrams, using handtools and soldering iron. Tests units, using equipment, such as circuit continuity tester, oscilloscope, and voltmeter, and adjusts or repairs malfunctioning units.
GOE: 06.02.23 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 89

825.381-014 AUTOMATIC-WINDOW-SEAT-AND-TOP-LIFT REPAIRER (automotive ser.)

Disassembles, repairs, installs, adjusts, and services hydraulic and electromagnetic automatic lift mechanisms used to raise and lower automobile windows, seats, and tops.
GOE: 05.10.03 STRENGTH: L GED: R3 M3 L3 SVP: 4 DLU: 77

825.381-018 CONTROLLER REPAIRER-AND-TESTER (railroad equip.) alternate titles: control inspector

Adjusts, cleans, repairs, and tests electric control equipment of commuter and rapid transit cars or streetcars, following wiring diagrams and using specialized test equipment and handtools: Blows dirt from relays and switches, using airhose. Examines parts, such as control points, relays, and wiring, and adjusts or replaces defective parts. Observes operation of relays to verify conformance to specifications. Disassembles electric controller cylinders and replaces defective parts, such as copper contact segments, insulation disks, and spacing washers. Examines systems for short circuits or broken wires preparatory to high potential test, using megameter, and tests for defective circuits. Assembles and paints controller cylinders and tests cylinders to verify specified operation.
GOE: 05.05.05 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

825.381-026 ELECTRICAL INSPECTOR (aircraft mfg.; air trans.) alternate titles: inspector, electrical bench; inspector, precision electrical assembly

Inspects and tests electrical parts, assemblies, and accessories prior to installation in aircraft for conformance to specifications and quality standards, using precision measuring instruments and test equipment: Examines parts and assemblies, such as wire harnesses, control panels, coaxial cables, and electrical jig boards, for completeness of assembly, quality, and conformance to blueprints, production illustrations, engineering drawings, and specifications. Inspects wiring of assemblies for accuracy of stripping, soldering, and crimping, and for defects, such as frayed wires, loose connections, and cracks. Verifies wire and cable length, dimensions, and clearance of parts, using precision instruments. Tests continuity and performance of parts, assemblies, and accessories, using test equipment. Records acceptance or rejection of parts on inspection report, and indicates reason for rejection.
GOE: 06.01.05 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

825.381-030 ELECTRICIAN (ship-boat mfg.) alternate titles: electrician, marine; electrician, outside

Installs and repairs wiring, fixtures, and equipment for all electrical services aboard ship and in shipyard facilities, following blueprints and wiring diagrams: Installs conduit to bulkheads with brackets and screws, using handtools, and threads wires through conduit to terminals, such as connection boxes, circuit breakers, voltage regulators, and switch panels. Strips insulation from wire ends and solders ends to terminals, using stripping pliers and soldering iron. Connects power-supply circuits to radio, radar, sonar, fire control, and other electronic equipment. Tests electrical characteristics, such as voltage, resistance, and phase angle, in circuits, using voltmeters, ohmmeters, and phase rotation indicators. May construct instrument panels, using handtools, rulers, dividers, and power drills, following specifications. May be designated according to work location as Electrician, Ship (ship-boat mfg.); Electrician, Shop (ship-boat mfg.); Electrician, Yard (ship-boat mfg.).
GOE: 05.05.05 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

825.381-034 ELECTRICIAN APPRENTICE (ship-boat mfg.) alternate titles: marine-electrician apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.05 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

825.381-038 THIRD-RAIL INSTALLER (r.r. trans.)

Installs third (power-supply) rails on electric elevated or subway railway tracks: Treats wooden insulator blocks by soaking for specified time in hot paraffin. Assembles trolley chairs by forcing top and bottom castings onto wooden insulator blocks with compressed-air press, drilling bolt holes through castings and blocks with power drill, and driving rivets into holes, using rivet gun. Paints anchor blocks with preservative to protect against rot. Installs trolley chairs beneath third rail at ends of rail sections by boring holes through tie and bottom castings and screwing trolley chairs to tie. Installs anchor blocks at center of third-rail sections, bolting block to rail and tie. Arc welds copper bands at junction of rails to provide unbroken electrical connections between rail sections [WELDER, ARC (welding)]. Fastens and positions annunciator rails to third-rail at specified points so contact will be made with third-rail shoe of passing trains. May specialize in installation and maintenance of conduit systems for electric street railways and be designated Conduit Installer (r.r. trans.).
GOE: 05.10.01 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

825.664-010 ELEVATOR-CONSTRUCTOR HELPER (construction) alternate titles: elevator-erector helper

Assists ELEVATOR CONSTRUCTOR (construction) to install freight and passenger elevators: Raises and moves heavy machinery and equipment, using hoists, dollies, rollers, wire rope, and cable slings. Holds material in position

to assist in installing rails and supporting framework. Drills holes in concrete or steel, using portable electric drill. Assembles and bolts rails, elevator motor, car, and control panels preparatory to installation. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.12 STRENGTH: H GED: R3 M2 L2 SVP: 3 DLU: 77

825.684-010 ELECTRICIAN HELPER, AUTOMOTIVE (automotive ser.)
Assists ELECTRICIAN, AUTOMOTIVE (automotive ser.) to repair automotive vehicle electrical equipment: Disassembles electrical units, such as starters and generators, using handtools. Removes and replaces defective parts, such as armatures, brushes, and wires. Washes parts. May lift motors and generators, using mechanical hoist, and move parts about repair shop, using handtruck. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.16 STRENGTH: M GED: R2 M2 L2 SVP: 2 DLU: 77

825.684-014 ELEVATOR-REPAIRER HELPER (any industry)
Assists ELEVATOR REPAIRER (any industry) to service and repair freight or passenger elevators, performing any combination of following duties: Assists in moving and raising elevator components, using hoists, dollies, and rollers. Assists in disassembly and assembly of elevator components, using mechanic's handtools. Cleans equipment, using scrapers and cleaning compound, and lubricates equipment with grease guns. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.15 STRENGTH: H GED: R3 M2 L2 SVP: 3 DLU: 77

825.684-018 BATTERY CHARGER (any industry)
Inspects, recharges, and replaces batteries of electric industrial trucks: Disconnects electrical leads and removes battery from industrial truck, using handtools and hoist. Checks fluid levels and specific gravity of cells and adds water and acid, using hydrometer, thermometer, and siphons, to ensure fluid concentration meets specifications. Cleans electrical leads and battery poles to provide contact surface, using wire brush. Attaches battery to battery charger and manipulates controls of battery charger to start flow of electricity into battery. Installs recharged battery in industrial truck. May remove and replace other defective electrical components, such as motor, switches, wires, and rheostats. May lubricate truck's moving parts, using grease gun.
GOE: 05.12.16 STRENGTH: M GED: R2 M2 L1 SVP: 3 DLU: 86

826 OCCUPATIONS IN ASSEMBLY, INSTALLATION, AND REPAIR OF INDUSTRIAL APPARATUS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with assembling, installing, and repairing industrial apparatus involving electrical circuitry.

826.131-010 ELECTRICAL SUPERVISOR (petrol. & gas)
Supervises and coordinates activities of workers installing, repairing, and inspecting oil field electrical equipment, such as primary and secondary power lines, transformers, submarine cables to offshore well sites, and electric motors. Inspects work for compliance with government electrical codes and company standards. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.05 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 77

826.131-014 SUPERVISOR, ELECTRICAL ASSEMBLIES (elec. equip.; machinery mfg.)
Supervises and coordinates activities of workers engaged in fabrication of subassemblies and assembly of electrical equipment, such as electric welding machines, conveyors, and other electrically powered machine tools: Confers with engineering and management staff to establish assembly procedures and production schedules. Interprets and modifies blueprints and wiring diagrams in accordance with assembly specifications. Inspects and tests assembled components and equipment, using oscilloscopes, voltmeters, ammeters, and other test instruments. Suggests design modifications to increase product efficiency and production output. Trains new workers and resolves personnel problems. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 77

826.261-010 FIELD-SERVICE ENGINEER (photo. appar.)
Installs and repairs microfilming, film-developing, and auxiliary photographic equipment at customers' premises: Assembles equipment and connects water and electrical lines, using handtools and following wiring diagrams and blueprints. Tests equipment performance and demonstrates operation and servicing of equipment to customer. Examines faulty equipment and processed film, interprets laboratory reports, and analyzes customer complaints to diagnose equipment malfunction. Repairs defective units, using handtools and repair manuals. Schedules service calls according to customer location and urgency of need. Recommends equipment design changes or upgrading as needed. Interviews prospective buyers and reports leads to sales personnel.
GOE: 05.05.13 STRENGTH: L GED: R4 M4 L3 SVP: 8 DLU: 77

826.361-010 ASSEMBLER AND WIRER, INDUSTRIAL EQUIPMENT (elec. equip.; machinery mfg.) alternate titles: panel assembler and wirer
Installs electrical wiring and assembles components in control cabinets, electrical and industrial equipment, and related industrial apparatus, according to blueprints and wiring diagrams: Squares, aligns, and assembles bases, sills, cabinet frames, or equipment structural components, on floor or floor plate, using jacks, clamps, squares, plumb line and dial indicator. Lays out diagram for electrical installations according to wiring specifications. Drills and taps holes in specified locations for mounting control units, using handtools and drill press. Attaches breakers, relays, contactors, bus bars, transformers, insulators, regulator cabinets, condenser units, motor and generator sets, meters, plugging devices, and fuse blocks to mounting holes with bolts and screws, using wrenches, screwdrivers, and nut runners. Cuts, strips, bends, and forms wire cable, conduit, pipe, and tubing used to connect circuits and subassemblies, using hacksaw, bandsaw, pipe cutters, and mechanical or hydraulic pipe or cable benders. Connects color-coded wires, using mirrors in compact areas. Solders connections and crimps connectors to wire ends, using soldering iron and pliers. Tests and adjusts electrical assemblies, using electrician's handtools and test equipment. Discusses errors in diagrams or production order with supervisor or engineer to clarify assembly problems. May be designated according to unit assembled as Assembler Dielectric Heater (elec. equip.); Control-Cabinet Assembler (elec. equip.); Welding-Machine Assembler (elec. equip.).
GOE: 06.01.04 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 82

826.381-010 FABRICATOR, INDUSTRIAL FURNACE (machinery mfg.)
Assembles and installs structural and electrical components to fabricate high-temperature industrial furnaces: Lays refractory brick to insulate furnace interior, using masonry trowel and mortar. Drills holes in brick to provide openings for heater elements, wiring, and instruments, according to shop drawings and schematics. Attaches manual or power door opening mechanisms and chain and heater guards, using power tools. Installs and wires heater elements, instruments, gauges, motors, and controls, following electrical schematics and blueprints. Tests assembled unit for operational defects and makes necessary adjustments. Operates paint sprayer to paint furnace as specified. Places completed unit in crate for shipment.
GOE: 05.10.01 STRENGTH: H GED: R3 M3 L3 SVP: 6 DLU: 77

826.384-010 CELL REPAIRER (chemical)
Assembles, installs, maintains, and repairs electrolytic cells, performing any combination of following duties: Starts concrete mixer and pours concrete slurry into assembled molds to cast sections of electrolytic cells, such as tops, bottoms, rings, and partitions [CELL MAKER (chemical)]. Positions copper bars, graphite blades, or carbon electrodes in cylindrical form (jig), and secures them by pouring molten lead into jig to fabricate anode units [ANODE BUILDER (chemical)]. Wraps asbestos diaphragm paper and perforated steel screen around jig assembly to fabricate cathode pots [POT BUILDER (chemical)]. Disconnects, dismantles, and replaces spent or defective electrolytic cell units, such as anodes and cathodes [CELL CHANGER (chemical)]. Cleans electrolytic cells, cell assemblies and glassware, and washes cathode screens to remove asbestos [CELL CLEANER (chemical)]. Coats cathode screens by dipping screens in asbestos slurry [CATHODE MAKER (chemical)]. Records data, such as condition of cell units, parts used, and date of change. May inspect defective cells and measure voltage drop, using voltmeter. May bolt current jumper to adjacent cells to shunt current around defective cell.
GOE: 06.02.32 STRENGTH: H GED: R3 M2 L2 SVP: 5 DLU: 77

826.684-010 ANODE BUILDER (chemical)
Fabricates anode units for use in electrolytic cells, using handtools and power tools: Paints cell bottoms, using brush. Assembles cylindrical form jig with handtools and hoist, and positions copper bars, graphite blades, or carbon electrodes in jig. Opens valve to admit melted lead to jig, or pours in lead to specified level, using container to secure copper bars, graphite blades, or carbon electrodes in place. Lifts anode assembly from jig, using hoist, and positions anode in cell bottom. Fills tar pot with mastic or tar mixture and turns valve on pot to heat mastic tar to pouring temperature. Opens spigot to fill container with mastic or tar, and pours it into anode assembly to prevent corrosion of lead and cell bottom and leakage around joints and copper bars. May operate jackhammer to dismantle spent anode units. May position graphite blades in cell bottom, using power wrench. May join electrode to electrical conductor with holding rings or lead bands.
GOE: 06.02.32 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 77

826.684-014 CELL CHANGER (chemical)
Replaces spent anodes or cathodes used in electrolytic cells, according to replacement schedule, using handtools and power tools: Disconnects electrical and pipe connections and removes retaining bolts to free cells, using wrenches. Removes cell top and cathode assembly, using tension handles, prybars, and hoist. Measures thickness of cathode blade and length of anode to determine remaining usable life, using ruler, and inspects anode for deterioration. Adjusts anode and cathode spacing, using handtools. Records cell and cathode number and condition of anode and cathode. Scrapes and washes putty and dirt from cell assembly, using hand scraper and steam or water hose, or cleans cathode bars and cell bottom with power grinder and acid. Cleans and smooths electrical connections, using emery cloth. Transfers defective units to cell repair room and obtains replacement parts, using cart or crane. Positions cell bottom, anode, cathode, and cell top in place, using hoist. Bolts assemblies together, replaces sight glasses, funnels, and percolator pipes, and secures electrical connections to *bus bar*, using handtools. Seals joints with putty, mortar, and asbestos, using putty extruder and knife. Turns valves to start brine flow. Records new parts used and date of change. May repair cells [CELL REPAIRER (chemical)]. When draining and cleaning mercury electrolytic cells, replacing mer-

cury, and timing rate of flow of mercury to ensure efficient operation, may be designated Mercury-Cell Cleaner (chemical).
GOE: 05.10.03 STRENGTH: H GED: R3 M2 L2 SVP: 5 DLU: 77

826.684-018 CELL INSTALLER (chemical)
Removes defective mercury electrolytic cells from rocker mechanism and installs new cells, using handtools: Removes bolts and rocker assembly that hold cell bottom in place on rocker mechanism, using wrenches. Signals OVERHEAD CRANE OPERATOR (any industry) 921.663-010 to remove defective cell and position replacement cell on rocker mechanism. Visually levels cell on mechanism and bolts it into place. Cements glass sight tubes in sides of concrete bottom and bolts copper hanger beneath cell bottom. May raise or lower cell bottom, using leveling jacks, and time rate of flow of mercury, using stopwatch, to ensure that cell is mounted in accordance with efficient operating requirements.
GOE: 05.12.12 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

826.684-022 POT BUILDER (chemical) alternate titles: cathode builder; diaphragm builder
Assembles cathode pots for use in electrolytic cells, using handtools and hoist: Assembles cathode rings on ends of cylindrical form jig, using handtools and hoist. Wraps asbestos diaphragm paper around inner and outer jig assembly and applies glue to secure asbestos in place. Wraps perforated steel diaphragm screens around assembly and clasps ends together or secures screen in place with metal hoops, using handtools. Wraps asbestos tape around cathode rim or hammers iron band around top to attain airtight connection. Applies putty, asbestos compound, and paint, using putty knife, putty extruder, and brush, to seal cathode connections and joints. Removes cathode assembly from jig, using hoist. May cut asbestos paper to required size. May insert rubber gaskets or solder overlapping metal at joints to attain airtight connections. May perform duties of CELL REPAIRER (chemical).
GOE: 05.10.03 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 77

827 OCCUPATIONS IN ASSEMBLY, INSTALLATION, AND REPAIR OF LARGE HOUSEHOLD APPLIANCES AND SIMILAR COMMERCIAL AND INDUSTRIAL EQUIPMENT

This group includes occupations concerned with installing service lines, connecting leads, and assembling components and accessories to install or repair large household electrical appliances and equivalent commercial and industrial installations, such as refrigerators, freezers, air-conditioners, heaters, washers, driers, and their related controls.

827.131-010 ELECTRICAL-APPLIANCE-SERVICER SUPERVISOR (any industry)
Supervises and coordinates activities of ELECTRICAL-APPLIANCE SERVICER (any industry) engaged in servicing, repairing, and installing electrical household appliances. Requisitions tools, supplies, and replacement parts. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.03 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 77

827.131-014 SUPERVISOR, MAJOR APPLIANCE ASSEMBLY (house. appl.)
Supervises and coordinates activities of workers engaged in assembly, inspection, testing, repair, and packing of major household appliances: Assigns duties to workers according to production schedules. Reads inspection and test reports to determine nature and cause of appliance defects. Recommends designs, tooling, and assembly modifications to increase efficiency or improve product quality. Trains workers and resolves employee grievances. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 77

827.131-018 SUPERVISOR, AIR-CONDITIONING INSTALLER (any industry)
Supervises activities of workers engaged in fabricating, installing, and repairing air-conditioning systems in residential and commercial buildings: Inspects and measures building to determine airflow requirements. Plans and draws layout and dimensions of ductwork, applying knowledge of sheet metal fabrication and air-conditioning system design, using pencil and ruler, and following specifications from air-conditioning equipment manufacturers and customer. Obtains price quotations on materials and purchases materials, such as sheet metal, compressors, and fans, from suppliers and tests equipment to verify that equipment is functioning. Schedules air-conditioning installation assignments. Examines installed air-conditioning systems to verify that system is functioning, using test instruments. Compiles labor and material cost figures and supporting media for billing purposes. Attends classes and seminars on air-conditioning components and system design to update skills. May instruct workers in sheet metal fabrication in shop. May supervise sheet metal fabrication in shop and resolve problems to maintain production schedule. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.04 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 86

827.261-010 ELECTRICAL-APPLIANCE SERVICER (any industry) alternate titles: appliance-service representative
Installs, services, and repairs stoves, refrigerators, dishwashing machines, and other electrical household or commercial appliances, using handtools, test equipment, and following wiring diagrams and manufacturer's specifications: Connects appliance to power source and test meters, such as wattmeter, ammeter, or voltmeter. Observes readings on meters and graphic recorders. Examines appliance during operating cycle to detect excess vibration, overheating, fluid leaks, and loose parts. Disassembles appliance and examines mechanical and electrical parts. Traces electrical circuits, following diagram, and locates shorts and grounds, using ohmmeter. Calibrates timers, thermostats, and adjusts contact points. Cleans and washes parts, using wire brush, buffer, and solvent, to remove carbon, grease, and dust. Replaces worn or defective parts, such as switches, pumps, bearings, transmissions, belts, gears, blowers, and defective wiring. Repairs and adjusts appliance motors. Reassembles appliance, adjusts pulleys, and lubricates moving parts, using handtools and lubricating equipment. May be known according to appliance repaired as Clothes-Drier Repairer (any industry); Coffee-Maker Servicer (any industry); Dishwashing-Machine Repairer (any industry); Electric-Range Servicer (any industry); Electric-Refrigerator Servicer (any industry); Washing-Machine Servicer (any industry).
GOE: 05.05.10 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

827.261-014 ELECTRICAL-APPLIANCE-SERVICER APPRENTICE (any industry) alternate titles: major-appliance-servicer apprentice, electrical
Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.10 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

827.361-010 AIR-CONDITIONING-UNIT TESTER (svc. ind. mach.)
Tests efficiency of heating and air-conditioning equipment under simulated operating conditions: Connects heating and air-conditioning equipment to facilities, such as heating units, waterlines, and spray devices to set up controlled temperature and moisture conditions. Constructs cardboard air ducts and other accessories for use in testing equipment. Couples gauges and instruments to system and starts equipment. Observes and records readings of instruments, such as thermometers, psychrometers, thermocouples, air flowmeters, voltmeters, ammeters, and pressure and draft gauges. Informs supervisor of unusual noise and instrument readings during operation of equipment. May plot instrument reading data.
GOE: 06.01.05 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

827.361-014 REFRIGERATION MECHANIC (svc. ind. mach.)
Fabricates and assembles components of refrigeration systems for environmental test equipment according to blueprints or schematic drawings and knowledge of refrigeration systems, using handtools, powered tools and welding equipment: Reads blueprints or schematic drawings to determine location, size, capacity, and type of components, such as compressor, condenser, expansion tank, valves, and tubing or piping needed to build refrigeration system. Mounts compressor, condenser, and other components in specified locations on frame, using handtools and arc or acetylene welding equipment. Cuts, bends, and brazes specified tubing to inlets and outlets of components to form liquid and suction lines of refrigeration system, using knowledge of metal properties. Installs expansion and control valves, using acetylene torch and wrenches. Adjusts valves according to specifications. Removes air from system and charges system with specified amount and type of refrigerant [GAS CHARGER (svc. ind. mach.)]. Tests lines, components, and connections for leaks with leak detector which indicates presence of refrigerant [GAS-LEAK TESTER (svc. ind. mach.)]. Attaches thermocouples to various points of refrigeration system and test-operates equipment to evaluate functioning and cooling capacity of system. Records pressure and temperature readings from gauges and *temperature potentiometer* during test run. Compares reading with specifications to evaluate performance of system, and adjusts or replaces parts as indicated. May fabricate and assemble structural portions of test equipment. May assemble and mount electrical wiring circuits, controls, and recording devices. May fabricate and assemble cascade and multiple stage refrigeration systems.
GOE: 05.05.09 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 77

827.381-010 CONTROL-PANEL TESTER (elec. equip.)
Inspects and tests electrical panels used to control machinery, equipment, and systems for conformance with specifications, following blueprints and wiring schematics, and using electrical testing equipment and instruments: Compares wiring and location of control devices on panel with blueprints and wiring diagrams to verify assembly. Examines wiring for loose or faulty connections. Connects leads from panel onto power source leads to prepare for testing activities. Turns rheostat to impose and regulate current loads onto panel controls and observes action of relays, cut-outs, and other devices for conformance with specifications. Tests wiring circuits and controls to isolate and locate causes of malfunctions, using electrical instruments, such as voltmeter, ammeter, and ohmmeter. Records causes of malfunctions on test sheet and routes defective panels for rework. May change defective control devices on panel, using handtools, and solder loose or faulty wiring.
GOE: 06.01.05 STRENGTH: L GED: R4 M4 L3 SVP: 7 DLU: 77

827.384-010 REFRIGERATOR TESTER (svc. ind. mach.)
Inspects and tests refrigeration units to evaluate functional operation of system, using knowledge of refrigeration systems and operating specifications: Connects unit to electrical outlet and starts compressor. Observes units to detect malfunction and ensure that cooling is taking place. Tests compressors on nonfunctioning units for specified wattage, using watt-meter. Times operating cycle of unit, using watch and replaces relay switches, or orders compressor

replacement to regulate length of operating cycle. Feels lines and other components at various points in system to determine if unit is functioning. Examines coolant lines for damage and accumulations of frost indicating constriction or obstruction in lines. Records and attaches inspection tag to malfunctioning units, indicating type and location of defects. May attach gauges to verify conformance of unit to temperature, pressure, B.T.U., and other operational specifications. May work in controlled temperature room.
GOE: 06.03.01 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

827.485-010 GAS CHARGER (svc. ind. mach.) alternate titles: charging-board operator

Tends charging board that charges cooling units of refrigerators, freezers, or air-conditioners with gas refrigerant, using one of following methods: (1) Sets indicator on charging board to control volume and type of refrigerant for unit being charged, following work order specifications. Determines pressure in refrigeration unit, using mercury gauge. Attaches filler hose from refrigeration tank to unit. Presses button to fill charging tank and pump refrigerant into compressor. (2) Turns indicator to specified setting and attaches filler hose to fill charging bomb. Mounts filled bombs on refrigeration unit. Attaches vacuum hose to unit to draw refrigerant into compressor. Weighs bombs before and after filling to ascertain weight of charge. Adjusts timers to maintain specified weight.
GOE: 06.04.36 STRENGTH: M GED: R2 M2 L2 SVP: 2 DLU: 77

827.584-010 ELECTRICAL-APPLIANCE PREPARER (any industry) alternate titles: uncrater

Assembles and tests electrical appliances, such as ranges, refrigerators, and washing machines, to prepare appliance for delivery and installation, using handtools and test lamp: Uncrates appliances, using pry bar, wire cutters, and nail puller. Assembles appliance parts, using screws and handtools. Connects appliance to electric current to test performance. Locates faulty circuits with test lamp. Solders and wraps wires with friction tape to repair insulation. Washes and polishes appliances. Examines exterior of appliance for chips, scratches, and dents. Keeps records of appliances received, assembled, and delivered. May be designated according to type of appliance assembled and tested as Dishwasher Preparer (any industry); Electric-Range Preparer (any industry); Electric-Refrigerator Preparer (any industry); Washer-Drier Preparer (any industry).
GOE: 05.12.16 STRENGTH: H GED: R2 M2 L2 SVP: 3 DLU: 77

827.584-014 GAS-LEAK TESTER (svc. ind. mach.)

Performs one or more of following tasks to test assembled and charged refrigeration units for refrigerant leaks: Adjusts controls to set balance and range of electronic leak tester. Moves nozzle of tester along refrigerant lines, condenser, and compressor and listens for buzzer indicating presence of gas. Narrows range of tester and probes area to pinpoint exact location of leak. Turns valve of gas tester to adjust flow of gas to copper flame-ring and ignites gas. Moves suction hose, joined to flame-ring, along surfaces of refrigeration unit and observes flame for change in color denoting presence of leaking refrigerant gas. Wraps wet litmus paper around joints of refrigeration unit and observes paper for color change indicating refrigerant leak. Marks number of defective part or joint on inspection tag, according to blueprint numbering chart, and attaches tag to unit. Records number and location of leaks on inspection chart.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

827.585-010 FOAM CHARGER (svc. ind. mach.)

Tends equipment that blows foam insulation into cooler and refrigerator doors and cabinet walls, using portable foam gun: Connects foam pump and nitrogen pressure tank to resin and catalyst barrels. Turns valve to regulate nitrogen pressure at specified level. Connects hose from freon tank to gun and adjusts freon pressure. Opens gun valve and conducts foam test to ensure proper mixture of ingredients. Inserts nozzle of gun into compartment openings and blows specified amounts of foam insulation into doors and cabinet walls. Inserts plugs into openings to seal filled compartment. Regulates overhead electric heaters to maintain constant room temperature. Records number and type of units filled on daily production record. Cleans equipment and work area. May prepare units to receive insulation.
GOE: 06.04.36 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 77

827.661-010 HOUSEHOLD-APPLIANCE INSTALLER (any industry)

Installs household appliances, such as refrigerators, washing machines, stoves, and related appliances, in mobile homes or customers' homes, using handtools: Levels refrigerators and adjusts doors. Connects water pipes to washing machines, using plumbing tools. Observes complete cycle of automatic washers and dryers and makes adjustments. Lights and adjusts pilot lights on gas stoves and examines valves and burners for gas leakage and specified flame. May assemble and install prefabricated kitchen cabinets in conjunction with appliances. May stain or finish cabinets.
GOE: 05.10.04 STRENGTH: H GED: R3 M3 L3 SVP: 6 DLU: 77

827.684-010 APPLIANCE ASSEMBLER, LINE (house. appl.; svc. ind. mach.)

Assembles major household or commercial appliances, such as ranges, ovens, washing machines, dryers, refrigeration units, water heaters, and dishwashers, using handtools: Obtains specified parts or subassemblies. Aligns holes, inserts screws or bolts, and tightens them, using nut runner or power screwdriver, to assemble preformed panels and support brackets to base. Bolts subassemblies, such as motors, pumps, transmissions, control panels, blowers, heating units, and doors, using wrenches and power nut runners. Aligns doors, brackets, racks, and moving parts before tightening to achieve appearance, fit, and movement specified. Packs or folds insulation between panels. Connects electrical wires on control panel to motors, heating units, or blowers, according to color and length of wire, by forcing plug connectors together and sliding plastic insulators over connection. Lubricates moving parts, using grease paddle or oilcan. May place panels in fixture to align for bolting. May clamp test wires to machine and observe meter and light to test for shorts, grounds, and wattage. May be designated according to appliance assembled as Air-Conditioning-Unit Assembler (svc. ind. mach.); Assembler, Coolers (svc. ind. mach.); Automobile Air-Conditioner Assembler (svc. ind. mach.); Clothes-Drier Assembler (house. appl.); Electric-Range Assembler (house. appl.); Washing-Machine Assembler (house. appl.).
GOE: 06.02.22 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 77

828 OCCUPATIONS IN FABRICATION, INSTALLATION, AND REPAIR OF ELECTRICAL AND ELECTRONICS PRODUCTS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with assembling, installing, erecting, and repairing electrical and electronic products.

828.131-010 SUPERVISOR, ELECTRONIC CONTROLS REPAIRER (engine-turbine)

Supervises and coordinates activities of workers engaged in repair of electronic controls of diesel engines and generators: Trains workers in diagnosis and repair of electronic controls of diesel engines and generators in heavy equipment, such as tractors, cranes, and compressors, using test equipment and following repair manuals, blueprints, diagrams, and schematics. Reviews service calls to determine type of equipment needing repair, equipment location, and nature of problem and schedules workers for service assignments. Orders supplies and materials and maintains service records. Assists workers in repair of electronic controls at job site or in maintenance shop. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.10 STRENGTH: M GED: R4 M4 L3 SVP: 8 DLU: 86

828.161-010 SUPERVISOR, ELECTRONICS SYSTEMS MAINTENANCE (any industry)

Supervises and coordinates activities of workers engaged in repair and maintenance of electronic equipment used in air navigational aids or in communications, monitoring, industrial control, or instrumentation systems. Participates in testing, modification, repair, and maintenance of radar, microwave links, indicator plotter, radar beacon, omnirange receivers and transmitters [ELECTRONICS MECHANIC (any industry)]. Maintains log of repair and maintenance activities occurring during shift.
GOE: 05.05.05 STRENGTH: L GED: R5 M5 L4 SVP: 8 DLU: 77

828.251-010 ELECTRONIC-SALES-AND-SERVICE TECHNICIAN (profess. & kin.)

Analyzes technical requirements of customer desiring to utilize electronic equipment, and performs installation and maintenance duties. Determines feasibility of using standardized equipment, and develops specifications for equipment required to perform additional functions. Installs, maintains, and repairs equipment.
GOE: 05.05.05 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

828.261-010 ELECTRONIC-ORGAN TECHNICIAN (any industry) alternate titles: electric-organ technicianc;

Installs, tests, adjusts, and repairs electronic organs, pianos, or related musical instruments, using circuit diagrams, service manuals, and standard test equipment: Places speakers along wall or in sound chambers, or mounts speakers on wall. Wires speakers to console. Tunes or adjusts instruments and amplification systems, using electronic test equipment and handtools. May be designated according to specialized function as Electronic-Organ Installer (any industry); Electronic-Piano Installer (any industry); Organ Tuner, Electronic (any industry).
GOE: 05.05.12 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

828.261-014 FIELD SERVICE ENGINEER (profess. & kin.) alternate titles: field service representative; field technical assistant

Installs and repairs electronic equipment, such as computer, radar, missile-control, avionics, and communication systems, in field installations: Consults with customer or supervisor to plan layout of equipment. Studies blueprints, schematics, manuals, and other specifications to determine installation procedures. Installs or oversees installation of equipment according to manufacturer's specifications. Operates system to demonstrate equipment and to analyze malfunctions. Interprets maintenance manuals, schematics, and wiring diagrams, and repairs equipment, utilizing knowledge of electronics and using standard test instruments and handtools. Instructs and directs workers in servicing and repairing equipment. Consults with engineering personnel to resolve unusual problems in system operation and maintenance. May instruct workers in electronic theory. May supervise workers in testing, tuning, and adjusting equipment to obtain optimum operating performance. May advise management regarding customer satisfaction, product performance, and suggestions for product improvements.
GOE: 05.05.05 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 88

828.261-018 SENIOR TECHNICIAN, CONTROLS (pipe lines)

Develops design modifications and provides technical assistance to workers engaged in installation, modification, and repair of gas compressor station controls and instruments: Tours compressor station and inspects or tests station control apparatus, using standard test equipment and handtools. Confers with superintendent to determine operational problems and efficiency of automatic control systems. Analyzes operational problems and develops modifications in design to improve efficiency. Trains workers and provides technical assistance in installation, maintenance, and repair techniques. Confers with manufacturers' representatives and submits proposed design modifications to improve efficiency of compressor station controls and instrumentation.
GOE: 05.01.08 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 77

828.261-022 ELECTRONICS MECHANIC (any industry) alternate titles: communication technician; electronics-equipment mechanic; electronics specialist; electronics-system mechanic; electronics technician; maintenance engineer

Repairs electronic equipment, such as computers, industrial controls, audio and video systems, radar systems, telemetering and missile control systems, transmitters, antennas, and servomechanisms, following blueprints and manufacturers' specifications, and using handtools and test instruments: Converses with equipment operators to ascertain problems with equipment before breakdown, and to determine if breakdown is due to human error or mechanical problems. Tests faulty equipment and applies knowledge of functional operation of electronic units and systems to diagnose cause of malfunction. Tests electronic components and circuits to locate defects, using oscilloscopes, signal generators, ammeters, and voltmeters. Replaces defective components and wiring and adjusts mechanical parts, using handtools and soldering iron. Aligns, adjusts, and calibrates equipment according to specifications. Calibrates testing instruments. Maintains records of repairs, calibrations, and tests. May enter information into computer to copy program from one electronic component to another, or to draw, modify or to store schematics, applying knowledge of software package used. May install equipment in industrial or military establishments and in aircraft and missiles. May operate equipment, such as communication equipment or missile control systems in ground and flight test, and be required to hold license from governmental agency. May be designated according to type of equipment repaired as Customer-Engineering Specialist (office machines); Electronics Mechanic, Computer (any industry); Radar Mechanic (any industry); Voting-Machine Repairer (government ser.).
GOE: 05.05.10 STRENGTH: M GED: R4 M4 L4 SVP: 7 DLU: 89

828.261-026 ELECTRONICS-MECHANIC APPRENTICE (any industry) alternate titles: electronics-technician apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.10 STRENGTH: M GED: R4 M4 L4 SVP: 7 DLU: 77

828.281-018 MISSILE FACILITIES REPAIRER (military ser.)

Repairs missile weapons system support facilities and equipment: Inspects, services, and replaces electrical, hydraulic, and mechanical components of missile weapons systems real-property-installed equipment, facilities, and ground support equipment, such as missile pedestals, crib suspensions, pendulum links, shock mounts, maintenance work platforms, erection booms, umbilical brackets, and suspension devices. Services support equipment with fuel, lubricants, hydraulic fluid, and air. Operates auxiliary motor generators, battery systems, and portable self-powered handling equipment. Aligns missile to launcher, using equipment such as collimator systems.
GOE: 05.10.01 STRENGTH: V GED: R3 M3 L3 SVP: 4 DLU: 77

828.281-022 RADIOACTIVITY-INSTRUMENT MAINTENANCE TECHNICIAN (petrol. & gas) alternate titles: radioactivity technician

Repairs and services electrical radioactivity-detecting instruments used to locate radioactive formations in oil- or gas-well boreholes, using special testing apparatus. Tests electronic, electrostatic, and electromagnetic elements and circuits of instruments with special laboratory testing apparatus to locate defective parts and to verify precise adjustments. Services special subsurface instruments containing radium or radioactive compounds.
GOE: 05.05.11 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 77

828.281-026 COMPUTERIZED ENVIRONMENTAL CONTROL INSTALLER (electron. comp.)

Installs and repairs programmable, computer-based control systems for regulating residential and commercial environmental energy equipment, such as heating, ventilating and air-conditioning (HVAC) systems, heat pumps, boilers, and chillers, applying knowledge of computer control systems and environmental energy equipment: Reads specifications, diagrams, and schematics detailing computer control installation requirements and existing environmental energy equipment design and layout. Installs, mounts, and connects specified computer hardware, such as central processing unit, keyboard, CRT display, temperature sensor, analog to digital converter, and interconnect wiring to interface with environmental energy equipment control circuits, using handtools and power tools. Types commands on input keyboard or inserts disk into disk drive to start and run computerized environmental control system through operating sequence. Tests control circuits to verify system operation or diagnose malfunctions, using voltmeter and oscilloscope. Isolates faults to computer controls or environmental energy units based on test results, specification data, and symptoms. Tests circuitry of faulty computer controls, using voltmeter, oscilloscope, and logic analyzer to isolate malfunctions to circuit board. Replaces faulty circuit boards, using handtools. Maintains records of installation, test results, and repairs.
GOE: 05.05.05 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 86

828.381-010 EQUIPMENT INSTALLER (any industry)

Installs electronic control panels and related mechanical or electrical equipment, such as motor generator units, battery chargers, utility reels, and darkroom equipment, in panel trucks following blueprint specifications: Measures distances with rule to lay out work in body of truck. Drills holes and bolts metal framework and supports in place, using electric drill and wrenches. Cuts, drills, and fits brackets, supports, covers, and fixtures from metal sheet, strap or bar stock, using metal cutting saws, drill press, grinders, and files. Bolts and screws control panels and assembled operating units to framework. Connects electrical wiring and cables, using electricians' handtools. Installs lighting fixtures, outlets, switches, wall boxes, and terminal boards.
GOE: 05.10.04 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

828.381-018 ASSEMBLER, ELECTROMECHANICAL (aircraft mfg.; electron. comp.; inst. & app.)

Assembles, tests, and repairs precision electromechanical parts, assemblies, and equipment, such as gyros, servomechanisms, electronic instruments, radar, and missile controls, according to blueprints, diagrams, and specifications, using handtools, power tools, precision instruments, and test equipment: Reads blueprints, schematics, and technical orders to determine methods and sequence of assembly operations. Examines parts for surface defects. Aligns, fits, and assembles component parts into completed units, using handtools, power tools, fixtures, and templates. Verifies dimensions and clearances of parts to ensure conformance to blueprint specifications, using instruments, such as micrometers, calipers, and height gauges. Solders and bolts electrical and electronic components in specified location on assembly [ELECTRONICS ASSEMBLER (comm. equip.; electron. comp.; inst. & app.) 726.684-018]. Tests functional performance of completed electromechanical assemblies, using test equipment. Repairs, reworks, and calibrates assemblies to meet operational tolerances. May fabricate parts, using shop equipment.
GOE: 06.01.04 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 89

829 OCCUPATIONS IN INSTALLATION AND REPAIR OF ELECTRICAL PRODUCTS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with assembling, installing, erecting, and repairing electrical equipment and related structures.

829.131-010 CABLE SUPERVISOR (construction; tel. & tel.; utilities) alternate titles: cable-splicing supervisor

Supervises and coordinates activities of workers engaged in installation, maintenance, and repair of underground, aerial, and buried cables and electrical equipment for power-utility, communication, or street-railway systems: Directs installation of main and feeder cables through conduit, splicing and lead-coating cable sections, connecting wires to terminals, and installing terminal and junction boxes, transformers, and other equipment in underground vaults or overhead platforms. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to specialty as Underground Supervisor (utilities).
GOE: 05.05.05 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

829.131-014 ELECTRICIAN SUPERVISOR (any industry)

Supervises and coordinates activities of ELECTRICIAN, MAINTENANCE (any industry) 829.261-018 and ELECTRICIAN (construction) 824.261-010 engaged in construction, maintenance and repair of electric power, lighting, and communication systems of buildings, factories, and transportation equipment: Plans wiring and installation of equipment and fixtures, such as motors, generators, switches, circuit breakers, and fuse boxes, according to blueprints, schematic drawings, and sketches. Inspects wiring and fixtures for conformance to company specifications or local electrical codes, using test equipment, such as voltmeter and ohmmeter. Performs other duties as described under SUPERVISOR (any industry) Master Title. May supervise workers engaged in maintenance of electrical systems and be designated Building-Maintenance Supervisor, Electrical (any industry); Electrician Supervisor, Maintenance (any industry). May supervise workers specializing in electrical systems of transportation equipment and be designated Electrician Supervisor, Airplane (air trans.); Electrician Supervisor, Automotive (automotive ser.); Electrician Supervisor Locomotive (railroad equip.). May be designated according to workers supervised as Circuit-Breaker Supervisor (utilities); Power-Transformer-Repair Supervisor (utilities); Service-Transformer-Repair Supervisor (utilities).
GOE: 05.05.05 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 81

829.131-018 INSTALLATION SUPERINTENDENT, PIN-SETTING MACHINE (construction)

Supervises and coordinates activities of workers engaged in installing automatic pin-setting machines in bowling alleys. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.09 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

tions of utility district: Trains workers in maintenance of equipment. Inspects work for conformance to specifications. Patrols telephone lines to look for broken insulators, storm damage, and leaning poles. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.05 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

829.261-010 COMPLAINT INSPECTOR (utilities)

Inspects and locates cause of defective electric service on customer's premises and repairs wiring and connections: Examines interior wiring, switches, fuses, circuit breakers, light sockets, and connections to appliances to detect irregularities or defects. Repairs or replaces defective or worn parts. Tests voltage on wire to meter to determine overload or underload [VOLTAGE TESTER (utilities)] and recommends new wiring arrangement to correct inadequacies. Examines and repairs broken lines from distribution pole to building or requests LINE REPAIRER (utilities) or TROUBLE SHOOTER (utilities) II to examine and repair connections and outside wiring if trouble cannot be located within building. May make minor repairs to appliances and report major defects to ELECTRICAL-APPLIANCE SERVICER (any industry).
GOE: 05.05.05 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

829.261-014 DENTAL-EQUIPMENT INSTALLER AND SERVICER (wholesale tr.)

Installs and services dental office equipment, such as hydraulic chairs and electric or pneumatic drill units, according to manufacturer's service manuals. Installs equipment and assembles specified hydraulic, pneumatic, and electrical connections, using handtools and power tools. Replaces obsolete or faulty equipment as ordered. Repairs or replaces defective or worn parts, such as motors, clutches, and switches. Performs routine servicing of equipment, such as lubricating gears and repacking bearings. May install and repair dental plumbing. May install, service, test, and calibrate dental x-ray equipment.
GOE: 05.10.02 STRENGTH: M GED: R4 M4 L3 SVP: 6 DLU: 77

829.261-018 ELECTRICIAN, MAINTENANCE (any industry) alternate titles: electrical repairer

Installs and repairs electrical systems, apparatus, and electrical and electronic components of industrial machinery and equipment, following electrical code, manuals, schematic diagrams, blueprints, and other specifications, using handtools, power tools, and electrical and electronic test equipment: Installs power supply wiring and conduit for newly installed machines and equipment, such as robots, conveyors, and *programmable controllers*, following electrical code and blueprints, using handtools and voltage tester. Connects power supply wires to machines and equipment, and connects cables and wires between machines and equipment, following manuals, schematic diagrams, and blueprints, using handtools and test equipment. Diagnoses malfunctioning apparatus, such as transformers, motors, and lighting fixtures, using test equipment, and replaces damaged or broken wires and cables, using handtools. Tests malfunctioning machinery, using test equipment, and discusses malfunction with other maintenance workers, such as MACHINE REPAIRER, MAINTENANCE (any industry) 638.261-030 and TOOL MAKER, MAINTENANCE (machine shop) 601.280-042, to diagnose malfunction. Replaces faulty electrical components of machine, such as relays, switches, and motors, and positions sensing devices, using handtools. Diagnoses and repairs or replaces faulty electronic components, such as printed circuit boards [ELECTRONICS TESTER (any industry) 726.261-018], using electronic test equipment and handtools. Replaces electric motor bearings and rewires motors. May push buttons and press keys on robot controller, *teach pendant*, and programmable controller to program automated machinery, such as robots, to operate automated machinery, to test for malfunctions, and to verify repairs. May plan layout of wiring and install wiring, conduit, and electrical apparatus in buildings [ELECTRICIAN (construction) 824.261-010]. May diagnose and replace faulty mechanical, hydraulic, and pneumatic components of machines and equipment. May be required to hold electrician's license. May be designated according to equipment repaired as Circuit-Breaker Mechanic (utilities); Electrician, Crane Maintenance (any industry); Electrician, Rectifier Maintenance (utilities); Salvage Repairer (utilities) I; Time Clock Repairer (elec. equip.); Transformer-Coil Winder (utilities); or according to work location as Electrician, Machine Shop (machine shop); Electrician Refinery (petrol. refin.); Underground Repairer (utilities). May be designated: Watch Electrician (tel. & tel.); Wirer, Maintenance (utilities).
GOE: 05.05.05 STRENGTH: M GED: R4 M4 L4 SVP: 8 DLU: 88

829.281-010 AUTOMATIC-DOOR MECHANIC (construction)

Installs, services, and repairs opening and closing mechanisms of automatic doors used in self-service grocery stores and similar establishments: Bores and cuts holes in flooring, using handtools and power tools. Sets in and secures floor treadle for activating mechanism and connects hydraulic powerpack and electrical panelboard to treadle. Covers treadle with carpeting and screws or nails down chrome strips around edges. Tests system by stepping on treadle. Repairs nonoperating systems, using handtools, blueprints, and schematic diagrams. May install frames and door units, using cutting tools and handtools. May install systems actuated by electronic-eye mechanism.
GOE: 05.10.03 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

829.281-018 IN-FLIGHT REFUELING SYSTEM REPAIRER (military ser.)

Inspects, tests, modifies, and repairs aircraft in-flight refueling systems and associated equipment, using electrical test instruments and special handtools, applying knowledge of system wiring diagrams, technical publications, and design characteristics: Repairs in-flight refueling electrical devices, such as elevation, telescope, and azimuth control assemblies and limit switches. Conducts detailed tests of in-flight refueling electrical systems, using ohmmeter, voltmeter, and electrical and hydraulic systems to ensure maximum operation efficiency, using wiring diagrams and technical publications. Adjusts end play, spacing, clearance, and specified torque on in-flight refueling components. Inspects seals, gaskets, hoses, tubing, hydraulic motors, fuel pumps, valves, filters, accumulators, and plumbing installations for leakage and functional operation. Fabricates wiring assemblies for replacing damaged cables and wiring in electrical systems.
GOE: 05.10.02 STRENGTH: L GED: R3 M3 L3 SVP: 7 DLU: 77

829.281-022 SOUND TECHNICIAN (any industry) alternate titles: inter-com installer; inter-com servicer

Installs, maintains, and services sound and intercommunication systems, multiple antenna systems, closed circuit TV systems, and associated apparatus: Installs coaxial cable and interconnecting cable and wiring. Tests installation to verify proper functioning. Tests, trouble-shoots, and services equipment. May install high-fidelity or stereophonic components or systems for playing musical recordings in homes or business establishments.
GOE: 05.05.05 STRENGTH: H GED: R4 M3 L3 SVP: 6 DLU: 77

829.361-010 CABLE SPLICER (construction; tel. & tel.; utilities) alternate titles: electrician, cable-splicing; splicer

Splices overhead, underground, or submarine multiple-conductor cables used in telephone and telegraph communication and electric-power transmission systems: Climbs utility poles or towers, utilizes truck-mounted lift bucket, or descends into sewers and underground vaults where cables are located. Cuts lead sheath from installed cable to gain access to defective cable connections, using hacksaw. Cuts and peels lead sheath and insulation from newly installed cables and conductors preparatory to splicing. Tests (traces or phases-out) each conductor to identify corresponding conductors in adjoining cable sections, according to electrical diagrams and specifications, to prevent incorrect connections between individual communication circuits or electric power circuits, using test lamp or bell system. Cleans, tins, and splices corresponding conductors by twisting ends together or by joining ends with metal clips and soldering each connection. Covers conductors with insulating or fireproofing materials. Fits lead sleeve around cable joint and wipes molten lead into joints between sleeve and cable sheath to produce moistureproof joint. Fills completed sleeve with insulating oil. May work on energized circuits to avoid interruption of service. May locate and repair leaks in pressurized cable. May work on board marine craft when splicing underwater cable and be designated Jointer, Submarine Cable (tel. & tel.; utilities).
GOE: 05.05.05 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

829.361-014 CABLE-SPLICER APPRENTICE (construction; tel. & tel.; utilities) alternate titles: splicer apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.05 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

829.361-018 CIRCULATING PROCESS INSPECTOR (elec. equip.) alternate titles: inspector, process

Inspects machined parts and mechanical or electrical assembly of electrical equipment to detect defective assemblies and ensure quality of production: Verifies dimensions and location or alignment of layouts of mechanical assemblies and electrical contacts, using micrometers, calipers, squares, rules, protractors, dial indicators, scales, and gauges. Compares machined surfaces with finished blocks. Examines parts to detect cracks, flaws, damaged surfaces, and burrs to ensure completeness. Stops defective assembly or machining operations and notifies supervisor. Examines colored wires connected to terminals of apparatus to verify wiring locations, and examines connections for excessive or loose solder. Tests electrical characteristics, such as resistance, short circuits, continuity, and grounds, using test equipment. Prepares inspection reports and records specified information on inspection tickets. May operate bench lathe to machine salvageable parts. May connect loose wires to terminals, using soldering iron or wire-wrapping gun. May be designated according to product inspected as Transformer Inspector (elec. equip.); Wiring Inspector (elec. equip.).
GOE: 06.01.05 STRENGTH: L GED: R3 M3 L3 SVP: 6 DLU: 77

829.381-010 PINSETTER ADJUSTER, AUTOMATIC (toy-sport equip.)

Inspects and adjusts automatic pinsetters, following blueprints, using handtools and gauges: Inspects pinsetter for defects and missing components following blueprint parts list. Mounts components or returns machine to assembly department for reworking. Rolls pinsetter to test bay and connects drive mechanism and power source. Adjusts microswitches, spring tension, traverse or circuit stops, cams, and other control mechanisms to specified settings, using handtools. Operates pinsetters to detect malfunctioning. Measures and regulates height and sweep of rake, using fixed gauge and handtools. Runs machine through complete cycle and inspects for pinsetting accuracy. Tests automatic shutoffs by running undersized pins through mechanism. Examines and adjusts each pin and pickup scissor to correct malfunctions.
GOE: 05.05.10 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

829.667-010 CABLE-SPLICER HELPER (construction; tel. & tel.; utilities)

Assists CABLE SPLICER (construction; tel. & tel.; utilities) to join ends of multiple-conductor cables used in telephone and telegraph communication sys-

tems and electric-power transmitting equipment by performing routine duties. Positions splicer's cart, opens manholes, hangs splicer's platform in position, and supplies splicer with tools and equipment. Tends small gasoline engine to pump water from underground conduit tunnels or to supply fresh air to worker in tunnel. Cuts lead tubing with hacksaw to form covering over spliced cables. Tends gasoline heater to melt lead and paraffin. Assists CABLE SPLICER (construction; tel. & tel.; utilities) in boiling out wet cables and affixing cables in tunnel racks or to poles. May pull cables through ducts and conduits [CABLE PULLER (construction; utilities)]. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.16 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 77

829.667-014 PINSETTER-MECHANIC HELPER (any industry)
Assists PINSETTER MECHANIC, AUTOMATIC (any industry) in repair and maintenance of automatic pinsetting bowling equipment: Carries tools and test apparatus to and from job site. Loosens bolts to assist in dismantling pinsetting equipment. Cleans equipment and parts, using solvent and rags. May perform routine oiling and greasing of moving parts. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.15 STRENGTH: H GED: R2 M2 L2 SVP: 2 DLU: 77

829.684-010 BATTERY INSPECTOR (railroad equip.; r.r. trans.)
Services and repairs railway car electrical equipment, using handtools, test equipment, and wiring diagram: Inspects electrical connections, wiring, charging relays, charging resistance box, and storage batteries, following wiring diagram and using voltmeter and hydrometer. Fills batteries with water and replaces defective wiring, fuses, brushes, coils, armatures, sockets, and light bulbs. Examines fan motor brushes and fills fan grease cups. Records defective equipment and batteries serviced.
GOE: 05.10.03 STRENGTH: L GED: R3 M3 L3 SVP: 4 DLU: 77

829.684-014 BODY WIRER (vehicles, nec) alternate titles: coach wirer; electrician, wiring; wirer
Installs circuit wiring in travel trailers and similar vehicles for lights, ignition, starting motors, and other electrical apparatus, following diagrams and color code: Locates and marks positions for outlet boxes on walls and ceiling, using templates or jigs. Cuts openings and drills holes for wire, light fixtures, outlet boxes, and fuse holders, using electric drill and router. Threads wires or preassembled cables through holes in floor or sides of vehicles and secures them to frame, using clips or staples. Installs fixtures and boxes in openings, using screwdriver. Connects terminals to power source to test operation of fixtures.
GOE: 05.05.05 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 90

829.684-018 CABLE PULLER (construction; utilities) alternate titles: cable placer; cable rigger
Pulls lead-sheathed electrical cables for electric power systems through ducts: Pushes long, flexible, steel ribbon (fish tape) or rods through duct. Attaches wire to rod or fish tape and pulls wire through duct. Attaches wire to cable and pulls cable through duct by hand or using winch. May pull ball or mandrel through duct to ensure clear passage for cable.
GOE: 05.12.16 STRENGTH: H GED: R2 M1 L1 SVP: 4 DLU: 77

829.684-022 ELECTRICIAN HELPER (any industry) alternate titles: wirer helper
Assists ELECTRICIAN (construction) 824.261-010 or ELECTRICIAN, MAINTENANCE (any industry) 829.261-018 to install and repair electrical wiring, fixtures, and equipment, performing any combination of following tasks: Gathers tools and supplies to be used at work site, according to instructions. Measures, cuts, and bends wire and conduit, using ruler and handtools. Drills holes for wiring, using power drill, and pulls or pushes wiring through opening. Traces out short circuits in wiring, using knowledge of wiring and test meter. Assists in lifting, positioning, and fastening objects, such as wiring, conduit, and motors. Performs minor repairs, such as replacing fuses, light sockets, bulbs, and switches, using handtools. Maintains tools and equipment and keeps supplies and parts in order. Disassembles defective electrical equipment, replaces defective or worn parts, and reassembles equipment, using handtools. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.16 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 82

829.684-026 ELECTRICIAN HELPER (ship-boat mfg.)
Assists ELECTRICIAN (ship-boat mfg.) in installing and repairing wiring, fixtures, and equipment aboard ship and in shipyard facilities: Supplies ELECTRICIANS (ship-boat mfg.) with materials and tools, using handtrucks, or by carrying material. Measures and cuts pipe conduit to specified length, using steel tape and hacksaw. Threads conduit ends, using pipe threader, and connects couplings and conduit fittings, using wrench. Fabricates conduit support brackets from strap iron strips, using hacksaw, shaping dies, hammer, and punch. Secures brackets to bulkheads with screws and bolts and pulls wires through conduit leading to connection boxes, switch panels, and other terminals. Strips insulation from wire ends, using wire stripping pliers. Ties or screws wires to terminals for subsequent soldering. Performs other duties described under HELPER (any industry) Master Title.
GOE: 05.12.16 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

84 PAINTING, PLASTERING, WATERPROOFING, CEMENTING, AND RELATED OCCUPATIONS

This division includes occupations concerned with preparing surfaces to be covered; mixing coating ingredients; erecting scaffolding; and applying protective or decorative materials, such as cement, concrete, lacquer, paint, plaster, and wallpaper, to structural surfaces by spraying, brushing, troweling, or handpressing.

840 CONSTRUCTION AND MAINTENANCE PAINTERS AND RELATED OCCUPATIONS

This group includes occupations concerned with applying paint and related materials to machinery, equipment, buildings, bridges, tanks, and marine hulls and superstructures, using brushes and spray guns.

840.131-010 SUPERVISOR, PAINTING (construction)
Supervises and coordinates activities of workers engaged in applying decorative and protective coats of paint, varnish, stain, enamel, or lacquer to exterior or interior surfaces, trimming, and fixtures of buildings or other structures: Assists workers in mixing and blending paint, removing old paint from surfaces, repairing and cleaning surfaces, and applying coatings to surfaces. May supervise workers covering room interiors with wallpaper or fabric and assist workers in removing old wallpaper, repairing cracks and holes in structural surfaces, measuring and cutting coverings, and applying wallpaper or fabric to interiors. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.07 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 86

840.131-014 SUPERVISOR, PAINTING, SHIPYARD (ship-boat mfg.)
Supervises and coordinates activities of workers engaged in painting parts, equipment, ships, and buildings in ship and boat building establishment: Trains new workers in operation of painting equipment. Inspects surface of area to be painted to determine worker assignments, such as sandblasting, wire brushing, scraping, and painting. Examines surfaces subsequent to painting to verify adherence to specified standards. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.07 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

840.381-010 PAINTER (construction)
Applies coats of paint, varnish, stain, enamel, or lacquer to decorate and protect interior or exterior surfaces, trimmings, and fixtures of buildings and other structures: Reads work order or receives instructions from supervisor or homeowner regarding painting. Smooths surfaces, using sandpaper, brushes, or steel wool, and removes old paint from surfaces, using paint remover, scraper, wire brush, or blowtorch to prepare surfaces for painting. Fills nail holes, cracks, and joints with caulk, putty, plaster, or other filler, using caulking gun and putty knife. Selects premixed paints, or mixes required portions of pigment, oil, and thinning and drying substances to prepare paint that matches specified colors. Removes fixtures, such as pictures and electric switchcovers from walls prior to painting, using screwdriver. Spreads dropcloths over floors and room furnishings, and covers surfaces, such as baseboards, door frames, and windows with masking tape and paper to protect surfaces during painting. Paints surfaces, using brushes, spray gun, or paint rollers. Simulates wood grain, marble, brick, or tile effects. Applies paint with cloth, brush, sponge, or fingers to create special effects. Erects scaffolding or sets up ladders to perform tasks above ground level. May be designated according to type of work performed as Painter, Interior Finish (construction); Painter, Maintenance (any industry); or according to type of material used as Calciminer (construction); Varnisher (construction). May also hang wallpaper and fabrics [PAPERHANGER (construction) 841.381-010]. May wash surfaces prior to painting with mildew remover, using brush.
GOE: 05.10.07 STRENGTH: M GED: R3 M2 L2 SVP: 7 DLU: 88

840.381-014 PAINTER APPRENTICE, SHIPYARD (ship-boat mfg.)
Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.10.07 STRENGTH: M GED: R3 M2 L2 SVP: 7 DLU: 77

840.381-018 PAINTER, SHIPYARD (ship-boat mfg.)
Prepares wood, fiberglass, and metal surfaces for painting, and paints parts, equipment, interiors, and exteriors of ships, boats, and shipyard and marina buildings, using brushes, spray guns, and rollers: Mixes solvents according to formula, and immerses parts in solution or washes surfaces to remove grease, rust, scale, and dirt. Burns off old paint, using blowtorch. Smooths wooden and plaster surfaces, using sandpaper, scrapers, and sanding machines. Fills cracks and holes with patching plaster, putty, or plastic wood. Washes and treats surfaces with oil, turpentine, and other preparations. Brushes and rubs filler material into grained wood to prepare surfaces for painting. Mixes and matches colors of paint, varnish, stain, shellac, and calcimine. Operates spray painting equipment or brushes or rolls paint on surfaces. Sands surfaces between coats and polishes final coat to specified finish. May spray or brush hot plastics or pitch on surfaces. May bake finishes on painted and enameled articles in baking oven. May cut glass and install window and door panes. May hang wallpaper. May cut stencils, and brush or spray lettering and decorations on surfaces.
GOE: 05.10.07 STRENGTH: M GED: R3 M2 L2 SVP: 7 DLU: 77

840.681-010 PAINTER, STAGE SETTINGS (motion picture) alternate titles: painter, set
Paints walls, exteriors and interiors of buildings, furniture, and other portions of motion picture sets, using brush, roller, or spray gun: Blends paints, matches colors, or uses premixed paint or stain. Paints surfaces or objects on set to rep-

resent stonework, surface marble effects, and wood grain. May paint or burn wood and other surfaces of articles used in motion picture sets to create appearance of age, deterioration, or usage and be designated Ager (motion picture).
GOE: 01.06.03 STRENGTH: L GED: R3 M2 L1 SVP: 7 DLU: 77

840.684-010 GLASS TINTER (glass products) alternate titles: colored-liquid-plastic applier

Applies colored liquid plastic to glass surface of installed windows and doors to reduce interior heat and glare from sunlight, using spray gun. Fills spray reservoir with solution. Applies plastic coating to glass surfaces from top of window or door and working downward to apply smooth, uniform coat. Positions collection trough at bottom of coated surface to reclaim excess liquid.
GOE: 06.04.33 STRENGTH: M GED: R2 M1 L2 SVP: 5 DLU: 77

840.687-010 PAINTER HELPER, SHIPYARD (ship-boat mfg.)

Assists PAINTER, SHIPYARD (ship-boat mfg.) performing any combination of following duties: Pours specified amounts of chemical solutions into stripping tanks. Places articles, such as cabinets, metal furniture, and paint containers into stripping tanks and removes articles after prescribed period of time. Fills cracks in plaster surfaces with putty or epoxy compounds, using putty knife. Smooths surfaces to be painted, using wire brush, sandpaper, or portable sanding and buffing equipment. Strips masking tape over surfaces not to be painted. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.12 STRENGTH: M GED: R2 M2 L1 SVP: 5 DLU: 77

841 PAPERHANGERS

This group includes occupations concerned with applying wallpaper, advertising material, and fabrics to walls, ceilings, and signs.

841.137-010 SUPERVISOR, BILLPOSTING (business ser.)

Supervises and coordinates activities of BILLPOSTERS (business ser.). Examines poster panels to verify specified size and sequential arrangement. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: L GED: R4 M2 L3 SVP: 6 DLU: 77

841.381-010 PAPERHANGER (construction)

Covers interior walls and ceilings of rooms with decorative wallpaper or fabric, using handtools: Measures walls and ceiling to compute number and length of strips required to cover surface. Sets up pasteboard and erects scaffolding. Marks vertical guideline on wall to align first strip, using plumb bob and chalkline. Smooths rough spots on walls and ceilings, using sandpaper. Fills holes and cracks with plaster, using trowel. Removes paint, varnish, and grease from surfaces, using paint remover and water soda solution. Applies acetic acid to damp plaster to prevent lime from bleeding through paper. Applies sizing (thin glue) to waterproof porous surfaces, using brush, roller, or pasting machine. Measures and cuts strips from roll of wallpaper or fabric, using shears or razor. Mixes paste to desired consistency and brushes paste on back of wallpaper or fabric, using paste brush. Trims selvage (rough edge) from strips, using straightedge and trimming knife. Places paste-coated strips on wall or ceiling to match adjacent edges of figured strips, and smooths strips with dry brush or felt-covered roller to remove wrinkles and bubbles. Smooths joints with seam roller and trims excess material at ceiling and baseboard, using knife. Removes old paper, using water, steam machine, or chemical remover and scraper. May apply paint to interior or exterior surface of buildings [PAINTER (construction)].
GOE: 05.05.04 STRENGTH: M GED: R4 M2 L2 SVP: 7 DLU: 77

841.684-010 BILLPOSTER (business ser.)

Attaches advertising posters on surfaces, such as walls and billboards, using handtools: Removes old poster, using scraping tool. Mixes paste-powder with water to form paste. Smears paste on wall or billboard surface, using brush. Aligns poster sections on billboard and smooths sections, using long-handled brush. Staples or tacks posters on fences, walls, or poles. Climbs ladder to work from deck at bottom of elevated billboard. May work from scaffolding.
GOE: 05.12.14 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

842 PLASTERERS AND RELATED OCCUPATIONS

This group includes occupations concerned with applying plaster, stucco, and related materials to structural surfaces.

842.131-010 SUPERVISOR, DRY-WALL APPLICATION (construction)

Supervises and coordinates activities of workers engaged in erecting metal studs and suspension ceiling grids and applying plasterboard or other wallboard to ceilings and walls of buildings. Studies blueprints and estimates worker-hours and materials required to complete job, applying mathematical formulas. Measures and marks location of metal framing on walls and ceilings. Inspects work to ensure adherence to company standards and building codes. Trains and assists workers in performance of duties. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.04 STRENGTH: V GED: R4 M3 L3 SVP: 7 DLU: 77

842.131-014 SUPERVISOR, LATHING (construction)

Supervises and coordinates activities of workers engaged in fastening wooden, metal, or rockboard lathing to walls, ceilings, and partitions of buildings to provide supporting base for plaster, fireproofing, or acoustical material. Measures and marks partition locations and center lines, plumbs and levels vertical and horizontal alignment of walls and ceilings, and draws guidelines to correct irregularities. Inspects work in progress to verify adherence to specifications. Trains and assists workers in performance of tasks. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.01 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

842.131-018 SUPERVISOR, PLASTERING (construction)

Supervises and coordinates activities of workers engaged in applying coats of plaster, stucco, cement, and fireproofing materials to surface of structures to produce protective or decorative finish. Analyzes blueprints to determine surface area to be covered and estimates worker-hours and materials requirements applying mathematical formulas. Demonstrates mixing, plastering, cementing and other techniques to workers. Inspects material application for uniform thickness, surface flaws, and consistency of mix. Inspects finished surface to verify quality of work and adherence to specifications. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.04 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

842.134-010 SUPERVISOR, TAPING (construction)

Supervises and coordinates activities of workers engaged in sealing joints between plasterboard and other wallboard to prepare wall for painting or papering. Estimates material and worker-hour requirements to complete job, applying mathematical formulas. Monitors operation of electric mixing machines and makes minor machine adjustments. Inspects work in progress to ensure quality meets company standards and adheres to building codes. Trains and assists workers in performance of tasks. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.01 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

842.361-010 LATHER (construction)

Fastens wooden, metal, or rockboard lath to walls, ceilings, and partitions of buildings to provide supporting base for plaster, fireproofing, or acoustical material, using handtools and portable power tools. Erects horizontal metal framework to which laths are fastened, using nails, bolts, and studgun. Drills holes in floor and ceiling, using portable electric tool, and drives ends of wooden or metal studs into holes to provide anchor for furring or rockboard lath. Wires horizontal strips to furring to stiffen framework. Cuts lath to fit openings and projections, using handtools or portable power tools. Wires, nails, clips, or staples lath to framework, ceiling joists, and flat concrete surfaces. Bends metal lath to fit corners, or attaches preformed corner reinforcements. Wires plasterer's channels to overhead structural framework to provide support for plaster or acoustical ceiling tile. May install metal casings around openings, metal window stools, and metal trim and plaster grounds (wood or metal strips) nailed to studding to provide guide for PLASTERER (construction). May weld metal frame supports to steel structural members. May be designated according to type of lath applied as Metal Lather (construction); Rockboard Lather (construction); Wood Lather (construction); or according to task performed as Metal Furrer (construction).
GOE: 05.10.01 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

842.361-014 LATHER APPRENTICE (construction)

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.10.01 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

842.361-018 PLASTERER (construction)

Applies coats of plaster to interior walls, ceilings, and partitions of buildings, to produce finished surface, according to blueprints, architect's drawings, or oral instructions, using handtools and portable power tools: Directs workers to mix plaster to desired consistency and to erect scaffolds. Spreads plaster over lath or masonry base, using trowel, and smooths plaster with darby and float to attain uniform thickness. Applies scratch, brown, or finish coats of plaster to wood, metal, or board lath successively. Roughens undercoat with scratcher (wire or metal scraper) to provide bond for succeeding coats of plaster. Creates decorative textures in finish coat by marking surface of coat with brush and trowel or by spattering surface with pebbles [STUCCO MASON (construction) 842.381-014]. May install lathing [LATHER (construction) 842.361-010]. May mix mortar. May install guide wires on exterior surface of buildings to indicate thickness of plaster to be applied. May install precast ornamental plaster pieces by applying mortar to back of pieces and pressing pieces into place on wall or ceiling and be designated Ornamental-Plaster Sticker (construction). May specialize in applying finish or rough coats of plaster and be desigated Plasterer, Finish (construction); Plasterer, Rough (construction). May apply plaster with spray gun and be designated Plasterer, Spray Gun (construction). May perform maintenance work only and be designated Plasterer, Maintenance (construction).
GOE: 05.05.04 STRENGTH: M GED: R3 M2 L2 SVP: 7 DLU: 81

842.361-022 PLASTERER APPRENTICE (construction)

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.04 STRENGTH: M GED: R3 M2 L3 SVP: 7 DLU: 77

842.361-026 PLASTERER, MOLDING (concrete prod.; construction) alternate titles: plasterer, ornamental

Molds and installs ornamental plaster panels and trim, and runs (casts) ornamental plaster cornices and moldings by either of following methods: (1)

Spreads freshly mixed plaster on table or in forms with trowel when molding and installing ornamental trim. Shapes plaster by hand, using template and cuts trim to size after plaster has hardened. Applies coat of plaster to wall and presses trim into position. (2) Nails wooden strips to wall and ceiling to serve as guide for template when casting (running) cornices or moldings. Applies plaster to wall or ceiling, using trowel. Pushes template over plaster, striking off excess plaster until desired shape and smoothness of molding is obtained.
GOE: 05.05.04 STRENGTH: M GED: R4 M2 L3 SVP: 7 DLU: 77

842.361-030 DRY-WALL APPLICATOR (construction) alternate titles: dry-wall installations mechanic; dry-wall installer; gypsum dry-wall systems installer

Plans gypsum drywall installations, erects metal framing and furring channels for fastening drywalls, and installs drywall to cover walls, ceilings, soffits, shafts, and movable partitions in residential, commercial, and industrial buildings: Reads blueprints and other specifications to determine method of installation, work procedures, and material, tool, and work aid requirements. Lays out reference lines and points for use in computing location and position of metal framing and furring channels and marks position for erecting metalwork, using chalkline. Measures, marks, and cuts metal runners, studs, and furring channels to specified size, using tape measure, straightedge and hand-and portable power-cutting tools. Secures metal framing to walls and furring channels to ceilings, using hand and portable power tools. Measures and marks cutting lines on drywall, using square, tape measure, and marking devices. Scribes cutting lines on drywall, using straightedge and utility knife and breaks board along cut lines. Fits and fastens board into specified position on wall, using screws, hand or portable power tools, or adhesive. Cuts openings into board for electrical outlets, vents or fixtures, using keyhole saw or other cutting tools. Measures, cuts, assembles and installs metal framing and decorative trim for windows, doorways, and vents. Fits, aligns, and hangs doors and installs hardware, such as locks and kickplates [CARPENTER (construction)] 860.381-022]. Worker is usually assisted by other workers.
GOE: 05.05.04 STRENGTH: V GED: R3 M3 L3 SVP: 7 DLU: 81

842.381-014 STUCCO MASON (construction) alternate titles: plasterer, stucco; stucco worker

Applies weatherproof, decorative covering of Portland cement or gypsum plaster to outside building surfaces, using handtools: Erects scaffolds. Applies various coats of material, using same technique as PLASTERER (construction). Decorates final or finish coat by marking coat with sand, or with brush or trowel, or by spattering with small stones. May nail wire mesh, lath, or similar material to outside surfaces to serve as binding device to hold stucco in place. May apply stucco, using spray gun. May install guide wires on surface of buildings to indicate thickness of stucco to be applied.
GOE: 05.05.04 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

842.664-010 TAPER (construction; mfd. bldgs.) alternate titles: dry-wall finisher; finisher, wallboard and plasterboard; sheetrock taper; taper and bedder; taper and floater

Seals joints between plasterboard or other wallboards to prepare wall surface for painting or papering: Mixes sealing compound by hand or with portable electric mixer, and spreads compound over joints between boards, using trowel, broadknife, or spatula. Presses paper tape over joint to embed tape into compound and seal joint, or tapes joint, using mechanical applicator that spreads compound and embeds tape in one operation. Spreads and smooths cementing material over tape, using trowel or floating machine to blend joint with wall surface. Sands rough spots after cement has dried. Fills cracks and holes in walls and ceiling with sealing compound. Installs metal molding at corners in lieu of sealant and tape. Usually works as member of crew. May apply texturing compound and primer to walls and ceiling preparatory to final finishing, using brushes, roller, or spray gun. May countersink nails or screws below surface of wall prior to applying sealing compound, using hammer or screwdriver.
GOE: 05.10.01 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 81

842.665-010 PLASTER-MACHINE TENDER (construction)

Tends machine that pumps plaster or stucco through spray-gun for application to ceilings, walls, and partitions of buildings: Starts and stops machine on signals from PLASTERER (construction). Fills hopper of machine with plaster. Turns valves to regulate pump and compressor. Assists in erecting scaffolds.
GOE: 05.12.06 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

842.684-010 DRY-WALL SPRAYER (mfd. bldgs.)

Sprays vinyl base compound on interior sheetrock walls of factory-built modular homes to produce plaster effect: Measures and pours compound ingredients into mixing vat according to mixing chart and blends ingredients, using electric blender. Pours compound into spray gun reservoir. Connects airlines to spray gun and adjusts nozzle to required spray density. Pulls trigger, and directs spray onto wall surfaces to produce plaster appearance. Adjusts spraying distance, spray density, and air pressure as required to enhance plaster effect. Inspects sprayed surfaces to detect missed areas and corrects defects, using knife and spray gun.
GOE: 06.04.33 STRENGTH: M GED: R3 M2 L1 SVP: 4 DLU: 77

842.684-014 DRY-WALL APPLICATOR (construction; mfd. bldgs.) alternate titles: dry-wall nailer; sheetrock installer

Installs plasterboard or other wallboard to ceiling and interior walls of building, using handtools and portable power tools: Installs horizontal and vertical metal or wooden studs for attachment of wallboard on interior walls, using handtools. Cuts angle iron and channel iron to specified size, using hacksaw, and suspends angle iron grid and channel iron from ceiling, using wire. Scribes measurements on wallboard, using straightedge and tape measure, and cuts wallboard to size, using knife or saw. Cuts out openings for electrical and other outlets, using knife or saw. Attaches wallboard to wall and ceiling supports, using glue, nails, screws, hammer, or powered screwdriver. Trims rough edges from wallboard to maintain even joints, using knife. Nails prefabricated metal pieces around windows and doors and between dissimilar materials to protect drywall edges. Work is usually performed with other workers. May remove plaster, drywall, or paneling during renovation project, using crowbar and hammer.
GOE: 05.10.01 STRENGTH: M GED: R2 M2 L2 SVP: 6 DLU: 81

843 WATERPROOFING AND RELATED OCCUPATIONS

This group includes occupations concerned with applying waterproofing and caulking materials to structures.

843.134-010 SUPERVISOR, DOPING (construction) alternate titles: joint supervisor

Supervises and coordinates activities of workers engaged in coating pipeline with protective covering: Directs workers engaged in removing rust and scale from pipeline, covering pipeline with adhesive asphalt compound, and wrapping pipe with materials, such as glass cloth and felt paper, to protect pipe from electrolytic decomposition. Locates insufficient covered areas, using electronic detector, and directs workers to apply additional dope (adhesive compound) and wrapping. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.07 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 77

843.137-010 SUPERVISOR, WATERPROOFING (construction)

Supervises and coordinates activities of workers engaged in preparing and applying waterproofing and dampproofing materials to structural surfaces, such as masonry and concrete. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.07 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

843.384-010 WOOD CAULKER (ship-boat mfg.)

Caulks seams between planking in hull or deck of wooden ships or boats to make them watertight by either of following methods: (1) Guides caulking tool that automatically forces caulking material into seam. Hammers material into seam, using tamping tool. Heats marine glue in melting pot. Fills glue runner (funnel) with glue and guides runner along seam to fill seam with glue. Removes excess glue, using scraper. (2) Pushes cotton line and hemp rope into seam and hammers them in place, using caulking iron and mallet. Smears hot pitch over seam, using mop, or spreads putty in seam. May hammer old caulking from seams, using reaming iron and mallet.
GOE: 05.12.14 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

843.482-010 METAL SPRAYER, CORROSION PREVENTION (any industry) alternate titles: metalizer, field operation; metal sprayer, protective coating

Controls portable flame spray equipment to spray corrosion-resistant coatings, such as zinc or aluminum, on objects, such as plates, tanks, and structural shapes according to specifications: Cleans and roughens surface of object to be coated, using sandblasting equipment [SANDBLASTER (any industry)]. Selects nozzle to accommodate size of wire to be melted and sprayed and screws nozzle into place on metalizing gun. Inserts wire into rear of gun and through feed rollers and nozzle. Connects hoses from gun to air compressor and tanks of oxygen and fuel gas, such as acetylene. Turns knobs to synchronize speed of wire feed, air pressure, and flow of oxygen and fuel indicated on dials to specifications computed from data charts. Ignites gases to melt wire and presses button or trigger to release compressed air which atomizes and sprays molten metal onto workpiece. Directs spray over surface of workpiece in specified pattern to obtain coating of required thickness as indicated by electromagnetic gauge or amount of wire used. May spray or brush paint or apply sealing material on coated surface for decoration or further protection [PAINTER, SPRAY (any industry) I]. May flame-spray nonmetallic objects, such as glass or plastics.
GOE: 05.12.14 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

843.684-010 STEEL-PLATE CAULKER (any industry) alternate titles: caulker

Caulks seams between plates of boilers, tanks, pressure vessels, or ships to make them watertight: Connects airhose to caulking hammer and inserts caulking chisel in hammer socket. Positions chisel on edge of seam and presses trigger of hammer to pound edge of overlapping plate into surface of adjoining plate to seal seam. May use hand caulking tool to close seams.
GOE: 05.12.14 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

843.684-014 UNDERCOATER (automotive ser.) alternate titles: rust proofer

Sprays protective compound onto chassis and underbody of automobiles and trucks to minimize rust and corrosion and to eliminate noise: Drives vehicle onto overhead rack. Removes headlights and other accessories, using handtools.

Steam cleans or pressure washes underside of vehicle preparatory to application of protective compound. Drills holes for interior spraying as required, using electric drill. Sprays specified areas of vehicle, using spray gun. Inserts plastic plugs to reseal holes subsequent to spraying. Replaces accessories and removes overspray and excess seepage from body seams and joints, using cloth and solvents. May mask painted or chromed surfaces to prevent exposure to undercoating spray, using tape. May spray firewall, underside of hood, and interior of trunk compartment.
GOE: 05.12.14 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

844 CEMENT AND CONCRETE FINISHING AND RELATED OCCUPATIONS

This group includes occupations concerned with covering, leveling, and smoothing cement and concrete surfaces.

844.364-010 CEMENT MASON (construction) alternate titles: cement finisher; cement paver; concrete finisher; concrete floater

Smooths and finishes surfaces of poured concrete floors, walls, sidewalks, or curbs to specified textures, using handtools or power tools, including floats, trowels, and screeds: Signals concrete deliverer to position truck to facilitate pouring concrete. Moves discharge chute of truck to direct concrete into forms. Spreads concrete into inaccessible sections of forms, using rake or shovel. Levels concrete to specified depth and workable consistency, using hand held screed and floats to bring water to surface and produce soft topping. Smooths, and shapes surfaces of freshly poured concrete, using straightedge and float or power screed. Finishes concrete surfaces, using power trowel, or wets and rubs concrete with abrasive stone to impart finish. Removes rough or defective spots from concrete surfaces, using power grinder or chisel and hammer, and patches holes with fresh concrete or epoxy compound. Molds expansion joints and edges, using edging tools, jointers, and straightedge. May sprinkle colored stone chips, powdered steel, or coloring powder on concrete to produce prescribed finish. May produce rough concrete surface, using broom. May mix cement, using hoe or concrete-mixing machine. May direct subgrade work, mixing of concrete, and setting of forms. May specialize in finishing steps and stairways and be designated Step Finisher (construction). May break up and repair old concrete surfaces, using pneumatic tools, and be designated Cement Mason, Maintenance (any industry). May spread premixed cement over deck, inner surfaces, joints, and crevices of ships and be designated Cementer (ship-boat mfg.).
GOE: 05.05.01 STRENGTH: H GED: R3 M3 L2 SVP: 7 DLU: 81

844.364-014 CEMENT-MASON APPRENTICE (construction) alternate titles: cement-finisher apprentice; concrete-finisher apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.01 STRENGTH: H GED: R3 M3 L2 SVP: 7 DLU: 77

844.461-010 CONCRETE-STONE FINISHER (concrete prod.)

Finishes ornamental stone facings and surfaces of concrete structural products: Fills holes with grout or mix to repair imperfections in structural panels, floor and roof slabs, highway dividers, grave markers, and ornamental flowerpots, using sponge, trowel, chisel, and hammer. Cuts out damaged areas and drills holes for reinforcing rods, using power saw and drill. Positions reinforcing rods and builds wooden mold around area to be repaired, using handtools. Mixes cement, aggregate, and coloring by hand and fills mold to match specifications of product being finished, using trowel, tamper, and scraper. Polishes stone facings to lustrous finish, using polishing machine [STONE POLISHER, MACHINE (stonework)], or applies acid solution to stone facing to remove excess facing mix around stones, using brush. Smooths rough spots on stone facing, using hand chisel and abrasive stone. Washes facing with water to remove excess acid and abrasive, using hose.
GOE: 05.05.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

844.681-010 CELL MAKER (chemical)

Casts concrete sections of electrolytic cells, such as tops, bottoms, collars, brine traps, and partitions, using handtools and power tools, hoist, and concrete mixer: Assembles iron molds, using hoist, and bolts sections together, using handtools. Washes and scrapes molds to remove dirt, using water hose and hand scraper, and brushes surface of molds with grease, oil, or tallow, to facilitate removal of molds from concrete. Shovels specified amounts of cement, rock, sand, insulating material, and water into concrete mixer, and starts machine to mix concrete to specified consistency. Shovels or dumps concrete into mold and tamps concrete, using power vibrator. Inserts reinforcing steel members in concrete. Tests hardness of concrete by touch, and removes molds, using wrenches and hoist. Finishes surface of section, using trowel or portable grinder, and transfers section to curing tank for water or tar immersion, using hoist. May install electrical connections, and weld or solder connections in place. May inventory and requisition supplies. May cast concrete rings for mercury cells, impregnating them in bath of molten tar, and tending steam chamber to dry coated rings and be designated Ring Maker (chemical). May cast concrete cell covers and fabricate cover parts, such as anode pins, using power tools and handpress, and be designated Cover Maker (chemical).
GOE: 06.02.30 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

844.684-010 CONCRETE RUBBER (concrete prod.) alternate titles: cement patcher; cement rubber; concrete pointer; concrete polisher

Finishes surface of concrete products or structural elements after forms have been removed: Mixes sand, cement, and water in specified proportions to make cement grout or slurry. Wets surface of concrete to bond surface. Fills holes and cracks with grout or slurry and smooths surface, using trowel. Clamps wooden forms to corners and pours grout or slurry into forms to patch broken corners. Chips, scrapes, rubs, and grinds high spots, ridges, and rough projections from surface to remove defective concrete, using pneumatic chisel or handtools. Cleans chipped area, using wire brush. Feels and observes surface to detect irregularities and rough or uneven surfaces. Selects abrasive stone according to finish specified or step in finishing process. Wets concrete surface and rubs surface with stone to obtain specified finish. May apply muriatic acid to concrete to clean surface.
GOE: 05.10.01 STRENGTH: M GED: R3 M1 L1 SVP: 5 DLU: 77

844.687-010 CEMENT SPRAYER HELPER, NOZZLE (concrete prod.; construction)

Assists CEMENT SPRAYER, NOZZLE (concrete prod.; construction) to apply stucco, cement mortar, or concrete to exposed earth, masonry, or steel surfaces: Moves and holds supply hose as spraying progresses, using rope sling. Drags screed over finished surface to cut and clean spots from surface. Cuts and squares corners, using trowel. Assists workers engaged in erecting and moving scaffolds and in coupling and uncoupling pipe. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.09 STRENGTH: H GED: R1 M1 L1 SVP: 2 DLU: 77

845 TRANSPORTATION EQUIPMENT PAINTERS AND RELATED OCCUPATIONS

This group includes occupations concerned with applying paint and related materials to transportation equipment, including automobiles, trucks, trailers, aircraft, and railway cars.

845.381-010 PAINTER APPRENTICE, TRANSPORTATION EQUIPMENT (aircraft mfg.; air trans.; automotive ser.)

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.10.07 STRENGTH: M GED: R3 M2 L3 SVP: 6 DLU: 77

845.381-014 PAINTER, TRANSPORTATION EQUIPMENT (aircraft mfg.; air trans.; automotive ser.)

Paints surfaces of transportation equipment, such as automobiles, buses, trucks, and aircraft, applying knowledge of surface preparation and painting techniques, using spray painting equipment, power tools, and work aids: Cleans, sands, and applies chemical solutions to prepare and condition surfaces prior to painting. Mixes and thins paint or other coating to specified color and consistency according to standard formulas or color charts, using spatula or mixing equipment and viscometer. Masks and covers surfaces not to be painted. Sprays specified amount or thickness of primer, protective, decorative, or finish coatings, such as paint, lacquer, sealer, or enamel, onto prepared surfaces, using spray equipment. Strips, sands, masks, and repaints surfaces, and blends and polishes finish to match surrounding areas, manually or using portable power tools. May apply or retouch paint, using brush. May lay out and paint insignias, symbols, designs, or other markings on painted surfaces, according to blueprints or specifications, using stencils, patterns, measuring instruments, brushes, or spray equipment. May regulate controls on equipment to cure and dry paint or other coatings. May set up portable ventilators, exhaust units, ladders, and scaffolding prior to painting. May operate lifting and moving devices to move materials and equipment and access areas to be painted. May remove accessories from motor vehicles, such as chrome, mirrors, and windshield wipers, prior to repainting. May be designated according to vehicle painted as Auto-Body Painter (automotive ser.); Painter, Aircraft (aircraft mfg.; air trans.); Painter, Aircraft-Production (aircraft mfg.); Painter, Automotive (automotive ser.); Painter, Decorative-Commercial Aircraft (aircraft mfg.).
GOE: 05.10.07 STRENGTH: M GED: R3 M2 L3 SVP: 6 DLU: 89

845.381-018 PAINT SPRAYER, SANDBLASTER (concrete prod.)

Spray paints and sandblasts heavy equipment, such as concrete mixer trucks, boom trucks, and payloaders, using spray gun and sandblasting equipment: Cleans grease, dirt, dried concrete, old paint, and rust from equipment, using solvent, water, rags, brushes, pneumatic wire brush, and chipping hammer. Cleans and prepares surface for painting, using air-powered sandblasting equipment. Applies paper and masking tape to protect unpainted surfaces, such as windows and trim. Stencils lettering and other identifying information on vehicles according to specifications. Selects paint according to company color scheme and specifications. Stirs paint, pours paint into spray container, and applies primer or finish coat of paint, using spray gun. Paints areas inaccessible to spray gun, using paint brush. Disassembles paint and sandblasting equipment and cleans equipment, using solvent, wire brushes, and dry cloth.
GOE: 05.10.07 STRENGTH: M GED: R3 M2 L1 SVP: 4 DLU: 86

845.681-010 RAILROAD-CAR LETTERER (r.r. trans.) alternate titles: painter, railroad car

Paints railroad freight cars and applies decalcomania lettering: Removes old paint, using blowtorch or paint remover and hand scraper. Mixes and matches

paints, following color charts. Paints cars, using brushes or spray gun. Cuts stencils, tacks stencils on car, and paints over stencils with brush or spray gun. Applies decalcomania lettering to interior and exterior surfaces of car. Paints black line around letters and numbers for emphasis, using brush.
GOE: 01.06.03 STRENGTH: L GED: R3 M2 L2 SVP: 7 DLU: 77

845.684-010 CAR SCRUBBER (railroad equip.) alternate titles: car cleaner; passenger-car scrubber

Cleans surfaces of railroad cars preparatory to painting: Strips car of articles, such as sign frames, signal cords, curtains, seat cushions, and window frames, using handtools. Sweeps or blows dirt from car, using broom or airhose. Scrubs surfaces of car, using brush, sponge, and cleaning solution. Rubs varnished surfaces of car, after painting, with powdered pumice stone and cloth to attain smooth even finish. Scrapes excess paint from window glass, using sharp edged instrument. May sand surface areas to remove paint, using emery cloth, and sandpaper. May mask areas not to be painted, using tape and masking liquid.
GOE: 05.12.18 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

845.684-014 PAINTER HELPER, AUTOMOTIVE (automotive ser.) alternate titles: sander

Assists PAINTER, TRANSPORTATION EQUIPMENT (aircraft mfg.; air trans.; automotive ser.) 845.381-014 by preparing surfaces of automotive vehicles, such as automobiles, buses, and trucks, for repainting and polishes repainted vehicles: Sands rough spots on automotive vehicle. Sprays scratched areas with filler solution, using spray gun. Applies paper and masking tape to protect unpainted surfaces, such as bumpers, windows, and chrome trim. Removes gloss from intermediate coats of paint, using wet sandpaper, to ensure adherence of next coat. Polishes final coat of paint, using polishing compound and cloth. Paints surfaces not readily accessible, such as wheels and underside of fenders, using brush and spray gun. May remove and replace chrome moldings and trim. May brush or spray undercoating material on replaced parts. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.12 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

849 PAINTING, PLASTERING, WATERPROOFING, CEMENTING, AND RELATED OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with painting, plastering, waterproofing, cementing, and related activities.

849.137-010 DISPATCHER (construction)

Supervises and coordinates activities of workers engaged in weighing, mixing, and shipping concrete and concrete aggregates. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.09.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

849.381-010 AIRPLANE COVERER (aircraft mfg.; air trans.) alternate titles: dope-and-fabric worker; doper

Fabricates, installs, and sprays cloth airplane surface coverings, using handtools and portable power tools: Marks dimensions of surface on cloth parts, using chalk and templates. Cuts cloth to size, using scissors or cutting machine. Operates sewing machine to stitch cloth to form envelope that fits structure to be covered and reinforces envelope with cloth tape. Fastens fabric parts to structure, using cement, needle and thread, or metal strips and screws. Sprays covering with water to produce smooth surface. Applies diluted dope to prime and tighten fabric, using handbrush. Brushes on clear and silver dope to strengthen and preserve fabric. Applies pigmented dope, using brush or spray gun to color and finish fabric. May fabricate patterns and templates.
GOE: 06.01.04 STRENGTH: M GED: R3 M2 L2 SVP: 7 DLU: 77

849.484-010 BOILER RELINER, PLASTIC BLOCK (foundry) alternate titles: plastic installer

Relines furnace with plastic block refractory material, using handtools. Removes worn or damaged lining, using handtools. Measures furnace wall and cuts required number of sheets from plastic block, using saw. Drills holes in wall and bolts overlapping layers of plastic to walls. Hammers surface to compress layers into solid sheet.
GOE: 05.10.01 STRENGTH: M GED: R2 M2 L1 SVP: 4 DLU: 77

849.665-010 PUMP TENDER, CEMENT BASED MATERIALS (concrete prod.; construction)

Tends one or more machines that pump concrete, grout, or dry mixtures of sand and cement through hoses to fill forms and crevices or to coat surfaces: Positions hose or temporary pipeline and snaps couplings together. Shovels materials into hopper, moves lever to discharge materials from skip into hopper, or signals CONCRETE-MIXING-TRUCK DRIVER (construction) to fill hopper with concrete. Moves controls to start and operate mixer. Starts pump or compressor and turns valves to regulate air pressure and flow of materials through hose. May aim hose nozzle into space to be filled or at surface to be coated. May lubricate and repair machinery. May be designated according to type of machine tended as Cement-Gun Operator (concrete prod.; construction); Concrete-Gun Operator (construction); Concrete-Pump Operator (construction); Grout-Pump Operator (construction).
GOE: 05.12.06 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

849.684-010 BOAT BUFFER, PLASTIC (ship-boat mfg.)

Applies buffing compound with brush and buffs hulls, decks, and cabins of fiberglass boats to impart glossy finish, using portable electric buffer. May sand rough areas, using sandpaper.
GOE: 06.04.24 STRENGTH: M GED: R1 M1 L1 SVP: 3 DLU: 77

85 EXCAVATING, GRADING, PAVING, AND RELATED OCCUPATIONS

This division includes occupations concerned with operating heavy earthmoving equipment in removal and placement of earth materials and grading earth surfaces; laying concrete and other hard-surface paving materials in highway, airport, and related construction; building surface or subsurface drainage systems and pipelines; and related activities including blasting, haulage, and pick-and-shovel work.

850 EXCAVATING, GRADING, AND RELATED OCCUPATIONS

This group includes occupations concerned with removing earth materials to and from open or underground excavations, including mines; dredging irrigation ditches, canals, and inland or offshore marine channels; and related activities, such as tending air locks and operating underground haulage equipment. Occupations in extraction of minerals are included in Division 93.

850.133-010 SUPERVISOR, RECLAMATION (mine & quarry)

Supervises and coordinates activities of workers engaged in restoration of land areas following surface mining operations: Studies engineering survey data and confers with mining officials to establish reclamation program in conformance with regulations. Directs grading crews to fill, grade, and contour land or to prepare certain areas for impoundment of water in artificial lakes. Inspects equipment for compliance with safety regulations. Maintains records of land areas restored.
GOE: 05.11.02 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

850.137-010 SUPERVISOR, CORE DRILLING (construction) alternate titles: test-boring crew chief

Supervises and coordinates activities of field crew engaged in obtaining substrata core samples for analysis of geological character of ground, nature of ore, or type and strength of foundation materials: Directs workers engaged in transporting bulldozers, trucks, core drills, and other machinery and equipment to work area. Directs workers engaged in boring operations and determines sequence of drilling, bit pressure, rate of feed, and location of drillings to comply with specifications. Removes cores and samples of formations from borings, and conducts preliminary geological classification based on color and density of sample, and type of material, such as clay, gravel, or silt. Marks location and hole number on sample or container for laboratory analysis. Records location, depth, and soil content of borings for use as reference by design and layout personnel, and for inclusion in subsequent construction contracts. Cooperates with property owners and municipal officials to avoid damage to property and equipment. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.11.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

850.137-014 SUPERVISOR, LABOR GANG (construction)

Supervises and coordinates activities of work crews engaged in digging and backfilling excavations for laying of pipelines or structure footings. Performs duties as described under SUPERVISOR (any industry) Master Title. May be designated according to specific activities of workers supervised as Supervisor, Backfilling (construction); Supervisor, Ditching (construction).
GOE: 05.12.01 STRENGTH: M GED: R4 M2 L3 SVP: 6 DLU: 77

850.137-018 SUPERVISOR, RIPRAP PLACING (construction)

Supervises and coordinates activities of workers engaged in placing stone on earthen slopes of structures, such as dikes and dams, to prevent soil erosion. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: L GED: R4 M3 L2 SVP: 6 DLU: 77

850.381-010 MINER (construction)

Drills and blasts earth and rock excavations to construct underground shafts and tunnels for projects, such as roads, railways, and waterways: Sets up pneumatic drilling machinery and moves lever controlling drilling action to drill blastholes in *tunnel heading* according to spacing, angle, and depth of hole specified by SUPERVISOR, TUNNEL HEADING (construction). Loads blastholes and fires powder charges to loosen earth and rock [BLASTER (any industry)]. Wedges, nails, or bolts timber or steel retaining structures to prevent cave-ins. May work in caissons. When concerned with erection of breast boards (timber bracing) to shore tunnel heading, may be designated Breast Worker (construction).
GOE: 05.11.01 STRENGTH: H GED: R4 M3 L2 SVP: 7 DLU: 77

850.387-010 INSPECTOR OF DREDGING (water trans.)

Estimates quantity of material dredged from bed of waterway, according to depth of residue deposited in scow, to ensure that dredging depth conforms to engineering specifications. Keeps records of findings. May drop measured lengths of weighted cable from scow to verify dredging depth.
GOE: 05.07.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

850.467-010 GRADE CHECKER (construction)

Sets grade stakes to guide earth moving equipment operators in sloping highways and fill embankments, using measuring instruments and handtools: Reads

survey stakes along highway right-of-way to determine grade specification for embankment. Measures horizontally and vertically, in specified ratio, from survey stake to juncture of embankment and initial excavation, using survey rod and eye level. Sets grade stakes, using hatchet, and chalk-marks excavation reference points on stake. Repeats measuring and staking at specified intervals to form horizontal stakeline along embankment. Observes excavating activities to verify conformance to stake references and notifies equipment operators or supervisor of deviations.
GOE: 05.03.01 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

850.662-010 HORIZONTAL-EARTH-BORING-MACHINE OPERATOR (construction) alternate titles: boring-machine operator; tunneling-machine operator

Sets up and operates boring machine to drill horizontal holes through earth banks for installation of pipelines under highways, railroads, canals, and other obstructions: Assembles and positions machine, augers, and casing pipes. Signals operator of crane to lower boring equipment into previously dug starter hole. Verifies depth and level of boring position, using surveyor's level and spirit level. Starts engine and moves levers to rotate and feed auger into earth, and simultaneously activates hydraulic ram that forces casing into hole. Retracts auger and forces earth cuttings back through casing to permit coupling additional sections of casing and auger. May operate machine which flushes and pumps earth cuttings from hole. May operate boring machine that drives pilot hole through earth bank and pulls auger bit back through bank to cut hole of required diameter.
GOE: 05.11.01 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

850.662-014 ROCK-DRILL OPERATOR II (construction) alternate titles: drifter

Operates drill supported by upright column, to drill through rock in construction work, such as tunnels, highways, or dams: Fits bit in chuck of drifter (drill). Regulates valve to release compressed air that activates drill. Turns screw to feed drill into rock. Regulates flow of water to remove dust and debris from hole, or blows dust out of hole with compressed air.
GOE: 05.11.01 STRENGTH: H GED: R3 M1 L1 SVP: 5 DLU: 77

850.663-010 DREDGE OPERATOR (construction; mine & quarry) alternate titles: dredge pumper

Operates power-driven dredge to excavate and maintain navigable channels in waterways and to mine sand and gravel at bottom of lakes, rivers, and streams: Directs workers engaged in placing shore anchors and cables, laying additional lengths of pipes from dredge to shore, and in pumping water from pontoons. Starts and stops engines to operate equipment. Moves levers to place dredge in position for excavation, engage hydraulic pump, raise and lower suction boom, and control rotation of cutterhead. Lowers anchor pole to verify depth of excavation, using winch, or scans depth gauge to determine depth of excavation. Starts power winch that draws in or lets out cable to change position of dredge, or pulls in and lets out cable manually.
GOE: 05.11.01 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

850.663-014 ELEVATING-GRADER OPERATOR (construction) alternate titles: plow holder; plow shaker

Operates self-powered or tractor-drawn elevating grader to plow and scrape up dirt and deposit dirt in trucks, stockpiles, or earth fills: Starts engine to drive machine or signals TRACTOR OPERATOR (any industry) to guide movement of tractor-drawn machine. Moves levers to raise and lower plowing disk and conveyor.
GOE: 05.11.01 STRENGTH: M GED: R3 M1 L1 SVP: 6 DLU: 77

850.663-018 LOCK TENDER II (construction)

Operates electrically powered locomotive or electrically driven winch to move narrow-gauge railroad car into or out of material lock (pressurized air chamber) during sewer or tunnel construction: Observes signals of LOCK TENDER (construction) I, to determine when specified air pressure has been reached. Couples cars or fastens winch hook to cars, and moves hand or foot controls to engage winch or start locomotive.
GOE: 05.11.01 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

850.663-022 MOTOR-GRADER OPERATOR (construction) alternate titles: blade-grader operator; motor-patrol operator; power-grader operator; road grader; road-hogger operator

Operates self-propelled grader to spread and level dirt, gravel, and stone, to grade specifications in construction and maintenance of earthwork structures, such as highways, streets, airports, dikes, and temporary roads: Drives grader and moves levers to regulate height and angle of grader blade, lower scarifier that loosens packed soil to permit grading, and to tilt front wheels of grader when making sharp turns. Drives grader in successive passes over working area, observing reference stakes or hand signals of assisting worker, to level surface to specified grade. Feels lever and listens to sound of engine to determine depth of cut. May perform fine or rough grading and be designated Motor Grader, Fine Grade (construction); Motor Grader, Rough Grade (construction). May operate tractor drawn grader to cut and smooth subgrade on street and highway paving projects and be designated Subgrader Operator (construction).
GOE: 05.11.01 STRENGTH: M GED: R3 M1 L1 SVP: 5 DLU: 77

850.663-026 STRIPPING-SHOVEL OPERATOR (mine & quarry)

Operates stripping shovel to remove overburden at strip mine or open pit preparatory to extracting operations: Moves levers and depresses pedals to scoop up blast-loosened dirt and rock from top of coal, ore, or rock seam and to deposit overburden in void left by preceding strip. Piles heavy rock at base and lighter materials on top to build permanent *spoil pile*. Signals BULLDOZER OPERATOR (any industry) I, to scrape scattered rock and dirt into pile within reach of shovel. May repair and replace shovel parts, such as gears, bearings, and bucket teeth, using handtools.
GOE: 05.11.02 STRENGTH: M GED: R3 M1 L1 SVP: 5 DLU: 77

850.682-010 SHIELD RUNNER (construction) alternate titles: erector operator; hydraulic operator; shield operator

Sets up and operates equipment to advance steel framework (shield) within tunnel during construction: Turns handcrank to regulate hydraulic valves that advance jacks used to push forward tunnel shield that supports overlying ground during tunnel construction. Moves levers to regulate movement of steel arm attached to shield to lift metal segments of *tunnel heading* into position.
GOE: 05.11.01 STRENGTH: L GED: R3 M1 L1 SVP: 5 DLU: 77

850.683-010 BULLDOZER OPERATOR I (any industry) alternate titles: grader operator

Operates tractor equipped with concave blade attached across front to gouge out, level, and distribute earth and to push trees and rocks from land preparatory to constructing roads and buildings or planting crops, or in mining, quarrying, and lumbering operations: Fastens attachments to tractor with clevis or wedge-pin hitches. Connects hydraulic hoses, belts, mechanical linkage, or power takeoff shaft to tractor to provide power to raise, lower, or tilt attachment. Moves levers to control tool bars, carriers, and disks. Moves levers and depresses pedals to maneuver tractor and raise, lower, and tilt attachment to clear right-of-way. Feels lever and listens for stalling action of engine to estimate depth of cut. Drives bulldozer in successive passes over terrain to raise or lower terrain to specified grade following markings on grade stakes or hand signals. Greases, oils, and performs minor repairs on tractor, using grease gun, oilcans, and handtools. When required to work to close tolerances, may be designated Fine-Grade-Bulldozer Operator (any industry). When operating bulldozer to loosen soil, may be designated Scarifier Operator (any industry). May be designated according to type of tractor operated as Crawler-Tractor Operator (any industry); Forest Fire Equipment Operator (government ser.); or attachment added as Angledozer Operator (any industry). May operate bulldozer to scrape surface clay to determine existence and types of clay deposits or to gather clay into piles preparatory to removal to brick-and-tile manufacturing plant and be designated Scraper Operator (mine & quarry).
GOE: 05.11.01 STRENGTH: H GED: R3 M2 L2 SVP: 5 DLU: 81

850.683-014 DITCHER OPERATOR (r.r. trans.)

Operates railcar-mounted toothed bucket to scoop fallen rock from ditches beside railroad track for removal to landfill area. Moves levers to guide bucket to scooping and dumping areas and dumps load in designated areas. Stops or resumes operation in response to railroad traffic signals.
GOE: 05.11.01 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

850.683-018 DRAGLINE OPERATOR (any industry)

Operates power-driven crane equipped with dragline bucket, suspended from boom by cable to excavate or move sand, gravel, clay, mud, coal, or other materials: Drives machine to work site. Moves hand levers and depresses pedals to rotate crane on chassis and position boom above excavation point, to raise and lower boom, to lower bucket to material, to drag bucket toward crane to excavate or move material, to place bucket over unloading point, and to tilt bucket to release material. May direct workers engaged in placing blocks and outriggers to prevent capsizing of machine when lifting heavy loads. May be designated according to type of chassis or power unit as Crawler-Dragline Operator (any industry); Diesel-Dragline Operator (any industry); Electric-Dragline Operator (any industry); Gasoline-Dragline Operator (any industry); or material excavated as Clay Hoister (cement); Walking-Dragline Operator (any industry).
GOE: 05.11.04 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

850.683-022 FORM-GRADER OPERATOR (construction) alternate titles: concrete-paving-form grader

Operates machine equipped with adjustable, revolving cutterhead to cut trench for concrete road to specified grade. Aligns grader with stakes and guidelines on ground. Lowers cutterhead and aligns depth gauge marker with guideline to control depth of trench. Moves throttle to regulate speed of machine and cutterhead. Raises and lowers cutterhead to reduce base material by making several shallow passes. Observes spiral conveyor that automatically moves loose dirt to side of trench.
GOE: 05.11.01 STRENGTH: L GED: R3 M2 L1 SVP: 4 DLU: 77

850.683-026 MUCKING-MACHINE OPERATOR (construction) alternate titles: mucker operator

Operates powered shovel or scraper loader (mucking machine) to hoist earth and rock, excavated from *tunnel headings*, onto cars or trucks: Moves levers to control movement of machine on narrow gauge track and to activate buckets or scrapers that scoop up or dig into materials and deposit them into dinkey cars or sweep materials from sides and bottom of tunnel heading and deposit materials on machine mounted conveyor.
GOE: 05.11.01 STRENGTH: L GED: R3 M1 L1 SVP: 3 DLU: 77

850.683-030 POWER-SHOVEL OPERATOR (any industry)

Operates power-driven machine, equipped with movable shovel, to excavate or move coal, dirt, rock, sand, and other materials: Receives written or oral in-

structions from supervisor regarding material to move or excavate. Pushes levers and depresses pedals to move machine, to lower and push shovel into stockpiled material, to lower and dig shovel into surface of ground, and to lift, swing, and dump contents of shovel into truck, car, or onto conveyor, hopper, or stockpile. Observes markings on ground, hand signals, or grade stakes to remove material, when operating machine at excavation site. May tend mining machinery, such as pulverizer. May be designated according to type of power unit as Diesel-Power-Shovel Operator (any industry); Electric-Power-Shovel Operator (any industry); Gasoline-Power-Shovel Operator (any industry). May operate power shovel equipped with duck-bill scoop and be designated Duck-Bill Operator (mine & quarry). May operate power shovel which digs by pulling dipper toward machine and be designated Back-Hoe Operator (any industry). May operate power shovel on which excavating bucket runs outward along horizontal boom to dig into materials and be designated Skimmer-Scoop Operator (any industry). May operate power shovel designed to be converted to crane, skimmer scoop, backhoe, or dragline and be designated Convertible-Power-Shovel Operator (any industry).
GOE: 05.11.01 STRENGTH: M GED: R3 M1 L1 SVP: 5 DLU: 80

850.683-034 ROCK-DRILL OPERATOR I (construction)

Drives and operates tractor-mounted rock drilling machine to drill explosive-charge holes through hard materials to facilitate blasting operations: Moves lever to set out-rigger jacks to level machine. Verifies level of machine, using spirit level. Inserts steel drill or rock bit into chuck. Moves levers to start, stop, and control drilling speed of machine. Drills holes and observes depth gauge on drill stem to verify depth of hole specified by BLASTER (any industry). May be designated according to type of machine operated as Reciprocating-Drill Operator (any industry); Rotary-Rock-Drilling-Machine Operator (any industry).
GOE: 05.11.01 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

850.683-038 SCRAPER OPERATOR (construction)

Operates tractor-drawn or self-propelled scraper to move, haul, and grade earth on construction sites, such as roadbeds, ditch banks, and water reservoirs: Moves switches, levers, and pedals to control loading gate on bucket (scraper), to adjust depth of cut, to raise and close filled bucket for hauling, and to spread or dump earth.
GOE: 05.11.01 STRENGTH: M GED: R3 M1 L2 SVP: 5 DLU: 77

850.683-042 TOWER-EXCAVATOR OPERATOR (construction) alternate titles: cable-tower operator; guyline operator; slackline operator; tower-dragline operator

Operates power machinery to activate dragline bucket slung between portable towers or to excavate and load sand, gravel, earth, or similar material into trucks or onto conveyors: Moves hand and foot levers to raise and lower bucket, load and dump bucket, and move bucket along slack line slung between towers to unloading point. May direct workers engaged in changing position of towers.
GOE: 05.11.04 STRENGTH: L GED: R3 M1 L1 SVP: 5 DLU: 77

850.683-046 UTILITY-TRACTOR OPERATOR (construction)

Drives pneumatic-tired tractor and controls grading or digging attachments to move and level materials, such as dirt and gravel, for construction of driveways, parking lots, and streets: Moves levers to engage gears to raise and lower attachment. Adjusts and controls bulldozer attachment to level earth to specified depth. Pulls grader attachment over cutout to trim edges, level surface, and spread rock. Controls back-hoe, trench-digging attachment, or lift-scoop attachment to dig and backfill trenches.
GOE: 05.11.01 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

850.684-010 EXCAVATOR (any industry)

Digs at archeological excavation sites to unearth pottery, bones, implements, and other archeological specimens, using shovel, pickax, scraper, and dusting broom.
GOE: 05.12.03 STRENGTH: H GED: R3 M1 L1 SVP: 3 DLU: 77

850.684-014 HORIZONTAL-EARTH-BORING-MACHINE-OPERATOR HELPER (construction) alternate titles: boring-machine-operator helper

Performs any combination of following duties to aid in drilling of horizontal holes for installation of pipelines under highways, railroads, canals, and other obstructions: Lays foundation timbers for boring machine and places timber braces to hold machine in place. Couples auger sections together and bolts sections to drive shaft. Removes dirt from hole, using shovel. Removes seepage water from boring machine pit, using portable sump. May place props between hydraulic rams and end of casing pipe. May hammer steel wedges into shaft collar to lock auger drive to ram yoke. May weld sections of casing pipe together, using arc-welding equipment.
GOE: 05.12.02 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

850.684-018 STRIPPING-SHOVEL OILER (mine & quarry) alternate titles: oiler

Lubricates stripping shovel used to remove overburden at strip mine or open pit: Observes panel to determine efficiency of automatic lubrication system. Heats dope (heavy duty lubricant) in dope box and sprays lubricant onto gears and other moving parts. Oils and greases shovel while in operation, using hand grease gun and oilcan. Inspects parts, such as swing pinions, boom pins, hoist gears, brakes, boom cable, and supports to detect wear. Records production, repairs, and downtime. May start driving mechanism of shovel and guide shovel into working position. May operate stripping shovel [STRIPPING-SHOVEL OPERATOR (mine & quarry)]. May lubricate other mining and quarrying equipment and be designated Dragline Oiler (mine & quarry); Walking-Dragline Oiler (mine & quarry).
GOE: 05.12.08 STRENGTH: H GED: R3 M1 L1 SVP: 6 DLU: 77

851 DRAINAGE AND RELATED OCCUPATIONS

This group includes occupations concerned with placing, joining, aligning, and sealing pipes in excavations, using caulking tools, sealing compounds, ropes, pipe-supporting equipment, and other devices and materials.

851.137-010 BANK BOSS (construction) alternate titles: levee superintendent

Supervises and coordinates activities of workers engaged in placing shore sections of discharge pipe from suction dredge and in grading material discharged from dredge onto shore. Determines location of discharge pipes, applying knowledge of material flow rate, capacity of fill leveling equipment, irregularities of terrain, and ultimate use of landfill. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

851.137-014 SUPERVISOR, SEWER MAINTENANCE (government ser.)

Supervises and coordinates activities of workers engaged in repair and maintenance of sewers: Directs workers in connecting sewer lines to mains. Inspects construction of new sewers and manholes to ensure conformance with specifications, according to blueprints. Directs workers in cleaning storm, water, and sewer catch basins, repairing broken sewer lines, and replacing worn and damaged parts. May assist workers in repairing breaks in sewers. May operate and repair equipment, such as jackhammers, pumps, air compressors, and other equipment, used in repair and maintenance of sewers. May direct workers in operation of mobile closed-circuit television monitoring system to inspect internal areas of sewer lines.
GOE: 05.12.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

851.262-010 SEWER-LINE REPAIRER, TELE-GROUT (sanitary ser.)

Operates mobile television and chemical sealing units to conduct internal inspection of sewer lines and to seal defects for prevention of water infiltration: Locates line sections to be inspected, using map, and determines setup procedures. Turns knobs to activate television equipment for video viewing. Adjusts TV camera and monitors controls for optimal clarity and contrast. Locates and identifies infiltration points and sewer defects to determine extent of sewer line damage. Prepares description of each sewer defect, and records pertinent data, including exact location of defect. Photographs screen picture of serious or unusual irregularities, using camera. Determines chemical composition of sealing compound based on type of sealing activity necessary to seal defects, and oversees preparation of compound. Turns control knobs of sealing unit to inflate packer to desired pressure, to air test infiltration point, to determine volume of needed sealing compound, and to pump correct amount of sealing chemicals. Turns air release valve to deflate packer after allowing specified time for sealing compound to set. Communicates with workers, using intercom system, and confers with supervisors to discuss condition of sewer lines, based on television inspection. Services, adjusts, and makes minor repairs to equipment and attachments. Gives directions to workers in efficient and safe use of television and grout, in work methods, and safety precautions. Drives television and grout unit truck.
GOE: 05.10.01 STRENGTH: L GED: R4 M3 L2 SVP: 7 DLU: 86

851.362-010 SEWER-LINE PHOTO-INSPECTOR (sanitary ser.)

Operates camera to photograph inside of sewer lines to conduct inspection and determine need for repairs: Locates line sections to be photographed, using map. Determines setup procedures. Floats rope used to pull camera to adjacent manhole to thread sewer lines. Directs workers in setting up cable stands over manholes. Loads camera with film and inspects battery of camera. Depresses button on camera to photograph small blackboard giving location of manhole, manhole number, data, and weather conditions for future reference. Attaches pulling cable to camera and instructs workers to position camera in sewer line and to turn cable stand handles that enable camera to move inside pipe. Snaps pictures at designated intervals until camera reaches downstream manhole. Detaches camera from cable, rewinds cable into reel, and disassembles equipment. Removes film and batteries from camera and sends film to be developed. Confers with supervisor to discuss condition of sewer lines as indicated in developed photographs. Drives pickup truck to haul crew and equipment. Services, adjusts, and makes minor repairs to camera, equipment, and attachments. Communicates with supervisor, using radio telephone. Gives directions to workers in efficient and safe use of camera and equipment, work methods, and safety precautions. Prepares daily report listing lines photographed.
GOE: 05.07.01 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 86

851.383-010 IRRIGATION SYSTEM INSTALLER (construction)

Installs underground pipe for farm irrigation systems performing any combination of following tasks: Drives straight-bed truck with attached pole trailer [POLE-TRUCK DRIVER (construction; tel. & tel.; utilities)] to deliver pipe, risers, and pump stands to installation site. Operates crawler-type trench digger to dig trench along prestaked route. Measures plastic pipe to specified length and cuts pipe, using handsaw. Applies plastic cement to pipe and coupler, using

brush, and fits pipe and coupler together. Attaches risers to pipe at specified intervals, using plastic cement and fittings. Digs hole for pump stand, using shovel, and lowers stand and assembled pipe into excavation by hand. Welds mating collar to pump stand [WELDER, ARC (welding)]. Operates crawler-type tractor to cover pipe [BULLDOZER OPERATOR (any industry) I].
GOE: 05.11.01 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

851.663-010 SEPTIC-TANK INSTALLER (construction)

Operates back-hoe (trench-excavating machine) to dig trenches for installation of septic tanks and drain lines for sewage disposal system: Reads blueprints to determine location of septic tank and drainpipes. Operates back-hoe to dig and refill trenches for septic tank and tile drainpipes and to transfer crushed rock or gravel to provide drainage base for pipes. Lowers septic tank into excavation, using back-hoe as hoist. Directs workers engaged in spreading crushed rock and gravel, in laying tile drainpipe, and in connecting drainpipes to branch sewers. May verify levels of rock or gravel, base, and tile drainpipe, using surveyor's or carpenter's level.
GOE: 05.11.01 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

853 PAVING OCCUPATIONS, ASPHALT AND CONCRETE

This group includes occupations concerned with combining asphaltic or concrete ingredients at mobile batching plants; applying asphalt or concrete to roadbeds and other substructures; and shaping and finishing asphalt or concrete; involves operating or tending machines for mixing, spreading, compacting, and leveling paving materials, and using trowels, screeds, rakes, shovels, and other devices.

853.133-010 SUPERVISOR, ASPHALT PAVING (construction)

Supervises and coordinates activities of workers engaged in spreading, rolling, and tamping asphalt or similar material to form surfaces of highways, streets, parking lots, and aircraft landing strips: Calculates number of trucks required to haul asphalt from mix plant according to capacity of vehicles, traffic conditions, distance from work site, and productivity of drivers. Tours work site to ascertain progress in meeting time schedules and to detect insufficient utilization of workers and equipment.Measures slope and thickness of paving to verify compliance with contract. Performs other duties as described under SUPERVISOR (any industry) Master Title. May supervise workers engaged in patching asphalt paving and be designated Supervisor, Patching (construction).
GOE: 05.11.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

853.137-010 SUPERVISOR, MIXING PLACE (construction)

Supervises and coordinates activities of workers engaged in mixing ingredients into concrete and in pouring and finishing concrete in highway and airport runway construction. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.01 STRENGTH: L GED: R4 M3 L2 SVP: 7 DLU: 77

853.663-010 ASPHALT-PAVING-MACHINE OPERATOR (construction) alternate titles: asphalt-spreader operator; bituminous-paving-machine operator; blacktop-paver operator; blacktop spreader; mechanical-spreader operator; paving-machine operator, asphalt or bituminous

Operates machine that spreads and levels hot-mix bituminous paving material on subgrade of highways and streets: Bolts extensions to screed to adjust width, using wrenches. Lights burners to heat screed. Starts engine and controls paving machine to push dump truck and maintain constant flow of asphalt into hopper. Observes distribution of paving material along screed and controls direction of screed to eliminate voids at curbs and joints. Turns valves to regulate temperature of asphalt flowing from hopper when asphalt begins to harden on screed.
GOE: 05.11.01 STRENGTH: M GED: R3 M1 L1 SVP: 5 DLU: 77

853.663-014 CONCRETE-PAVING-MACHINE OPERATOR (construction)

Operates concrete paving machine to spread and smooth freshly poured concrete surfaces for concrete roads and landing fields: Starts machine, engages clutch, and shifts gears to control machine's movement along rails on concrete forms. Moves levers and turns handwheels to lower attachment that spreads wet concrete within forms. Observes surface of concrete to point out low spots for workers to add concrete. Operates machine with attachments to successively vibrate, screed, strike-off (remove excess from), and float surface of concrete, to spray on curing compound, and cut expansion joints. When cutting expansion joints, places strips of material, such as cork, asphalt, or steel, in joints, or places roll of expansion-joint material on machine that automatically inserts material into joints. When operating machine to screed and float surface, may be designated Concrete-Finishing-Machine Operator (construction). May be designated according to specific function of machine attachment as Center-Line-Cutter Operator (construction); Curing-Machine Operator (construction); Gang-Vibrator Operator (construction); Joint-Machine Operator (construction); Longitudinal-Float Operator (construction). May be designated: Screed Operator (construction); Spreader Operator (construction); Strike-Off-Machine Operator (construction); Vibrating-Screed Operator (construction).
GOE: 05.11.01 STRENGTH: M GED: R3 M1 L1 SVP: 3 DLU: 77

853.663-018 ROAD-OILING-TRUCK DRIVER (construction) alternate titles: bituminous-distributor operator; oil sprayer; oil-spreader operator; oil-spreader-truck operator; road-oil distributor

Drives and operates truck equipped with tank to spray oil or bituminous emulsions on road surfaces: Connects hose from storage tank to truck tank and moves lever to fill pressure tank with bituminous liquid. Regulates burner to heat liquid. Starts auxiliary pump. Drives truck at constant speed to obtain uniform distribution of oil. May signal worker to open discharge valve.
GOE: 05.11.01 STRENGTH: L GED: R3 M1 L1 SVP: 5 DLU: 77

853.663-022 STONE-SPREADER OPERATOR (construction) alternate titles: spreader box operator

Operates stone-spreading machine to lay gravel, stone, and cold-mix asphalt on road surfaces: Hooks spreader to rear of dump truck and trips truck tailgate latch. Signals DUMP-TRUCK DRIVER (any industry) to hoist dump body and dump material into spreader hopper. Adjusts hopper opening to ensure required amount of material is deposited on road surface. Drags material from truck bed, using shovel, to distribute material along length of hopper.
GOE: 05.11.01 STRENGTH: L GED: R3 M1 L1 SVP: 5 DLU: 77

853.665-010 ASPHALT-DISTRIBUTOR TENDER (construction) alternate titles: oil-distributor tender

Tends bituminous distributor on rear of road-oiling truck that sprays tar, asphalt, road oils, and emulsions over highways, streets, and parking areas: Snaps or screws on spray bars to attain required width of spray. Turns valve to regulate flow of material at specified rate. Moves levers to adjust height of spray bar from road surfaces. Signals ROAD-OILING-TRUCK DRIVER (construction) or ASPHALT-PAVING-MACHINE OPERATOR (construction) to start and stop truck or paving machine. Observes distribution of material over road surface to ensure uniform distribution. Turns handwheels to set angle and depth of screed. Verifies depth specifications of compacted asphalt, using depth gauge. Monitors flow gauges, tachometer, and temperature gauge. Oils and lubricates equipment.
GOE: 05.12.14 STRENGTH: L GED: R2 M2 L1 SVP: 2 DLU: 77

853.683-010 CURB-MACHINE OPERATOR (construction)

Drives and operates curbing machine to extrude concrete and asphalt curbing on parking lots: Reads specifications to determine location, width of base, and shape of curbing to be installed. Lays string between reference points and sprays paint along string to form curb-machine guide marks. Brushes cement and water mix onto pavement to provide bond between curbing and pavement. Selects and installs specified curb-forming die into machine, using handtools. Fills hopper of machine with asphalt or concrete mix, using shovel. Starts machine motor, engages clutch, and guides machine that extrudes curbing along guidelines. Smooths edges of curbing, using trowel, and cuts expansion joints in curbing at specified intervals, using edger. Maintains and repairs machine, using mechanics' handtools. Drives curbing machine onto truck trailer and drives truck to transport machine to job site.
GOE: 05.11.01 STRENGTH: H GED: R3 M2 L1 SVP: 4 DLU: 77

853.683-014 HEATER-PLANER OPERATOR (construction) alternate titles: asphalt-surface-heater operator; heater operator

Drives and controls machine that heats and scrapes road surface to smooth surface: Starts burner (heating unit) of machine. Presses lever to lower heating unit over pavement to soften pavement. Turns handwheels to lower and position scraper blade. Drives machine over road to smooth surface.
GOE: 05.11.01 STRENGTH: M GED: R3 M1 L1 SVP: 3 DLU: 77

853.683-018 JOINT-CLEANING-AND-GROOVING-MACHINE OPERATOR (construction) alternate titles: joint-cleaning-machine operator; pavement-joint-cleaning-machine operator ; safety-grooving-machine operator

Operates machine to clean expansion joint grooves or to cut new grooves in concrete or asphalt pavement, and to rout out cracks in concrete and asphalt pavement: Installs cutters in cutterhead and mounts cutterhead on cone of main drum shaft, using handtools. Guides machine along joint or crack, sighting through mirror fastened to front of machine. Lowers and raises cutter according to sounds of blades in contact with paved surface to cut safety grooves in specified paved sections. Measures to verify depth of grooves, using depth gauge and adjusts cutting blades according to depth specifications. Cleans and replaces cutters when dirty or worn.
GOE: 05.11.01 STRENGTH: M GED: R3 M1 L1 SVP: 4 DLU: 77

853.685-010 ASPHALT-HEATER TENDER (construction)

Tends portable or stationary heating unit to heat asphalt for application on road surfaces: Lights fire and opens fuel valves to regulate fuel supply. Screws hose connections to heater unit to connect circulating system between tank and unit. Starts pump to circulate asphalt through heating unit. Observes temperature gauge and adjusts blower and damper controls to regulate heat and maintain required temperature.
GOE: 05.12.10 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

859 EXCAVATING, GRADING, PAVING, AND RELATED OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with excavating, grading, paving, and related activities.

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859.133-010 SUPERVISOR, RIGHT-OF-WAY MAINTENANCE (utilities)

Supervises and coordinates activities of workers engaged in maintaining roads and flood-control facilities along electric power transmission line right-of-way: Reviews work orders to determine types of equipment required for job. Examines maps and blueprints to determine location of transmission line and directs crews to job site. Directs crews in constructing, maintaining, and rerouting sections of roadways and in repairing culverts, retaining walls, bridges, and dikes. Directs paving of areas in and around power plants. Instructs workers in operation of equipment, such as tractors and road graders. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

859.137-010 SUPERVISOR, GRADING (construction) alternate titles: supervisor, excavating

Supervises and coordinates activities of workers engaged in excavating and grading right-of-way for construction of projects, such as highways, streets, drainage ditches, and dams: Measures distances from reference points to locate boundaries of construction site. Directs work crews engaged in operating vehicles and machines to dump, scrape, and spread dirt. Verifies curvature of graded surface, using hand level. Performs other duties as described under SUPERVISOR (any industry) Master Title. May supervise bituminous paving crew [SUPERVISOR, ASPHALT PAVING (construction)]. May supervise work crew engaged in operating machines to tamp, roll, and smooth surface for subgrade of highway and be designated Supervisor, Fine Grading (construction). May supervise workers engaged in laying drainage tile and concrete and metal culverts and be designated Supervisor, Culvert Laying (construction). May be designated according to activity of workers supervised as Supervisor, Dumping (construction); Supervisor, Rough Grading (construction).
GOE: 05.11.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

859.137-014 SUPERVISOR, PILE DRIVING (construction)

Supervises and coordinates activities of workers engaged in driving pilings into ground to provide foundations for structures, such as buildings and bridges, and retaining walls for earth embankments, such as cofferdams: Directs workers engaged in operating machines to drive metal, concrete, and wood piling and metal and wood sheets (sheet piling). May direct workers engaged in setting charges of explosives to remove defective piling. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.11.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

859.137-018 SUPERVISOR, TUNNEL HEADING (construction) alternate titles: header boss; shifter

Supervises and coordinates activities of tunnel construction crew engaged in sinking shafts, boring tunnels, placing tunnel segments, moving shield forward, and excavating in front of sheild: Determines spacing, alignment, and depth of blast holes. Verifies that shoring, bracing, and movement of tunnel shield conform to safety regulations. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

859.261-010 BLASTER (any industry) alternate titles: firer; shooter

Assembles, plants, and detonates charges of industrial explosives to loosen earth, rock, stumps, or to demolish structures to facilitate removal: Examines mass, composition, structure, and location of object to be blasted, estimates amount and determines kind of explosive to be used, and marks location of charge holes for drilling. Assembles primer (blasting cap and fuse or electric squib and booster charge) and places primer with main charge in hole or near object to be blasted. Covers charge with mud, sand, clay, or other material and tamps firm to improve detonation and confine force of blast. Signals to clear area of personnel and equipment. Lights fuse or connects wires from charge to battery or detonator to detonate charge. May operate jackhammer, hand drill, or electric drill to bore holes for charges. May climb cliffs or banks to plant explosive charge, using ropes and safety harness, and be designated High Scaler (construction). May set and detonate explosive charges to improve flow of water into wells and be designated Shooter, Water Well (construction).
GOE: 05.10.06 STRENGTH: H GED: R4 M4 L4 SVP: 7 DLU: 77

859.267-010 STREET-OPENINGS INSPECTOR (utilities) alternate titles: public improvement inspector

Inspects construction and excavation of gas or electric sites to ensure precautions are taken to prevent damage to company facilities: Interprets blueprints and work order specifications and marks location of underground facilities and dimensions of trenches to be dug, using stakes and chalkline. Observes progress of work and reports extent of damages, such as broken or exposed pipes and cables or caved-in vaults, and urgency of repairs required. May coordinate gas or power construction and maintenance projects with underground work of municipal departments and other utilities.
GOE: 05.07.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

859.281-010 GRAVEL INSPECTOR (construction)

Tests samples of gravel to determine suitability for use in highway construction: Weighs sample before and after heating to determine moisture content. Screens gravel through numbered screens to determine coarseness of sample. May perform other duties in material testing laboratory, such as hardness tests, breakage tests, density tests for flexible base, compression and tensile strength tests, and tests for stress and strain [LABORATORY TESTER (any industry)].
GOE: 05.07.01 STRENGTH: L GED: R4 M3 L3 SVP: 5 DLU: 77

859.362-010 WELL-DRILL OPERATOR (construction) alternate titles: rotary-drill-rig operator; water-well driller

Sets up and operates portable drilling rig (machine and related equipment) to drill wells: Extends stabilizing jackscrews to support and level drill rig. Moves levers to control power-driven winch that raises and extends telescoping derrick. Bolts trusses to derrick and machine frame. Assembles drilling tools, using handtools or power tools. Moves levers and pedals to raise and lower drill tools and well casing into well bore. Moves levers and pedals and turns handwheels to control action of machine that drills or punches well bore and lowers casing into well. Pours water into well or pumps water or slush into well to cool drill bit and remove drillings. Listens to sounds of drilling machine and feels cable or brake to determine changes in rock formations being penetrated or variations in drilling process. Moves levers to adjust stroke and impact of cable tool drilling machine or changes drill bits of rotary drilling machine according to nature of strata encountered. Replaces drill bit with tool to collect samples of earth or rock being penetrated. Inspects core samples to determine nature of strata encountered or takes samples to laboratory for analysis. Records drilling progress and geological data. Splices worn or broken cable. Fabricates well casings and builds up worn drill bits, using oxyacetylene cutting and welding equipment. Retrieves lost equipment from bore holes, using fishing (specialized retrieval) tools and equipment. May repair drill bits, using forging furnace, hammer, and anvil. May be designated according to type drilling rig operated as Well-Drill Operator, Cable Tool (construction); Well-Drill Operator, Rotary Drill (construction). May operate well-drilling rig to restore irrigation, industrial, and domestic water wells to active production and be designated Well-Reactivator Operator (construction).
GOE: 05.11.03 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 77

859.682-010 EARTH-BORING-MACHINE OPERATOR (construction; utilities) alternate titles: earth-auger operator; hole-digger operator; post-hole digger

Operates earth-boring machine, mounted on truck or tractor, to dig holes for poles or posts: Sets auger of specified size into drill spindle, using bolts or pins. Starts drilling engine and moves levers to regulate rate of speed and depth of penetration of auger. May drive truck or tractor to work site. May operate hoist to lift power line poles into position in drilled holes.
GOE: 05.11.01 STRENGTH: M GED: R3 M1 L1 SVP: 4 DLU: 77

859.682-014 FOUNDATION-DRILL OPERATOR (construction)

Operates drilling unit, mounted on truck or crawler track, to drill holes for concrete pier and footing foundations: Raises and lowers boom to specified angle for drilling. Swings boom, controls hoist drums, raises and lowers drill, hoists drill bit, bell reamer, casing, and reinforcement steel into position, and controls rotary table that drives drill into earth. Observes drill stem during drilling operation and increases or decreases brake pressure on drill stem hoist drum to prevent swaying motion. Raises drill stem and swings boom to discharge dirt from drill bit or *bell reamer*. Observes type of earth formation penetrated to determine need for lowering casing into hole to seal off water and prevent cave-in of soft formations.
GOE: 05.11.01 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

859.682-018 PILE-DRIVER OPERATOR (construction) alternate titles: hoisting engineer, pile driving

Operates pile driver mounted on skids, barge, crawler treads, or locomotive crane to drive piling as foundations for structures, such as buildings, bridges, and piers: Moves hand and foot levers to control diesel-, electric-, gasoline-, or steam-powered hoisting equipment to position piling leads, hoist piling into leads, and position hammer over top of pile. Moves levers and turns valves to activate power-driven hammer, or raise and lower drophammer which drives piles to required depth. May be designated according to type of power used to activate pile driver as Compressed-Air-Pile-Driver Operator (construction); Diesel-Pile-Driver Operator (construction); or type of piles driven as Concrete-Pile-Driver Operator (construction); Sheet-Pile-Driver Operator (construction); Wood-Pile-Driver Operator (construction); or type of mounting used as Pile-Driver Operator, Barge Mounted (construction). May be designated: Drop-Hammer-Pile-Driver Operator (construction); Electric-Pile-Driver Operator (construction); Steam-Pile-Driver Operator (construction).
GOE: 05.11.01 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

859.683-010 OPERATING ENGINEER (construction; mine & quarry) alternate titles: heavy-equipment operator

Operates several types of power construction equipment, such as compressors, pumps, hoists, derricks, cranes, shovels, tractors, scrapers, or motor graders, to excavate, move, and grade earth, erect structural and reinforcing steel, and pour concrete or other hard surface paving materials: Turns valves to control air and water output of compressors and pumps. Adjusts handwheels and depresses pedals to drive machines and control attachments, such as blades, buckets, scrapers, and swing booms. Repairs and maintains equipment. May operate machinery on sales lot or customer's property to demonstrate saleable features of construction equipment and be designated Demonstrator, Construction Equipment (wholesale tr.).
GOE: 05.11.01 STRENGTH: M GED: R3 M1 L2 SVP: 6 DLU: 82

859.683-014 OPERATING-ENGINEER APPRENTICE (construction; mine & quarry) alternate titles: heavy-equipment-operator apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.

GOE: 05.11.01 STRENGTH: M GED: R3 M1 L2 SVP: 6 DLU: 77

859.683-018 RAILWAY-EQUIPMENT OPERATOR (r.r. trans.)

Operates several types of heavy equipment, such as rail-mounted tamping machines, brooms, graders, and ballast cleaning machines to tamp ballast beneath and between ties, to clean tracks, to clean and redistribute ballast, and to grade and level ballast on railroad tracks: Pulls levers and depresses pedals to drive machines and control attachments, such as blades, hydraulic turntables, jacks, brooms, and tampers. Tightens loose bolts and adjusts blades, using wrenches. Lubricates machines, changes oil, and fills hydraulic reservoirs to specified levels. May be designated according to type equipment operated as Ballast-Cleaning-Machine Operator (r.r. trans.); Ballast-Regulator Operator (r.r. trans.); Tamping-Machine Operator (r.r. trans.); Track-Broom Operator (r.r. trans.).

GOE: 05.11.01 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

859.683-022 REINFORCING-STEEL-MACHINE OPERATOR (construction)

Drives and operates machine that lays, spaces, and automatically ties steel rods used to reinforce concrete highway paving: Starts machine, engages clutch, and shifts gears to control machine's movement along concrete forms. Observes function of machine to detect irregular spacing of rods and missed ties. Notifies supervisor of equipment malfunction. Maintains equipment according to specifications.

GOE: 05.11.01 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

859.683-026 ROAD-MIXER OPERATOR (construction) alternate titles: rotary-soil-stabilizer operator; roto-mixer operator; stabilizer operator; stabilizing-machine operator; traveling-plant operator

Drives and operates machine that mixes waterproofing and binding material with soil to stabilize soil for road surfaces and airport runways: Pushes levers and turns wheels to set depth of scoop and rotary blades that pick up and pulverize soil. Starts engine to propel machine and power-rotary digging and mixing blades. Starts pump and adjusts valve to feed waterproofing compounds and binding materials, such as cement, chemicals, and bituminous binders into mixing mechanism. Steers machine in prescribed path. Inspects earth falling from machine and adjusts valves to regulate flow of liquid, judging content of mixture by appearance of poured soil. May be designated according to type of equipment operated as Pulvi-Mixer Operator (construction); Single-Pass-Soil-Stabilizer Operator (construction).

GOE: 05.11.01 STRENGTH: L GED: R3 M1 L1 SVP: 5 DLU: 77

859.683-030 ROAD-ROLLER OPERATOR (construction) alternate titles: roller operator; roller, pneumatic; roll operator

Drives heavy rolling machine (road roller) to compact earth fills, subgrades, flexible base, and bituminous surface to grade specifications preparatory to construction of highways, streets, and runways: Moves levers, depresses pedals, turns handwheels, and pushes throttle to control and guide machine. Drives machine in successive overlapping passes over surface to be compacted. Determines speed and direction of machine, based on knowledge of compressibility of material under changing temperatures, so that ridges are not formed by excessive pressure. Pushes hand roller and pounds surfaces, using hand tamp, or guides portable power roller over areas not accessible to road roller. May be designated according to surface rolled as Road-Roller Operator, Hot Mix (construction); Subgrade-Roller Operator (construction); or according to source of power used as Diesel-Roller Operator (construction); Gas-Roller Operator (construction).

GOE: 05.11.01 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

859.684-010 LANE-MARKER INSTALLER (construction)

Installs button-type lane markers along paved highways and streets, using handtools: Sets signs and cones adjacent to work site to divert flow of traffic. Measures and marks installation locations between survey control points, using tape, string, and chalk. Blends epoxy compounds to form specified mix, using spoon. Applies epoxy to marked locations along roadway, using putty knife, and twists plastic markers to position into epoxy. Sights along button line to verify alignment.

GOE: 05.12.14 STRENGTH: M GED: R2 M2 L1 SVP: 3 DLU: 77

859.687-010 BLASTER HELPER (any industry) alternate titles: powder carrier; shooter's helper

Assists BLASTER (any industry) in placing and detonating explosives used to loosen earth and rock, performing any combination of following tasks: Carries explosive bags, cartridges, or powder to blasting area and deposits explosive device in previously drilled holes as directed. Shovels earth or drill cuttings into holes after placement of charge and tamps earth to confine and increase force of detonation, using shovel or pole. Connects explosive cord to blasting cap and lead wire to firing device, or attaches fuse to charge. Fires charge on signal from BLASTER (any industry). Performs other duties as described under HELPER (any industry) Master Title.

GOE: 05.12.02 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

86 CONSTRUCTION OCCUPATIONS, N.E.C.

This division includes craft and noncraft occupations, not elsewhere classified, concerned with building and repairing structures.

860 CARPENTERS AND RELATED OCCUPATIONS

This group includes occupations concerned with fabricating, installing, and repairing structures and structural members made of wood and materials that can be worked like wood, such as plastic and fiberglass, using handsaws, ripsaws, planers, braces, hammers, and other carpentry tools and woodworking machines.

860.131-010 SUPERVISOR, ACOUSTICAL TILE CARPENTERS (construction)

Supervises and coordinates activities of workers engaged in installing acoustical tile to walls and ceilings of buildings: Measures and marks centerlines, guidelines, and location of hooks that hold ceiling suspension grid, according to blueprints and written specifications, to lay out work, using level, plumbline, chalkline, and tape measure. Directs workers in various installation tasks, such as suspending metal grids from ceilings, aligning and butting tile with joints of previously laid tile, and securing tiles with nails, screws, staples, or glue. Inspects smoothness of surfaces, alignment and butting of tiles, and fastening of tile for adherence to specifications. Performs other duties as described under SUPERVISOR (any industry) Master Title.

GOE: 05.10.01 STRENGTH: H GED: R4 M4 L3 SVP: 8 DLU: 77

860.131-014 SUPERVISOR, BOATBUILDERS, WOOD (ship-boat mfg.) alternate titles: carpenter supervisor, wooden ship

Supervises and coordinates activities of workers engaged in building, repairing, or modifying wooden boats, life rafts, floats, or pontoons: Assigns workers to specific duties, such as building pilot houses, cockpits, or cabins, installing masts or booms, laying keels and installing ribs, and fabricating and installing rudders and rudder controls. Directs workers in such procedures as installing skylights, desks, chairs, cabins, and other structural units and furnishings. Inspects specific assemblies, such as door panels, ceiling panels, and wall coverings, for conformance to dimensional specifications and quality standards, using level, square, and measuring instruments and applying knowledge of carpentry. Trains new workers in use of equipment and tools. Performs other tasks as described under SUPERVISOR (any industry) Master Title.

GOE: 05.05.02 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 80

860.131-018 SUPERVISOR, CARPENTERS (construction)

Supervises and coordinates activities of workers engaged in construction, installation, and repair of wooden structures and fixtures: Examines blueprints to determine dimensions of structure. Lays out floorplan and cabinetwork, using rule, framing square, and calipers. Selects materials and structural units, such as lumber, prefabricated doors and cabinets of wood or plastic, and paneling, and inspects them to ensure conformance with provisions of building code and local ordinance. Determines sequence of activities concerned with fabrication, assembly, and erection of structure. Assigns workers to such tasks as cutting material to size, building concrete forms, erecting wooden framework, and laying flooring. Inspects work performed by subcontractors, including ductwork, wiring, and pipe installations, to ensure conformance with specifications. Installs doors, builds stairs, and lays hardwood floors. May supervise workers engaged in building timber structures, such as cofferdams, trestles, and supports for concrete forms. May make cost estimates for contracts. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to area of specialization as Bowling-Alley-Installation Supervisor (construction); Cofferdam-Construction Supervisor (construction); Form-Building Supervisor (construction); Timbering Supervisor (construction).

GOE: 05.05.02 STRENGTH: M GED: R4 M4 L3 SVP: 8 DLU: 77

860.131-022 SUPERVISOR, JOINERS (ship-boat mfg.)

Supervises and coordinates activities of workers engaged in fabricating, installing, and repairing wooden furnishings in ships or boats: Assigns specific tasks to workers, such as installing interior wood paneling in cabins, laying tile or linoleum on decks, installing soundproofing materials to equipment spaces, and installing laminated plastic or fiberboard surfaces on tables or workbenches. Confers with supervisory personnel of other crafts to coordinate worker assignments and to achieve maximum production. Performs other duties as described under SUPERVISOR (any industry) Master Title.

GOE: 05.05.02 STRENGTH: L GED: R4 M4 L3 SVP: 8 DLU: 77

860.131-026 SUPERVISOR, MOLD CONSTRUCTION (concrete prod.)

Supervises and coordinates activities of workers engaged in fabrication and repair of wooden forms and molds used for casting concrete products: Requisitions materials, tools, and parts for machinery required to fabricate or repair wooden molds and forms. Inspects products at various stages of construction to ensure conformance with standards. Measures, cuts, shapes, and assembles materials to repair or construct molds and forms according to blueprint specifications, using ruler, handtools, and power tools. Performs other duties as described under SUPERVISOR (any industry) Master Title.

GOE: 06.01.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

860.137-010 CARPENTER-LABOR SUPERVISOR (construction)

Supervises and coordinates activities of workers engaged in supplying materials to workers who construct, erect, install, and repair wooden structures and

fixtures. Directs work crew to strip forms and dismantle temporary wooden structures. May supervise workers engaged in pouring concrete into wooden forms. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

860.261-010 CARPENTER INSPECTOR (any industry)

Inspects buildings, desks, cabinets, tables, and other wooden structures and equipment in establishments to ensure specified standards of maintenance. Reports nature and extent of repairs needed or directs CARPENTERS, MAINTENANCE (any industry) to make repairs. Keeps records of conditions before and after repairs. May make repairs within limits of preventive maintenance.
GOE: 05.07.01 STRENGTH: M GED: R4 M2 L3 SVP: 7 DLU: 77

860.281-010 CARPENTER, MAINTENANCE (any industry) alternate titles: carpenter, repair

Constructs and repairs structural woodwork and equipment in establishment, working from blueprints, drawings, or oral instructions: Builds, repairs, and installs counters, cabinets, benches, partitions, floors, doors, building framework, and trim, using carpenter's hand tools and power tools. Installs glass in windows, doors, and partitions. Replaces damaged ceiling tile, floor tile, and wall coverings. May build cabinets and other wooden equipment in carpenter shop, using woodworking machines, such as saws, shaper, and jointer [CABINETMAKER (woodworking) 660.280-010]. May install items, such as window shades, venetian blinds, and curtain rods, wall fans, and door locks for tenants. May be designated according to place at which work is performed as Carpenter, Mine (mine & quarry); or according to specific items made or maintained as Flume Maker (mine & quarry); Frame Maker (leather mfg.); Meat-Cutting-Block Repairer (any industry).
GOE: 05.05.02 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 86

860.281-014 CARPENTER, SHIP (ship-boat mfg.)

Fabricates and repairs ship's structural woodwork and wooden gear according to blueprints, drawings, and diagrams: Builds floors, doors, and partitions, using woodworking machines, saws, hammers, braces, and other carpenters' tools. Moves controls of winch and windlass to raise or lower anchor. Greases running gear and anchor windlass. Replaces defective chains or stanchions on lifelines or guardrails. Sounds water tanks with tape and plumb bob. Computes and logs sounding findings.
GOE: 05.05.02 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

860.361-010 BOATBUILDER, WOOD (ship-boat mfg.)

Fabricates, repairs, or modifies wooden boats, life rafts, and pontoons, according to blueprints, using handtools, power tools, and measuring instruments: Lays out full-scale outline of boat on mold-loft floor, using crayon, scales, and protractor, following blueprints and table of offsets. Establishes dimensional reference points on layout and makes templates of parts. Scribes dimensional lines on lumber, following templates. Cuts and forms parts, such as keel, ribs, and sidings, using carpenter's handtools and power tools [MACHINIST, WOOD (woodworking) 669.380-014]. Attaches overhead hoist to precut sections of boat hull and signals coworker to position timbers according to layout of boat, using hoist. Secures timbers together following specified procedure, using adhesive, hardware, and handtools or power tools. Assembles shell of boat by forming steam-softened sidings on mold, removing mold, and securing sidings to keel, or by securing ribs to keel and covering ribs with planking. Builds and installs structures, such as pilot house, cabin, rudder, and foundations for machinery, shafting, and propeller's supports, and installs preformed decking, masts, booms, and ladders, according to blueprints, using handtools, power tools, scale, calipers, and gauges. Work is usually performed with other workers. May caulk seams [WOOD CAULKER (ship-boat mfg.) 843.384-010]. May specialize in fabricating particular part of boat and be designated Bulkhead Carpenter (ship-boat mfg.); Bulwark Carpenter (ship-boat mfg.); Hull Builder (ship-boat mfg.); Keel Assembler (ship-boat mfg.).
GOE: 05.05.02 STRENGTH: M GED: R3 M3 L2 SVP: 6 DLU: 80

860.361-014 BOATBUILDER APPRENTICE, WOOD (ship-boat mfg.)

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.02 STRENGTH: M GED: R3 M3 L2 SVP: 6 DLU: 77

860.381-010 ACOUSTICAL CARPENTER (construction) alternate titles: acoustical-material worker; metal-tile lather

Mounts acoustical tile to walls and ceilings of buildings to reduce reflection of sound and to decorate rooms: Measures and marks surface to lay out work, according to blueprints and drawings. Inspects furrings, mechanical mountings, and masonry surface for plumbness and level, using spirit or water level. Nails or screws molding to wall to support and seal joint between ceiling tile and wall. Scribes and cuts edges of tile to fit wall where wall molding is not specified. Mounts tiles, using any of following methods: (1) Applies cement to back of tile and presses tile into place, aligning with layout marks and joints of previously laid tile. (2) Nails channels or wood furring strips to surfaces to provide mounting for tile. Places building paper between tile and furring strip preparatory to application of butt-edge tile. Nails, screws, or staples tile to wooden furring strips. (3) Hangs dry lines (stretched string) to wall molding to guide positioning of main runners. Drives hanger inserts into reinforced concrete ceiling, using power fastening tool, and suspends and bends hanger wires at points touching dry lines. Threads wires through holes in main runners, and cuts and attaches cross supports to suspended runners and wall molding, using snips, clips, and rivet gun. Cuts tiles for fixtures and borders, using keyhole saw, and inserts tiles into supporting framework. May wash concrete surfaces with washing soda and zinc sulfate solution before mounting tile to increase adhesive qualities of surfaces.
GOE: 05.05.02 STRENGTH: M GED: R4 M3 L2 SVP: 7 DLU: 77

860.381-022 CARPENTER (construction)

Constructs, erects, installs, and repairs structures and fixtures of wood, plywood, and wallboard, using carpenter's handtools and power tools, and conforming to local building codes: Studies blueprints, sketches, or building plans for information pertaining to type of material required, such as lumber or fiberboard, and dimensions of structure or fixture to be fabricated. Selects specified type of lumber or other materials. Prepares layout, using rule, framing square, and calipers. Marks cutting and assembly lines on materials, using pencil, chalk, and marking gauge. Shapes materials to prescribed measurements, using saws, chisels, and planes. Assembles cut and shaped materials and fastens them together with nails, dowel pins, or glue. Verifies trueness of structure with plumb bob and carpenter's level. Erects framework for structures and lays subflooring. Builds stairs and lays out and installs partitions and cabinet work. Covers subfloor with building paper to keep out moisture and lays hardwood, parquet, and wood-strip-block floors by nailing floors to subfloor or cementing them to mastic or asphalt base. Applies shock-absorbing, sound-deadening, and decorative paneling to ceilings and walls. Fits and installs prefabricated window frames, doors, doorframes, weather stripping, interior and exterior trim, and finish hardware, such as locks, letterdrops, and kick plates. Constructs forms and chutes for pouring concrete. Erects scaffolding and ladders for assembling structures above ground level. May weld metal parts to steel structural members. When specializing in particular phase of carpentry, is designated according to specialty as Combination-Window Installer (construction); Lay-Out Carpenter (construction). When specializing in finish carpentry, such as installing interior and exterior trim, building stairs, and laying hardwood floors, is designated Finish Carpenter (construction). When erecting frame buildings and performing general carpentry work in residential construction, is designated House Carpenter (construction). May remove and replace sections of structures prior to and after installation of insulating materials and be designated Building-Insulating Carpenter (construction; retail trade). May perform carpentry work in construction of walk-in freezers and environmental test chambers and be designated Carpenter, Refrigerator (svc. ind. mach.). May be designated: Door Hanger (construction); Finished-Hardware Erector (construction); Garage-Door Hanger (construction); Hardwood-Floor Installer (construction); Jalousie Installer (construction); Stair Builder (construction); Trim Setter (construction); Weather Stripper (construction); Wood-Sash-and-Frame Carpenter (construction); Wood-Strip-Block Floor Installer (construction).
GOE: 05.05.02 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 88

860.381-026 CARPENTER APPRENTICE (construction)

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.02 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

860.381-030 CARPENTER, BRIDGE (r.r. trans.) alternate titles: bridge repairer

Repairs wooden railroad bridges, trestles, and tunnel supports, and replaces decayed, split, or crooked timbers, working as member of crew: Strikes timbers with hammer and listens to sound to detect decay. Installs temporary support to hold structure in place while decayed timber is removed. Loosens nuts and bolts that hold timber in place, using hand wrench or air-powered wrench. Removes timber, using crowbar, or hammers on timber to slide it out of place. Measures and cuts replacement timber to required size, using handsaw or electric saw. Bores bolt holes in timber, using electric drill. Slides new timber into place and secures it with nuts and bolts. May replace defective railroad ties supporting track on bridge.
GOE: 05.05.02 STRENGTH: H GED: R4 M2 L2 SVP: 7 DLU: 77

860.381-034 CARPENTER, MOLD (brick & tile; concrete prod.) alternate titles: mold-forms builder; patternmaker

Constructs and repairs wooden brick-and-tile molds and patterns or constructs wooden forms for molding concrete mixtures in manufacture of concrete products, and performs general maintenance carpentry duties: Lays out and marks measurements on material from blueprints, drawings, or samples, shapes material to size with handtools or power saw, fits mold sections with hand plane, chisel, or jointer, and joins sections with wood screws to construct new molds or patterns. Removes damaged or worn parts and fashions and screws new parts in place to repair molds. Performs general maintenance carpentry, such as repairing wooden doors, sills, floors, and stairways [CARPENTER, MAINTENANCE (any industry)]. May cut sheet metal mold linings and edge coverings to size, using chisel, hacksaw, and shears, and screw them in place. May make rubber molds when irregular surfaces (undercuts) of product require flexible molds. May make plastic molds by applying successive layers of liquid plastic and fiberglass cloth around model.
GOE: 05.05.02 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

860.381-038 CARPENTER, RAILCAR (railroad equip.)

Installs and repairs woodwork, such as flooring, wall linings, sidings, posts, sills, and window sashes, in railcars, including freight cars and cabooses: Inspects interior of railcar to detect broken, damaged, or cracked woodwork. Estimates amount and kind of lumber required for repairs or installation. Measures

and cuts required lumber and plywood materials to specified size, using ruler and handsaw or power saw. Repairs or replaces defective woodwork, using handtools. Installs tongued-and-grooved or plywood flooring and wall linings, using pneumatic squeezing, nailing, and stapling devices. Replaces broken door and window glass. May install aisle runners, rafters, and roof canvas to flooring and roofs of streetcars or cable cars and be designated Carpenter, Streetcar (railroad equip.).
GOE: 05.05.02 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

860.381-042 CARPENTER, ROUGH (construction) alternate titles: bracer

Builds rough wooden structures, such as concrete forms, scaffolds, tunnel and sewer supports, and temporary frame shelters, according to sketches, blueprints, or oral instructions: Examines specifications to determine dimensions of structure. Measures boards, timbers, or plywood, using square, measuring tape, and ruler, and marks cutting lines on materials, using pencil and scriber. Saws boards and plywood panels to required sizes. Nails cleats (braces) across boards to construct concrete-supporting forms. Braces forms in place with timbers, tie rods, and anchor bolts, for use in building concrete piers, footings, and walls. Erects chutes for pouring concrete. Cuts and assembles timbers to build trestles and cofferdams. Builds falsework to temporarily strengthen, protect, or disguise buildings undergoing construction. Erects scaffolding for buildings and ship structures and installs ladders, handrails, walkways, platforms, and gangways. Installs door and window bucks (rough frames in which finished frames are inserted) in designated positions in building framework, and braces them with boards nailed to framework. Installs subflooring in buildings. Nails plaster grounds (wood or metal strips) to studding to provide guide for PLASTERER (construction). Fits and nails sheathing (first covering of boards) on outer walls and roofs of buildings. Builds sleds from logs and timbers for use in hauling camp buildings and machinery through wooded areas. When specializing in particular phase of rough carpentry, is designated according to specialty as Carpenter, Cradle And Dolly (ship-boat mfg.); Dock Builder (construction); Falsework Builder (construction); Scaffold Builder (construction; ship-boat mfg.); Sheather (construction); Timber Setter (construction). When building and repairing timber structures which support sawmill machinery, is designated Construction Millwright (saw. & plan.). When performing rough carpentry work above ground on sewer or tunnel projects, is designated Surface Carpenter (construction).
GOE: 05.05.02 STRENGTH: H GED: R4 M4 L2 SVP: 7 DLU: 77

860.381-046 FORM BUILDER (construction) alternate titles: carpenter, form; wood-form builder

Constructs built-in-place or prefabricated wooden forms, according to specifications, for molding concrete structures: Studies blueprints and diagrams to determine type and dimension of forms to be constructed. Saws lumber to blueprint dimensions, using handsaw or power saw, and nails lumber together to make form panels. Erects built-in-place forms or assembles and installs prefabricated forms on construction site according to blueprint specifications, using handtools, plumb rule, and level. Inserts spreaders and tie rods between opposite faces of form to maintain specified dimensions. Anchors and braces forms to fixed objects, using nails, bolts, anchor rods, steel cables, planks, and timbers.
GOE: 05.05.02 STRENGTH: H GED: R4 M3 L2 SVP: 7 DLU: 77

860.381-050 JOINER (ship-boat mfg.) alternate titles: boat joiner

Fabricates, assembles, installs, or repairs wooden furnishings in ships or boats according to blueprints, using handtools, power tools, and measuring instruments: Lays out, cuts, assembles, and installs wooden parts, such as deckhouses, doors, sashes, paneling, battery cribs, and refrigerator doors, using woodworking handtools and power tools, scales, square, and calipers. Installs hardware and gaskets, using handtools. Lays linoleum on deck or ladder treads, using mastic, spreaders, and linoleum-cutting tools. Installs fiberglass or cork insulation on sides of ship below waterline to prevent water condensation. Cuts, fits, and installs glass in skylights, cabins, and other parts of ship or boat. Molds, bends, and laminates wood to form parts of ship, using steam chambers, clamps, glue, and jigs. Fabricates, assembles, and installs desks, chairs, and cabinets, using woodworking machinery, such as jigsaws, planers, jointers, mortisers, and tenoners. Shapes irregular parts to fit and joins matched grain wood, such as oak, mahogany, and teak.
GOE: 05.05.02 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 80

860.381-054 JOINER APPRENTICE (ship-boat mfg.)

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.02 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

860.381-058 SHIPWRIGHT (ship-boat mfg.) alternate titles: carpenter, ship; woodworker

Constructs or repairs ships, following blueprints or ship's plans: Sights, plots, and marks reference points and lines on building dock or shipway to maintain alignment of vessel during construction or repair, using transit, plumb bob, tapes, and levels. Builds keel and bilge blocks, cradles, and shoring for supporting ships in drydock, marine railways, shipways, or building docks, using woodworking handtools and power tools. Positions and secures blocking and other structures on dock platform, according to ship's blueprints. Aligns vessel over blocks [DOCK HAND (ship-boat mfg.)]. Establishes reference points and lines on ship's hull for locating machinery and other equipment, in accordance with ship's alignment and shape. Fabricates and installs furring pieces, aprons, uprights, and other wood framing in ship. Shapes, finishes, and installs wooden spars, masts, and cargo and boat booms. Trims wooden frames and other timbers, using broadax and adz. Spikes or bolts metal fittings, plates, and bulkheads to wooden parts of ship, using brace and bits, augers, mauls, and wrenches.
GOE: 05.05.02 STRENGTH: M GED: R4 M4 L3 SVP: 8 DLU: 77

860.381-062 SHIPWRIGHT APPRENTICE (ship-boat mfg.) alternate titles: carpenter apprentice, ship

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.02 STRENGTH: M GED: R4 M4 L3 SVP: 8 DLU: 77

860.381-066 TANK BUILDER AND ERECTOR (construction) alternate titles: tank maker, wood

Constructs and erects wooden tanks for storing liquids according to blueprint specifications: Cuts and shapes tank parts from redwood, fir, and cypress lumber, using power-driven saws and carpenter's handtools. Fits parts together and tests holding properties of tanks and adjusts tank sections to make them watertight and airtight. Directs hoisting of tank parts onto buildings and assembles them, using handtools.
GOE: 05.05.02 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

860.381-070 TANK ERECTOR (construction) alternate titles: carpenter, wooden-tank erecting

Assembles and erects precut parts at work site to construct wooden storage or processing tanks and vats: Computes reference points from blueprints, diagrams, and other specifications, using measuring instruments. Measures and marks position of dunnage (subjoints) on foundation and lifts dunnage into place, manually or using powered hoist. Wedges leveling shims under dunnage, using carpenter's level and handtools. Forms tank bottoms, headings (ends) for horizontally mounted circular tanks, and ends and sides for rectangular tanks, by inserting wooden dowels into corresponding holes in sides of boards and hammering boards together. Hammers croze of staves over edge of tank bottoms or heads to form sides of circular tanks, and hammers endboards into crozed bottoms and sides to assemble rectangular tanks. Inspects and shapes parts for fit during assembly, using hand plane or saw and carpenter's rule. Positions metal hoops or rods around tank, affixes washers, lugs, and nuts, and tightens nuts, using wrenches. Positions tank or vat on foundation, using powered hoist and secures them on foundation, using handtools. May assemble scaffolding, using handtools. May cut openings for drain outlets, fill pipes, and manholes, using drills and saws. May install metal outlet covers and force sealant between metal flanges and wooden parts of tank, using wrenches and caulking tools. May install mechanical agitators or other machinery in tank [MILLWRIGHT (any industry)].
GOE: 05.05.02 STRENGTH: V GED: R4 M3 L3 SVP: 7 DLU: 77

860.664-010 CARPENTER I (mfd. bldgs.)

Erects prefabricated buildings at building sites, using carpenter's handtools: Directs TRUCK-CRANE OPERATOR (any industry) in positioning floor, wall, ceiling, and roof panels on house foundation. Aligns and fastens panels, using chalkline, hammer, and nails. Cuts openings in floor panels for wiring, using power saw. Measures, cuts, and fastens siding, exterior trim, and sheetrock to frame members, using tape measure, power saw, nails, and hammer. May direct workers engaged in assembling prefabricated buildings.
GOE: 05.10.01 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

860.664-014 JOINER HELPER (ship-boat mfg.)

Performs any combination of following tasks to assist JOINER (ship-boat mfg.) in constructing and repairing wooden and plastic parts of vessels, such as cabin paneling, cabinets, and deck structures: Cuts wooden battens to specified size, using portable power saw. Attaches battens to bulkheads, using glue, screws, and powered screwdriver. Cuts mahogany, oak, or birch paneling to specified size, and holds paneling in place while JOINER (ship-boat mfg.) secures paneling to battens. Cuts insulating or sound-absorbing material, such as fiberglass, cork, or felt, into specified shape, following templates or oral directions and using shears, rules, knife, or straightedge. Hammers retaining holders into studs to hold insulation in place and tapes seams of insulation to obtain smooth joint. Spreads rubber or plastic cement on decks to be covered with tile or linoleum. Cuts tile or linoleum to fit in corners and around equipment, using cutting tools. Applies glue to joints or edges of cabinet or furniture parts, using brush, assembles parts together, and places assembled parts in clamps until glue has dried. Covers tables and desks with laminated plastic covering material. Smooths boat surfaces to remove defects, such as ridges, tool marks, glue, and excess caulking material, using hand sander.
GOE: 05.10.01 STRENGTH: M GED: R3 M2 L1 SVP: 4 DLU: 77

860.664-018 SHIPWRIGHT HELPER (ship-boat mfg.) alternate titles: carpenter helper; woodworker helper

Performs following tasks to assist SHIPWRIGHT (ship-boat mfg.) in constructing and repairing ships: Holds plumb bobs, sighting rods, and other equipment to aid SHIPWRIGHT (ship-boat mfg.) in establishing reference points and lines of ship, to position ship in drydock or to load machines and equipment. Positions and secures keel and bilge blocks, cradles, shoring, and other structures in drydock or shipway to support ship, using handtools and power tools. Drives wedges or packing between ship's hull and blocks to adjust height of blocking, using sledge. Obtains tools, equipment, and materials from storage

and carries them to work site. Assembles plates, bolts, and other metal fittings. Drills bolt holes in timbers or decking and tightens bolts, using portable power drill and handtools and power wrenches.
GOE: 05.12.12 STRENGTH: H GED: R2 M1 L1 SVP: 4 DLU: 77

860.681-010 CARPENTER II (mfd. bldgs.)
Assembles prefabricated building wall panels, using handtools and power tools: Reads blueprints to determine type of wall panel required. Selects precut studs, measures top and bottom leaders, and marks studs and leader locations, using tape measure. Lays materials on worktable according to markings to fabricate wall frame. Aligns sheetrock on frame. Locates, marks, and cuts receptacle openings in sheetrock, using tape measure, template, and handsaw. Reads specification sheet to determine types of windows and siding required on outside of wall panel. Selects and installs prefabricated windows in prepared openings, using hammer and nails. Measures, marks, cuts, and fastens siding and molding to form outside wall of panel, using tape measure and handtools. Moves completed panel to shipping area, using electric hoist. May direct workers in fastening studs and sheetrock. May operate nailing and routing machines to assemble wall panels and components.
GOE: 06.02.22 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

860.684-010 BUILDER, BEAM (mfd. bldgs.)
Cuts and assembles lumber to build false ceiling beams for prefabricated homes: Measures and marks lumber according to specification sheet for beam dimensions, using tape measure and marker. Positions and cuts lumber on workbench, using table saw. Aligns and interlaces different sizes of lumber to obtain specified dimension of beams. Measures beam to determine conformance to specifications, using tape measure. Stores beams on storage rack.
GOE: 06.04.25 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 77

860.684-014 SIDER (mfd. bldgs.)
Applies siding and installs prefabricated doors and windows to exterior wall panels of prefabricated and modular homes, following work orders and using handtools: Lays out siding on sheathing, and cuts siding to fit, using square and hand or portable power saw. Fastens siding to sheathing using hammer, nails, and power tacker. Drills vent holes in wall panels, using power drill, and inserts vents. Fastens tarpaper weather stripping around perimeter of door and window openings, using power tacker. Positions and aligns windows and doors in openings, using tape measure. Fastens doors and windows to wall panel studs, using hammer and nails. Moves completed panels to storage area, using electric hoist. May install precut insulation between wall studs.
GOE: 05.10.01 STRENGTH: H GED: R3 M1 L2 SVP: 3 DLU: 77

860.684-018 CAR BLOCKER (any industry)
Fabricates and installs braces to prevent shifting or damage to products shipped in railroad cars: Determines size of bracing needed, using tape measure. Selects lumber and cuts boards, using power saw. Assembles boards and fits or wedges braces into position to prevent load from shifting during transit. Nails braces to car floor or walls, using hand- or air-powered hammer. May secure load with banding machine and clincher. May place and inflate dunnage bags with compressed air between sections of load or between ends and sides of car and load. May cover load with tarpaulin.
GOE: 05.12.12 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 86

860.684-022 DISPLAY FABRICATOR (fabrication, nec)
Fabricates and assembles parts to manufacture smoking pipe sales displays: Traces pattern or sketch onto construction material or marks dimensions of parts on material, using ruler and pencil. Cuts out display parts along marked lines, using machines such as bandsaw and variety saw. Wipes stain on parts, using rag, or applies paint or varnish, using portable spray gun. Places parts in specified sequence and assembles parts to form displays, using pneumatic stapler. Assembles packing carton, inserts display into carton, and seals carton, using pneumatic stapler. Attaches shipping information to carton, using pneumatic stapler, or writes address on carton, using crayon.
GOE: 06.04.22 STRENGTH: H GED: R3 M2 L2 SVP: 2 DLU: 86

861 BRICK AND STONE MASONS AND TILE SETTERS

This group includes occupations concerned with preparing and laying brick, concrete block, tile, marble, and related materials, using chisels, hammers, trowels, and other handtools and implements.

861.131-010 BRICKLAYER SUPERVISOR (construction)
Supervises and coordinates activities of workers engaged in laying brick, tile, cinderblock, and other materials to construct or repair structures, such as walls, arches, sewers, and partitions: Assigns workers to specific duties. Inspects work in progress to determine conformance to specifications. Trains new workers in use of handtools. May supervise workers engaged in laying only tile and be designated Tile Setter Supervisor (construction). Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.01 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

861.131-014 CHIMNEY SUPERVISOR, BRICK (construction)
Supervises and coordinates activities of CHIMNEY BUILDERS, BRICK (construction) engaged in erecting brick chimneys or smokestacks for industrial plants: Measures distances and lays first tier of bricks to lay out specified circumference and curvature of chimney. Directs workers engaged in raising scaffolds and inspects scaffolding for conformance to safety regulations. Inspects work to ensure conformity to specifications, using spirit level. Lays out openings in chimney and supervises installation of templates. May keep time and progress records. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.01 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

861.131-018 STONEMASON SUPERVISOR (construction)
Supervises and coordinates activities of workers engaged in erecting stone structures, such as piers, walls, and abutments and laying walks, curbstones, and other types of masonry. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

861.131-022 SUPERVISOR, MARBLE (construction)
Supervises and coordinates activities of workers engaged in cutting, tooling, and setting marble and granite slabs in construction and repair of floors and walls of buildings: Estimates amount and type of materials needed. Trains new workers in use of handtools and methods of cutting, tooling, and setting of marble or granite slabs. Maintains time reports. Inspects work in progress to determine adherence to specifications. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.01 STRENGTH: H GED: R4 M3 L3 SVP: 8 DLU: 77

861.131-026 SUPERVISOR, TERRAZZO (construction)
Supervises and coordinates activities of workers engaged in mixing, applying, and finishing cement, sand, pigment and marble chips to floors, stairways and cabinet fixtures: Estimates materials needed. Trains new workers in use of handtools and equipment for mixing, applying, and finishing terrazzo surfaces. Prepares production reports. Inspects work in progress to determine adherence to specifications. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.01 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

861.134-010 SUPERVISOR, SMOKE CONTROL (steel & rel.)
Supervises and coordinates activities of workers engaged in patching and repairing coke oven components to ensure oven smoke emissions comply with company and government air pollution regulations: Observes oven operations to detect smoke emissions and inspects ovens to ascertain cause of smoke. Determines oven repairs required, utilizing knowledge of oven structure, and confers with designated personnel to coordinate scheduling of repairs. Reviews technical literature on recent developments in controlling smoke emissions and consults with engineering and management personnel to evaluate feasibility of implementing new methods. Develops smoke emissions programs, conducts tests to determine effectiveness of programs, and prepares reports of test results for management. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.04.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 86

861.361-010 COMPOSITION-STONE APPLICATOR (construction)
Casts composition stone and applies it over surfaces of structures to provide decorative coating: Nails tar paper and lath over wall to be covered. Mixes and spreads mortar over lath with trowel, to form base for precast stone. Measures wall surface and marks lines with straightedge to lay out prescribed pattern. Lines interiors of molds with treated paper to prevent sticking and sprinkles pulverized coloring over paper. Fills molds with composition-stone mixture to produce stones of various sizes and shapes and allows mixture to set and absorb coloring. Positions molds along guidelines on wall, according to prescribed sequence for color and size. Presses molds in place to force out surplus water and to set stone. Removes molds and peels paper from surface when precast stone and mortar have hardened. Trims precast stone with caulking trowel, to fit corners, edges, and other structural shapes. Directs workers who mix mortar for plaster and composition stone, and prepares molds, following factory specifications. May smooth surfaces with waterproofing tool and buffer.
GOE: 05.05.01 STRENGTH: L GED: R3 M2 L2 SVP: 7 DLU: 77

861.361-014 MONUMENT SETTER (construction) alternate titles: setter; tombstone setter
Sets stone at cemetery gravesites to erect monuments, following diagrams and written specifications: Lays out foundation for monument, using rule and staked lines. Digs trench for foundation, using pick and shovel. Mixes mortar [MORTAR MIXER (concrete prod.; construction)] and pours mortar into trench to prepare foundation for setting base stone. Removes sections of monument from truck bed and guides stone onto foundation, using skids, hoist, or truck crane. Aligns and levels stone, using rule, square, plumbline, wedges, and crowbar. Spreads mortar on stone with trowel and sets subsequent sections of stone in position according to numbers or letters marked on stone. Fills joints between stone with mortar and finishes joints, using trowel. Removes excess mortar from monument, using water and brush. Works as member of team to erect monuments.
GOE: 05.05.01 STRENGTH: H GED: R4 M2 L3 SVP: 7 DLU: 77

861.381-010 ACID-TANK LINER (construction)
Assembles and installs acid-proof brick lining in metal tanks used for processing and storing of acid: Cleans inside of tank to remove foreign matter, such as rust, scale, and grease, using sandblasting equipment. Removes dust from tank lining, using gasoline dampened cloth. Applies specified coats of primer cement to lining of tank, using spray gun. Heats plastic sheet, using torch, to

fuse plastic coating onto primer cement. Rolls sheet to ensure that inner surface of sheet is attached to primer cement, using hand roller. Tests plastic lining with electrostatic tester to ensure against defects, such as pin holes and cracks. Cuts bricks to specified shape to ensure against crystallizing of cement and seepage of acid into lining. Lays bricks over lining and applies specified coats of plastic cement. Fuses bricks to plastic lining, using torch and applies acid-proof cement to brick joints, using trowel.
GOE: 05.05.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

861.381-014 BRICKLAYER (brick & tile) alternate titles: kiln repairer

Repairs and rebuilds tunnel, periodic, and shuttle kilns used to burn tile, brick, and sewer pipe: Examines kilns after burning cycles to determine need for repair. Lays firebrick to construct casing walls, flues, feather walls, and burner wickets, using mortar, trowels, plumbobs, hammers, and brick. Spreads plastic refractories over exposed brickwork to protect against deterioration by heat. Lays brick flooring in periodic kilns. May be designated according to type of kiln repaired as Tunnel-Kiln Repairer (brick & tile; pottery & porc.).
GOE: 05.05.01 STRENGTH: M GED: R3 M2 L2 SVP: 8 DLU: 77

861.381-018 BRICKLAYER (construction)

Lays building materials, such as brick, structural tile, and concrete cinder, glass, gypsum, and terra cotta block (except stone) to construct or repair walls, partitions, arches, sewers, and other structures: Measures distance from reference points and marks guidelines on working surface to lay out work. Spreads soft bed (layer) of mortar that serves as base and binder for block, using trowel. Applies mortar to end of block and positions block in mortar bed. Taps block with trowel to level, align, and embed in mortar, allowing specified thickness of joint. Removes excess mortar from face of block, using trowel. Finishes mortar between brick with pointing tool or trowel. Breaks bricks to fit spaces too small for whole brick, using edge of trowel or brick hammer. Determines vertical and horizontal alignment of courses, using plumb bob, gaugeline (tightly stretched cord), and level. Fastens brick or terra cotta veneer to face of structures, with tie wires embedded in mortar between bricks, or in anchor holes in veneer brick. May weld metal parts to steel structural members. May apply plaster to walls and ceiling, using trowel, to complete repair work [PLASTERER (construction)]. May be designated according to material used as Cinder-Block Mason (construction); Concrete-Block Mason (construction); Terra-Cotta Mason (construction); or work performed as Bricklayer, Maintenance (any industry). When specializing in construction of specified structures, is designated according to specialty as Bricklayer, Sewer (construction); Chimney Builder, Brick (construction). May be designated: Block Setter, Gypsum (construction); Hollow-Tile-Partition Erector (construction); Plaster-Block Layer (construction); Silo Erector (construction).
GOE: 05.05.01 STRENGTH: H GED: R4 M3 L3 SVP: 8 DLU: 77

861.381-022 BRICKLAYER APPRENTICE (construction)

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.01 STRENGTH: H GED: R4 M3 L3 SVP: 8 DLU: 77

861.381-026 BRICKLAYER, FIREBRICK AND REFRACTORY TILE (construction) alternate titles: brickmason

Lays firebrick and refractory tile to build, rebuild, reline, or patch high-temperature or heating equipment, such as boilers, ovens, furnaces, converters, cupolas, ladles, and soaking pits, according to job orders and blueprints: Lays out work, using chalklines, plumb bobs, tapes, squares, and levels. Calculates angles and courses for building walls, arches, columns, corners, and bottoms. Removes burned or damaged brick and cleans surface of setting, using sledgehammer, pry bar, pneumatic chipping gun, scraper, and wire brush. Cuts brick to size, using brick hammer or powered abrasive saw. Spreads fire-clay mortar over brick with trowel and lays brick in place. Spreads or sprays refractories over exposed bricks to protect bricks against deterioration by heat, using trowel or spray gun. Positions or bends special frame or hanger over casings to lay arches. Cuts, notches, or drills openings to provide outlets, pyrometer mountings, brackets, and heating elements, using handtools. Patches or replaces firebrick linings of ladles and furnace tap holes. Constructs refractory forms for controlling quantity and flow of molten materials from furnace to rolling machines. May replace bolts, brackets, and heating elements, repair coke oven doors, weld cracks or holes in shell, or perform other repairs. May pack insulation into shells and frames to insulate heating equipment, such as furnaces, boilers, and ovens. May be designated according to structure worked on as Bessemer-Bottom Maker (steel & rel.); Coke-Oven Mason (steel & rel.); Door Repairer (steel & rel.); Furnace Mason (construction); Lip-And-Gate Builder (glass mfg.); Open-Hearth Door-Liner (steel & rel.); Vessel Liner (steel & rel.). When specializing in repair and replacement of firebrick and refractory tile in casings or linings of equipment, is designated Firebrick-And-Refractory Tile Repairer (construction).
GOE: 05.05.01 STRENGTH: M GED: R3 M3 L2 SVP: 6 DLU: 82

861.381-030 MARBLE SETTER (construction)

Cuts, tools, and sets marble slabs in floors and walls of buildings and repairs and polishes slab previously set in buildings: Trims, faces, and cuts marble to specified size, using power sawing, cutting, and facing equipment and handtools. Drills holes in slab and attaches bracket. Spreads mortar on bottom of slab and on sides of adjacent slabs. Sets block in position, tamps it into place, and anchors bracket attachment with wire. Fills joints with grout. Removes excess grout from marble with sponge. Cleans and bevels cracks or chips on slabs, using handtools and power tools. Heats cracked or chipped area with blowtorch and fills defect with composition mastic that matches grain of marble. Polishes marble and other ornamental stone to high luster, using power tools or by hand.
GOE: 05.05.01 STRENGTH: H GED: R4 M2 L3 SVP: 7 DLU: 77

861.381-034 SOFT-TILE SETTER (construction; retail trade) alternate titles: tile setter

Applies decorative steel, aluminum, and plastic tile (known as soft tile to distinguish from ceramic tile) to walls and cabinets of bathrooms and kitchens: Measures surface to locate center points and draws horizontal and vertical guidelines through them. Brushes waterproof compound over plaster surfaces to seal pores. Spreads adhesive cement over wall, using trowel or broad knife. Positions tile on cement, following specified pattern. Presses tile into cement. Removes excess cement from joints between tile to clean finished surface, using damp cloth or cleaning compound. Rolls sheet wall covering with hand roller to press into cement. May wipe grout into joints of tile to seal them. May be designated according to type of tile applied as Metal-Tile Setter (construction; retail trade); Plastic-Tile Layer (construction; retail trade).
GOE: 05.05.01 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 77

861.381-038 STONEMASON (construction)

Sets stone to build stone structures, such as piers, walls, and abutments, or lays walks, curbstones, or special types of masonry, such as alberene (acid-resistant soapstone for vats, tanks, and floors), using mason's tools: Shapes stone preparatory to setting, using chisel, hammer, and other shaping tools. Spreads mortar over stone and foundation with trowel and sets stone in place by hand or with aid of crane. Aligns stone with plumbline and finishes joints between stone with pointing trowel. May spread mortar along *mortar guides* to ensure joints of uniform thickness. May clean surface of finished wall to remove mortar, using muriatic acid and brush. May be designated according to masonry work performed as Alberene-Stone Setter (construction); Artificial-Stone Setter (construction); Curb Setter (construction); Flagsetter (construction); Granite Setter (construction); Gutter-Mouth Cutter (construction). May set cut and dressed ornamental and structural stone in buildings and be designated Stone Setter (construction).
GOE: 05.05.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

861.381-042 STONEMASON APPRENTICE (construction) alternate titles: stone rigger; stone-setter apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

861.381-046 TERRAZZO WORKER (construction) alternate titles: artificial-marble worker; floor grinder

Applies cement, sand, pigment, and marble chips to floors, stairways, and cabinet fixtures to attain durable and decorative surfacing according to specifications and drawings: Spreads roofing paper on surface of foundation. Spreads mixture of sand, cement, and water over surface with trowel to form terrazzo base. Cuts metal division strips and presses them into terrazzo base so that top edges form desired design or pattern and define level of finished floor surface. Spreads mixture of marble chips, cement, pigment, and water over terrazzo base to form finished surface, using float and trowel. Scatters marble chips over finished surface. Pushes roller over surface to imbed chips. Allows surface to dry, and pushes electric-powered surfacing machine over floor to grind and polish terrazzo surface. Grinds curved surfaces and areas inaccessible to surfacing machine, such as stairways and cabinet tops, with portable hand grinder. May precast terrazzo blocks in wooden forms. May perform finishing operations only and be designated Terrazzo Polisher (construction).
GOE: 05.05.01 STRENGTH: M GED: R4 M2 L3 SVP: 7 DLU: 77

861.381-050 TERRAZZO-WORKER APPRENTICE (construction)

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.01 STRENGTH: M GED: R4 M2 L3 SVP: 7 DLU: 77

861.381-054 TILE SETTER (construction) alternate titles: tile fitter; tile layer; tile mason

Applies tile to walls, floors, ceilings, and promenade roof decks, following design specifications: Examines blueprints, measures and marks surfaces to be covered, and lays out work. Measures and cuts metal lath to size for walls and ceilings with tin snips. Tacks lath to wall and ceiling surfaces with staple gun or hammer. Spreads plaster base over lath with trowel and levels plaster to specified thickness, using screed. Spreads concrete on subfloor with trowel and levels it with screed. Spreads mastic or other adhesive base on roof deck, using serrated spreader to form base for promenade tile. Cuts and shapes tile with tile cutters and biters. Positions tile and taps it with trowel handle to affix tile to plaster or adhesive base. May be designated according to type of work done as Roof-Promenade-Tile Setter (construction).
GOE: 05.05.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

861.381-058 TILE SETTER APPRENTICE (construction)

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

861.381-062 TILE-CONDUIT LAYER (construction)

Lays tile conduit that insulates and protects water or steampipes: Lays runners in previously excavated trench and checks slope with carpenter's level,

digging out or filling in with loose earth. Splits drain tile longitudinally and places halved tiles on runners, fitting spigot end of each half tile into bell end of adjacent tile. Mixes mortar of cement, oakum, and water, and applies it to edges of top half of tiles after PIPE FITTER (construction) has laid water or steampipes in bottom tiles already in position. Places top half sections on corresponding bottom half tiles and seals joints between sections by forcing mortar into bell end of tiles [PIPE LAYER (construction)].
GOE: 05.10.01 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

861.664-010 MARBLE FINISHER (construction) alternate titles: marble helper; marble mason helper; marble mechanic helper; marble setter helper

Supplies and mixes construction materials for MARBLE SETTER (construction) 861.381-030, applies grout, and cleans installed marble: Moves marble installation materials, tools, machines, and work devices to work areas. Mixes mortar, plaster, and grout, as required, following standard formulas and using manual or machine mixing methods. Moves mixed mortar or plaster to installation area, manually or using wheelbarrow. Selects marble slab for installation, following numbered sequence or drawings. Drills holes and chisels channels in edges of marble slabs to install metal wall anchors, using power drill and chisel. Bends wires to form metal anchors, using pliers, inserts anchors into drilled holes of marble slab, and secures anchors in place with wooden stake and plaster. Moves marble slabs to installation site, using dolly, hoist, or portable crane. Fills marble joints and surface imperfections with grout, using grouting trowel or spatula, and removes excess grout, using wet sponge. Grinds and polishes marble, using abrasives, chemicals, and manual or machine grinding and polishing techniques. Cleans installed marble surfaces, work and storage areas, installation tools, machinery, and work aids, using water and cleaning agents. Stores marble, installation materials, tools, machinery, and related items. May modify mixing, material moving, grouting, polishing, and cleaning methods and procedures, according to type of installation or materials. May repair and fill chipped, cracked, or broken marble pieces, using torch, spatula, and heat sensitive adhesive and filler. May secure marble anchors to studding, using pliers, and cover ends of anchors with plaster to secure anchors in place. May assist MARBLE SETTER (construction) to saw and position marble. May erect scaffolding and related installation structures.
GOE: 05.05.01 STRENGTH: V GED: R2 M1 L1 SVP: 5 DLU: 86

861.664-014 TERRAZZO FINISHER (construction) alternate titles: terrazzo helper; terrazzo mechanic helper; terrazzo worker helper

Supplies and mixes construction materials for TERRAZZO WORKER (construction) 861.381-046, applies grout, and finishes surface of installed terrazzo: Moves terrazzo installation materials, tools, machines, and work devices to work areas, manually or using wheelbarrow. Measures designated amounts of ingredients for terrazzo or grout, using graduated containers and scale, following standard formulas and specifications, and loads portable mixer, using shovel. Mixes materials according to experience and requests from TERRAZZO WORKER (construction) 861.381-046, and dumps mixed materials that form base or top surface of terrazzo into prepared installation site, using wheelbarrow. Applies curing agent to installed terrazzo to promote even curing, using brush or sprayer. Grinds surface of cured terrazzo, using power grinders, to smooth terrazzo and prepare for grouting. Spreads grout across terrazzo to fill surface imperfections, using trowel. Fine grinds and polishes surface of terrazzo, when grout has set, using power grinders. Washes surface of polished terrazzo, using cleaner and water, and applies sealer, according to manufacturer's specifications, using brush. Installs grinding stones in power grinders, using handtools. Cleans installation site, mixing and storage areas, tools, machines, and equipment, using water and various cleaning devices. Stores terrazzo installation materials, machines, tools, and equipment. May modify mixing, grouting, grinding, and cleaning procedures according to type of installation or material used. May assist TERRAZZO WORKER (construction) 861.381-046 to position and secure moisture membrane and wire mesh prior to pouring base materials for terrazzo installation. May spread marble chips or other material over fresh terrazzo surface and press into terrazzo, using roller. May cut divider and joint strips to size as directed. May assist TERRAZZO WORKER (construction) 861.381-046 to lay terrazzo. May cut grooves in terrazzo stairs, using power grinder, and fill grooves with nonskid material.
GOE: 05.05.01 STRENGTH: V GED: R2 M1 L2 SVP: 5 DLU: 86

861.664-018 TILE FINISHER (construction) alternate titles: tile mechanic helper; tile setter helper

Supplies and mixes construction materials for TILE SETTER (construction) 861.381-054, applies grout, and cleans installed tile: Moves tiles, tilesetting tools, and work devices from storage area to installation site manually or using wheelbarrow. Mixes mortar and grout according to standard formulas and request from TILE SETTER (construction), using bucket, water hose, spatula, and portable mixer. Supplies TILE SETTER (construction) with mortar, using wheelbarrow and shovel. Applies grout between joints of installed tile, using grouting trowel. Removes excess grout from tile joints with wet sponge and scrapes corners and crevices with trowel. Wipes surface of tile after grout has set to remove grout residue and polish tile, using nonabrasive materials. Cleans installation site, mixing and storage areas, and installation machines, tools, and equipment, using water and various cleaning tools. Stores tile setting materials, machines, tools, and equipment. May apply caulk, sealers, acid, steam, or related agents to caulk, seal, or clean installed tile, using various application devices and equipment. May modify mixing, grouting, grinding, and cleaning procedures according to type of installation or material used. May assist TILE SETTER (construction) to position and secure metal lath, wire mesh, or felt paper prior to installation of tile. May cut marked tiles to size, using power saw or tile cutter.
GOE: 05.05.01 STRENGTH: V GED: R2 M1 L2 SVP: 5 DLU: 86

861.684-010 CUPOLA PATCHER (foundry) alternate titles: cupola liner

Repairs and rebuilds lining of cupola: Mixes sand, clay, and other refractory materials and applies mixture, using trowels and other handtools, to burned areas in brick lining of cupola. Tears out badly burned brick linings and relines cupola with new firebrick, using bricklayer's tools. Closes and props drop-doors of cupola and lines furnace bottom with sand. Builds and repairs clay troughs through which metal runs from taphole to ladle. May use air chisel to remove burned brick.
GOE: 05.05.01 STRENGTH: M GED: R3 M1 L1 SVP: 4 DLU: 77

861.684-014 PATCHER (steel & rel.)

Repairs parts of coke ovens, such as oven jambs, floors, walls, and roofs, regenerator walls, and standpipe joints and linings with refractory materials, using handtools, spray gun, and sandblast machine: Mixes slurry according to specifications, and shapes bricks. Lays brick to patch defective areas or resets jamb or charging hole castings, and smooths work by sandblasting.
GOE: 05.10.01 STRENGTH: H GED: R2 M1 L1 SVP: 4 DLU: 77

861.684-018 TILE SETTER (mfd. bldgs.)

Lays tile and installs cabinets in bathrooms of manufactured buildings: Selects color of tile according to specification sheet. Lays out sheets of floor tile and cuts backing to fit, using shears. Applies adhesive to subfloor and wall with brush and trowel. Cuts wall tiles to fit around tub fixtures, using hand cutter, and presses tiles into place. Wipes grout between tiles and removes excess with wet sponge. Selects bathroom accessories from stock. Installs and anchors fixtures in designated positions, using handtools.
GOE: 05.12.09 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 77

861.684-022 REPAIRER, KILN CAR (brick & tile)

Repairs kiln cars: Sweeps dust and chipped brick from beds of empty kiln cars, using broom. Scrapes loose or chipped mortar from sides of kiln cars, using trowel. Pours water and mortar mix into wheelbarrow, stirs mixture, and spreads and smooths mortar onto sides of kiln cars to repair heat-resistant cover, using trowel. Replaces broken refractory blocks on beds of kiln cars and straightens uneven blocks, using rubber mallet. Lubricates kiln car wheels, using grease gun. May position wooden frame over frame of kiln car, pour mortar into wooden frame, lay insulation mat over mortar, and place refractory slabs and bricks in prescribed order over mat to build new kiln cars.
GOE: 05.12.08 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 86

861.687-010 BRICKLAYER HELPER, FIREBRICK AND REFRACTORY TILE (construction) alternate titles: brickmason helper

Performs any combination of following duties to assist BRICKLAYER, FIREBRICK AND REFRACTORY TILE (construction) in repairing and rebuilding furnaces, ovens, ladles, and similar structures: Removes burned and damaged brick and cleans surfaces of settings, using bar, hammers, chisels, and wire brush. Sweeps and removes refuse from casings. Conveys tools and materials to work site. May mix mortar, using powered mixer. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.09 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

861.687-014 PATCHER HELPER (steel & rel.) alternate titles: helper, patcher

Assists PATCHER (steel & rel.) in mixing slurries and in making repairs to coke ovens and auxiliary equipment. Screens refractory materials, stacks bricks for preheating, and performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.09 STRENGTH: H GED: R1 M1 L1 SVP: 2 DLU: 77

862 PLUMBERS, GAS FITTERS, STEAM FITTERS, AND RELATED OCCUPATIONS

This group includes occupations concerned with assembling and installing gas, steam, plumbing, and related fixtures, pipes, and fittings in structures, using pipe-cutting and pipe-threading tools, welding equipment, and other pipefitting tools and equipment.

862.131-010 PIPE-FITTER SUPERVISOR (construction)

Supervises and coordinates activities of workers engaged in fabricating, assembling, installing, and maintaining piping, fixtures, and equipment for gas, steam, hot water, fire sprinkler system, or oil heating, cooling, lubricating, and industrial processing systems: Assigns workers to specific duties. Inspects completed processing systems to determine conformance to specifications. Trains new workers in use of equipment and tools. Performs duties as described under SUPERVISOR (any industry) Master Title. May supervise workers engaged in working on high-pressure systems and be designated Steam-Fitter Supervisor (construction). May supervise workers engaged in maintenance and repair work and be designated Pipe-Fitter Supervisor, Maintenance (any industry); Steam-Fitter Supervisor, Maintenance (any industry).
GOE: 05.05.03 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

862.131-014 PIPE-FITTER SUPERVISOR (ship-boat mfg.)
Supervises and coordinates activities of workers engaged in installing and maintaining piping systems of ships: Inspects installation of equipment, such as lockers, heating and air-conditioning units, and lavatory facilities to ensure standard requirement. Verifies dimensions of pipes, fittings, and valves, using micrometers, rulers, and levels. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.03 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

862.131-018 PLUMBER SUPERVISOR (construction)
Supervises and coordinates activities of workers engaged in assembly, installation, and repair of pipes, fittings, and fixtures of heating, water supply, and waste disposal systems for buildings: Trains new workers. Inspects work in progress and completed work to determine conformance to specifications. Performs duties as described under SUPERVISOR (any industry) Master Title. When supervising workers who specialize in maintenance and repair of heating, water, and drainage systems in industrial or commercial establishments, is designated Plumber Supervisor, Maintenance (construction).
GOE: 05.05.03 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

862.131-022 SUPERVISOR, PIPELINES (petrol. & gas) alternate titles: gang supervisor, pipe lines; roustabout, head
Supervises and coordinates activities of workers engaged in operating digging and pipelaying machines and in installation of pipe, pumps, valves, and meters to construct and maintain pipelines. Performs duties described under SUPERVISOR (any industry) Master Title. May be designated according to work location as Oil-Field Pipeline Supervisor (petrol. & gas).
GOE: 05.11.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

862.132-010 WELL-POINT PUMPING SUPERVISOR (construction)
Supervises and coordinates activities of workers engaged in erecting pumping systems, pumping subsurface water, and operating and maintaining pumps to provide underground and drinking water at construction sites. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

862.134-010 SUCTION-DREDGE-PIPELINE-PLACING SUPERVISOR (construction) alternate titles: shore-working supervisor; suction-dredge-dumping supervisor
Supervises and coordinates activities of workers engaged in transporting and joining pipe to provide outlet for excavated material discharged from dredge. Directs workers engaged in connecting pipe, tightening joints, and guiding pipe sections into place. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.03 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 77

862.134-014 SUPERVISOR, WATER SOFTENER SERVICE (business ser.)
Supervises and coordinates activities of workers engaged in installation and maintenance of water conditioning equipment: Coordinates operation of plant regeneration equipment to keep customer exchange tanks regenerated and ready for delivery. Trains workers in installation and maintenance of equipment. Supervises workers engaged in shipping and receiving of water conditioning materials and equipment. Assigns service routes to WATER-SOFTENER SERVICER-AND-INSTALLER (business ser.) according to customer location. Compiles cost of installation and service of water conditioning units to determine customer cost. Inspects installed units to determine malfunctioning of system, using gauges and analyzers, and notifies repair worker of repair required. Adjusts customers complaints. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.01 STRENGTH: L GED: R4 M3 L4 SVP: 8 DLU: 77

862.137-010 MAINS-AND-SERVICE SUPERVISOR (utilities) alternate titles: gas-distribution supervisor
Supervises and coordinates activities of workers engaged in constructing, maintaining, and repairing gas mains and in servicing pipes from mains to customer's premises: Marks work order diagram to indicate location of installations. Measures distances with tape and marks pavement or earth to indicate location of pipes requiring repairs, referring to work order diagram or map of mains and services. Inspects work in progress and directs workers to test pipes for leaks. May direct workers engaged in installation of meters and regulators to establish initial service for customer. May direct workers engaged in installing bonding, insulation, and counter-current generators to protect pipes against electrolytic corrosion. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to activity as Leak-Gang Supervisor (utilities); Service-Crew Supervisor (utilities).
GOE: 05.05.03 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

862.137-014 STEAM-DISTRIBUTION SUPERVISOR (utilities) alternate titles: chief-maintenance supervisor
Supervises and coordinates activities of workers engaged in installing, maintaining, and repairing steam-distribution lines and equipment: Maintains blueprints or maps of entire steam-distribution system. Authorizes all installation locations and maintenance work to avoid contact and interruption with other electric, gas, and water underground installation. Inspects all pipe connections and equipment installations before turning on steam. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.03 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

862.137-018 WATER-AND-SEWER-SYSTEMS SUPERVISOR (waterworks) alternate titles: water-maintenance supervisor; water-service supervisor; water supervisor
Supervises and coordinates activities of workers engaged in installing, maintaining, repairing, and servicing water distribution and sewage facilities: Assigns work activities to crewmembers concerned with excavating and backfilling trenches and culverts, installing, repairing, and replacing water and sewer mains, joining and caulking pipeline, repairing valves and hydrants, drilling and installing taps in mains, and performing related street repairs, working from land plats, maps, and other diagrams. Requisitions materials and equipment, such as pipes, special fittings and unions, cranes, draglines, air compressors, and welders. Inspects work to determine conformance to specifications. May prepare reports concerned with such items as human resource utilization, time records, work progress, and disposition of materials. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.03 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

862.261-010 PIPE FITTER (ship-boat mfg.) alternate titles: pipe fitter, marine
Lays out, installs, and maintains ships' piping systems, such as steam heat and power, hot water, hydraulic, air pressure, and oil lines, following blueprints, and using handtools and shop machines: Plans layout of pipe sections, allowing for conformance to specifications, holes, and obstructions. Cuts and bores holes in bulkheads and decks for installation of pipes. Operates shop machines to cut and thread pipe and pipe fittings, such as valves, traps, and thermostats. Packs pipe with sand to avoid contortion of pipe and bends pipe to specified shape on pipe-bending fixture. Bolts or welds pipe brackets to support pipe systems. Connects pipes to fixtures, such as radiators, laundry, and galley equipment, pumps, and tanks, using wrench, and solders joints to seal connections, using hand torch. Repairs, packs, and adjusts valves. Tests installed systems for leaks and to ensure that system meets specifications, using hydrostatic and other pressure test equipment.
GOE: 05.05.03 STRENGTH: H GED: R4 M4 L3 SVP: 7 DLU: 77

862.281-010 COPPERSMITH (ship-boat mfg.)
Lays out, cuts, bends, and assembles pipe sections, pipefittings, and other parts from copper, brass, and other nonferrous metals: Lays out full-scale floor drawings or makes templates, following blueprints of pipe assemblies. Builds framework on bending slab to use as guide for bending, shaping, and joining assemblies. Cuts pipe, using handtools or shop machinery, and packs it with sand, rosin, or other material to prevent flattening during bending. Heats bend area with gas torch to soften metal and bends pipe, allowing for stretch at outside radius and compression at inside radius, using pipe-bending machines. Reheats and hammers pipe to eliminate wrinkles resulting from bending. Solders or brazes flanges on end of pipe. Flares or bells pipe mouths, using belling and flaring tools and mallet. Bends tubing to form coils for parts, such as feed water or oil heater. Lays out patterns and templates on sheet stock, using knowledge of geometry. Bends, hammers, bumps, razes, and planishes sheet stock to fabricate such parts as expansion joints, tanks, heads, cowls, and air chambers, using handtools, gas torches, and shop machinery. Sweats, rivets, solders, or brazes seams to obtain finished part. Coats parts by dipping them in mixture of molten tin and lead to prevent erosion, galvanic, and electrolytic action. Conducts hydrostatic tests to detect leaks in fabricated pipe. May install piping aboard ship.
GOE: 05.05.03 STRENGTH: M GED: R4 M2 L3 SVP: 8 DLU: 77

862.281-014 COPPERSMITH APPRENTICE (ship-boat mfg.)
Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.03 STRENGTH: M GED: R4 M2 L3 SVP: 8 DLU: 77

862.281-018 OIL-BURNER-SERVICER-AND-INSTALLER (any industry)
Installs and services automatic oil burners in furnaces in homes and commercial establishments, using handtools and pipe-threading tools: Assembles and positions oil-storage tank between furnace and wall of building. Drills holes in wall and affixes oil inlet and outlet pipes from storage tank through holes to outside of building. Removes ashpit and grate bars from furnace and installs burner in opening. Seals space around burner with plaster. Connects pipe to storage tank and burner to convey oil. Installs thermostatic control and damper in chimney. Observes color and height of flame and volume of smoke emitted to determine causes of faulty operation. Examines flue draft, using draftstat, and changes balance weight to adjust damper. May install and service automatic coal stokers.
GOE: 05.05.03 STRENGTH: M GED: R3 M1 L2 SVP: 7 DLU: 77

862.281-022 PIPE FITTER (construction) alternate titles: plumber, pipe fitting
Lays out, assembles, installs, and maintains pipe systems, pipe supports, and related hydraulic and pneumatic equipment for steam, hot water, heating, cooling, lubricating, sprinkling, and industrial production and processing systems, applying knowledge of system operation, and following blueprints: Selects type and size of pipe, and related materials and equipment, such as supports, hangers, and hydraulic cylinders, according to specifications. Inspects work site to determine presence of obstructions and to ascertain that holes cut for pipe will not cause structural weakness. Plans installation or repair to avoid obstructions and to avoid interfering with activities of other workers. Cuts pipe, using saws,

pipe cutter, hammer and chisel, cutting torch, and pipe cutting machine. Threads pipe, using pipe threading machine. Bends pipe, using pipe bending tools and pipe bending machine. Assembles and installs variety of metal and nonmetal pipes, tubes, and fittings, including iron, steel, copper, and plastic. Connects pipes, using threaded, caulked, soldered, brazed, fused, or cemented joints, and handtools. Secures pipes to structure with brackets, clamps, and hangers, using handtools and power tools. Installs and maintains hydraulic and pneumatic components of machines and equipment, such as pumps and cylinders, using handtools. Installs and maintains refrigeration and air-conditioning systems, including compressors, pumps, meters, pneumatic and hydraulic controls, and piping, using handtools and power tools, and following specifications and blueprints. Increases pressure in pipe system and observes connected pressure gauge to test system for leaks. May weld pipe supports to structural steel members. May observe production machines in assigned area of manufacturing facility to detect machinery malfunctions. May operate machinery to verify repair. May modify programs of automated machinery, such as robots and conveyors, to change motion and speed of machine, using *teach pendant*, control panel, or keyboard and display screen of *robot controller* and *programmable controller*. May be designated Steam Fitter (construction) when installing piping systems that must withstand high pressure. May be designated according to type of system installed as Pipe Fitter, Ammonia (construction); Pipe Fitter, Fire-Sprinkler Systems (construction); Pipe Fitter, Gas Pipe (construction); or type of piping used as Pipe Fitter, Plastic Pipe (construction); Pipe Fitter, Soft Copper (construction). May be designated: Airdox Fitter (mine & quarry); Freight-Air-Brake Fitter (railroad equip.); Instrument Fitter (construction); Maintainer, Sewer-And-Waterworks (construction); Pipe Fitter, Maintenance (any industry); Pipe Fitter, Welding (construction); Pneumatic-Tube Fitter (construction); Sprinkler-And-Irrigation-System Installer (construction); Tuyere Fitter (steel & rel.).
GOE: 05.05.03 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 88

862.281-026 PIPE-FITTER APPRENTICE (construction)

Performs duties as described under APPRENTICE (any industry) Master Title. Frequently specializes, after completing apprenticeship program, in such areas as refrigeration [REFRIGERATION MECHANIC (any industry)]; air-conditioning [HEATING-AND-AIR-CONDITIONING INSTALLER-SERVICER (construction)]; general pipefitting [PIPE FITTER (construction); PIPE FITTER (ship-boat mfg.)]; or gas, oil, hot water, and steam heating systems [OIL-BURNER-SERVICER-AND-INSTALLER (any industry); GAS-APPLIANCE SERVICER (any industry)].
GOE: 05.05.03 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 77

862.361-010 FURNACE INSTALLER (utilities)

Installs and regulates gas-burner units in building-heating furnaces to convert furnaces from wood, coal, or oil to gas: Directs helper to prepare furnace for installation of gas burner unit. Lays brick foundation [BRICKLAYER (construction)] in furnace ashpit and positions heating unit on foundation. Draws sketch of pipes and fittings required to connect gas burner to gas supply. Measures, cuts, threads, bends, and installs pipe between burner and gas supply with assistance of helper, using pipefitters' tools. Installs thermostat in heated area and makes wiring connections between building terminal box, switchbox, burner motor, and thermostat [ELECTRICIAN (construction)]. Ignites gas burner and adjusts gas-flow and air-supply control valves until observation of gas flame indicates correct combustion.
GOE: 05.05.05 STRENGTH: M GED: R4 M2 L3 SVP: 7 DLU: 77

862.361-014 GAS-MAIN FITTER (utilities) alternate titles: pipe fitter

Lays pipe to repair and extend nonwelded gas mains and to install or repair service pipes between mains and residences: Drills hole in section of main to which new pipe will be fitted and inserts inflated rubber bag to seal off flow of gas. Removes faulty pipe by unscrewing bolts at joint with hand wrench. Lays gas mains by fitting spigot end of one pipe section into bell end of another. Bolts joints together. Places wooden blocks under pipe to adjust pipe to line and grade, testing gradient with carpenter's level. Fastens steel cap over free end of gas-main extensions. Drills hole or installs reducing fitting in main where service pipes begin. Bolts saddle clamp around main, preparatory to welding. Drills hole through welded saddle clamp into main, using power drill. Cuts, threads, and screws together sections of pipe forming service line, and lays service line in trench. Bolts end of service line to saddle clamp, using special compression coupling to produce gas-tight connection. Removes rubber expanding bag to resume flow of gas and caps holes with screw plugs. Installs various gas-main attachments, such as *drips*, ells, and tees. Tests pipe for weak joints by forcing air into pipe with air compressor and coating joints with soap and water, and notes formation of bubbles, indicating leak. Tightens bolts or repairs leaky joints. May install gas meters. May install pipes beneath roads, lawns, or locations where not feasible to dig trenches, by forcing pipe through earth with special pipe jack. May direct crew in excavating trench and positioning pipe. May fuse bonds to pipe joints, using holder and flash chemicals (cadweld), to concentrate high temperatures at point of fusion. May install and repair service lines only and be designated Pipe Fitter, Street Service (utilities).
GOE: 05.05.03 STRENGTH: M GED: R4 M2 L3 SVP: 7 DLU: 77

862.361-018 PIPE FITTER, DIESEL ENGINE I (engine-turbine) alternate titles: piper

Installs oil, air, fuel, and water lines on diesel engines, using blueprints and process documents to determine pipe size, location of connection, and angles of bends: Cuts pipe and bends to specified angle, using tube bending machine [BENDING-MACHINE OPERATOR (any industry) I]. Brazes connections to pipe, using holding fixtures and gas furnace. Bolts pipe to pipe supports on engine, using wrenches. Brazes or welds pipe to engine, using acetylene and arc welding equipment. May visually estimate angles and bend small pipe and tubing to conform to curvature of engine, using bending fixtures and handtools. May fabricate piping for stock. May replace worn or broken pipes on diesel engines.
GOE: 05.05.03 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

862.361-022 STEAM SERVICE INSPECTOR (utilities) alternate titles: inspector, outside steam-distribution; manhole-and-underground-steam-line inspector

Installs, inspects, and repairs underground steam mains and auxiliary equipment: Turns valve to shut off steam and to blow steam from pipe section to be worked on, using valve key, wrench, or special bar. Places pipe in previously dug ditch and bolts or welds pipe sections together, using handtools or welding equipment. Cuts threads and fits pipe [PIPE FITTER (construction)], and fastens expansion joint over connection by turning couplings with wrench. Installs or replaces auxiliary equipment, such as pressure regulating valves, gaskets, and steam traps, using pipefitting tools. Enters manholes periodically and examines steam lines and equipment for vapor leakage or loose connections and feels street surface above mains for heat indicative of steam leakage. Repacks expansion joints and repairs steam traps and other defective equipment. Operates motorized pump to remove water from flooded manholes. May repair steam meters.
GOE: 05.05.03 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 77

862.381-014 INDUSTRIAL-GAS FITTER (utilities) alternate titles: industrial servicer

Installs gas-heating units in industrial boilers, and rebuilds firebox of coal-burning boilers to utilize gas, following blueprints and written specifications. Dismantles old firebox and removes obstructing boiler parts. Positions shoring to support boiler when portions of masonry supporting boiler must be removed. Installs or modifies metal structures inside firebox that support refractory lining, according to blueprints. Lays firebox [BRICKLAYER, FIREBRICK AND REFRACTORY TILE (construction)] and installs boiler parts previously removed. Installs required number of gas burners in firebox. Measures, cuts, threads, bends, and installs gas supply and feeder pipes between gas burners and previously installed gas meter [PIPE FITTER (construction)]. Installs air supply pipes between motor-blower and gas burners. Removes shoring, replaces masonry, and inspects all pipe joints and gas burners for leakage or incorrect installation.
GOE: 05.10.01 STRENGTH: H GED: R3 M2 L2 SVP: 7 DLU: 77

862.381-022 PIPE FITTER, DIESEL ENGINE II (engine-turbine)

Installs high and low pressure piping and tubing for lubrication, cooling, and steam systems of turbines, compressors, condensers, pumps, and generators according to graphic and oral instructions: Lays out full size sketch of assembly on table, using layout tools. Bends, assembles, and positions pipe on sketch, using coupling joints and hydraulic bending machine. Brazes or tack welds piping and fittings into position [WELDER, TACK (welding)]. Climbs in and out of erection pit and onto erection platform to bolt piping to products. Tags or stamps items to identify parts during reassembly. May heat pipe to facilitate bending, using portable gas heating equipment. May install air, fuel, and water lines on diesel engines [PIPE FITTER, DIESEL ENGINE (engine-turbine) I].
GOE: 05.05.03 STRENGTH: H GED: R4 M2 L3 SVP: 7 DLU: 77

862.381-030 PLUMBER (construction)

Assembles, installs, and repairs pipes, fittings, and fixtures of heating, water, and drainage systems, according to specifications and plumbing codes: Studies building plans and working drawings to determine work aids required and sequence of installations. Inspects structure to ascertain obstructions to be avoided to prevent weakening of structure resulting from installation of pipe. Locates and marks position of pipe and pipe connections and passage holes for pipes in walls and floors, using ruler, spirit level, and plumb bob. Cuts openings in walls and floors to accommodate pipe and pipe fittings, using handtools and power tools. Cuts and threads pipe, using pipe cutters, cutting torch, and pipe-threading machine. Bends pipe to required angle by use of pipe-bending machine or by placing pipe over block and bending it by hand. Assembles and installs valves, pipe fittings, and pipes composed of metals, such as iron, steel, brass, and lead, and nonmetals, such as glass, vitrified clay, and plastic, using handtools and power tools. Joins pipes by use of screws, bolts, fittings, solder, plastic solvent, and caulks joints. Fills pipe system with water or air and reads pressure gauges to determine whether system is leaking. Installs and repairs plumbing fixtures, such as sinks, commodes, bathtubs, water heaters, hot water tanks, garbage disposal units, dishwashers, and water softeners. Repairs and maintains plumbing by replacing washers in leaky faucets, mending burst pipes, and opening clogged drains. May weld holding fixtures to steel structural members. When specializing in maintenance and repair of heating, water, and drainage systems in industrial or commercial establishments, is designated Plumber, Maintenance (any industry).
GOE: 05.05.03 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 77

862.381-034 PLUMBER APPRENTICE (construction)

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.03 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 77

862.381-038 THREAD INSPECTOR (petrol. & gas) alternate titles: pipe-thread inspector

Inspects threads on joints of steel casings, tubings, drillpipes, and other tubular oil well equipment to detect defects and to determine conformance to specified tolerances in taper, lead, and threads per inch, using precision gauges and instruments: Measures machined threads and outside diameter of pipes to determine thread size, taper, threads per inch, and size of pipe to ensure clearance for lowering pipe into well, using thread gauge and micrometer. Determines whether combinations of thread elements will form joints capable of withstanding weight of entire string of piping in well and of preventing entrance of outside fluids or gases, applying knowledge of standard and obsolete thread forms.
GOE: 05.07.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

862.662-010 PIPE-CLEANING-AND-PRIMING-MACHINE OPERATOR (construction)

Operates pipe cleaning and priming machine to clean rust, scale, and dirt from pipelines, and to apply prime coating of hot asphalt: Selects cleaning and priming head to fit pipe and bolts them to machine-driven pulley. Bolts scraping knives and steel wire brushes to inside of cleaning head and bristle brushes inside priming head. Adjusts spring tension on knives and brushes with handtools. Signals TRACTOR OPERATOR (any industry) to lift and slide pipe cleaning and priming machine over end of pipe. Starts engine and moves levers to rotate cleaning and priming heads around pipe, and to propel machine along pipeline. Opens valve to start flow of hot asphalt coating onto pipe surfaces. May operate machine to remove heavy deposits of scale, rust, or other foreign matter from pipes preparatory to cleaning and coating and be designated Pipe-Cleaning-Machine Operator (construction).
GOE: 05.11.01 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

862.681-010 PLUMBER (mfd. bldgs.)

Installs bath plumbing systems in manufactured buildings, according to blueprints: Reads blueprints to determine type of plumbing system required. Writes cutting list that specifies sizes and quantity of copper pipe to be cut by PLUMBING ASSEMBLER-INSTALLER (mfd. bldgs.). Marks locations and bores holes in floor joists for pipes, using tape measure, template, and power auger. Selects and inserts precut pieces of copper tubing and fittings in holes. Connects tubing and fittings, using solder paste or solder and torch, to form sewer, drain, and water lines. Selects plumbing fixtures, such as toilets, sinks, and tubs, from storage. Squares tubing projecting through floor to ensure snug fit of fixtures, using square, wedges, and hammer, and solders fixtures to tubing. Squares fixtures with level. May direct workers engaged in preassembly and installation of wall systems, such as risers, air chambers, and shower assemblies.
GOE: 05.05.03 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

862.682-010 PIPE CUTTER (mfd. bldgs.)

Operates machine to cut, thread, and ream pipes, and assembles pipes, according to blueprints, to form mobile home water system, using handtools: Measures and marks pipes to be cut and threaded, using tape measure and pencil. Positions and secures pipe in chuck of machine. Starts machine and turns handwheel to engage pipe with dies that cut threads. Pulls lever to lubricate pipes and dies, and turns handwheel to activate reaming tool to burr inside of pipe. Moves lever to open dies, and turns handwheel to disengage dies from pipe. Repositions pipe in chuck and aligns cutting wheels with mark on pipe. Starts machine and turns handle to apply pressure on cutting wheels. Applies sealing compound to threads and fittings with brush and joins pipes in sequence specified, according to blueprints, to form water system, using wrench and vise.
GOE: 06.02.02 STRENGTH: M GED: R4 M2 L3 SVP: 4 DLU: 77

862.682-014 PIPE-WRAPPING-MACHINE OPERATOR (construction; pipe lines)

Operates pipe-wrapping machine to coat pipelines with asphalt or other corrosion-resisting compounds and wrap them spirally with fabrics, such as glass cloth and felt paper, to form protective coating that prevents electrolytic decomposition of oil and gas pipelines: Inspects paper holders and observes flow of hot compounds into reservoir to maintain adequate supply of materials. Starts engine and moves levers to activate mechanism that rotates paper head around pipe and propels machine along pipeline. Turns valves to regulate flow of dope to coat pipe. Adjusts brake tension on paper reels with handtools to ensure tight wrapping.
GOE: 05.11.01 STRENGTH: L GED: R3 M1 L2 SVP: 5 DLU: 77

862.684-010 JUNCTION MAKER (brick & tile) alternate titles: branch maker; fitting maker

Joins sections of unbaked sewer pipe at specified angles to form junctions, using jigs and handtools: Positions green pipe in cutting jig or places pattern or diagram on end of pipe section and cuts pipe to specified angle and length or cuts holes in pipe, using knife or wire cutter. Roughens cut edge and side of second pipe section to facilitate coupling, using comb-like tool. Dampens roughened surfaces of pipes to ensure that clay bonds together. Joins pipe sections and molds clay around joint. Cuts and smooths hole in second pipe at inner junction, using handtools. May insert bracing inside pipe to ensure shape of pipe during drying and firing.
GOE: 06.02.30 STRENGTH: M GED: R2 M1 L2 SVP: 5 DLU: 77

862.684-014 LABORER, CONSTRUCTION OR LEAK GANG (utilities)

Performs any combination of following tasks in laying, repairing, and extending underground gas and steam mains and distribution pipes: Erects barricades and places lanterns around work site to protect workers from street traffic. Breaks up pavement, using airhammer, and digs ditches preparatory to laying or removing pipe. Maneuvers pipe sections, valves, and fittings into position, and holds pieces steady while worker tightens threaded connections. Cuts, threads, and joins pipe sections as directed. Assists PIPE CAULKER (construction) in caulking pipe joints. Mixes and lays concrete to raise top of manhole to level of new street construction. Patches cracks in underground vault walls with concrete and brushes or sprays walls with waterproof compound. May drive truck and tend mobile ventilating equipment to supply fresh air to workers in underground vaults.
GOE: 05.12.12 STRENGTH: H GED: R2 M1 L1 SVP: 4 DLU: 77

862.684-018 PIPE-FITTER HELPER (ship-boat mfg.)

Assists PIPE FITTER (ship-boat mfg.) in assembling and installing aboard ships and boats pipe assemblies for systems, such as propulsion, fresh water, and heat: Requisitions tools and equipment for workers. Fills pipe with sand or melted resin to prevent pipe distortion during bending operations. Holds pipes during bending and installation. Fits assemblies into place aboard ship by screwing and bolting them together and connecting them to tanks, pumps, and other systems, using wrenches and other handtools. Immerses pipe in chemical solution to remove dirt, oil, and scale. Cleans shop machine with solvent and rags and sweeps working areas. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.12 STRENGTH: H GED: R3 M1 L2 SVP: 5 DLU: 77

862.684-022 PIPE-FITTER HELPER (construction) alternate titles: fitter helper

Assists PIPE FITTER (construction) to assemble and install piping for air, ammonia, gas, and water systems: Cuts or drills holes in walls to permit passage of pipes, using pneumatic drill. Selects specified type and size of pipe. Mounts pipe hangers and brackets on walls and ceiling to hold pipe. Assists PIPE FITTER (construction) to install valves, couplings, and other fittings. May disassemble and remove damaged or worn pipe. Performs other duties as described under HELPER (any industry) Master Title. May assist in installation of high-pressure piping and be designated Steam-Fitter Helper (construction). May assist in installation of gas burner to convert furnaces from wood, coal, or oil and be designated Furnace Installer Helper (utilities).
GOE: 05.12.12 STRENGTH: H GED: R2 M1 L2 SVP: 3 DLU: 77

862.684-026 PLUMBING ASSEMBLER-INSTALLER (mfd. bldgs.)

Assembles and installs manufactured building bathroom hardware, fixtures, and plumbing, under direction of PLUMBER (mfd. bldgs.): Cuts copper tubing according to written instructions, using power saw. Connects, solders, and squares pipes, using solder paste or solder and torch, vice, and level. Selects preassembled wall plumbing units, such as risers, air chamber, and valves, according to diagram. Fastens units to studs with metal braces, using hammer and nails. Selects, assembles, and installs fixtures, such as tub, sink, toilet, and shower fixtures, using handtools. Applies glue to vanity and sets vanity in place.
GOE: 06.02.22 STRENGTH: M GED: R3 M1 L2 SVP: 4 DLU: 77

862.684-030 WATER REGULATOR AND VALVE REPAIRER (waterworks)

Inspects, maintains, repairs, and replaces control devices, such as water pressure regulators, gate valves, and hydrants on water mains in water treatment and distribution systems: Inspects, disassembles, and repairs damaged or malfunctioning control devices of water distribution systems, using handtools. Cleans parts of rust and scale, using scraper and emery cloth. Lubricates wearing surfaces of movable parts. Replaces defective parts or installs new control devices, using handtools. Turns pentagonal nut, using wrench or handwheel to adjust control devices regulators to control water pressure and flow for operating conditions, such as water main leaks, shut-offs, and for trial and emergency purposes. May grind valve seat to remove surface flaws to avoid leakage, using special grinding tool. Prepares requisitions and reports concerning materials needed to effect repairs, cause, and extent of damage to equipment.
GOE: 05.10.02 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

862.684-034 WATER-SOFTENER SERVICER-AND-INSTALLER (business ser.)

Installs and services water-softener tanks: Tests water quality for acidity, iron content, and hardness, using test kit. Examines plumbing system to determine connections, pipes, and pipe fittings required. Cuts, threads, and installs pipes, control valves, and couplings, using wrenches, pipe cutters, pipe threaders, and gas soldering equipment. Installs tank and attaches pipes and hoses to tank, fills tank with water, and inspects tank and pipes for leaks or other defects. Connects hoses of portable regenerating equipment to water-softener tank, and operates equipment to regenerate tank with chemicals to restore water-softener qualities at specified time intervals. Replaces sodium chloride in brine holding tank of automatic soft water conditioning system on specified schedule.
GOE: 05.10.01 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 86

862.687-010 COOLING-PIPE INSPECTOR (construction) alternate titles: pipe inspector

Inspects cooling pipes used in concrete structures, such as dams, retaining walls, and other structures, to locate defective pipes, leaking couplings, or defective fittings, prior to covering of pipe with poured concrete. Tightens joints or couplings with hand wrench to eliminate leaks.
GOE: 05.07.01 STRENGTH: L GED: R3 M1 L2 SVP: 5 DLU: 77

862.687-014 HOLIDAY-DETECTOR OPERATOR (construction) alternate titles: electric-detector operator; jeeper operator; pipe jeeper

Tests coating and wrapping of pipelines for holidays (inadequately coated areas), using electric detecting machine: Places jeeper (encircling coiled spring) around pipe. Closes switch to complete electric circuit between battery or generator and jeeper. Pushes jeeper along pipeline and listens for signal which indicates defect in pipe coating and cover. Moves jeeper back and forth over area where signal occurs until electric arcing is observed. Marks holiday with crayon.

GOE: 05.07.01 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

862.687-018 HYDRO-PNEUMATIC TESTER (any industry)

Tests boilers, tanks, fittings, pipes, and similar objects to detect and locate leaks, using compressed air or water pressure: Installs fittings on object to seal outlets and connects object to high-pressure air or water line, using handtools. Activates air compressor or water pump until gauge registers specified internal pressure. Observes gauge for loss of pressure indicative of leaks, and examines object for escaping air or water to detect leaks. Marks object at source of leaks for subsequent repair. May apply soap solution to surface of object or immerse object to facilitate location of air leaks. May test object under high pressure to ensure compliance with product safety ratings. May be designated according to type of test used as Hydrostatic Tester (any industry); Pneumatic Tester (any industry).

GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

862.687-022 OIL-BURNER-SERVICER-AND-INSTALLER HELPER (any industry)

Assists OIL-BURNER-SERVICER-AND-INSTALLER (any industry) in installing and servicing automatic oil burners in homes and commercial establishments: Carries tools and equipment, such as burners, pipes, pipefittings, handtools, portable power tools, plaster, and insulating materials from truck to work site. Loosens bolts and screws of ashpit and grate bars. Lifts disassembled parts from work area. Hands tools and parts to worker drilling holes in walls, installing oil storage tanks, pipes, and insulating materials. Loosens bolts of oil burners, using wrenches, and removes and cleans oil strainer and sediment bowl with rag. Performs other duties as described under HELPER (any industry) Master Title.

GOE: 05.12.12 STRENGTH: H GED: R1 M1 L1 SVP: 2 DLU: 77

863 ASBESTOS AND INSULATION WORKERS

This group includes occupations concerned with covering and lining structures with asbestos, cork, canvas, tar paper, magnesia, and related materials, using saws, knives, rasps, trowels, and other tools and implements.

863.134-010 BUILDING-INSULATION SUPERVISOR (construction) alternate titles: insulation supervisor

Supervises and coordinates activities of work crew engaged in inserting insulating material in walls, floors, ceilings, and roofs of buildings. Assigns workers to specific duties. Demonstrates to new workers techniques of cutting and installing insulation. Inspects installed insulation to determine conformance to specifications. Performs duties as described under SUPERVISOR (any industry) Master Title. May be designated according to type of insulating material used as Mineral-Wool-Insulation Supervisor (construction).

GOE: 05.10.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

863.134-014 SUPERVISOR, INSULATION (construction)

Supervises and coordinates activities of workers engaged in applying insulating material to exposed surfaces of equipment, such as boilers, tanks, air ducts or pipes: Estimates and requisitions necessary materials and supplies. Assigns workers to specific duties. Demonstrates to new workers techniques of cutting and applying insulation. Inspects applied insulation for conformance to specifications. Compiles production and worker performance reports. Resolves employee grievances. Performs duties as described under SUPERVISOR (any industry) Master Title.

GOE: 05.10.01 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

863.364-010 INSULATION-WORKER APPRENTICE (construction) alternate titles: insulator apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.

GOE: 05.10.01 STRENGTH: M GED: R3 M2 L3 SVP: 6 DLU: 77

863.364-014 INSULATION WORKER (construction)

Applies insulating material to exposed surfaces of structures, such as air ducts, hot and cold pipes, storage tanks, and cold storage rooms: Reads blueprints and selects required insulation material (in sheet, tubular, or roll form), such as fiberglass, foam rubber, styrofoam, cork, or urethane, based on material's heat retaining or excluding characteristics. Brushes adhesives on or attaches metal adhesive-backed pins to flat surfaces as necessary to facilitate application of insulation material. Measures and cuts insulation material to specified size and shape for covering flat or round surfaces, using tape measure, knife, or scissors. Fits, wraps, or attaches required insulation material around or to structure, following blueprint specifications. Covers or seals insulation with preformed plastic covers, canvas strips, sealant, or tape to secure insulation to structure, according to type of insulation used and structure covered, using staple gun, trowel, paintbrush, or caulking gun.

GOE: 05.10.01 STRENGTH: M GED: R3 M2 L3 SVP: 6 DLU: 86

863.381-010 CORK INSULATOR, REFRIGERATION PLANT (construction) alternate titles: insulation worker, interior surface

Applies insulating slabs of cork or fiberglass to walls, floor, and ceiling: Embeds parallel rows of slabs in hot asphalt spread on surfaces or spreads cement mortar on slab with trowel and sticks it to surface. Nails slabs to walls and ceiling construction for additional security. May leave narrow space between wall and slab, if wall structure is rough and uneven, and fill space with cement mortar. May construct false ceiling by nailing slabs to wooden framework or by wiring slabs to T-irons. May construct cork partition walls by cementing rows of cork slabs one upon another. May finish cork surface of walls and ceiling with cement plaster or asphalt mastic compound. May spread concrete over floor slabs to form wearing floor [CEMENT MASON (construction); PLASTERER (construction)].

GOE: 05.10.01 STRENGTH: L GED: R3 M2 L2 SVP: 7 DLU: 77

863.381-014 PIPE COVERER AND INSULATOR (ship-boat mfg.)

Covers boilers, pipes, tanks, and refrigeration units, with insulating materials, such as asbestos, cork, plastic, and magnesia to reduce loss or absorption of heat, prevent moisture condensation, and to deaden sound: Wires prefabricated asbestos covering around steam and hot water piping, using handtools. Trowels mastic or brushes cement on asbestos cloth to obtain smooth finish and covers piping with cloth. Fits thermoblock and magnesia-block insulation around insulating boilers, evaporators, and turbines. Wires insulation on machinery and staples wire netting over insulation. Trowels cement on wire netting to protect insulating material. Wires cork on salt water, refrigeration, and air-conditioning piping and cements cloth over insulating material to obtain smooth finish. Cuts sheets of insulation into sections, using handsaw and miter box. Fits and cements sections around fittings. Covers gas piping of refrigeration or air-conditioning systems with molded plastic. Fabricates detachable insulation for valves or similar fitting by measuring connections, preparing patterns, cutting asbestos cloth, stuffing cloth with amosite (plastic pipe covering), and sewing cover together on power sewing machine. Wires detachable covers on valves or fittings, using handtools. Installs fiberglass or spun glass on ventilating systems to deaden sound and prevent vibration.

GOE: 05.10.01 STRENGTH: M GED: R4 M2 L3 SVP: 8 DLU: 77

863.664-010 BLOWER INSULATOR (railroad equip.; retail trade; wholesale tr.) alternate titles: hose handler

Blows insulating material into spaces within walls, floors, and ceilings, using hose attached to blower, to insulate buildings or railway cars: Inserts nozzle of hose through opening into spaces to be filled. Signals INSULATION-POWER-UNIT TENDER (construction; retail trade; wholesale tr.) to start blower. Turns valve to regulate insulation flow from hose nozzle, and moves hose to distribute insulating material evenly. Climbs ladder or erects scaffold to reach working position. Seals insulation access holes of railway car with wooden bungs or metal caps, using hammer and punch. May insulate walls by covering them with sheets of insulating material, using nails or lacing wire.

GOE: 05.12.14 STRENGTH: M GED: R2 M1 L1 SVP: 5 DLU: 77

863.684-010 COMPOSITION-WEATHERBOARD APPLIER (construction) alternate titles: composition-siding worker

Applies composition weatherboard to exterior of buildings, using carpenter's handtools: Cuts, fits, and nails sections of composition weatherboard to building. Trims sections around windows, doors, and other apertures with molding. Fastens reinforced copper corners to building.

GOE: 05.12.12 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

863.684-014 SIDER (construction; mfd. bldgs.; retail trade) alternate titles: siding applicator

Applies asbestos, aluminum, pulpwood fiber, plastic panels, brick veneer, or porcelainized metal siding to building exteriors to provide decorative or insulating surfaces: Attaches tar paper, building paper, or other material to building surface, using nails or adhesive cement to provide insulating base. Fastens wood or metal laths to surface, using screws or nails. Fits and fastens siding material to laths, using rule, measuring tape, handtools, power tools, nails, screws, or bolts. Cuts and trims material to shape when fitting siding around windows or corners, using knife, shears, or portable power saw. Waterproofs surface by filling joints or cracks with caulking compound, using putty knife, trowel, or caulking gun. May apply precut siding or may cut material to size and shape at work site. May attach siding to surface of building, using adhesive cement. May attach siding by interlocking pieces through tabs provided at edges, following sequence indicated by numbers printed on reverse of each piece. May specialize in type of siding applied and be designated Aluminum-Siding Installer (construction; retail trade); Asbestos-Siding Installer (construction; retail trade); Concrete-Panel Installer (construction; retail trade); Ornamental-Brick Installer (construction; retail trade); Plastic-Panel Installer (construction; retail trade); Porcelain-Enamel Installer (construction; retail trade).

GOE: 05.10.01 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

863.685-010 INSULATION-POWER-UNIT TENDER (construction; retail trade; wholesale tr.) alternate titles: feeder worker power-unit operator

Tends gasoline engine-driven compressor unit used to blow insulating materials into ceiling and wall spaces of buildings: Pushes button or turns handcrank to start engine. Moves lever to start air compressor. Empties bags of rock wool into hopper of feeding unit where wool is blown by compressed air through

hose to sections within ceiling and walls of buildings to obtain insulation against heat or cold. Services engine and compressor unit.
GOE: 05.11.01 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

864 FLOOR LAYING AND FINISHING OCCUPATIONS

This group includes occupations concerned with finishing inlaid, hardwood, or composition floors, and laying asphalt, carpet, cork, linoleum, and rubber blocks or sheet materials, using rollers, knives, trowels, sanding machines, and other devices.

864.381-010 CARPET LAYER (retail trade)
Lays carpet and rugs: Measures and cuts carpeting to size according to floor sketches, using carpet knife. Sews sections of carpeting together by hand. Cuts and trims carpet to fit along wall edges, openings, and projections. May lay linoleum.
GOE: 05.10.01 STRENGTH: H GED: R3 M2 L2 SVP: 7 DLU: 77

864.481-010 FLOOR LAYER (construction; retail trade) alternate titles: floor coverer; floor-covering-tile layer
Applies blocks, strips, or sheets of shock-absorbing, sound-deadening, or decorative covering to floors, walls, and cabinets: Disconnects and removes obstacles, such as appliances and light fixtures. Sweeps, scrapes, sands, or chips dirt and irregularities from base surfaces, and fills cracks with putty, plaster, or cement grout to form smooth, clean foundation. Measures and cuts covering materials, such as rubber, linoleum or cork tile, and foundation material, such as felt, according to blueprints and sketches, using rule, straightedge, linoleum knife, and snips. Spreads adhesive cement over floor to cement foundation material to floor for sound-deadening, and to prevent covering from wearing at board joints. Lays out centerlines, guidelines, and borderlines on foundation with chalkline and dividers. Spreads cement on foundation material with serrated trowel. Lays covering on cement, following guidelines, to keep tile courses straight and butts edges of blocks to match patterns and execute designs. Joins sections of sheet covering by overlapping adjoining edges and cutting through both layers with knife to form tight joint. Rolls finished floor to smooth it and press cement into base and covering. May soften area of floor covering with butane torch to fit materials around irregular surfaces. May lay carpet [CARPET LAYER (retail trade)]. May be designated according to type of floor laid as Asphalt-Tile-Floor Layer (construction; retail trade); Cork-Tile-Floor Layer (construction; retail trade); Linoleum-Floor Layer (construction; retail trade); Linoleum Layer (construction; retail trade); Linoleum-Tile-Floor Layer (construction; retail trade); Rubber-Tile-Floor Layer (construction; retail trade).
GOE: 05.10.01 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

864.481-014 FLOOR-LAYER APPRENTICE (construction; retail trade) alternate titles: floor-coverer apprentice
Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.10.01 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

864.684-010 FLOOR AND WALL APPLIER, LIQUID (construction)
Applies liquid glaze and colored chips to floors and walls to form seamless covering: Applies primer coat of liquid vinyl to floor with squeege and allows surface to dry. Mixes specified amounts of liquid glaze and catalyst, which hardens glaze, and spreads glaze to floor with notched steel trowel. Sprinkles colored chips over surfaces after allowing surface to dry for specified time. Applies second coat of liquid glaze with finishing trowel. Sands surface with floor sander, and applies additional coats of liquid glaze. Repeats procedure when applying seamless covering to walls except primer and liquid glaze are applied with roller and wall surface is sanded by hand.
GOE: 05.10.07 STRENGTH: M GED: R3 M1 L2 SVP: 4 DLU: 77

864.687-010 CARPET-LAYER HELPER (retail trade)
Assists CARPET LAYER (retail trade) to lay carpeting on floors and stairs by performing any combination of following duties: Stretches and tacks carpeting to floors. Cuts rug padding to specified size and tacks it in place on floor, using hammer. Trims carpeting to fit around openings, using knife. Nails metal treads across door openings to hold carpet in place. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.10.01 STRENGTH: H GED: R2 M1 L2 SVP: 3 DLU: 77

865 GLAZIERS AND RELATED OCCUPATIONS

This group includes occupations concerned with preparing and setting glass in structures, using bolts, screws, putty, grinding and buffing wheels, glass-cutting tools, and other materials and devices.

865.131-010 GLAZIER SUPERVISOR (construction)
Supervises and coordinates activities of GLAZIERS (construction) engaged in cutting and installing glass in windows, skylights, store fronts, and showcases, or on surfaces, such as building fronts, interior walls, ceilings, and tabletops. Trains new workers. Inspects installed glass to ensure work meets specifications. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

865.361-010 MIRROR INSTALLER (construction)
Installs custom mirrors on walls, ceilings, and doors in homes and commercial establishments, according to work orders and diagrams, with assistance of helper, using handtools: Loads and arranges mirrors on truck, according to sequence of customer orders. Covers each mirror section with burlap to prevent nicks, scratches, and breakage. Drives to customer location and unloads mirrors, equipment, and tools. Moves furniture to clear work site area and covers floor and furniture with drop cloths. Measures mirrors and dimensions of area to be covered by mirrors, using ruler, chalked cord, work order, and diagram. Determines plumb of walls or ceilings, using plumb line and level. Installs furring strips and shims to level wall surface and provide solid backing for mirrors, using ruler, saw, hammer, and nails. Cuts metal mounting strips and moldings to required lengths, using hacksaw or metal cutters. Attaches strips and moldings to wood, plaster, or concrete walls, using nails, screws, and stud gun. Applies mastic cement, putty, or screws in mirrors with predrilled holes to position and secure mirrors. Accepts payment for completed work.
GOE: 05.10.01 STRENGTH: H GED: R3 M2 L2 SVP: 6 DLU: 86

865.381-010 GLAZIER (construction) alternate titles: glass setter; glass-worker; glazier, plate glass
Installs glass in windows, skylights, store fronts, and display cases, or on surfaces, such as building fronts, interior walls, ceilings, and tabletops: Marks outline or pattern on glass, and cuts glass, using glasscutter. Breaks off excess glass by hand or with notched tool. Fastens glass panes into wood sash with glazier's points, and spreads and smooths putty around edge of panes with knife to seal joints. Installs mirrors or structural glass on building fronts, walls, ceilings, or tables, using mastic, screws, or decorative molding. Bolts metal hinges, handles, locks, and other hardware to prefabricated glass doors. Sets glass doors into frame and fits hinges. May install metal window and door frames into which glass panels are to be fitted. May press plastic adhesive film to glass or spray glass with tinting solution to prevent light glare. May install stained glass windows. May assemble and install metal-framed glass enclosures for showers and be designated Shower-Enclosure Installer (construction). May be designated according to type of glass installed as Glazier, Structural Glass (construction); Plate-Glass Installer (construction).
GOE: 05.10.01 STRENGTH: M GED: R3 M2 L2 SVP: 7 DLU: 77

865.381-014 GLAZIER APPRENTICE (construction)
Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.10.01 STRENGTH: M GED: R3 M2 L2 SVP: 7 DLU: 77

865.684-010 GLASS INSTALLER (automotive ser.) alternate titles: auto-glass worker; glazier; windshield installer
Replaces broken or pitted windshields and window glass in motor vehicles: Removes broken glass by unscrewing frame, using handtools. Cuts flat safety glass according to specified pattern, using glasscutter. Smooths cut edge of glass by holding against abrasive belt. Applies moistureproofing compound along cut edges and installs glass in vehicle. Weatherproofs window or windshield and prevents it from rattling by installing rubber channeling strips around sides of glass. Installs precut replacement glass to replace curved windows. May replace or adjust parts in window-raising mechanism.
GOE: 05.10.01 STRENGTH: M GED: R3 M1 L2 SVP: 4 DLU: 77

865.684-014 GLASS INSTALLER (woodworking) alternate titles: glass inserter; glass setter; glazier
Installs glass in millwork products, such as doors, window sashes, china closets, and office partitions: Places door or sash on worktable and inserts precut glass in opening, or inserts glass as products pass on conveyor, using either of following methods: (1) Inserts precut molding into window opening around edges of glass and taps molding against glass edges, using hammer and wood block. Tacks molding to frame, using hammer or staple gun. (2) Fastens glass into window opening, driving glazier's points into frame over glass, using point-driving tool. Presses and smooths putty into angle formed by glass and wood to make joint watertight, using putty knife. May spread sealing compound around edges of opening before inserting glass, using air gun or knife. May fit framed glass into openings in doors and screw frame to door, using screwdriver. May cut glass [GLASS CUTTER (any industry) 775.684-022]. May be designated according to glass installed as Door-Glass Installer (saw. & plan.); Window Assembler (saw. & plan.).
GOE: 06.04.30 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 87

865.684-018 GLAZIER, METAL FURNITURE (furniture)
Installs glass in doors or other openings in metal furniture, using handtools and power tools: Lays doorframe on glazing block. Inserts and forces rubber cushions in cleats (grooves) of doorframe. Sets glass in place on cushion. Taps upper and lower glazing strips in place into cleats over glass. Lays side strips in place and bores holes in strips at door corners. Screws strips onto doorframe.
GOE: 06.02.22 STRENGTH: M GED: R3 M1 L2 SVP: 5 DLU: 77

865.684-022 REFRIGERATOR GLAZIER (svc. ind. mach.)
Installs airtight plate glass windows in refrigerator display cases and walk-in coolers, using handtools and portable powered drill: Measures and cuts adhesive tape, rubber, or plastic gasket material to fit around outside edge of pane to form airtight seal. Fits gasket material around glass and secures window assembly in cabinet.

GOE: 06.02.22 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

866 ROOFERS AND RELATED OCCUPATIONS

This group includes occupations concerned with covering roofs and exterior walls of structures with slate, asphalt, aluminum, wood, and related materials, using brushes, knives, punches, hammers, and other tools.

866.131-010 ROOFING SUPERVISOR (construction)

Supervises and coordinates activities of workers engaged in covering roofs with roofing materials: Schedules work and assigns duties to workers. Demonstrates to new workers techniques of applying various types of roofing material. Inspects work in progress and when completed to determine conformance to specifications. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.01 STRENGTH: M GED: R4 M2 L3 SVP: 7 DLU: 77

866.381-010 ROOFER (construction)

Covers roofs with roofing materials other than sheet metal, such as composition shingles or sheets, wood shingles, or asphalt and gravel, to waterproof roofs: Cuts roofing paper to size, using knife, and nails or staples it to roof in overlapping strips to form base for roofing materials. Aligns roofing material with edge of roof, and overlaps successive layers, gauging distance of overlap with chalkline, gauge on shingling hatchet, or by lines on shingles. Fastens composition shingles or sheets to roof with asphalt, cement, or nails. Punches holes in slate, tile, terra cotta, or wooden shingles, using punch and hammer. Cuts strips of flashing and fits them into angles formed by walls, vents, and intersecting roof surfaces. When applying asphalt or tar and gravel to roof, mops or pours hot asphalt or tar onto roof base. Applies alternate layers of hot asphalt or tar and roofing paper until roof covering is as specified. Applies gravel or pebbles over top layer, using rake or stiff-bristled broom. May construct and attach prefabricated roof sections to rafters [CARPENTER (construction)]. May attach shingles to exterior walls and apply roofing paper and tar to shower pans, decks, and promenades to waterproof surfaces. When specializing in one type of roofing materials, is designated according to specialty as Aluminum-Shingle Roofer (construction); Asbestos-Shingle Roofer (construction); Asphalt, Tar, And Gravel Roofer (construction); Composition Roofer (construction); Roofer, Gypsum (construction); Slate Roofer (construction); Tile-And-Terra-Cotta Roofer (construction); Wood-Shingle Roofer (construction).
GOE: 05.10.01 STRENGTH: M GED: R3 M2 L2 SVP: 7 DLU: 77

866.381-014 ROOFER APPRENTICE (construction)

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.10.01 STRENGTH: M GED: R3 M2 L2 SVP: 7 DLU: 77

866.684-010 ROOFER APPLICATOR (construction)

Sprays roofs, sidings, and walls with urethane or polyurethane foam to bind, seal, insulate, or soundproof sections of structures: Flips switches to start generator, air compressor, and heaters. Turns nozzle on spray gun to obtain specified consistency of mixture. Directs foam onto surfaces, and determines thickness of foam, using probe. Connects hose of nitrogen tank to spray compound supply tank when spraying is completed, and turns valves to inject nitrogen into supply tank to prevent crystallization of compounds in tank.
GOE: 05.12.14 STRENGTH: L GED: R3 M1 L2 SVP: 6 DLU: 77

869 MISCELLANEOUS CONSTRUCTION OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with building and repairing structures.

869.131-010 CABIN-EQUIPMENT SUPERVISOR (air trans.)

Supervises and coordinates activities of workers engaged in repairing and overhauling aircraft cabin fixtures: Reads schedules to plan work sequences and assigns workers to duties, such as disassembling and repairing passenger seats, flight attendant buffets, cargo containers, cutting carpeting, upholstery material, and leather and plastic paneling, reconditioning seat belts and other safety equipment; and sewing drapes and slip covers. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

869.131-014 CONCRETING SUPERVISOR (construction)

Supervises and coordinates activities of work crews engaged in preparing and applying concrete for fabricating, covering, and reinforcing structures, including buildings, bridges, highways, and dams: Oversees workers who place forms for molding concrete, install reinforcing steel, and convey, pour, finish, and cure concrete. Reads specification sheets for information, such as sizes of aggregates and proportions of cement and water required, to ensure that concrete is mixed according to specifications. Inspects bracing and shoring of concrete forms to ensure their stability before and during pouring. Indicates positions for pouring chutes and runways, cranes, or paving machines to facilitate conveying concrete from mixer to forms. Trains new workers. Directs workers who spread, vibrate, screed, and float concrete, to ensure that concrete is compacted to desired consistency and surface is finished to specified uniformity and smoothness. Examines concrete, after forms are stripped, and gives instruction to workers to repair defects, such as roughness and honeycombed appearance. Prescribes methods for curing concrete, such as covering surface of green (fresh) concrete with burlap, plastic, earth, straw, or chemical compound, to prevent green concrete from drying out rapidly or freezing. Supervises workers engaged in spraying cement mortar or concrete to cover exposed earth, masonry, and steel surfaces and forcing grout (thin mixture of sand, cement, and water) into drilled holes, spaces between foundations and surrounding earth, and fissures in rock foundations, to reinforce structures. Records data, such as time spent on various phases of job and yardage and distribution of concrete poured. May collect samples of each concrete mix for laboratory analysis. May be designated according to workers supervised as Cement-Finishing Supervisor (construction); Concrete-Paving Supervisor (construction); Concrete-Pouring Supervisor (construction); Curb Supervisor (construction); Grout Supervisor (construction). When supervising workers engaged in preparing, setting, and removing tunnel forms for molding concrete in sewer and tunnel construction, may be designated Form-Setter Supervisor (construction); Tunnel-Form-Placing Supervisor (construction). When supervising workers who mold and install reinforced concrete wall slabs, may be designated Tilt-Wall Supervisor (construction). Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

869.131-018 FIELD-ASSEMBLY SUPERVISOR (mfd. bldgs.)

Supervises and coordinates activities of workers engaged in erecting prefabricated homes at construction site: Verifies alignment of floor, walls, ceilings, and roof panels positioned on house foundation visually and with level for compliance with specifications. Trains new workers in construction procedures and techniques. Installs prefabricated exterior doors, using handtools. Maintains production and time records and requisitions supplies. Performs other duties as described under SUPERVISOR (any industry) Master Title. May supervise workers installing trim and components in prefabricated homes and be designated Trim-Crew Supervisor (mfd. bldgs.).
GOE: 05.10.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

869.131-022 HOUSE-MOVER SUPERVISOR (construction)

Supervises and coordinates activities of workers engaged in moving houses and buildings: Inspects buildings for structural weaknesses, such as warped joist, dry rot and termite erosion, and inadequate framing. Supervises workers in positioning of beams, cribbing, hydraulic jacks, dollies, chaining of dollies to house beams, and positioning of structure at new site. Directs workers to raise or lower hydraulic jacks at various locations to align house and verifies alignment of house, using transit. Performs other duties as described under SUPERVISOR (any industry) Master Title. May supervise workers engaged in demolishing structures, salvaging materials, and removing debris.
GOE: 05.10.01 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 77

869.131-026 STEEL-PAN-FORM-PLACING SUPERVISOR (construction) alternate titles: steel-floor-pan-placing supervisor

Supervises and coordinates activities of workers engaged in placing and erecting metal pan forms for prestressed concrete structures and removing, cleaning, and storing forms: Lays out stringers and marks guidelines to locate positions for pans (concrete forms). Directs workers engaged in erecting stringers and shoring to support metal pan forms while concrete is being poured and cured. Trains new workers. May supervise worker engaged in installation of reinforcing steel, and pouring and finishing of concrete and be designated Concreting Supervisor (construction). Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

869.131-030 SUPERVISOR, MANUFACTURED BUILDINGS (mfd. bldgs.; vehicles, nec)

Supervises and coordinates activities of workers engaged in one or more phases of fabrication, assembly, and furnishing of manufactured buildings and travel trailers: Inspects manufactured buildings and travel trailers to ensure assembly and furnishings meet specifications and floor plans. Informs workers of defects and suggests repair methods. May lay out and build assembly jigs. May be designated according to type of work supervised as Assembly Supervisor (mfd. bldgs.; vehicles, nec); Subassembly Supervisor (mfd. bldgs.; vehicles, nec); Final-Finish Supervisor (mfd. bldgs.; vehicles, nec); Millroom Supervisor (mfd. bldgs.; vehicles, nec); Supervisor, Travel Trailer (vehicles, nec). Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

869.131-034 TANKAGE SUPERVISOR (construction) alternate titles: tank-builder supervisor

Supervises and coordinates activities of workers engaged in erecting and maintaining metal tanks used to store liquid materials, such as crude oil, gasoline, and heating oil: Installs and maintains tank components, such as automatic gauges, valves, and vents. May supervise workers engaged in cleaning and painting tanks. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.06 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

869.131-038 SUPERVISOR, SWIMMING-POOL MAINTENANCE (construction)

Supervises and coordinates activities of workers engaged in construction, repair, and maintenance of swimming pools: Measures and marks pool excavation site, using transit and stakes. Directs workers in mixing, pouring, and leveling cement to form pool floor and in assembling prefabricated pool walls and lin-

ing. Cuts openings for plumbing into sides of pool and directs workers in installation of fixtures, such as pipes, spigots, valves, and pumps. Oversees installation of pool solar-heating system components. Inspects work in progress and completed pool installation to verify adherence to specifications. Trains new workers in work methods and assists workers in pool construction, maintenance, and repair. May secure contracts for pool installation and write customer orders. Performs other duties as decribed under SUPERVISOR (any industry) Master Title.
GOE: 05.02.02 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 86

869.133-010 CLEARING SUPERVISOR (construction) alternate titles: clean-up supervisor; right-of-way supervisor

Supervises and coordinates activities of workers engaged in clearing way for structures, such as buildings, bridges, highways, and pipelines: Directs workers engaged in cutting timber, burning brush, blasting stumps, and grading and leveling land. Directs workers engaged in constructing temporary bridges and roads to provide access to construction site. Directs workers engaged in restoring property, such as land, roadways, drainage ditches, and fences, damaged by construction activity. Confers with CLAIM AGENT (petrol. & gas; pipe lines) to ensure that restorations comply with agreements. May load and fire charges of explosives to blast stumps [BLASTER (any industry)]. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.11.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

869.134-010 FENCE-ERECTOR SUPERVISOR (construction)

Supervises and coordinates activities of FENCE ERECTORS (construction) engaged in setting and stretching wire mesh fences, and building wooden or concrete fences. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

869.134-014 SUPERVISOR, ADJUSTABLE-STEEL-JOIST-SETTING (construction)

Supervises and coordinates activities of workers engaged in erecting adjustable steel joists to support concrete floor-slab forms in building construction. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.06 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

869.134-018 SUPERVISOR, PIPELINE MAINTENANCE (pipe lines) alternate titles: crew supervisor; maintenance-crew supervisor; pipe-line maintenance supervisor

Supervises and coordinates activities of workers engaged in maintenance of oil and gas pipelines and pipeline facilities, such as pumping units, compressor stations, tank farms, and right-of-ways: Directs workers engaged in patrolling, inspecting, repairing, and installing pipelines and communication systems, painting pipes and tanks, and in clearing right-of-way. Orders digging and backfilling of culverts and drainage ditches, involving use of trucks, bulldozers, and backhoes. Instructs new workers in work methods, operation of equipment, and safety regulations. Inspects work in progress and completed work to ensure adherence to specifications. Supervises construction or removal of pipelines and pipeline facilities. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

869.134-022 TRACK-LAYING SUPERVISOR (construction) alternate titles: extra-gang supervisor; rail gang supervisor; track layer, head; track leader

Supervises and coordinates activities of workers engaged in laying and repairing railroad tracks: Measures distances from reference stakes to locate positions for installation of trackage, switches, and crossovers. Verifies alignment of rails by measuring distances from rails to predetermine center line. Supervises TRACK-SURFACING-MACHINE OPERATOR (construction) and TRACK LAYER (construction) in repair of railroad tracks. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.11.01 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

869.134-026 SUPERVISOR, ASBESTOS REMOVAL (construction)

Supervises and coordinates activities of workers engaged in removing asbestos from ceilings, walls, floors, and other structures: Reviews job specifications, inspects work site, and confers with contracting agent to evaluate removal project. Estimates length of time, number of workers, and equipment and supplies required to accomplish project. Hires new workers and instructs workers in safety and removal procedures. Assigns and supervises workers in specific tasks, such as setup of equipment and removal and clean-up of asbestos. Monitors and inspects quality of work during project. Examines workers' equipment, such as respirator systems, air evacuation and filtration systems, and air quality testing devices, to ensure that they meet company and government safety standards. May maintain project records and order supplies. May assist workers in removal activities. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.01 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 86

869.137-010 TRAFFIC-MAINTENANCE SUPERVISOR (government ser.)

Supervises and coordinates activities of workers engaged in installing and repairing traffic signals, erecting signs or devices, such as traffic islands and barriers, and in painting traffic-control lines on pavement. When traffic control maintenance is a police responsibility, may be designated Traffic-Maintenance Officer (government ser.). May be designated according to responsibility as Paint-Crew Supervisor (government ser.); Traffic-Signal Supervisor, Maintenance (government ser.); Traffic-Sign Erection Supervisor (government ser.).
GOE: 05.10.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

869.137-014 WRECKING SUPERVISOR (construction)

Supervises and coordinates activities of TRACTOR-CRANE OPERATOR (any industry) and other workers engaged in razing structures, salvaging materials, and removing debris. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.11.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

869.261-010 HOUSE MOVER (construction)

Prepares buildings for moving from one site to another on trailer truck or rollers, determining most suitable technique based on knowledge of structures and moving-permit regulations: Observes size, shape, and position of building to determine placement of beams and route of travel. Cuts large buildings into sections, using carpentry tools, to facilitate moving building, and to comply with permit regulations. Breaks holes in foundation or removes underpinning, using steel cutters and carpentry tools. Directs workers in positioning timbers or steel beams under house. Positions jacks under beams and raises house. Rolls pneumatic-tired dollies under beams, lowers house onto dollies, and fastens dollies to beams, using chains. Bolts crossbeam to supporting beams to provide tow-bar to move house. Attaches winch-cable to crossbeams. Directs TRACTOR-TRAILER-TRUCK DRIVER (any industry) in moving building to new location and positioning it on new site. May turn guilding arm of rear dollies, using block and tackle to assist truck driver to negotiate sharp turns. May erect foundation. May lower and level house on foundation at new location, using hydraulic jacks. May confer with city and highway officials to obtain permit to move house over streets and roads. May direct CARPENTER HELPERS, HARDWOOD FLOORING (construction).
GOE: 05.10.01 STRENGTH: H GED: R4 M3 L3 SVP: 6 DLU: 77

869.261-014 MECHANICAL-TEST TECHNICIAN (inst. & app.)

Fabricates test structures and installs electronic recording instruments according to schematics, blueprints, and engineering specifications, to provide test facilities for research on aircraft arresting gear: Constructs monorail anchoring stands and footings, using arc welder, drill press, press brake, and handtools. Lays out reference points at test site for installation of monorail, using transit and level. Installs monorail, using handtools. Loads and positions moving and still cameras to record test results. Installs device for triggering test stages. Installs electronic equipment, such as galvanometer and oscillograph, following schematics, to record temperature, pressure, velocity, and force. Tests, adjusts, and repairs recording instruments to replace defective electrical components and to solder loose connections, using voltmeter, ohmmeter, and handtools. Prepares report of test observations.
GOE: 05.05.06 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

869.261-018 POURED-CONCRETE-WALL TECHNICIAN (construction)

Surveys and marks construction site, and constructs concrete buildings, using surveying instruments, blueprints, handtools, and power tools, working as member of crew: Reads structural specifications, such as blueprints, building plans, sketches, and plot maps of site location to ascertain dimensions of structure and types of materials to be used. Measures and bolts together wooden or metal sections to form walls, windows, and door frames, using handtools and power tools. Surveys excavation site to ensure specified angles and dimensions of structure footings, using surveying instruments, such as transit and theodolite. Measures distances to points, using steel tape, and records station numbers, distances, and elevations in logbook. Stakes corners of building site and signals BULLDOZER OPERATOR (any industry) I 850.683-010 to excavate area to specified depth. Lays building and wall footings and trues corners, using plumb bob and string, chalk, stakes, footing and wall forms, and hammer. Signals CONCRETE-MIXING-TRUCK DRIVER (construction) 900.683-010 and guides pouring chute that dumps cement into wall and footing cavities. Smooths tops of poured cement, using trowel. Removes wooden forms after cement has dried to free walls and footings, using hammer. Sprays asphalt on outer wall surfaces and footings to waterproof structures. Installs subgrade drainage tile and connects tile to specified points at sewer drain.
GOE: 05.10.01 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 86

869.261-022 REPAIRER, RECREATIONAL VEHICLE (vehicles, nec)

Repairs recreational vehicles, such as campers, travel trailers, and motor homes according to customer service request or work order: Confers with customer or reads work order to determine nature and extent of damage to vehicle. Inspects, examines, or tests parts or item to be repaired or replaced. Lists parts needed, estimates costs, and plans work procedure, using parts list, technical manuals, diagrams, and personal knowledge. Removes damaged exterior panels of vehicle, using handtools. Repairs and replaces structural frame members, seals leaks, and replaces or repairs malfunctioning items, such as heaters, stoves, refrigerators, or water pumps, using equipment and tools, such as drill press, wrenches, and saws. Repairs electrical wiring, plumbing, and gaslines (propane), using items such as caulking compounds, electrical wiring and tape, and plastic or copper pipe. Refinishes wood surfaces on cabinets, doors, moldings, and walls, using woodworking tools, spray equipment, paints, and varnishes. Inspects, examines, and tests functional parts of vehicle, using pressure gauges, ohmmeter, and other test equipment, according to work order, to verify completeness of work performed on new or repaired units before delivery to customer.

GOE: 05.10.01 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 86

869.261-026 WIND TUNNEL MECHANIC (aircraft mfg.)
Constructs, modifies, maintains, and services wind and propulsion tunnel research facilities used to test models of aircraft components, utilizing knowledge of engineering test methods and procedures, using handtools, power tools, machines, and equipment: Installs and aligns mechanical, hydraulic, and pneumatic test equipment and models on support structures, using handtools, power tools, and precision instruments. Installs instrumentation, such as thermocouples and pressure taps, on model and test equipment. Inspects test setup and operates equipment to detect and correct malfunctions. Maintains instrumentation equipment and accessories, such as pressure valves, icing indicators, drive units, spray units, and pumps. Confers with engineering and other personnel during testing and modifies model, test support structure, or test equipment as directed.
GOE: 05.10.04 STRENGTH: M GED: R4 M4 L4 SVP: 7 DLU: 87

869.281-010 FURNACE INSTALLER-AND-REPAIRER, HOT AIR (any industry) alternate titles: furnace worker; heating worker
Installs and repairs hot-air furnaces, stoves, and similar equipment in accordance with diagrams and other specifications, using handtools and pipe-threading tools: Constructs foundation of concrete or other noncombustible material. Assembles and positions heating units in accordance with diagrams, using handtools. Cuts holes in floors and walls to form air duct outlets. Installs air ducts, smoke pipes, blowers, and stokers, following blueprints of building and using handtools. Installs fuel pipes, using dies, pipe cutters, and pipe wrenches. Wraps insulating asbestos around air ducts. Connects and adjusts timers and thermostats. Inspects inoperative heating units to locate causes of trouble. Disassembles heating unit and replaces or repairs defective parts, using handtools. Cuts, bends, and crimps sheet metal to repair furnace and stove casing and pipes, using crimpers, files, snips, handbrakes, and sheet metal hammers. Reassembles and starts heating unit to test operation.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

869.281-014 HOUSE BUILDER (construction)
Builds and repairs houses, barns, commercial buildings, garages, and similar structures according to rough sketches or verbal orders, typically performing duties of several building trades crafts workers, especially those of BRICKLAYER (construction); CARPENTER (construction); PAINTER (construction); PAPERHANGER (construction); PLASTERER (construction). Worker is not expert in any one trade and work usually does not possess finish of more specialized workers. May prepare own building plans. May sublet portions of work to specialists. This job is generally found in rural areas where specialists in individual building trades are not available.
GOE: 05.05.02 STRENGTH: M GED: R3 M3 L3 SVP: 7 DLU: 77

869.281-018 YARD INSPECTOR (ship-boat mfg.)
Examines various units of vessels during construction for faulty work quality and compliance with blueprint specifications and Navy standards, using measuring tools: Inspects welded joints for specified fusion. Examines structural units to determine that frames, plates, and foundations are assembled, according to blueprint specifications. Examines installation of machinery and gear, checking on alignment and operation. Checks installation and operation of electrical wiring and equipment. Examines piping and sheet metalwork. Supervises tests on tanks, pipes, and bulkheads.
GOE: 05.07.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

869.287-010 BRIDGE INSPECTOR (r.r. trans.)
Inspects railroad bridges, trestles, culverts, and waterways to detect damage or wear and to ensure structures conform to safety regulations, building codes, and railroad engineering specifications: Inspects waterways to determine need for cleaning, straightening, or enlargement. Inspects masonry in tunnels, culverts, and waterways to detect cracks in concrete or signs of settlement. Verifies alignment of bridge with road track, using levels and similar gauging instruments. Observes installation of guardrails on bridges to ensure construction according to specifications. Inspects fire protection equipment, such as fire alarms, sprinkler systems, and water barrels, on bridges and in tunnels. Determines need for repainting structures to prevent rust or excessive weathering. Measures clearance between bridges and roads to ensure sufficient clearance for passage of vehicles, in accordance with local building codes and specifications. Inspects piles, posts, and timbers to determine if decayed, split, or crooked. Strikes wooden supports with hammer and listens for sounds indicating decay. Inspects bolts and rivets at joints of floor beams, stringers, and panel points to ensure they are securely fastened. Inspects steel girders to detect buckling. Inspects drainage systems to detect obstructions. Inspects inside of tunnels to detect excessive vegetation growth. Prepares reports of findings, noting location and type of structure, defect, and extent of damage.
GOE: 05.07.01 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

869.361-010 CONDUIT MECHANIC (construction; utilities) alternate titles: duct layer
Builds and repairs concrete underground vaults and manholes, and installs ducts to provide installation and maintenance facilities for underground power cables: Installs sheeting, shoring, and bracing for excavation. Builds wooden forms and erects steel reinforcing for concrete vaults and manholes. Directs workers engaged in pouring concrete into forms, and removes forms after concrete has set. Installs brackets and braces, and cuts apertures required for installation of electric equipment and ducts. Lays drainpipe and connects it to sewer system. Forces air through ducts to test for obstructions, using air compressor. Demolishes or trims vaults and manholes, using pneumatic tools, working in proximity to high-voltage electric cables and equipment. Cuts and lays tile or fiber ducts, using portable power saw and grinder and brickmason's handtools. Cuts, threads, bends, and installs metal conduit. May lay precast concrete ducts.
GOE: 05.05.06 STRENGTH: H GED: R3 M3 L3 SVP: 7 DLU: 77

869.361-014 HYDRAULIC-JACK ADJUSTER (construction)
Sets up hydraulic jacks used to raise precast concrete floors and roof slabs: Guides threaded lift rods, raised by STRUCTURAL-STEEL WORKERS (construction), through holes in jack frames. Slips lift nut (nut cap) over end of rod and inserts hinged nut to fasten lift rod onto jack. Mounts hydraulic motor to jack, using handtools. Fits drive chain around gears on motor and lift nuts. Pulls idler gear arm to adjust tension of drive chain and bolts it in position. Snaps hose fittings and electric wiring in place to connect jacks to control panel and pump. Observes performance of jacks during lifting operations and signals LIFT-SLAB OPERATOR (construction) when malfunction occurs.
GOE: 05.05.06 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

869.361-018 SIGN ERECTOR-AND-REPAIRER (fabrication, nec)
Erects wood or metal framework for use as billboards for outdoor advertisements: Examines blueprints and measures distances with rule and tape to lay out work. Cuts wooden structural parts to shape and size, using power-driven woodworking machines. Directs HOLE-DIGGER-TRUCK DRIVER (construction; tel. & tel.; utilities) in digging holes and setting poles to support structure. Drills holes in masonry or concrete walls with portable power drill, and installs anchor bolts, working from swinging scaffold to install supports on side of buildings. Bolts or nails billboard framework to supports, and directs WELDER, ARC (welding) in welding metal joints. Bolts, nails, or screws wood or metal panels to framework to form base for billboards. Bolts, screws, or clips metal trim in place to form decorative seal for joints between panel and framework. Erects scaffolds and hoists. Repairs billboards by replacing defective parts. May fabricate sign parts, using woodworking and metalworking machines. May paint completed billboard. May install floodlight fixtures. May dig post holes by hand and secure posts in holes.
GOE: 05.05.06 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

869.367-010 ASSISTANT CONSTRUCTION SUPERINTENDENT (construction)
Assists superiors in directing activities of workers concerned with construction of buildings, dams, highways, pipelines, or other construction projects: Assists superiors in planning construction procedures, specifications, work schedules, and material needs. Inspects work in progress to ensure that work conforms to specifications and adherence to work schedules.
GOE: 05.02.02 STRENGTH: L GED: R3 M3 L3 SVP: 7 DLU: 77

869.367-014 MEASURER (retail trade)
Measures windows and doors of customer's home to facilitate custom installation of metal doors, windows, and screens, using folding rule and tape measure. Prepares work order containing window and door dimensions and other customer specifications. May estimate cost of installation.
GOE: 05.09.02 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 77

869.367-018 PIPELINE CONSTRUCTION INSPECTOR (construction)
Inspects materials and quality of work of pipeline construction for conformance to specifications: Observes preparation of right-of-way for conformance to contract agreement. Verifies depth and alignment of trenches, using tape measure. Examines bottom of trench for rocks or other hard objects that might damage pipe coatings. Examines surface and x-ray films of welded joints to detect external and internal welding defects. Observes coating and wrapping of pipe or pipe joints for conformance to specifications and verifies accuracy of coating by observing or conducting electricial tests for holidays (inadequately coated areas on pipe). Advises supervisor regarding corrections to be made.
GOE: 05.07.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

869.381-010 HOUSE REPAIRER (construction)
Repairs and remodels houses and small buildings, according to blueprints or oral instructions: Measures distances and marks reference points on existing structure to lay out work. Removes defective members, existing siding, sheathing, and trim, using pinch bar, portable power saw, hammer, and other carpenter's handtools. Cuts lumber to size and shape, using hand or portable power saw. Nails and screws new framework, sheathing, and trim in place. Fills cracks and other defects in plaster or plasterboard with patching plaster, using trowel. Sands plaster patch after drying to match existing surface. Paints interior and exterior surfaces to specified color and texture. Replaces or installs new electrical fixtures, plumbing hardware, and brickwork, using pliers, screwdrivers, wrenches, and trowel.
GOE: 05.10.04 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

869.381-014 LABORATORY-EQUIPMENT INSTALLER (construction)
Installs laboratory and hospital equipment, such as chemical-resistant tables, laboratory benches, hoods for fumes, and operating-room sinks, according to blueprints, using carpentry and plumbing tools: Measures distances on wall or floor with rule or tape to lay out installation. Drills holes in masonry or steel framework with portable electric drill. Assembles equipment and anchors it to framework, using tap-in socket or expansion bolts.
GOE: 05.10.01 STRENGTH: V GED: R3 M3 L3 SVP: 7 DLU: 77

869.381-018 PIPE INSTALLER (construction; utilities)
Installs conduit pipe used to protect electrical wiring in buildings and transportation equipment: Reads blueprints to determine size, position, and amount

of conduit pipe required. Cuts threads, and bends pipe, using handtools and power tools. Installs pipe in walls, ceilings, and floors.
GOE: 05.10.01 STRENGTH: H GED: R3 M2 L3 SVP: 7 DLU: 77

869.381-022 SAFE-AND-VAULT SERVICE MECHANIC (business ser.; wholesale tr.) alternate titles: safe repairer; vault mechanic

Installs and repairs safes and vault doors in banks and other establishments: Installs vault doors and deposit boxes in banks, according to blueprints, using equipment, such as powered drills, taps and dies, and truck crane and dolly. Removes, repairs, adjusts, and reinstalls safes, vault doors, vault compartments, hinges, and other vault and safe equipment, using handtools and other machines and equipment, such as lathes, drill presses, and welding and acetylene cutting apparatus. Tests and repairs locks and locking devices [LOCKSMITH (any industry)]. Removes interior and exterior finishes and sprays on new finishes.
GOE: 05.05.06 STRENGTH: H GED: R3 M3 L3 SVP: 7 DLU: 77

869.381-026 SIGN ERECTOR I (fabrication, nec) alternate titles: sign hanger

Erects preassembled illuminated signs on buildings or other structures, according to sketches, drawings, or blueprints: Measures location for sign and marks points where holes for expansion shields are to be drilled, using measuring tape and chalk. Drills holes, using star drill. Drives expansion shield into hole with hammer, and secures lag bolts in shield, using wrench. Attaches hanging pole for sign to building front with lag bolts, and secures pole with guy wires attached from pole to lag bolts. Secures cornice hook on roof, rigs block and tackle, and hoists sign into position, or operates hydraulic boom to position sign. Secures sign to hanging pole with hooks. Makes electrical connections to power source and tests sign for correct operation. May prewire sign before installing. May use welding equipment when installing sign. May mount plastic signs with adhesives. May fabricate signs according to specifications and be designated Sign Maker (fabrication, nec).
GOE: 05.05.06 STRENGTH: M GED: R4 M2 L3 SVP: 7 DLU: 77

869.381-030 STEEPLE JACK (construction)

Constructs, maintains, and demolishes elevated structures, such as smokestacks, water tanks, and steeples, according to specifications: Climbs ladder attached to structure; assembles and climbs interlocking ladder; constructs and climbs scaffolding tower around structure; attaches block and tackle to cable, fastened on structure or on boom of adjoining erection tower; or uses crane to hoist self in boatswain chair. Positions and welds fabricated steel sections to structure; lays bricks and lines concrete brick and stone chimneys; fills mortar joints of fractures; installs lightning protection devices; applies paint and waterproofing solutions; sandblasts to clean and polish; positions and nails ladders, rails, and scaffolding to structure; or constructs and repairs roofs, using such roofing materials as asphalt and shingles. Demolishes structure by any of following methods: Dismantles sections and chutes section to ground; cuts out section of base, shores up with timbers and dynamites or burns timbers to collapse structure; or cuts structure at base, using cable attached to block and tackle fastened to boom of adjoining erection tower, to lower structure to ground. May fasten brackets onto structure, lay planks on brackets and attach guard rail on brackets to construct scaffold. May repair brick chimneys and smokestacks and be designated Chimney Repairer (construction).
GOE: 05.05.06 STRENGTH: M GED: R3 M3 L3 SVP: 7 DLU: 77

869.381-034 TIMBER FRAMER (mine & quarry) alternate titles: timber repairer

Cuts, fits, installs, and repairs supporting timbers and other framework in underground mine, using carpentry tools: Measures and cuts timbers for roof supports and framing, such as ladders, chutes, walls, and ventilation doors, using handsaw or power saw, square, and rule. Sets roof timbers and inserts wedges to hold them in place. Erects cribbing to increase support or control ventilation [STOPPING BUILDER (mine & quarry)]. Mortises joints with saw, chisel, or adz, and bores boltholes with brace and bit or power drill. Installs braces to repair or shore up loose timbering, using hammer and spikes. May set and wedge props (posts) in place as temporary support for roof or working face. May cut timbers to size and load them onto cars for haulage to mine. May build wooden forms, and mix and pour concrete supports. May set and bolt together steel roof supports and insert wedges to hold supports in place.
GOE: 05.05.02 STRENGTH: H GED: R3 M2 L2 SVP: 6 DLU: 77

869.384-010 REPAIRER, MANUFACTURED BUILDINGS (mfd. bldgs.; vehicles, nec)

Repairs defective units and systems in mobile, modular, and prefabricated homes and travel trailers, using handtools and power tools: Connects water hose to inlet pipe of plumbing system and tests operation of water closets and sinks. Examines and pressure-tests pipes and connections to detect leaks. Repairs leaks with caulking compound or replaces pipes, using pipe wrench. Connects electrical system to outside power source and activates switches to test operation of appliances and light fixtures. Locates and repairs frayed wiring, broken connections, or incorrect wiring, using ohmmeter, soldering iron, tape, and handtools. Opens and closes doors, windows, and drawers to test their operation and trims edges to fit, using jack-plane or drawknife. Resets hardware, using chisel, mallet, and screwdriver. Refinishes wood surfaces on cabinets, doors, moldings, floors, and walls, using power sander, putty, wood finish or paint and brush. May install furniture in mobile home [INSTALLER (mfd. bldgs.; vehicles, nec)]. May seal open side of modular units or double-wide mobile homes to prepare them for shipment, using polyethylene sheets, nails, and hammer. May drive truck to transport mobile and modular homes or travel trailers. May position mobile home for permanent occupancy on customer's lot, using building blocks, bubble levels, hydraulic jacks, lumber, shingles, and handtools. May be designated Servicer, Travel Trailers (vehicles, nec).
GOE: 05.10.01 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 77

869.387-010 POLE INSPECTOR (utilities) alternate titles: field inspector; pole tester

Inspects power line poles for rot or other deterioration: Examines poles supporting power line. Taps pole with hammer and listens for vibrations indicating internal decay. Tests defective poles with probing bar or bores into poles with brace and bit or auger to determine extent of rot. Drives wooden pegs into bored holes to seal against moisture, using hammer. Prepares reports indicating condition and draws diagrams showing location of poles, with recommendations for pole replacement or type of treatment required to arrest rotting or restore poles. Collects sample of unusual type of rot for laboratory analysis. May estimate labor and materials costs of repairing or replacing poles. May examine attachments to poles and report conditions hazardous to power line facilities.
GOE: 05.07.01 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

869.463-010 SWIMMING POOL INSTALLER-AND-SERVICER (construction)

Performs any combination of following tasks in constructing, installing, and servicing swimming pools at commercial and residential sites: Plots length and width of pool site, according to specifications, and marks corners of site, using stakes and sledgehammer. Confers with customer to ensure that pool location and dimensions meet customer's demands. Operates backhoe to dig, shape, and grade walls of in-ground pool. Assembles and aligns wall panel sections, using nuts, bolts, electric air gun, and transit. Pours premixed concrete mixture between dirt wall and wall panels to establish footing (foundation base) to anchor bottoms of wall panels and cross braces. Dumps and spreads gravel into hollow foundation to form drain field, using wheelbarrow, shovel, and rake. Digs trenches, spreads gravel, and lays drain tiles uphill of pool site to divert ground water. Lays out and connects pipelines for water inlet, return valves, and filters, using handtools. Snaps coping section to inside upper edge of wall panels around pool circumference to secure liner edge and protect pool users. Mixes prescribed amounts of cement, sand, and water, and pours mixture into foundation. Spreads and smooths mixture evenly throughout foundation, using trowel, and allows mixture to set. Assembles heater parts, connects gas, oil, or electric lines, and starts heater to verify working order of unit. Installs liner into pool, starts pump to fill pool with water, and installs return valves. Builds concrete deck around pool. Lays out and assembles prefabricated parts of above-ground pool, installs liner, connects plumbing lines, starts pump, and checks pool for leaks. Maintains and repairs pool and equipment, advises customers, and sells chemicals to prevent pool water problems.
GOE: 05.10.01 STRENGTH: V GED: R4 M4 L4 SVP: 8 DLU: 86

869.481-010 AWNING MAKER-AND-INSTALLER (furniture; retail trade)

Fabricates and installs fiberglass and metal awnings for homes and commercial and industrial establishments: Measures windows, doors, and other openings for size of awning and cuts and assembles frame [AWNING-FRAME MAKER (tex. prod., nec)]. Lays out and cuts fiberglass sheets to size with circular saw or cuts metal slats to proper length with handtools or power tools and bolts to frame. Drills holes in window and door frames, masonry, or brick, and mounts brackets. Hangs awnings in brackets. Installs and fastens control rod to louvers or awnings, and tests for ease of operation. May solder frame parts. May paint awnings desired color, using spray gun. May assemble venetian blinds [VENETIAN-BLIND ASSEMBLER (furniture; retail trade)].
GOE: 05.10.01 STRENGTH: M GED: R3 M3 L2 SVP: 5 DLU: 77

869.484-010 AWNING HANGER (construction; retail trade; tex. prod., nec) alternate titles: awning erector; awning installer

Attaches rigid or roll-up canvas, metal, or plastic awnings onto buildings, using handtools and power tools: Measures installation site of awning, such as door, window, and store front, and marks location for frame brackets and hinges. Drills holes into brick, stone, or wood. Screws or nails frame fittings into place. Mounts awning frame to fittings and fastens into position with handtools. Attaches crank roller to frame and building as required. Rolls or lifts awning and makes adjustments to canvas, metal, plastic, ropes, and frame to correct operating defects. May measure buildings to develop specifications for fabrication of awnings. May install awning hoods. May fabricate awning frame [AWNING-FRAME MAKER (tex. prod., nec)]. May assemble awning to frame [RIGGER (tex. prod., nec)]. May repair canvas coverings [CANVAS REPAIRER (any industry)].
GOE: 05.10.01 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 77

869.484-014 DRAPERY HANGER (retail trade) alternate titles: installation worker, draperies; installer

Installs draperies in customers' homes: Measures area to be covered, and delivers finished draperies to customers' homes. Screws and bolts brackets and hangers onto wall, using handtools. Hangs and arranges draperies to enhance appearance of room. May install window shades and venetian blinds.
GOE: 05.10.01 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

869.484-018 VENETIAN-BLIND INSTALLER (furniture; retail trade)

Installs venetian blinds in customer's home or business establishment: Measures and marks location for hanging brackets, using rule and pencil. Drills

bracket holes in cement, plaster, or wood and installs brackets, using hand or electric drill and screwdriver. Secures blinds in brackets and pulls lowering, raising and tilting cords to detect and adjust functioning defects. Measures installation site to obtain specifications for fabrication of blinds. May sell venetian blinds and assist customer in color selection of blinds. May clean and repair venetian blinds [VENETIAN-BLIND CLEANER AND REPAIRER (any industry)]. May assemble new venetian blinds [VENETIAN-BLIND ASSEMBLER (furniture; retail trade)].
GOE: 05.10.01 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

869.487-010 MEASURER (struct. metal)
Measures door and window openings in buildings for metal-framed doors and windows: Measures opening for size of door or window required. Records measurements for fabricators and assemblers. May adjust and repair faulty doors or windows, using manual and portable power tools.
GOE: 05.09.02 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

869.564-010 LINE WALKER (petrol. & gas; petrol. refin.; pipe lines) alternate titles: line rider
Patrols oil and gas pipelines and communication systems on foot, horseback, or in automobile to locate and repair leaks, breaks washouts, and damaged utility wires and poles: Inspects pipelines to detect evidence of leaks, such as oil stains, odors, and dead vegetation. Repairs small leaks, using caulking tools, hammers, clamps, and wrenches. Reports large leaks and washouts to district office. Inspects telephone and telegraph wires to locate broken insulators, wires and fallen poles, and reports findings. Inspects operation of automatic drip bleeder on gaslines to detect malfunctions, such as clogged valves, and adjusts or repairs valves, using handtools. Installs and replaces warning signs along road and water crossings. Prepares inspection reports.
GOE: 05.07.01 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 77

869.567-010 SURVEYOR HELPER (any industry)
Performs any of following duties to assist in surveying land: Holds level or stadia rod at designated points to assist in determining elevations and laying out stakes for mapmaking, construction, mining, land, and other surveys. Calls out reading or writes station number and reading in notebook. Marks points of measurement with elevation, station number, or other identifying mark. Measures distance between survey points, using steel or cloth tape or surveyor's chain. Marks measuring points with keel (marking crayon), paint sticks, scratches, tacks, or stakes. Places stakes at designated points and drives them into ground at specified elevation, using hammer or hatchet. Cuts and clears brush and trees from line of survey, using brush hook, knife, ax, or other cutting tools. May perform duties as directed by LAND SURVEYOR (profess. & kin.) or SURVEYOR ASSISTANT, INSTRUMENTS (profess. & kin.). May perform one operation and be designated Brush Clearer, Surveying (any industry); Staker, Surveying (any industry); Surveyor Helper, Chain (any industry); Surveyor Helper, Rod (any industry).
GOE: 05.12.02 STRENGTH: M GED: R3 M1 L2 SVP: 4 DLU: 77

869.662-010 LIFT-SLAB OPERATOR (construction) alternate titles: slab lifting engineer; slab lifting supervisor
Operates hydraulic jacks to raise precast concrete floors and roof slabs into position: Directs HYDRAULIC-JACK ADJUSTERS (construction) engaged in erecting scaffolds, hoisting and installing hydraulic jacks on top of support columns, erecting lift rods, and fastening them to jack and support plates set in concrete slab. Measures and marks grade lines on support columns. Connects pump and jacks to control panel, and positions panel on slab so that jacks and grade marks may be observed during lifting. Starts pump and moves levers and valves on control panel to regulate action of jacks. Signals worker to verify grade with rule. Adjusts control valves when slab has reached predetermined position. Directs welding crew to weld supporting collars or brackets to column. May drive truck, equipped with winch, to raise jacks to position on support columns, and to lift and remove equipment from slab.
GOE: 05.12.04 STRENGTH: M GED: R4 M2 L3 SVP: 7 DLU: 77

869.664-010 CONCRETE-BUILDING ASSEMBLER (mfd. bldgs.)
Performs any combination of following duties concerned with assembling concrete buildings at construction site, working as member of crew: Positions column location templates at specified locations on prepared concrete foundations for installing wall panel support columns. Nails template to floor, using cement nails and hammer. Enlarges recessed area around reinforcement rod projecting from floor at column installation site to ensure proper height of column when installed, using hammer and chisel. Wets area with water to ensure bonding of mortar, and applies mortar with trowel. Installs column in wet mortar with protruding pipe end of column down over rod. Aligns and braces column vertically, using bubble lever, board, nails, and hammer. Nails upper column support templates to top of columns, using hammer and measures distance between columns, using tape. Installs outside and inside wall panels that have tongue-and-groove edges, using pneumatic hoist. Inserts pin through hoist hooks and holes in concrete wall panels to lift and position panels between columns. Signals worker to operate hoist to maneuver panel past rough spots in grooves of columns. Removes obstructions in grooves with hammer and chisel. Patches holes, cracks, and joints in assembled sections of building, using mortar and trowel.
GOE: 05.12.12 STRENGTH: H GED: R2 M2 L2 SVP: 4 DLU: 77

869.664-014 CONSTRUCTION WORKER I (construction)
Performs any combination of following duties on construction projects, usually working in utility capacity, by transferring from one task to another where demands require worker with varied experience and ability to work without close supervision: Measures distances from grade stakes, drives stakes, and stretches tight line. Bolts, nails, aligns, and blocks up under forms. Signals operators of construction equipment to facilitate alignment, movement, and adjustment of machinery to conform to grade specifications. Levels earth to fine grade specifications, using pick and shovel. Mixes concrete, using portable mixer. Smooths and finishes freshly poured cement or concrete, using float, trowel, or screed. Positions, joins, aligns, and seals pipe sections. Erects scaffolding, shoring, and braces. Mops, brushes, or spreads paints or bituminous compounds over surfaces for protection. Sprays materials such as water, sand, steam, vinyl, paint, or stucco through hose to clean, coat, or seal surfaces. Applies caulking compounds by hand or with caulking gun to seal crevices. Grinds, sands, or polishes surfaces, such as concrete, marble, terrazzo, or wood flooring, using abrasive tools or machines. Performs variety of tasks involving dextrous use of hands and tools, such as demolishing buildings, sawing lumber, dismantling forms, removing projections from concrete, mounting pipe hangers, and cutting and attaching insulating material. Work is usually performed with other workers. May be designated according to duties performed as Batterboard Setter (construction); Billboard-Erector Helper (construction); Bricklayer, Paving Brick (construction); Caulker (construction). May be designated: Carpenter Helper, Maintenance (construction); Cement Mason, Highways And Streets (construction); Cement Sprayer, Nozzle (concrete prod.; construction); Concrete-Wall-Grinder Operator (construction); Corrugated-Sheet-Material Sheeter (construction); Cradle Placer (construction); Dampproofer (construction); Drain Layer (construction); Duct Installer (construction; mfd. bldgs.); Fine Grader (construction); Fitter (construction; pipe lines); Floor Finisher (construction); Floor-Sanding-Machine Operator (construction); Form-Builder Helper (construction); Form Setter, Metal-Road Forms (construction); Form Setter, Steel Forms (construction); Form Setter, Steel-Pan Forms (construction); Foundation-Drill-Operator Helper (construction); Glazier Helper (construction); Ground Wirer (construction); Holder, Pile Driving (construction); Hydrant-And-Valve Setter (construction); Insulation Installer (construction); Joist Setter, Adjustable Steel (construction); Laborer, Adjustable Steel Joist (construction); Laborer, Carpentry, Dock (construction); Layer-Out, Plate Glass (construction); Lightning-Rod Erector (construction); Ornamental-Iron-Worker Helper (construction); Painter, Rough (construction); Painter, Structural Steel (construction); Paint-Stripping-Machine Operator (construction); Permastone Dresser (construction); Pile-Driving Setter (construction); Pipe Caulker (construction); Pipe Layer (construction); Pipeline Worker (construction); Plumber Helper (construction); Pointer, Caulker, And Cleaner (construction); Pump-Erector Helper (construction); Receiver Setter (construction); Roofer, Vinyl Coating (construction); Seat Installer (construction); Septic-Tank Servicer (construction); Sewer Tapper (construction); Shore (construction); Stone Polisher (construction); Tapping-Machine Operator (construction); Tuck Pointer (construction); Waterproofer (construction); Well-Drill-Operator Helper, Cable Tool (construction); Well-Drill-Operator Helper, Rotary Drill (construction); Wrecker (construction).
GOE: 05.10.01 STRENGTH: H GED: R3 M3 L3 SVP: 4 DLU: 88

869.664-018 SEWER-LINE REPAIRER (sanitary ser.)
Repairs and maintains municipal storm and sanitary sewer lines, performing any combination of following tasks: Inspects manholes to locate stoppage. Runs cleaning rods through rod guide, fits front end of rod with auger, using wrench, and lowers guide into position. Thrusts rods into invert and advances them until auger reaches obstruction. Rotates rods manually with turning pin, or attaches end of rod to portable power rodder to rotate rods. Pulls lever and depresses pedal of machine to advance cleaning tool to encounter obstruction and to rotate cable or rods until obstacle is broken. Retracts rods to drag out obstructions, such as roots, grease, and other deposits. Cleans and repairs catch basin, manholes, culverts, and storm drains, using handtools. Lays brick to raise manhole walls to prescribed street level, using masonry tools. Measures distance of excavation site, using tape measure, and marks outline of area to be trenched according to direction of supervisor. Breaks asphalt and other pavement, using airhammer, pick, and shovel. Cuts damaged section of pipe with cutters and removes broken section from ditch. Replaces broken pipes and reconnects pipe sections, using pipe sleeve. Inspects joints to ensure tightness and seal before backfilling. Packs backfilled excavation, using air and gasoline tamper. Taps mainline sewers to install sewer saddles. Replaces manhole covers. Updates sewer maps and manhole charting. Drives pickup trucks to haul crew, materials, and equipment. Services, adjusts, and makes minor repairs to equipment, machines, and attachments. Communicates with supervisor and other workers, using radio telephone. Prepares records showing actions taken, human resource and equipment utilization, and disposition of material. Requisitions tools and equipment. Operates sewer cleaning equipment including power rodder, high velocity water jet, sewer flusher, bucket machine, wayne ball, and vac-all. Cleans and disinfects domestic basements and other areas flooded as a result of sewer stoppages. May lead workers in large repair and construction crew and direct other workers in efficient and safe use of machines, work methods, and safety procedures.
GOE: 05.12.12 STRENGTH: H GED: R3 M2 L2 SVP: 6 DLU: 86

869.665-010 AUXILIARY-EQUIPMENT TENDER (construction)
Tends one or more portable power-driven pumps, compressors, or generators to provide power for tools, machinery, and equipment, to remove water, or to maintain air supply at construction site: Connects hoses, pipelines, or power cables, using wrench, and fills fuel tank. Starts power unit, pump, or compressor, and sets controls to regulate air pressure or electricity. Observes temperature,

pressure, or amperage gauges and adjusts controls to maintain specified level. Lubricates, maintains, and repairs equipment, using handtools. May be designated according to equipment tended as Compressor Operator (construction); Generator Tender, Portable (construction); Lock Tender (construction) I; Pump Tender (construction).
GOE: 05.11.01 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

869.667-010 COLUMN PRECASTER (mfd. bldgs.)

Performs any combination of following duties concerned with making concrete columns to be used as wall panel and ceiling supports in concrete buildings: Cleans forms of concrete residue, using putty knife, hammer, chisel, wire brush, and broom. Sprays oil on forms to prevent concrete from sticking to form, using pressure sprayer. Assembles forms, using bolts and wrench. Places opened sided aluminum column forms on form bed in specified alignment. Positions pipe inside columns and tapes end of pipe to prevent entry of concrete, using masking tape. Attaches end pieces of forms that hold pipe and concrete when concrete is poured. Inserts metal spacers into open side of column to stabilize column sides during pouring of concrete. Signals CONCRETE-MIXING-TRUCK DRIVER (construction) to position mixer to fill columns. Moves discharge chute of mixer to distribute concrete. Operates electric vibrator to evacuate air bubbles and allow even distribution of concrete in column form. Disassembles and removes column form, using wrench, hammer, and chisel. Inserts and secures sleeve fittings on end of pipe, using screwdriver. Places cast columns in storage area.
GOE: 06.04.32 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

869.667-014 SIGNALER (construction) alternate titles: highballer

Signals or relays signals to operators of hoisting equipment engaged in raising or lowering loads and pumping or conveying materials, such as concrete and gunite, by telephoning, blowing whistle, motioning by hand or flag, or by pulling bell cord. May remove dogs, chains, or slings from hoisted material.
GOE: 05.12.04 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

869.681-010 CONCRETE-FENCE BUILDER (construction)

Constructs concrete block and mortar post and installs precast concrete panels to build fences: Lays out fence, according to blueprint specifications, using level and tape measure. Operates earth moving equipment to clear and level land [OPERATING ENGINEER (construction; mine & quarry)]. Operates power-auger to dig post holes [EARTH-BORING-MACHINE OPERATOR (construction; utilities)]. Positions reinforcing iron in holes, and places preshaped wood forms around hole. Mixes and pours concrete into forms or lays concrete blocks to form fence post, using mixer, wheelbarrow, or trowel. Positions precast concrete panels between block or concrete post, using crane.
GOE: 05.05.01 STRENGTH: H GED: R3 M2 L2 SVP: 6 DLU: 77

869.682-010 CIRCULAR SAW OPERATOR (construction)

Operates circular saw to cut concrete or asphalt along marked line to facilitate installation and repair of utility systems and equipment: Installs specified diamond edged circular blade, using handtools. Positions and lowers guide arm of saw over marked cutting line. Connects water hose to supply coolant between cutting blade and surface. Starts motor and pushes lever to lower blade into concrete surface until specified depth has been attained. Pulls lever to activate self-propelled saw along marked line. Guides saw along line, using handle bars attached to saw. Changes worn cutting blades and makes minor repairs, using handtools.
GOE: 05.10.01 STRENGTH: M GED: R3 M1 L2 SVP: 5 DLU: 77

869.682-014 CORE-DRILL OPERATOR (construction)

Operates core drilling equipment to drill holes of specified size in walls or slabs of concrete to facilitate installation and repair of utility systems and equipment: Locates and marks position for drill base, using rule and chalk. Secures drill base to floor, using bolts and wrench. Bolts drill stand to base, mounts drill motor on stand, and levels drill by turning screws at base of drill, using wrench. Connects equipment to electrical outlet, and attaches water hose which supplies coolant for drill. Attaches diamond tipped core drill to drill rod, and fastens rod in machine, using wrench and other handtools. Starts motor and turns crank to move drill into specified drilling position. Observes pressure gauge to maintain specified pressure on drill bit with crank. Tapes plastic bags to finished walls to prevent water damage. Lubricates equipment and makes minor repair, using grease gun and handtools.
GOE: 05.11.03 STRENGTH: M GED: R3 M1 L2 SVP: 5 DLU: 77

869.683-010 FORM-TAMPER OPERATOR (construction) alternate titles: form tamper; form-tamping-machine operator; tamping-machine operator, road forms

Operates gasoline powered machine to tamp earth solidly around foundation form: Lifts and positions machine on single rail of form. Pushes lever to engage crankshaft and activate tamping arms. Pushes or pulls machine manually, using Y-shaped handle to balance and guide machine along rail. Removes or places earth at sides of form, using shovel.
GOE: 05.11.01 STRENGTH: H GED: R2 M1 L2 SVP: 3 DLU: 77

869.683-014 RIGGER (construction)

Operates power winch, equipped with cathead, to haul and slack ropes and cables to move barge or skid-mounted piledriver into position and hold piledriver leads in position for driving piling at angles: Attaches lines to piling or snubbing post to pull or anchor piledriver. Winds and releases ropes or cables on winch drum to move barge, piledriver, or piledriver leads. Fastens lines to piledriver platform or barge to hold it in place while driving piles.
GOE: 05.11.01 STRENGTH: H GED: R3 M1 L2 SVP: 4 DLU: 77

869.683-018 TAMPING-MACHINE OPERATOR (construction) alternate titles: asphalt-tamping-machine operator; hydraulic-hammer operator; tamper operator

Operates crawler-tire or pneumatic-tire mounted tamping machine to compact earthen fills and finished road materials: Drives machine to work area. Moves levers to control tamping action of machine. May operate machine with interchangeable hammers to cut or break up pavement and drive guardrail posts into earth.
GOE: 05.11.01 STRENGTH: L GED: R3 M1 L2 SVP: 5 DLU: 77

869.684-010 ASSEMBLER (mfd. bldgs.; vehicles, nec) alternate titles: framer

Performs any combination of following duties to assemble mobile and modular homes or travel trailer coaches, following blueprints and verbal instructions, using handtools and power tools: Positions precut frame members in jigs and nails, rivets, or bolts members together to assemble wall, floor, and roof frames, using carpenter tools. Positions wheel and spring assembly on brackets of chassis, using chain hoist, and bolts assembly to chassis, using power wrench. Installs tires on wheels, using power tire changer and tire tools. Positions and fastens precut metal beams on front of chassis to form tongue and attaches jack-and-hitch assembly to tongue, using arc-welding equipment. Sprays undercoating compound on floor frame and chassis with spray gun. Installs furring strips, insulation, and plywood flooring over floor frame, using carpenter's tools, staple gun, insulation tape, and gang-nail press. Positions and bolts chassis-and-wheel assembly to floor frame, using hoist and impact wrench. Erects side, end, and roof sections, using hoist or crane, and fastens sections to floor frame, using rivet gun or welding equipment and carpenter's tools. Assembles and installs preformed sections of sheet metal to form heating and air-conditioning ducts, using power screwdriver and aluminum tape. Stuffs insulation batting between wall frame members, and attaches wood or metal paneling to form interior walls, using brush, glue gun, rivet gun, and hammer. Lays out and cuts openings in wall and floor panels, according to blueprint specifications, to facilitate installation of windows, vents, electrical outlets, and heat registers, using rule, power saw, and tin snips. Fastens registers in openings, using screwdriver. May install electrical wiring and copper tubing and perform other duties as described under INSTALLER (mfd. bldgs.; vehicles, nec) 869.684-026. May lead and give directions to other workers. May be designated according to section assembled as Floor Finisher (mfd. bldgs.); Floor Framer (mfd. bldgs.); Roof Framer (mfd. bldgs.); Sheller (mfd. bldgs.); Side Framer (mfd. bldgs.); Wheel Installer (mfd. bldgs.). May assemble utility buildings and be designated Assembler, Utility Buildings (mfd. bldgs.).
GOE: 06.02.22 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 79

869.684-014 ASSEMBLER, SKYLIGHTS (plastic prod.)

Assembles and polishes plexiglass dome skylights, using handtools and electric buffer: Places aluminum frame on assembly table. Masks frame with adhesive-backed cork tape. Attaches dome to frame, using electric drill, electric screwdriver, or electric riveting gun. Polishes dome to remove blemishes, using electric buffer. Stacks domes on pallet. May move pallet to shipping department, using dolly.
GOE: 06.04.24 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

869.684-018 ASSEMBLER, SUBASSEMBLY (mfd. bldgs.; vehicles, nec)

Joins precut wood, metal, and plastic board pieces to assemble roof, sidewall, and floor subassemblies of manufactured buildings or travel trailer coaches, using assembly jig, handtools, and power handtools: Positions and aligns roof trusses, girders, studs, and other frame members in assembly jig, according to blueprint specifications. Fastens frame members together, using hammer and nails, gang-nail-press, or welding equipment. Attaches insulation and furring strips to framework, using pneumatic stapler. Attaches plywood, plasterboard, or metal sheathing to framework to form interior wall, ceiling, and subfloor of home, using power screwdriver and stapler, glue gun, hammer and nails, or pneumatic nailer. Trims sheathing overlap, using portable router. Measures, marks, bores, or cuts out sections of sheathing to facilitate installation of utility outlets and wiring, according to blueprints, using templates, power drill, and router. Moves completed subassembly to storage or assembly area. May be designated according to specific work performed as Roof Assembler (mfd. bldgs.) II; Interior Wall Assembler (mfd. bldgs.); Floor Assembler (mfd. bldgs.); Frame Assembler (mfd. bldgs.).
GOE: 06.04.22 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 77

869.684-022 FENCE ERECTOR (construction) alternate titles: ironworker, wire-fence erector; wire-fence builder

Erects and repairs metal and wooden fences and fence gates around industrial establishments, residences, or farms, using power tools and handtools: Lays out fence line, using tape measure, and marks positions for postholes. Digs postholes with spade, posthole digger, or power-driven auger. Blasts rock formations with dynamite to facilitate digging of postholes. Sets metal or wooden post in upright position in posthole. Mixes concrete by hand or by use of cement mixer. Pours concrete around base of post or tamps soil into posthole to embed post. Aligns posts, using line or by sighting along edges of posts. Verifies vertical alignment of posts with plumb bob or spirit level. Attaches fence-rail support to post, using hammer and pliers. Cuts metal tubing, using pipe cutter and inserts tubing through rail supports. Completes top fence rail of metal fence by connecting tube sections by use of metal sleeves. Attaches rails

or tension wire along bottoms of posts to form fencing frame. Stretches wire, wire mesh, or chain link fencing between posts and attaches fencing to frame. Assembles gate and fastens it in position, using handtools. Saws required lengths of lumber to make rails for wooden fence. Nails top and bottom rails to fence posts, or inserts them in slots on posts. Nails pointed slats to rails to construct picket fence. Erects alternate panel, basket weave, and louvered fences. May weld metal parts together, using portable gas welding equipment. May be designated according to material used as Metal-Fence Erector (construction); Wire-Fence Erector (construction); Wooden-Fence Erector (construction); or according to specific duty performed as Fence-Gate Assembler (construction); Fence Setter (construction); Fence Stretcher (construction).
GOE: 05.10.01 STRENGTH: H GED: R3 M2 L2 SVP: 5 DLU: 77

869.684-026 INSTALLER (mfd. bldgs.; vehicles, nec) alternate titles: final finisher

Performs any combination of following duties to install fixtures and appliances and lay floor covering in mobile and modular homes and travel trailer coaches, using handtools and power tools: Locates, measures, and outlines installation areas for fixtures, such as partitions, doors, window facing, cabinets, and trim; and appliances, such as stoves, refrigerators, and heaters; using blueprint, tape measure, and chalk. Drills holes, attaches brackets and other holding devices, and installs fixtures and appliances, using power drills and screwdrivers. Measures, cuts, and flares copper tubing used as gas supply line and connects tubing to range, furnace, and heater, using cutter, flaring tools, and pliers. Connects water supply and drainage pipelines to sinks, bathtubs, shower, and toilet, using wrenches. Connects wiring to electrical appliances, using screwdriver and pliers. Measures, cuts out, and lays floor covering, such as linoleum tile and carpet, using tape measure, knife, cement trowel, and staple gun. Measures, cuts out, and attaches metal and wood molding around sink tops, cabinets, counter edges, and carpeting. Installs hardware, such as doorknobs, rods, racks, and holders. May drill holes through floor and bolt floor to metal chassis of mobile home, using drill, bolts, and impact wrench. May uncrate appliances and inspect for defects, such as dents or scratches. May direct activities of other workers. May be designated according to article installed as Appliance Installer (mfd. bldgs.; vehicles, nec); Cabinet-And-Trim Installer (mfd. bldgs.; vehicles, nec); Door Installer (mfd. bldgs.; vehicles, nec) II; Hardware Installer (mfd. bldgs.; vehicles, nec); Tile Installer (mfd. bldgs.; vehicles, nec).
GOE: 06.02.22 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

869.684-030 LAWN-SPRINKLER INSTALLER (construction)

Installs underground lawn sprinkler systems: Lays out plastic or copper tubing, according to sketch or blueprint. Digs trenches with shovel or by use of ditching machine. Cuts tubing to desired length, using handtools. Connects lengths of tubing, using paintbrush and solvent to fuse ends of plastic tubing, and handtorch and solder to join metal piping and connections. Makes connection to water main, using handtools. Turns valve to start water flow and observes operation to detect leaks. Installs electrical and mechanical control mechanisms for automatic operation. Fills trench with dirt after installation, using shovel.
GOE: 05.10.01 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

869.684-034 LAY-OUT WORKER (mfd. bldgs.)

Lays out wall, ceiling, and floor panels to facilitate fabrication of modular homes: Reads production schedule and observes drawings to determine style of panels to be assembled and to determine materials required. Lays out materials, such as studs, joists, and headers of designated dimensions on worktable, using tape measure. Assist in assembly of panels, using nailing gun.
GOE: 06.02.31 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

869.684-038 PANEL INSTALLER (mfd. bldgs.) alternate titles: ceiling installer; closet builder; interior paneler, partition setter

Installs prefabricated wooden or plastic board panels to form closets, walls, and ceilings in mobile or modular homes, using handtools and power tools: Conveys or assists other workers to convey panels to floor of home. Positions panels in sequence specified by blueprints and verifies alignment, using measuring tape and template. Fastens panels to specified sidewall and floor areas and to adjacent panels to form closets and dividing walls, using power screwdriver and staple gun. Lifts and positions ceiling panels in place, using hoist and nails or screws panels to roof truss, using hammer, staple gun or power screwdriver. Punches holes in ceiling and wall panels to facilitate installation of heating, plumbing and appliance vents, using hammer. May cut panel sections to required dimensions, using table saw.
GOE: 06.04.22 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

869.684-042 ROOF ASSEMBLER I (mfd. bldgs.)

Assembles roof sections of modular homes, performing any combination of following tasks: Positions and attaches precut plywood sheets onto wood or metal roof frames, using jig, adjustable vise clamps, and powered screwdriver or nail gun. Applies rubber cement or asphalt to plywood surface, using adhesive gun or roller, and lays plastic covering or asphalt felt paper in overlapping pattern to cover roof surface. Cuts roof covering to required length, using knife. Brushes plastic covering to smooth and remove air pockets, using broom. Attaches felt covering to roof, using staple gun. Positions and attaches plasterboard sheets to ceiling side of roof frame to form ceiling, using powered screwdriver. Operates electric hoist to move roof section between work stations. May install insulation between rafters to insulate roof, using stapler. May position and attach shingles to roof, using space gauge and pneumatic staple gun.
GOE: 06.04.22 STRENGTH: M GED: R3 M1 L2 SVP: 3 DLU: 77

869.684-046 ROUSTABOUT (petrol. & gas) alternate titles: connection worker; gang worker; roughneck

Assembles and repairs oil field machinery and equipment, using handtools and power tools: Digs holes, sets forms, and mixes and pours concrete into forms, to make foundations for wood or steel derricks, using posthole digger, handtools, and wheelbarrow. Bolts or nails together wood or steel framework to erect derrick. Dismantles and assembles boilers and steam engine parts, using handtools and power tools. Bolts together pump and engine parts. Connects tanks and flow lines, using wrenches. Unscrews or tightens pipe, casing, tubing, and pump rods, using hand and power wrenches and tongs.
GOE: 05.10.01 STRENGTH: H GED: R3 M1 L2 SVP: 5 DLU: 77

869.684-050 SHEETROCK APPLICATOR (mfd. bldgs.)

Fastens sheetrock to interior surface of manufactured building wall panels, using handtools: Installs blanket insulation between studs of exterior walls. Covers insulation with plastic moisture barrier and tacks plastic to studs. Selects required length of sheetrock and lays sheetrock on frame. Measures and marks position of electrical outlets, using tape measure and template. Cuts openings with handsaw. Squares frame, positions, and fastens sheetrock, using tape measure, nails, hammer, screws, and powered screwdriver. Cuts openings for windows and excess sheetrock, using router. Moves completed panel to next work station, using electric hoist.
GOE: 06.04.34 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

869.684-054 SIGN ERECTOR II (fabrication, nec)

Erects, assembles, and maintains roadside signs and billboards at designated locations, using handtools and power tools: Digs hole with post hole digger or shovel. Places wood or metal post in hole. Fills hole with cement and tamps cement to hold post in vertical position. Operates airhammer to drive channel-metal post into ground. Bolts, screws, or nails plywood or metal sign panels to sign post or frame, using handtools. Replaces worn and damaged signs. Repaints rusted signs. May erect metal sign support structure over highways. May operate banding machine to band signs on utility poles. May dismantle and number signs sections for transfer and reassembly at new locations and be designated Advertising-Display Rotator (business ser.).
GOE: 05.10.01 STRENGTH: H GED: R3 M2 L2 SVP: 3 DLU: 77

869.684-058 STOPPING BUILDER (mine & quarry) alternate titles: braddisher; ventilation worker

Builds doorways and brattices (ventilation walls or partitions in underground passageways) of materials, such as canvas, wood, concrete, brick, or concrete block as specified to construct partition to control circulation of air through passageways and working areas. Erects partitions to support roof in areas unsuited to timbering or bolting. May install rigid and flexible air ducts to transport air into work areas. May drill and blast obstructing bolders to reopen ventilation shafts.
GOE: 05.10.01 STRENGTH: H GED: R3 M1 L2 SVP: 5 DLU: 77

869.684-062 STULL INSTALLER (concrete prod.)

Installs stulls (wooden cross-bracing) inside partially cured concrete pipes to maintain round contour of pipes during curing process: Saws boards to specified length, using table saw. Nails crosspiece to end of each board. Inserts first stull at one end of pipe to span diameter and wedges stull ends tightly in place, using hammer and wedges. Wedges two more stulls crosswise to first stull and nails stulls together at intersection. Installs additional stulls in same manner at center and opposite end of pipe.
GOE: 05.12.12 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

869.684-066 TRIMMER (mfd. bldgs.) alternate titles: installer, molding and trim

Fabricates and installs molding and trim in manufactured buildings, using handtools and power tools: Measures and cuts wooden and plastic molding and trim to specified size, using hand shears, miter box, and radial saw. Reads blueprint to determine location for installation and fastens molding and trim to interior surfaces of manufactured buildings, using pneumatic stapler and hammer.
GOE: 06.04.25 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

869.684-074 UTILITY WORKER (mfd. bldgs.; vehicles, nec)

Performs any combination of following tasks in manufacture of mobile homes and travel trailers: Tends woodworking and metalworking machines to cut and shape wood and metal parts. Cuts, shapes, and assembles parts, using handtools and power tools. Installs parts, household appliances, furnishings, and fixtures, using handtools and power tools. Trains inexperienced workers. Assists, relieves, or substitutes for INSTALLER (mfd. bldgs.; vehicles, nec); ASSEMBLER (mfd. bldgs.; vehicles, nec); and PLUMBER (mfd. bldgs.).
GOE: 06.02.22 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

869.684-078 VENEER STAPLER (ship-boat mfg.) alternate titles: boat wrapper

Staples successive layers of veneer lamina strips over boat frames preparatory to bonding to build up small hulls: Positions mucilage-faced strips over frames, laying each strip at an angle to lower one and securing strips with hand-stapling machine. Cuts off excess lengths of wood. Inspects hull visually and tactually for gaps on surface. Cuts and fits veneer wedges into gaps and secures them with staples. Repeats strip laying and stapling until desired thickness is attained.
GOE: 06.04.25 STRENGTH: M GED: R3 M1 L2 SVP: 4 DLU: 77

869.684-082 ASBESTOS REMOVAL WORKER (construction)

Removes asbestos from ceilings, walls, beams, boilers, and other structures, following hazardous waste handling guidelines: Assembles scaffolding and seals

off work area, using plastic sheeting and duct tape. Positions mobile decontamination unit or portable showers at entrance of work area. Builds connecting walkway between mobile unit or portable showers and work area, using handtools, limber, nails, plastic sheeting, and duct tape. Positions portable air evacuation and filtration system inside work area. Sprays chemical solution over asbestos .overed surfaces, using tank with attached hose and nozzle, to soften asbestos. Cuts and scrapes asbestos from surfaces, using knife and scraper. Shovels asbestos into plastic disposal bags and seals bags, using duct tape. Cleans work area of loose asbestos, using vacuum, broom, and dust pan. Places asbestos in disposal bags and seals bags, using duct tape. Dismantles scaffolding and temporary walkway, using handtools, and places plastic sheeting and disposal bags into transport bags. Seals bags, using duct tape, and loads bags into truck.
GOE: 05.10.01 STRENGTH: H GED: R3 M2 L2 SVP: 2 DLU: 86

869.685-010 KETTLE TENDER (construction) alternate titles: burner; dope firer; dope heater; furnace tender; heater worker

Tends portable kettle that heats tar, asphalt, lead, or sealing compound for use as protective coating for pipelines, roofs, and pavement: Cuts asphalt, tar, or other corrosion-resistant compound into pieces with ax and places pieces in kettle. Maintains fire under kettle to bring materials to required temperature, judging heat from appearance of materials and gauges on kettle. May remove adhering asphalt from rakes or tamping irons by heating them or by use of fuel oil. May be designated according to material heated as Leadite Heater (construction); Tar Heater (construction).
GOE: 05.12.10 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

869.687-010 AWNING-HANGER HELPER (construction; retail trade; tex. prod., nec) alternate titles: installation helper

Assists AWNING HANGER (construction; retail trade; tex. prod., nec) to install canvas, wood, metal, and plastic awnings and to assemble and erect carports, patio covers, and metal panel fences. Digs post holes, using post hole digger or powered drill. Mixes concrete in mortar box or wheelbarrow, using hoe or shovel. Drills holes. Bolts and screws brackets to building to hold frame. Holds awnings during installation and lowers or raises awnings to observe their operation. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.12 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

869.687-014 CAMOUFLAGE ASSEMBLER (ordnance)

Inserts steel wool by hand into openings of frames made of wood and chicken wire to make fireproof camouflage barriers.
GOE: 06.04.34 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

869.687-018 CLEANER (mfd. bldgs.)

Cleans interiors of manufactured buildings and makes minor repairs to correct defects, following oral instructions. Cleans interior of manufactured buildings, using broom, mop, dust cloth, and vacuum cleaner. Fills nail holes in woodwork, using putty and knife. Repairs minor defects, such as loose wall panels, missing trim, and defective door catches, using pneumatic stapler and screwdriver. Paints woodwork and soiled sections of ceiling, using paint and brush. Loads manufactured buildings components for shipment to construction site [LOADER (mfd. bldgs.)]. May hang curtains, using tape measure, curtain rods, screws and power screwdriver.
GOE: 05.12.18 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

869.687-022 CONCRETE-FLOAT MAKER (concrete prod.)

Performs any combination of following tasks concerned with fabricating and casting concrete moorage floats: Flattens, cuts, and bends rolled wire mesh to fabricate reinforcing cages, using flattening table, power cutters, bending table, and metal fastening clinchers. Assembles and seals cardboard cartons for use as cores for buoyancy chambers, using masking tape and shellac. Cuts reinforcing rods to specified length, using hydraulic cutters. Erects and fastens steel form sections with connecting pins. Settles concrete poured on bottom of form, using pneumatic vibrator. Places pair of wire cages in steel form and positions with metal spacers. Inserts cartons in cages. Places pouring plate on mold over cages, shovels poured concrete from plate into sides around cages, and settles it with vibrator. Lifts pouring plate aside and shoves rods into concrete to reinforce sides. Fills space on top of cages with concrete and levels concrete with trowel. Drives drainage tubes through top of tank into cartons, using hammer, and shoves fitting bolts into tank through holes in sides of mold. Strips forms, using hammer and pry bar. Sprays tank with sealer, using hand sprayer, and stamps trade name, using hand die.
GOE: 05.12.12 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

869.687-026 CONSTRUCTION WORKER II (construction)

Performs any combination of following tasks, such as erecting, repairing, and wrecking buildings and bridges; installing waterworks, locks, and dams; grading and maintaining railroad right-of-ways and laying ties and rails; and widening, deepening, and improving rivers, canals, and harbors, requiring little or no independent judgment: Digs, spreads, and levels dirt and gravel, using pick and shovel. Lifts, carries, and holds building materials, tools, and supplies. Cleans tools, equipment, materials, and work areas. Mixes, pours, and spreads concrete, asphalt, gravel, and other materials, using handtools. Joins, wraps, and seals sections of pipe. Performs variety of routine, nonmachine tasks, such as removing forms from set concrete, filling expansion joints with asphalt, placing culvert sections in trench, assembling sections of dredge pipeline, removing wallpaper, and laying railroad track. Many of these jobs are not full time; project size and organization of work determine whether workers spend their time on one job or transfer from task to task as project progresses to completion. Some workers habitually work in one branch of industry, whereas others transfer according to availability of work or on seasonal basis. Work is usually performed with other workers. May be designated according to specific work performed as Air-Hammer Operator (construction); Asphalt-Plant Worker (construction); Asphalt Raker (construction); Backer-Up (construction); Bell-Hole Digger (construction); Brick Cleaner (construction). May be designated: Bricklayer Helper (construction); Brick-Paving Checker (construction); Cage Tender (construction); Carpenter Helper, Hardwood Flooring (construction); Cement-Mason Helper (construction); Clamper (construction); Cold Patcher (construction); Concrete-Pump-Operator Helper (construction); Concrete-Vibrator Operator (construction); Connector Hand (construction); Crank Hand (construction); Crushed-Stone Grader (construction); Curb-Setter Helper (construction); Dope Pourer (construction); Dredge Pipe Installer (construction); Dump Grader (construction); Fixer-Bed Placer (construction); Floor-Finisher Helper (construction); Floor-Layer Helper (construction; retail trade); Form-Setter Helper (construction); Form Stripper (concrete prod.; construction); Form Tamper (construction); Grader (construction); Grader Tamper (construction); Grouter Helper (construction); Hod Carrier (construction); Hoosier Pole Hand (construction); Inserter (construction); Joint Filler (construction); Laborer, Batching Plant (construction); Laborer, Bituminous Paving (construction); Laborer, Cement-Gun Placing (construction); Laborer, Concrete Paving (construction); Laborer, Corrugated-Iron-Culvert Placing (construction); Laborer, Electric Power And Transmission Line (construction; utilities); Laborer, Heading (construction); Laborer, Pile Driving, Ground Work (construction); Laborer, Pipeline (construction); Laborer, Plumbing (construction); Laborer, Road (construction); Laborer, Shaft Sinking (construction); Laborer, Shore Dredging (construction); Laborer, Steel Handling (construction); Laborer, Stone Block Ramming (construction); Laborer, Wrecking And Salvaging (construction); Loft Worker, Pile Driving (construction); Material Hauler (construction); Miner Helper (construction); Mixer, Hand, Cement Gun (construction); Mold Maker (construction); Mortar Mixer (concrete prod.; construction); Mucker (construction); Mucker, Cofferdam (construction); Mud-Jack Nozzle Worker (construction); Oil Sprayer (construction); Painter Helper (construction); Paperhanger, Pipe (construction); Paper Latcher (construction); Paper Spooler (construction); Paving-Bed Maker (construction); Paving Rammer (construction); Pipe-Layer Helper (construction); Pipe-Machine Operator (construction); Plasterer Helper (construction); Portable Grout-Mixer Operator (concrete prod.; construction); Puddler, Pile Driving (construction); Reinforcing-Iron-Worker Helper (construction); Reinforcing-Steel Worker, Wire Mesh (construction); Riprap Placer (construction); Roofer Helper (construction); Roofer Helper, Vinyl Coating (construction); Sheeting Puller (construction); Sheet-Pile-Hammer Operator (construction); Skip Tender, Concrete Mixing Or Batch Plant (construction); Slicer (construction); Squeegee Finisher (construction); Stain Remover (construction); Stone-And-Concrete Washer (construction); Stonemason Helper (construction); Stone Unloader (construction); Structural-Steel-Worker Helper (construction); Subgrade Tester (construction); Track Layer (construction); Track-Repairer Helper (construction); Trench Trimmer, Fine (construction); Wallpaper Remover, Steam (construction); Wall Washer (construction); Waterproofer Helper (construction); Well Digger (construction); White Washer (construction).
GOE: 05.12.03 STRENGTH: V GED: R2 M1 L1 SVP: 2 DLU: 79

869.687-030 FURNACE-INSTALLER-AND-REPAIRER HELPER, HOT AIR (any industry) alternate titles: furnace repairer helper

Assists FURNACE-INSTALLER-AND-REPAIRER, HOT AIR (any industry) in installing and repairing hot-air furnaces: Carries tools and components, such as furnace, casing, duct sections, and materials to work area. Cleans fire pots, smoke, and hot-air ducts [FURNACE CLEANER (any industry)]. Holds furnace parts in place for assembling. Loosens or tightens nuts, screws, and bolts in assembling or dismantling furnace, using handtools. Performs other tasks as described under HELPER (any industry) Master Title.
GOE: 05.12.12 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

869.687-034 HOUSE-MOVER HELPER (construction)

Assists HOUSE MOVER (construction) to move buildings from one site to another on trailer trucks or rollers, performing any combination of following duties: Disconnects water and sewer lines, using wrenches, sledgehammer, chisel, or block and tackle. Raises building uniformly to prevent cracking of walls, using screw jacks and shoring blocks. Positions timbers or steel beams under buildings as directed. Lowers buildings onto trailer or roller, and attaches towing cables, chains, or rope at specified locations. Assists in lowering building onto new location.
GOE: 05.12.04 STRENGTH: H GED: R1 M1 L1 SVP: 2 DLU: 77

869.687-038 INSPECTOR (mfd. bldgs.)

Inspects manufactured buildings for conformance to specifications during specified intervals of assembly line construction: Measures dimensions and spacing of structural members in building components, such as walls, floors, ceilings, closets and windows for conformance to specifications, using square, plumb, and tape measure. Compares room dimensions, wall alignments, plumbing, and electrical elements with blueprints. Fills plumbing system with air to check for leaks, using air pump and pressure gauge. Tests electrical system for completeness of circuits, using ohmmeter. Inspects surfaces of walls, floors, and ceilings for defects, such as color irregularities, warped sections, and cracks. Compares furnishings of manufactured buildings with customer's order to en-

sure compliance. Prepares inspection report on findings for SUPERVISOR, MANUFACTURED BUILDINGS (mfd. bldgs., vehicles, nec).
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L3 SVP: 6 DLU: 77

869.687-042 TIMBER-FRAMER HELPER (mine & quarry)
Assists TIMBER FRAMER (mine & quarry) to cut and erect supports in mine: Places and holds timbers, such as posts, headers, and cap-pieces in position for sawing and notching. Saws, hews, and nails timbers as directed, performing duties as described under HELPER (any industry) Master Title.
GOE: 05.12.12 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

89 STRUCTURAL WORK OCCUPATIONS, N.E.C.

This division includes occupations, not elsewhere classified, concerned with structural work.

891 OCCUPATIONS IN STRUCTURAL MAINTENANCE, N.E.C.

This group includes occupations, not elsewhere classified, concerned with structural assembly and maintenance.

891.131-010 DOCK SUPERVISOR (ship-boat mfg.) alternate titles: supervisor, ship maintenance services
Supervises and coordinates activities of workers engaged in drydocking, painting, cleaning, and repairing vessels: Analyzes vessel's blueprints and specifications to determine size, shape, and number of keel and bilge blocks required to support vessel. Directs DOCK HAND (ship-boat mfg.) in assembling, positioning, and securing blocks to floating drydock platform, marine railway, or floor of graving dock. Sights reference points for positioning vessel over blocks, using transit, and directs DOCK HAND (ship-boat mfg.) in aligning of vessel over blocks. Directs workers in pumping operations to raise vessel and in positioning, flooding, and pumping caisson (gate) in graving dock. Directs workers engaged in cleaning and maintenance of vessel. Oversees flooding operations and removal of vessels from drydock. Performs other duties as described under SUPERVISOR (any industry) Master Title. May supervise SHIPWRIGHT (ship-boat mfg.) and be designated Shipwright Supervisor (ship-boat mfg.).
GOE: 05.12.18 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

891.137-010 MAINTENANCE SUPERVISOR (any industry) alternate titles: building-and-grounds supervisor; building-maintenance supervisor, mechanical; building supervisor
Supervises and coordinates activities of workers engaged in maintaining and repairing physical structures and utility systems of buildings and maintaining grounds: Directs workers engaged in painting and performing structural repairs to masonry, woodwork, and furnishings of buildings, and maintaining and repairing building utility systems, such as electrical wiring and controls, heating and ventilating systems [UTILITIES-AND-MAINTENANCE SUPERVISOR (any industry) 899.131-018]; and water distributing and plumbing systems [PLUMBING SUPERVISOR, MAINTENANCE (construction) 862.131-018]. Directs workers engaged in ground maintenance activities, such as mowing lawns, trimming hedges, removing weeds, and raking and disposing of leaves and refuse. Requisitions tools, equipment, and supplies. Inspects completed work for conformance to blueprints, specifications, and standards. Performs other duties as described under SUPERVISOR (any industry) Master Title. May supervise workers engaged in installing, servicing, and repairing mechanical equipment.
GOE: 05.02.02 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 87

891.137-014 SUPERVISOR, AIRCRAFT CLEANING (air trans.)
Supervises and coordinates activities of workers engaged in cleaning interiors and exteriors of airplane: Trains new workers. Observes work procedures and inspects completed work to ensure adherence to efficiency and safety standards, quality of work, and cleaning requirements. Inventories and orders replacement cleaning and sanitary supplies. Records inspection results and sanitary supplies used on cleaning report. Performs duties as prescribed under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

891.137-018 SUPERVISOR, TANK CLEANING (water trans.)
Supervises and coordinates activities of TANK CLEANER (any industry) engaged in cleaning ship's tanks for storing volatile liquids: Determines work sequence and equipment required from job order. Instructs worker in connecting steam, air, and water hoses to equipment located on shore. Inspects completed work for conformance to standards. Maintains record of work accomplished. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

891.564-010 PIPE CHANGER (mine & quarry)
Changes, rotates, and cleans pipes that carry materials, such as concentrate slurry and tailings throughout iron ore processing plant: Removes bolted couplings or flanges and changes precut pipe sections or replaces hoses on cyclone feed and discharge lines, concentrate lines, and tailings lines, using wrenches, chain hoist, and impact wrench. Loosens bolted couplings and rotates pipe, using chain wrench so that inner pipe surfaces are worn evenly by abrasive slurry. Stencils direction and date of rotation on pipe. Inserts pipe cleaner (cylindrical go-devil with scraper and leather fins) into pipe through trap and notifies pumping section to start material flow to force cleaner through pipe to clean out deposits. Removes cleaner at end of pipe. Disassembles, transports, and reassembles pipe sections in new mining areas, using handtools.
GOE: 05.12.12 STRENGTH: H GED: R2 M1 L2 SVP: 3 DLU: 77

891.684-010 DOCK HAND (ship-boat mfg.)
Performs following duties concerned with drydocking and cleaning exteriors of ships and maintenance of drydock and piers: Positions keel blocks on dock platform and builds bilge blocks as directed by DOCK SUPERVISOR (ship-boat mfg.), using handtools and clamps. Opens flood valves in floating drydock sections to submerge platform. Winds up docking lines, using winch, or snubs lines over dock cleats to position ship over drydock. Starts pumps to remove water from drydock sections and turns pump controls to keep dock platform on even keel. Washes or steam cleans exterior of ship's hull to remove marine growth and loose paint, using high-pressure water hose, or steam-cleaning equipment. Scrapes barnacles or other marine growth from hull with long-handled scraper and chips rust or paint from hull with pneumatic tool. Erects stages and scaffolds to reach sections of hull. Opens and closes flood valves on drydock when removing ship from dock, to keep dock platform on even keel as it submerges. Floods or drains caisson (gate) of graving drydock and assists in floating caisson in or out of position across drydock entrance.
GOE: 05.12.18 STRENGTH: H GED: R2 M1 L2 SVP: 3 DLU: 77

891.684-014 RUBBER AND PLASTICS WORKER (military ser.)
Inspects, repairs, replaces, and modifies soundproofing and sweat proofing equipment aboard drydocked or moored submarines: Inspects submarines to detect hazards or malfunctions. Replaces worn or defective rubber and plastic items, such as grommets. Sprays soundproofing material on internal submarine walls, using compressor. Affixes neoprene sheets to submarine walls. Shapes and finishes plastic and rubber items, using handsaws, sanders, grinders, or drill presses.
GOE: 05.10.01 STRENGTH: H GED: R3 M3 L3 SVP: 4 DLU: 77

891.684-018 SWIMMING-POOL SERVICER (any industry) alternate titles: maintenance worker, swimming pool; pool servicer
Cleans, adjusts, and performs minor repairs to swimming pools and auxiliary equipment: Removes leaves and other debris from surface of water, using net. Cleans bottom and sides of pool, using such aids as underwater vacuum cleaner, hose, brush, detergent, acid solution, and sander. Inspects and replaces loose or damaged tile. Cleans and repairs filter system. Adjusts and performs minor repairs to heating and pumping equipment, using mechanic's handtools. Dumps chemicals, in prescribed amounts, to purify water in pool. Prepares service report of materials used and work performed.
GOE: 05.10.04 STRENGTH: M GED: R3 M1 L2 SVP: 4 DLU: 77

891.684-022 BUILDING CLEANER (any industry)
Cleans brick, stone, or metal exterior of structures, using cleaning agents, such as sand, acid solution, and steam: Cleans limited section of surface to determine strength of cleaning agents needed to prepare desired surface finish. Erects swinging scaffold, positions ladders, or assembles metal scaffolding to facilitate cleaning of structures. Pours specified portions and type of cleaning agents into hoppers or tanks of truck-mounted pumping equipment, and turns valves of equipment to produce steam and pump cleaning agents through hoses. Presses levers of spray nozzles to regulate flow of cleaning agent over structure surface. Cleans excessively stained surface areas, using brushes and cleaning compound. Sprays concrete floor to etch surface for cleaning and applies filler compound to seal floor surface. Cleans exterior surfaces of vehicles, using high pressure hoses and cleaning solutions. Cleans rugs on premise of customer, using chemicals, handbrushes, or portable scrubbing machine. Replaces worn parts of cleaning equipment and maintains equipment, using handtools.
GOE: 05.10.01 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 86

891.685-010 STEAM-CLEANING-MACHINE OPERATOR (construction)
Tends one or more portable generators used to generate steam for steam-cleaning exposed surfaces of masonry structures: Connects hose line and electric leads to source of water supply and electric power. Starts pump to force water through generator coils. Fills tanks with cleaning compounds. Starts fire under generator when water coils are full. Turns valves to regulate flow of water and cleaning compound through hose line. Observes pressure gauge to ensure that required steam pressure is maintained. Flushes generator coils with scale remover to clean them.
GOE: 05.11.01 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

891.687-010 CHIMNEY SWEEP (any industry) alternate titles: chimney cleaner; cleaning operator
Cleans soot from chimneys: Removes pipe connecting furnace to flue, using handtools. Cleans soot from chimney pit, using vacuum cleaner that automatically discharges into receptacle mounted on truck. Cleans connecting pipes with brush, replaces pipe, and seals joints with cement. Closes fireplace openings and other outlets to clean chimney from above. Lowers weighted bag down flue, withdraws bag which expands and scrapes soot from lining of chimney. Empties bag and inspects interior of chimney to ensure completion of cleaning process, using reflecting light of mirror. May make oral or written reports to request services of CHIMNEY REPAIRER (business ser.). May brush interior of chimney, boilers, and furnaces.
GOE: 05.12.18 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

891.687-014 FURNACE CLEANER (any industry)
Cleans fire pots, ducts, vents, registers, air chambers, and filter screens of domestic furnaces: Scrapes soot and ash from fire pot and smoke chambers, using scraper and wire brush. Cleans filter screens, using solvent. Removes dust-clogged air filters and places clean filters into brackets. Brushes and washes dust from air chamber and ducts, using wire or fiber brush. Removes loose soot, ash, and dust, using hand scoop and portable vacuum cleaner. Examines seams of furnace section for defects, such as cracks, and reports defects to customer or furnace repairer. May extract dust from ducts and jackets, using vacuum equipment. May tighten nuts, bolts, and screws on furnace, using handtools.
GOE: 05.12.18 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

891.687-018 PROJECT-CREW WORKER (any industry)
Cleans walls, floors, ceilings, and structural members of buildings, using steam-cleaning equipment, brooms, and scrapers, and removes spillage and overflow of materials being processed or manufactured, with shovel and rake. Applies sealer to tile and concrete floors to protect them against subsequent spillage, using mop or brush. Sprays insecticides and fumigants over cleaned areas to prevent insect and rodent infestation.
GOE: 05.11.01 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

891.687-022 TANK CLEANER (any industry)
Cleans interiors of boilers, storage tanks, industrial processing tanks, kilns, and tank and refrigerator railroad cars to remove emulsion and incrustations, using shovels, squeegees, brooms, scrapers, hoses, water, and solvents: Drains tank, connects hose to water or steam lines, and sprays walls, roof, and bottom of tank to flush residue, such as oil, acid, grease, and sludge through tank openings. Scrapes and scrubs walls, using detergents, solvents, scrapers, and brushes to remove incrustations, scale, or deposits of coke or catalyst. Sweeps up debris and shovels sludge into buckets or wheelbarrows or down chutes. Removes chemical residues and other liquids from tank bottoms with squeegees or pump and suction hoses. May dry tanks with wood shavings or portable air-drying equipment. May test gas content of tanks. May add specified chemicals to industrial tanks to maintain and replenish tank processing solutions. May be designated according to type of tank cleaned as Acid-Tank Cleaner (petrol. refin.); Boiler Cleaner (any industry); Plating-Tank Cleaner (electron. comp.); Tank-Car Cleaner (petrol. refin.).
GOE: 05.12.18 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 86

891.687-030 TUBE CLEANER (any industry)
Cleans scale from inside of tubes that are used in boilers, kilns, and stills to circulate hot air or water: Removes plugs or assemblies from tube ends, using handtools. Pushes compressed-air rotary scraper or wire brush through tubes to scrape scales from interior surfaces. Flushes or blows out loosened deposits, using water or airhose. May inspect tubes by drawing electric light through them. May be designated according to type of tube cleaned as Boiler-Tube Reamer (any industry); Evaporator Repairer (chemical); Flue Cleaner (any industry); Still Cleaner, Tube (petrol. refin.); Tar Heat-Exchanger Cleaner (petrol. refin.). May steam clean outside of boiler tubes and be designated Boiler-Tube Blower (any industry).
GOE: 05.12.18 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

899 MISCELLANEOUS STRUCTURAL WORK OCCUPATIONS, N.E.C.

This group includes miscellaneous occupations, not elsewhere classified, concerned with structural work.

899.130-010 SUPERVISOR, CANAL-EQUIPMENT MAINTENANCE (waterworks) alternate titles: maintenance supervisor
Supervises and coordinates activities of workers engaged in repair and maintenance of irrigation canal gates, waterways, recorder wells (concrete lined sumps housing instruments to measure canal water level), and other canal structures. Orders erection of prefabricated concrete forms and scaffolding and directs workers in operation of sandblasting gear, air compressors, welding equipment, cement mixers, and truck-cranes. Inspects completed work for compliance to specifications. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.06.03 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

899.131-010 LABOR-CREW SUPERVISOR (construction; utilities)
Supervises and coordinates activities of workers engaged in constructing manholes, transformer vaults, and substation foundations, in installing street light poles, and in laying pipe and ductwork for telephone, electric, water and sewage systems, and gas and oil lines: Reads blueprints and interprets data, including angles required in bending pipe, mixture of concrete most suitable for soil conditions, locations for placement of pipe sections, and type and amount of insulating wrapping and adhesive compound required to protect pipe. Directs activities of workers engaged in inspecting pipe for deficiencies by use of x-ray equipment or by means of high-pressure air tests, of workers engaged in removing rust and applying protective coating to pipe, of workers engaged in laying pipe on land or underwater, of workers engaged in performing dredging, underwater blasting and backfilling activities, and of workers engaged in digging up and removing pipelines. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to area of specialization as Duct-Layer Supervisor (construction; utilities); Fabrication Supervisor (construction); Lower-In Supervisor (construction); Pipe-And-Test Supervisor (construction); Pipe-Laying Supervisor (construction); River-Crossing Supervisor (construction); Take-Up Supervisor (construction).
GOE: 05.12.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

899.131-014 LOCK MAINTENANCE SUPERVISOR (construction)
Supervises and coordinates activities of workers engaged in installation, alteration, repair, and maintenance of structures, machines, equipment, and utility systems used to operate canal locks: Confers with project engineer on planning of work project relative to maintenance, repair, or alteration of items, such as buildings, utility systems, spillway gates, lock and dam walls; and walks and streets at lock site. Schedules work project to minimize interference with canal operation. Requisitions and verifies materials and equipment delivered to work site. Inspects work in progress and completed projects to ensure conformance to specifications. Trains workers in work methods and procedures. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.04 STRENGTH: H GED: R4 M4 L3 SVP: 8 DLU: 77

899.131-018 UTILITIES-AND-MAINTENANCE SUPERVISOR (any industry) alternate titles: maintenance-and-utilities supervisor
Supervises and coordinates activities of workers engaged in maintaining building utility systems, such as electrical wiring and control systems, heating, ventilating, water supply, steam generating, and related pipe systems. Performs other duties as described under SUPERVISOR (any industry) Master Title. May compile reports of cost of completed work. May inspect systems to determine preventative maintenance needs. May supervise workers engaged in maintaining and repairing processing equipment and machinery [MAINTENANCE-MECHANIC SUPERVISOR (any industry) 638.131-022]. May supervise workers engaged in maintaining buildings and grounds.
GOE: 05.06.02 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 86

899.131-022 UTILITY SUPERVISOR, BOAT AND PLANT (ship-boat mfg.)
Supervises and coordinates activities of workers engaged in preparing boats for shipment: Supervises workers engaged in cleaning interior and exterior surfaces of boats. Examines equipment on boat to determine compliance with specifications. Reports deficiencies and reinspects boats after repairs. Constructs staging and dollies for shipment of boats, according to specifications, using rules, dividers, squares, and marking instruments. Cuts and drills materials at points marked to form joints, holes for fasteners, casters, or reinforcements, using hand and portable power tools. Fits and fastens pieces together, using handtools. Loads boat onto transport trailer, using electric hoist. Positions hoist hooks on slings attached to boat cradle to lift and lower boat onto trailer. Tightens chain fasteners, using clamp lever, to secure boat to trailer. Installs and maintains plant electrical, water, and compressed air systems, using power tools and handtools. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

899.133-010 SUPERVISOR, LABOR GANG (any industry) alternate titles: boss; bull-gang supervisor; field supervisor; floating-labor-gang supervisor; general-labor supervisor; group supervisor, yard; overseer; yard-labor supervisor
Supervises and coordinates activities of workers engaged in cleaning and maintenance of industrial buildings and grounds: Inspects work areas to determine type of work required and materials and equipment to be used. Directs workers in projects, such as construction of ditches and roadways and grading drainage areas. Operates equipment, such as bulldozers and graders and trains workers in equipment operation. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

899.134-010 HIGHWAY-MAINTENANCE SUPERVISOR (government ser.)
Supervises and coordinates activities of workers engaged in maintaining highways, municipal and rural roads, and rights-of-way in safe condition: Routinely inspects all primary and secondary roads in maintenance district. Plans and coordinates all maintenance to roads. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.11.01 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

899.137-010 AIRPORT-MAINTENANCE CHIEF (air trans.) alternate titles: superintendent, maintenance, airports; gang boss; gang pusher
Supervises and coordinates activities of workers engaged in repairing and maintaining airport facilities: Reviews maintenance records and inspects facilities to determine repair needs. Prepares work specifications in accordance with regulations governing airport facilities. Requisitions materials and supplies. Assigns crews to repair of asphalt and concrete runways, taxiways, approaches, ramp and concourse lighting systems, patching and cleaning of loading aprons, roads and sidewalks, cleaning of drains, painting of buildings, and cultivating of lawns, shrubs, and other planted areas. Inspects work for compliance with specifications. Prepares maintenance reports. Estimates annual maintenance expenditures for use in preparation of budget. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.04 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

899.137-014 SUPERINTENDENT, TRACK (construction)
Supervises and coordinates activities of workers engaged in maintenance and construction of racetrack buildings, grounds, and parking facilities: Inspects

premises to determine extent of repairs. Studies soil test reports to plan maintenance of racetrack surface, such as watering, discing, and grading. Compiles cost estimates of repairs and new construction and submits estimates to management for approval. Supervises workers engaged in repairing and maintaining buildings, removing and replacing top soil, watering, discing, and grading track surface, planting and plowing vegetation on track oval to renovate track, planting and trimming flowers, shrubs, and grass to maintain landscape, and repairing and rebuilding parking facilities. Compiles reports of human resources utilized, work progress, and disposition of materials. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

899.137-018 SUPERVISOR, MAINTENANCE (petrol. refin.)
Supervises and coordinates activities of workers engaged in construction, maintenance, and cleaning activities at petroleum refinery. Performs duties as described under SUPERVISOR (any industry) Master Title. May supervise workers engaged in cleaning stills, storage tanks, and distillation towers only and be designated Supervisor, Tank Cleaning (petrol. refin.).
GOE: 05.12.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

899.261-010 DIVER (any industry) alternate titles: submarine worker
Works below surface of water, using scuba gear (self-contained underwater breathing apparatus) or in diving suit with air line extending to surface to inspect, repair, remove, and install equipment and structures: Descends into water with aid of DIVER HELPER (any industry), and communicates with surface by signal line or telephone. Inspects docks and bottoms and propellers of ships. Repairs vessels below water line, replacing missing or leaking rivets with bolts. Caulks leaks in ships or caissons. Guides placement of pilings for structures, such as docks, bridges, cofferdams, and oil drilling platforms. Lays, inspects, and repairs underwater pipelines, cables, and sewers, using handtools. Cuts and welds steel, using oxyycetylene cutting torch and arc-welding equipment, utilizing air balloon device for working underwater. Cleans debris from intake and discharge strainers. Removes obstructions from marine railway or launching ways with pneumatic and power handtools. Levels rails by driving wedges beneath track with maul or sledgehammer. Removes launching cradles and sliding ways from keels of newly launched vessels, using power and handtools. Places rigging around sunken objects and hooks rigging to crane lines. Rigs explosives for underwater demolitions. Searches for lost, missing, or sunken objects, such as bodies, torpedoes, sunken vessels, and equipment. Places recording instruments below surface of water preparatory to underwater tests or experiments. May set sheet pilings for cofferdams. May drill holes in rock for blasting purposes at bottom of lake or harbor and be designated Marine Driller (construction). May work in flooded mines. May use armored diving equipment for dangerous missions. May photograph underwater structures or marine life. May place sandbags around pipelines or base of cofferdam to provide structural support.
GOE: 05.10.01 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 77

899.261-014 MAINTENANCE REPAIRER, INDUSTRIAL (any industry) alternate titles: maintenance associate; plant-maintenance worker; utility repairer
Installs, maintains, and repairs machinery, equipment, physical structures, and pipe and electrical systems in commercial or industrial establishments, following specifications, blueprints, manuals, and schematic drawings, using handtools, power tools, hoist, crane, and measuring and testing instruments: Visually inspects and tests machinery and equipment, using electrical and electronic test equipment. Listens for unusual sounds from machines or equipment to detect malfunction and discusses machine operation variations with supervisors or other maintenance workers to diagnose problem or repair machine. Dismantles defective machines and equipment and installs new or repaired parts, following specifications and blueprints, using precision measuring instruments and handtools [MACHINE REPAIRER, MAINTENANCE (any industry) 638.261-030]. Cleans and lubricates shafts, bearings, gears, and other parts of machinery, using rags, brushes, and grease gun. Installs and repairs electrical apparatus, such as transformers and wiring, and electrical and electronic components of machinery and equipment [ELECTRICIAN, MAINTENANCE (any industry) 829.261-018]. Lays out, assembles, installs, and maintains pipe systems and related hydraulic and pneumatic equipment, and repairs and replaces gauges, valves, pressure regulators, and related equipment [PIPE FITTER (construction) 862.281-022]. Repairs and maintains physical structure of establishment [MAINTENANCE REPAIRER, BUILDING (any industry) 899.381-010]. May install machinery and equipment according to blueprints and other specifications [MILLWRIGHT (any industry) 638.281-018]. May install, program, or repair automated machinery and equipment, such as robots or *programmable controllers*. May set up and operate machine tools, such as lathe, grinder, drill, and milling machine to repair or fabricate machine parts, jigs and fixtures, and tools. May operate cutting torch or welding equipment to cut or join metal parts. May fabricate and repair counters, benches, partitions, and other wooden structures.
GOE: 05.05.09 STRENGTH: H GED: R4 M4 L3 SVP: 8 DLU: 88

899.281-010 CANAL-EQUIPMENT MECHANIC (waterworks)
Repairs and maintains gates and other structures of irrigation canals, using handtools, power tools, and welding equipment: Disassembles gate-moving gear at dam sites to remove worn or damaged gate cable, using mechanics' handtools. Slides fitting over new cable and pours molten zinc over fitting to secure fitting to cable. Threads cable around drum of gate lifting apparatus and bolts fitting to gate. Welds broken parts of gates and other dam structures. Builds scaffolding and working platforms, using handtools. Sandblasts old paint and corrosion from gates. Paints gates, using spray gun. Lubricates gear trains, gear boxes, cables, and other fittings, using hand grease gun. Mixes concrete and repairs or constructs wells and pumps, using jackhammer, air drill, and water pump. Constructs and repairs structural and mechanical parts of checks, turnouts, and wasteways along canals. May repair and maintain inland waterway structures and equipment and be designated Lock-And-Dam Equipment Repairer (water trans.).
GOE: 05.10.01 STRENGTH: H GED: R3 M3 L3 SVP: 6 DLU: 77

899.364-010 CHIMNEY REPAIRER (business ser.)
Cleans, repairs, relines, remortars, and modifies chimneys of private residences, according to home owners' desires, using wire brush, hammer, chisel, trowel and mortar, brick, tile, metal pipe, and other handtools: Temporarily seals all openings into chimney to prevent soot leakage, using newspaper or plastic sheet and masking tape. Climbs ladders to roof of building and lowers weighted wire brush or scraper on rope down chimney to remove soot adhering to inside of chimney or removes soot from trap at chimney base by hand or by use of vacuum cleaner. Replaces loose or missing bricks or loose mortar. Relines chimney with double-walled metal pipe, inserting pipe in sections from top, when converting to gas heat. Cements outside of chimney in attic. Makes any other masonry repairs to chimney, such as relining chimney with tile or refacing chimney with decorative stone. May install dampers in fireplaces. May widen fireplace opening and install fans at top of chimney to correct draft.
GOE: 05.10.01 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

899.364-014 ARTIFICIAL-FOLIAGE ARRANGER (retail trade)
Cuts out, assembles, and installs artificial foliage, such as trees, shrubs, and flowers, to achieve aesthetic effects in commercial and industrial locations, using handtools and working as member of team: Receives instructions from supervisor, and reviews work orders to determine materials needed, such as soil, stones, styrofoam, planters, and artificial floral items, to complete customer's request. Selects, cuts, and assembles materials to form artificial flowers, trees, and shrubs, utilizing experience and knowledge of floral design and using clips, wire, glue, colored tape, scissors, and wire cutters. Loads materials into van, and drives van to deliver artificial floral displays to customer's premise. Arranges displays at customer's premise to create natural effect, utilizing ground covers, such as gravel, pinebark, and soil, according to effect desired by customer. Services arrangements to replace or repair damaged items and to rearrange displays as specified by customer. Prepares daily reports of materials used in each arrangement to maintain inventory records.
GOE: 05.12.12 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 86

899.381-010 MAINTENANCE REPAIRER, BUILDING (any industry) alternate titles: building repairer
Repairs and maintains physical structures of commercial and industrial establishments, such as factories, office buildings, apartment houses, and logging and mining constructions, using handtools and power tools: Replaces defective electrical switches and other fixtures. Paints structures, and repairs woodwork with carpenter's tools. Repairs plumbing fixtures. Repairs plaster and lays brick. Builds sheds and other outbuildings.
GOE: 05.10.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 81

899.384-010 TRANSPORTATION-EQUIPMENT-MAINTENANCE WORKER (museums) alternate titles: maintenance worker; renovator; transportation-museum helper
Assists in restoration or maintenance of transportation equipment, such as automobiles, ships, aircraft, streetcars, or locomotives, displayed by museums or similar institutions through performance of any combination of following tasks: Repairs or replaces interior components of equipment, such as wooden panels, seat cushions, window molding, or dashboards, using handtools and power tools, and utilizing carpentry, metalworking, and upholstering techniques. Cuts lumber or sheet metal to designated size, installs components, such as brake assemblies, rudders, or propellers, or welds metal sections, to assist other workers in reconstruction or renovation of exterior structural sections and accessories. Cleans surfaces with wire brushes and solvent, applies rustproofing agent to surfaces, vacuums and dry cleans upholstered components, brushes or sprays paint, lacquer, or other coating on cleaned surfaces, or stencils and paints letters or designs on equipment or vehicles to restore or simulate original appearance. Builds, repairs, and installs wooden steps, scaffolds, and walkways to gain access to or permit improved view of exhibited equipment. May be designated according to specialty of institution as Antique-Auto-Museum-Maintenance Worker (museums); according to principal activity as Maintenance Carpenter (museums); or according to job location as Exhibit Cleaner (museums).
GOE: 05.05.06 STRENGTH: M GED: R3 M2 L3 SVP: 5 DLU: 86

899.484-010 MOBILE-HOME-LOT UTILITY WORKER (retail trade) alternate titles: maintenance worker, house trailer
Performs variety of duties at sales lot, to prepare new and used units, such as campers, travel trailers, mobile homes, and motor homes for display and sale: Unpacks crated furnishings and places them in proper location within trailer. Assembles and adjusts lines and hoses for utility fittings, using handtools. Cleans and polishes interior and exterior of units for sale. Repairs or replaces items, such as furniture, plumbing fixtures, electrical system, and bottled gas fittings to refurbish units. Repairs plumbing, electrical system, and bottled gas fittings. Installs linoleum and wall and floor tile. Paints furniture and parts of

interior, using spray gun or brush. May drive truck to pick up and deliver mobile houses over long and short distances.
GOE: 05.10.04 STRENGTH: H GED: R3 M1 L2 SVP: 6 DLU: 77

899.487-010 TESTER (rubber goods)
Tests rubber bladders, used with sections of inflatable buildings, for air leaks, using compressed airhose and mercury manometer: Attaches valve to bladder, using screwdriver. Inflates bladder to specified pressure with compressed airhose. Checks pressure using manometer. Records air temperature. Rechecks pressure and records air temperature periodically. Computes change in pressure due to temperature change, using formula. Removes valves and deflates bladder.
GOE: 06.03.01 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

899.664-010 DIVER HELPER (any industry) alternate titles: diver assistant; diver tender; life-line attendant
Helps DIVER (any industry) into diving suit, inspects diving equipment, and maintains communications with submerged DIVER (any industry) by lifeline or telephone: Helps DIVER (any industry) into suit equipped with hardshell headpiece (helmet), breathing hose, belt and breast weights, and leaded feet. Examines equipment to ensure no obstructions in airhose and communication line exist and that air pressure is in accordance with DIVER'S (any industry) specifications. Hands equipment to DIVER (any industry) and helps diver into water. Attends lifeline and telephone to receive signals from DIVER (any industry), such as tugs on lifeline and instructions on telephone, to pull in or let out lifeline and airhose. Maintains check on time diver is submerged, weather conditions, and air compressor to ensure safety of DIVER (any industry). May be assigned only to letting out and taking in airhose and be designated Hose Tender (any industry).
GOE: 05.12.12 STRENGTH: M GED: R3 M1 L2 SVP: 3 DLU: 77

899.664-014 SEWER-PIPE CLEANER (business ser.) alternate titles: electric-sewer-cleaning-machine operator
Removes roots, debris, and other refuse from clogged sewer lines and drains, using portable electric sewer cleaning machine, and repairs breaks in underground piping: Positions or disassembles sewer trap machine at sewer or drain outlet. Removes drain cover, using wrench. Installs rotary knives on flexible cable, mounted on reel of machine, according to diameter of pipe to be cleaned. Starts machine to feed revolving cable into opening, stopping machine and changing knives as necessary to conform to diameter or contour of pipe. Withdraws cable to deposit accumulated residue removed from pipe in containers for disposal. Observes residue for evidence of mud, indicating broken sewer line. Measures distance from sewer opening to suspected break, using plumbers' snake, tapeline, or by estimating position of cutting head within sewer. Notifies coworkers to dig out ruptured line or digs out shallow sewers, using shovel. Removes and replaces broken tile section or pipe, using caulking compound and cement to form watertight joint. Replaces or directs replacement of earth. Replaces dull knives and performs repairs on machine, using handtools. May estimate cost of service to customer. May clean sewage collection points and sanitary lines in streets and sewage plants.
GOE: 05.12.12 STRENGTH: M GED: R3 M1 L2 SVP: 3 DLU: 77

899.682-010 DIVER PUMPER (construction; fishing & hunt.)
Operates portable hand pump or motor-driven air compressor to provide fresh air to DIVER (any industry): Places air pump or air compressor where DIVER (any industry) enters water. Turns hand crank or starts compressor motor to pump air. Observes pressure gauge to ensure required pressure is maintained. Oils cylinders and bearings of pump and replaces air filters.
GOE: 05.12.06 STRENGTH: M GED: R3 M1 L1 SVP: 4 DLU: 77

899.684-010 BONDACTOR-MACHINE OPERATOR (foundry)
Sprays interior surfaces of cupolas with refractory mixture to reline interiors, using spray equipment: Loads specified amount of material, such as clay, sand, and water into mixing tank of machine and starts machine to mix ingredients. Installs preformed metal scaffolding in interior of cupola, using handtools. Opens compressed-air valves on machine to force mixture into hose, climbs scaffolding with hose, and sprays surfaces. May chip clay from interior of cupola, lay bed of cupola, or repair ladle linings.
GOE: 05.12.14 STRENGTH: M GED: R3 M1 L1 SVP: 3 DLU: 77

899.684-014 HIGHWAY-MAINTENANCE WORKER (government ser.) alternate titles: highway worker
Maintains highways, municipal and rural roads, and rights-of-way in safe condition, performing combination of following duties: Erects and repairs guardrails, highway markers, and snow fences, using handtools and nails, and power tools. Dumps, spreads, and tamps asphalt, using pneumatic tamper to patch broken or eroded pavement. Drives truck [TRUCK DRIVER, HEAVY (any industry)] to transport crew and equipment to work site. May drive snow-removal equipment, consisting of truck or tractor equipped with adjustable snowplow and blower unit, and be designated Snow-Plow Operator, Truck (government ser.); Snow-Plow Tractor Operator (government ser.). May drive tractor with mower attachment to cut grass around airfield runways.
GOE: 05.12.12 STRENGTH: M GED: R3 M1 L2 SVP: 3 DLU: 77

899.684-018 LAMINATOR (rubber goods)
Glues rubberized fabric and foam to form sections of inflatable buildings: Measures and cuts strips of fabric to specified length, using tape measure and knife. Cleans edges of fabric with solvent and glues strips of fabric together, overlapping edges for specified size. Cleans strip of joined fabric with solvent, and applies glue to strip of foam and fabric, working as member of crew. Fits glued sections together, and repeats process until fabric is covered with foam. Applies glue to other side of foam and to other strip of fabric. Attaches fabric to foam by hand or uses hand roller while crewmember holds and guides fabric. Trims rubberized fabric to specified size, and cuts openings for doors and windows, using template and knife. Inserts metal framed doors and windows in openings. Cleans and attaches edges of frame and fabric, using solvent and tape.
GOE: 06.02.22 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

899.684-022 MAINTENANCE-REPAIRER HELPER, INDUSTRIAL (any industry) alternate titles: general-maintenance helper; maintenance mechanic helper
Assists MAINTENANCE REPAIRER, INDUSTRIAL (any industry) 899.261-014 in repairing and maintaining machinery, equipment, physical structures, and plumbing and electrical systems of industrial establishment, using handtools and power tools: Dismantles machines or equipment, replaces defective parts and motors, and adjusts feed mechanisms. Cleans and lubricates machine parts, such as shafts, pulleys, gears, and bearings, using rags, brushes, grease gun, and oilcan. Replaces or repairs machine belts. Removes dust, dirt, grease, and waste material from machines. Paints machines or equipment to prevent corrosion. Bends and cuts conduit and wire, and drills holes in walls, floors, and ceilings for electrical connections. Connects wire to motors, fixtures, and other electrical equipment, replaces switches and fuses, and splices wire and insulates wire with friction tape. Bends, cuts, and threads pipe, cuts openings in walls, ceilings, and floors for pipes, and seals pipe joints with sealing compound. Cuts out and joins parts for worktables, benches, shelves and other furnishings, using power tools and handtools. Patches or replaces plaster or plaster board and paints walls, ceilings, and trim of building. Clears clogged drains, and replaces plumbing fixtures. Performs other duties as described under HELPER (any industry) Master Title. May operate welding machine to repair or join metal parts.
GOE: 05.10.04 STRENGTH: H GED: R3 M1 L2 SVP: 5 DLU: 89

899.684-026 PIPELINER (pipe lines)
Maintains and repairs pipelines, pumping stations, and tank farms by performing any combination of following duties as member of crew: Removes rust and foreign substances from meters and valves, using sand blasting equipment. Pours corrosion resistant material over pipe or applies material with brush or spray gun. Wraps pipe with strips of paper or fabric to prevent corrosion and leakage. Drives and operates such equipment as backhoes, bulldozers, and side booms to dig ditches, lay pipe, and backfill ditches. Positions materials, pipes, fittings, and pumping equipment for carpenters, mechanics, and welders. Installs screw-pipe and manifold connections, using wrenches and pipe tongs. Cleans storage tanks, using squeegees and rakes. Dismantles and restores items, such as fences, gates, and water lines, that inhibit pipeline work, using earth moving equipment, pick, and shovel. Cuts brushes, trees, and weeds with axes and hoes; digs drainage ditches, using shovel; and gathers trash, pipe parts, and equipment to clear grounds along pipelines right-of-way. Spreads chemical pellets along right-of-way for control of tree growth. Loads and unloads trucks. May walk along line to detect leaks [LINE WALKER (petrol. & gas; petrol. refin.; pipe lines)]. May operate pumping equipment [PUMPER (any industry)]. May operate pipe-cleaning-and-wrapping machines to apply dope and wrap pipe.
GOE: 05.10.04 STRENGTH: H GED: R3 M1 L2 SVP: 5 DLU: 77

899.684-030 PORTABLE SAWYER (railroad equip.)
Saws holes in wood panels, using portable saber saw in railroad car manufacturing establishment: Lifts panel onto worktable, places template on panel, and scribes around template with pencil to mark cutting outline. Bores starter hole in specified position on panel, using portable electric drill. Inserts saw blade into hole, starts saw, pushes blade against wood, and guides saw along scribed cutting line to make cut specified. Removes cut panel from worktables to stockpile.
GOE: 06.02.25 STRENGTH: M GED: R3 M2 L1 SVP: 3 DLU: 77

899.684-034 SHAFT MECHANIC (mine & quarry) alternate titles: shaft repairer; shaft tender
Inspects, repairs, and replaces mine shaft parts, such as timbers, cage guides, guardrails, and cable, using handtools. Tightens joints of compressed air, steam, and water pipes in shaft, using pipe wrenches. May build doors and brattices of canvas or wood. May erect partitions of concrete, concrete block, or brick.
GOE: 05.10.01 STRENGTH: H GED: R3 M1 L2 SVP: 5 DLU: 77

899.684-038 STRIPPER AND TAPER (rubber goods)
Applies bias tape over seams of rubberized fabric to protect and reinforce sections of inflatable buildings: Lifts and attaches sections of buildings to circular frame, working as member of crew. Turns handcrank to roll first section of building to top of frame. Cleans seams with solvent, and applies glue to seam and bias tape. Attaches and centers tape on seams, using hand roller and hand pressure. Turns handcrank to position other sections of building and repeats bonding process. Removes, straightens, and cuts tape to correct flaws, using solvent to loosen glue. Reglues corrected sections. Removes completed building, using handcrank.
GOE: 06.04.29 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

899.684-042 WINDOW REPAIRER (any industry)
Repairs and adjusts metal and wooden casement windows, storm windows and doors, and jalousies, using handtools and portable power tools: Repairs or

replaces locks, hinges, and cranks. Realigns windows and screens to fit casements. Oils moving parts of sections. May cut and install glass. May paint windows, using brush or spray equipment.
GOE: 05.12.12 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

899.684-046 MAINTENANCE WORKER, MUNICIPAL (government ser.)

Performs any combination of following duties to maintain and repair property of municipality, using variety of machines, tools, and equipment: Receives written work orders or verbal instructions from municipal administrator. Cuts grass and trims weeds on town property and parks, using lawn mower and weed trimmer. Digs flower beds and plants flowers, using gardening tools. Constructs decorative flower garden borders from wood, using handtools. Cleans buildings, washes windows, and empties trash cans, using brooms, cleaning supplies, and floor buffer. Paints interior and exterior walls and trim, using paint and painting tools. Operates backhoe to dig trenches for water and sewer pipe. Drives truck and loads fallen tree limbs and roadside trash onto truck, and delivers refuse to landfill. Repairs streets and sidewalks with asphalt, cold patching materials, and concrete, using shovel, hand roller, trowel, level, and long-handled tamp. Removes and replaces damaged parking meters and traffic signs. Operates snow removal equipment to maintain streets, sidewalks, and driveways. Reads water meters and records reading in logbook. Maintains and repairs municipal buildings' plumbing and electrical systems, including replacing worn or defective parts, such as switches and fuses. Repairs or replaces building brick, stone, and concrete. Maintains and repairs wood parts of buildings, using carpenter tools. Replaces worn or damaged parts, such as hoses, wiring, and belts, in machines and equipment, such as truck, street sweeper, and riding mower. Hand washes vehicles.
GOE: 05.12.12 STRENGTH: H GED: R3 M2 L3 SVP: 5 DLU: 86

899.687-010 DECORATOR, STREET AND BUILDING (any industry)

Installs decorations, such as flags, lights, and bunting, on streets, on or in buildings, halls, and booths for events, such as parades, conventions, and festivals: Strings and connects electric wiring and lights. Hangs decorations in streets and in or on buildings and structures, using wire, rope, and handtools, working from ladders or elevated truck platforms. Constructs framework to support displays, using woodworking machines and handtools. May build and decorate parade floats and be designated Float Builder (any industry).
GOE: 05.12.12 STRENGTH: V GED: R2 M1 L1 SVP: 4 DLU: 77

899.687-014 LABORER, AIRPORT MAINTENANCE (air trans.)

Maintains and repairs airport facilities and grounds by performing any combination of following tasks: Operates sweeping machine to clean streets of dust and trash [STREET-SWEEPER OPERATOR (government ser.)]. Operates power mower to mow lawns and fields of airport. Plants, waters, fertilizes, and prunes shrubs and plants to beautify airport grounds. Drives light truck to haul dirt and trash and to move equipment. Cleans runway drain ditches, catch basins, and drains, and fills holes in fields and grounds, using shovels, hoe, and rake. Repairs damaged fences, replaces defective or damaged parking meters and weathered traffic signs, using handtools. May asssist maintenance workers in performing repairs to electrical, plumbing, or heating systems.
GOE: 05.12.12 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

9 MISCELLANEOUS OCCUPATIONS

This category includes occupations concerned with transportation services; packaging and warehousing; utilities; amusement, recreation, and motion picture services; mining; graphic arts; and various miscellaneous activities. Occupations concerned with activities listed above and involving extensive record keeping are found in Category 2. Occupations concerned with hoisting and conveying of logs are included in this category. Other logging occupations are found in Category 4.

90 MOTOR FREIGHT OCCUPATIONS

This division includes occupations concerned with transporting cargo over highways, city streets, or within compounds of industrial, construction, or mining areas, by driving vehicles powered by gasoline, diesel, propane, or related fuels, or electricity.

900 CONCRETE-MIXING-TRUCK DRIVERS

This group includes occupations concerned with driving a truck and controlling a mounted concrete mixer to mix concrete and transport it to construction sites and dumping mixed concrete into chutes leading to forms.

900.683-010 CONCRETE-MIXING-TRUCK DRIVER (construction) alternate titles: batch-mixing-truck driver; moto-mix operator; ready-mix-truck driver; transit-mix operator

Drives truck equipped with auxiliary concrete mixer to deliver concrete mix to job sites: Drives truck under loading hopper to receive sand, gravel, cement, and water and starts mixer. Drives truck to location for unloading. Moves levers on truck to release concrete down truck chute into wheelbarrow or other conveying container or directly into area to be poured with concrete. Cleans truck after delivery to prevent concrete from hardening in mixer and on truck, using water hose and hoe. May spray surfaces of truck with protective compound to prevent adhering of concrete. May assemble cement chute.
GOE: 05.08.03 STRENGTH: M GED: R3 M1 L1 SVP: 3 DLU: 86

902 DUMP-TRUCK DRIVERS

This group includes occupations concerned with driving a dump truck to transport sand, gravel, coal, and similar cargo.

902.683-010 DUMP-TRUCK DRIVER (any industry)

Drives truck equipped with dump body to transport and dump loose materials, such as sand, gravel, crushed rock, coal, or bituminous paving materials: Pulls levers or turns crank to tilt body and dump contents. Moves hand and foot controls to jerk truck forward and backward to loosen and dump material adhering to body. May load truck by hand or by operating mechanical loader. May be designated according to type of material hauled as Coal Hauler (any industry); Dust-Truck Driver (any industry); Mud Trucker (steel & rel.). May be designated according to type of equipment driven for off-highway projects as Dump-Truck Driver, Off-Highway (any industry).
GOE: 05.08.01 STRENGTH: M GED: R3 M1 L1 SVP: 2 DLU: 80

903 TRUCK DRIVERS, INFLAMMABLES

This group includes occupations concerned with driving trucks to transport liquid, dry, or gaseous cargoes of inflammable, explosive, volatile, radioactive, or otherwise dangerous material.

903.683-010 EXPLOSIVES-TRUCK DRIVER (ordnance)

Drives specially modified truck to transport explosive material. Loads and unloads containers according to prescribed safety methods and observes safety regulations in transit. Keeps record of materials moved.
GOE: 05.08.01 STRENGTH: M GED: R3 M1 L2 SVP: 3 DLU: 77

903.683-014 POWDER-TRUCK DRIVER (ordnance)

Drives specially modified truck to transport gunpowder from freight cars and motor trucks to and from storage magazines and blending houses. Stores kegs, drums, and boxes of various type powders according to prescribed safety methods and follows safety regulations in transit.
GOE: 05.08.01 STRENGTH: M GED: R3 M1 L2 SVP: 3 DLU: 77

903.683-018 TANK-TRUCK DRIVER (petrol. refin.; retail trade; wholesale tr.)

Drives tank truck to deliver gasoline, fuel oil, lubricating oil, or liquefied petroleum gas to customers: Drives truck into position to load at filling rack. Opens valves or starts pumps to fill tank. Reads gauges or meters and records quantity loaded. Drives truck to customer's premises. Connects hose to tank and opens valves. Records amount delivered and issues ticket to customer. May attach ground wire to truck. May be designated according to type of fuel delivered as Fuel-Oil-Delivery Driver (petrol. refin.; retail trade; wholesale tr.); Gas-Delivery Driver (petrol. refin.; retail trade; wholesale tr.). May drive trailer truck and be designated Trailer-Tank-Truck Driver (petrol. refin.; retail trade; wholesale tr.).
GOE: 05.08.01 STRENGTH: M GED: R3 M1 L2 SVP: 3 DLU: 81

904 TRAILER-TRUCK DRIVERS

This group includes occupations concerned with driving semitrailer or full-trailer trucks to transport cargo.

904.383-010 TRACTOR-TRAILER-TRUCK DRIVER (any industry) alternate titles: semi-truck driver; trailer-truck driver

Drives gasoline or diesel-powered tractor-trailer combination, usually long distances, to transport and deliver products, livestock, or materials in liquid, loose, or packaged form: Drives truck to destination, applying knowledge of commercial driving regulations and skill in maneuvering vehicle in difficult situations, such as narrow passageways. Inspects truck for defects before and after trips and submits report indicating truck condition. Maintains driver log according to I.C.C. regulations. May assist workers in loading and unloading truck. May transport new automobiles or trucks from manufacturers or rail terminals to dealers and be designated Transport Driver (motor trans.). May drive tractor with two trailers hitched in tandem and be designated Double-Bottom Driver (any industry). May drive tractor-trailer combination to deliver poles for utility and construction companies and be designated Pole-Truck Driver (construction; tel. & tel.; utilities). May work as member of two-person team: driving tractor with sleeper bunk behind cab and be designated Long-Haul-Sleeper Driver (any industry). May drive tractor-trailer combination to deliver or spray water and be designated Water-Truck Driver (construction; petrol. & gas) I.
GOE: 05.08.01 STRENGTH: M GED: R3 M2 L3 SVP: 4 DLU: 81

904.683-010 LOG-TRUCK DRIVER (logging) alternate titles: log hauler

Drives truck, equipped with long-tongued trailer, to haul logs from forest to mill or storage yard: Maneuvers truck into loading position according to signals from loading crew. Fastens chain or cable binders around logs to secure load on trailer during transit. May release binders and start power hoist to dump logs. May assist in loading and unloading logs, using crane hook or cant hook. May raise empty trailer to carrying position on truck bed, using hoist, for deadhead (empty) trip to forest. May steer trailer from cab attached to rear end of log trailer and be designated Trailer Steerer (logging).
GOE: 05.08.01 STRENGTH: M GED: R3 M1 L2 SVP: 4 DLU: 79

905 TRUCK DRIVERS, HEAVY

This group includes occupations concerned with driving trucks of 3 tons or greater capacity.

905.483-010 MILK DRIVER (dairy products) alternate titles: milk hauler

Drives insulated tank truck to transport bulk milk between farms, dairies, and commercial establishments: Examines milk to detect sediment or stale odor, and takes sample for laboratory analysis. Observes level gauge of storage tank and computes and records weight of milk in tank. Connects hose and turns valves to pump milk into truck. Washes truck. May clean and sterilize tank. May load and drive refrigerated van to haul cans of milk.
GOE: 05.08.01 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 77

905.663-010 GARBAGE COLLECTOR DRIVER (motor trans.)

Drives packer-type truck, dump truck, or truck equipped with hydraulic lifting device to collect garbage and trash, and transports load to disposal area. Records mileage and fuel consumption.
GOE: 05.08.03 STRENGTH: M GED: R3 M1 L1 SVP: 3 DLU: 77

905.663-014 TRUCK DRIVER, HEAVY (any industry)

Drives truck with capacity of more than 3 tons, to transport materials to and from specified destinations: Drives truck to destination, applying knowledge of commercial driving regulations and area roads. Prepares receipts for load picked up. Collects payment for goods delivered and for delivery charges. May maintain truck log, according to state and federal regulations. May maintain telephone or radio contact with supervisor to receive delivery instructions. May load and unload truck. May inspect truck equipment and supplies, such as tires, lights, brakes, gas, oil, and water. May perform emergency roadside repairs, such as changing tires, installing light bulbs, tire chains, and spark plugs. May position blocks and tie rope around items to secure cargo during transit. When driving truck equipped for specific purposes, such as fighting fires, digging holes, and installing and repairing utility company lines, may be designated Fire-Truck Driver (petrol. & gas); Hole-Digger-Truck Driver (construction; tel. & tel.; utilities). When specializing in making deliveries, may be designated Delivery-Truck Driver, Heavy (any industry). May be designated according to

type of truck driven as Truck Driver, Flatbed (logging). May be designated according to kind of cargo transported as Water Hauler (logging).
GOE: 05.08.01 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 81

905.663-018 VAN DRIVER (motor trans.) alternate titles: furniture-mover driver

Loads furniture into van, drives truck to specified destination, and unloads furniture: Drives van to loading point and consults householder on furniture to be moved. Gives directions to VAN-DRIVER HELPER (motor trans.) in moving articles to van. Wraps furniture with blankets to prevent damage. Wraps dishes and fragile items in packing paper and packs them into containers. Loads truck, using dollies and handtruck, distributing weight evenly, forming compact load, and utilizing space. Drives van to destination and unloads cargo. Obtains customers signature or collects payment for services. May service van [GAS-AND-OIL SERVICER (motor trans.)]. May remove window frames and erect block and tackle on house to remove bulky items. May move delicate equipment or instruments for industrial firms. May deliver items such as furniture and large appliances to department store customers and be designated Bulk Driver (motor trans.).
GOE: 05.08.03 STRENGTH: V GED: R3 M2 L3 SVP: 4 DLU: 77

905.683-010 WATER-TRUCK DRIVER II (construction; petrol. & gas)

Drives tank truck to transport water for construction projects or to provide water for use in drilling shallow bore-holes on petroleum-prospecting sites. May insert pipe in refilled trenches and other excavations, and operate auxiliary pump on truck to pump water into fill to settle and compact dirt. May drive truck equipped with sprinkling attachment to settle dust on roadways and streets and to saturate flexible base for compaction. May drive truck equipped with trailer [TRACTOR-TRAILER-TRUCK DRIVER (any industry)].
GOE: 05.08.01 STRENGTH: M GED: R3 M1 L2 SVP: 3 DLU: 77

905.687-010 TRUCK-DRIVER HELPER (any industry) alternate titles: driver helper; trucker helper

Assists TRUCK DRIVER, HEAVY (any industry) by performing any combination of following tasks: Loads and unloads vehicles by hand or by use of handtruck or dolly. Pads, stacks, and secures items in position on truck to prevent damage during shipment. Delivers and stacks merchandise on customer's premises and collects payment or obtains receipt for goods. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.03 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

905.687-014 VAN-DRIVER HELPER (motor trans.) alternate titles: furniture mover; van helper

Assists VAN DRIVER (motor trans.) in loading and unloading moving van: Wraps dishes and fragile items in paper or corrugated cardboard and packs them in barrels. Rolls up rugs, removes pictures from walls, and loads furniture into van. Arranges articles in truck to form compact load, using ropes and padding to secure goods and prevent breakage. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.03 STRENGTH: V GED: R2 M1 L1 SVP: 3 DLU: 77

906 TRUCK DRIVERS, LIGHT

This group includes occupations concerned with driving trucks of less than 3 tons capacity.

906.683-010 FOOD-SERVICE DRIVER (hotel & rest.) alternate titles: food-service agent

Drives truck to deliver refrigerated and electric-warming cabinets containing previously prepared meals to airports, and unloads cabinets into airplanes: Loads cabinets into truck and drives truck to flight field. Maneuvers truck beneath airplane to be loaded and moves truck levers to elevate truck bed to level of airplane door. Unloads cabinets into airplane and connects electrical cords of cabinets to electrical outlets of airplane. Presents billing form to designated airline representative and collects receipt. Loads empty cabinets onto truck and returns them to commissary kitchen.
GOE: 05.08.03 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

906.683-014 LIQUID-FERTILIZER SERVICER (agriculture)

Drives truck to deliver liquid fertilizer to field location and pumps fertilizer into tractor-drawn applicator tank: Drives truck, containing supply tank filled with fertilizer, to area to be fertilized. Couples hose from supply tank to feeder tank mounted on tractor. Opens valves on feed pipes to synchronize flow of fertilizer onto soil with speed of tractor, using pipe wrench. Inspects tanks, hose, piping and couplings for leaks and replaces defective parts, using handtools. Records quantity of fertilizer applied.
GOE: 05.08.03 STRENGTH: M GED: R3 M1 L1 SVP: 3 DLU: 77

906.683-018 TELEPHONE-DIRECTORY-DISTRIBUTOR DRIVER (business ser.)

Drives automobile or truck to transport telphone directories from central storage facilities to distribution area: Loads vehicle with assigned number of books and drives to distribution district, parking vehicle in convenient or centralized location. Distributes books to TELEPHONE-DIRECTORY DELIVERERS (business ser.) for delivery to residences and business establishments indicated on address lists. May transport TELEPHONE-DIRECTORY DELIVERERS (business ser.) to distribution area. May deliver telephone directories, on foot, after parking vehicle.
GOE: 05.08.03 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

906.683-022 TRUCK DRIVER, LIGHT (any industry)

Drives truck with capacity under 3 tons to transport materials in liquid or packaged form and personnel to and from specified destinations, such as railroad stations, plants, residences, offices, or within industrial yards: Verifies load against shipping papers. Drives truck to destination, applying knowledge of commercial driving regulations and roads in area. Prepares receipts for load picked up. Collects payment for goods delivered and for delivery charges. May maintain truck log according to state and federal regulations. May maintain telephone or radio contact with supervisor to receive delivery instructions. May drive truck equipped with public address system through city streets to broadcast announcements over system for advertising or publicity purposes. May load and unload truck. May inspect truck equipment and supplies, such as tires, lights, brakes, gas, oil, and water. May perform emergency roadside repairs, such as changing tires, installing light bulbs, fuses, tire chains, and spark plugs. May be known in establishment according to type of activity as Crew-Truck Driver (any industry); Insect Sprayer, Mobile Unit (government ser.); Mail-Truck Driver (any industry); Motor-Vehicle-Escort Driver (business ser.); Pick-Up Driver (motor trans.); Service-Parts Driver (automotive ser.); Sprinkler-Truck Driver (any industry).
GOE: 05.08.01 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 87

909 MOTOR FREIGHT OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with motor freight transportation.

909.127-010 SAFETY COORDINATOR (motor trans.) alternate titles: supervisor

Coordinates safety traffic program and instructs truck and trailer drivers in matters pertaining to traffic and safety regulations, and care of equipment: Instructs drivers regarding company regulations, penalties for infraction of rules, or safety and conservation measures. Rides with drivers to detect errors in handling cargo or driving vehicle. Patrols highway to detect violation of company regulations by drivers and to observe condition of vehicles and road. Reroutes truck as result of unsatisfactory road conditions. Investigates accidents involving company trucks, questions witnesses and drivers to determine causes of accidents and makes adjustments in accordance with governmental regulatory agencies' and company procedures. Directs transfer of cargo from damaged truck to substitute vehicle to ensure scheduled delivery. Analyzes accident reports obtained from governmental agencies to determine driver's need for additional training. Trains supervisors in such matters as safety and conservation of equipment and driving hazards. Confers with department heads concerning such problems as accident rates and abuse of equipment, and recommends measures to improve safety records and to conserve equipment.
GOE: 11.10.05 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

909.137-010 DRIVER SUPERVISOR (motor trans.)

Supervises and coordinates activities of TRACTOR-TRAILER-TRUCK DRIVER (any industry) 904.383-010 and TRUCK DRIVERS, HEAVY (any industry) 905.663-014 engaged in operating motor vehicles to haul materials for motor freight company or in off-highway haulage activities at industrial site. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.08.01 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 78

909.137-014 GARBAGE-COLLECTION SUPERVISOR (motor trans.) alternate titles: rubbish-collection supervisor; trash-collection supervisor

Supervises and coordinates activities of workers engaged in collecting garbage and other refuse and transporting refuse to disposal plants or areas. Assigns routes and trucks to workers. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.08.03 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

909.137-018 TRUCK SUPERVISOR (motor trans.)

Supervises and coordinates workers engaged in loading and transporting machinery and industrial equipment, such as construction machinery, or field drilling and pumping equipment, tanks, vessels, compressors and pumps for chemical plants, refineries and pipeline pump stations: Observes installation of old machinery and equipment or studies sizes and weights of new equipment from bills of lading and other specifications, and plans procedures for dismantling and loading equipment. Trains workers in rigging hoists, and dismantling and loading equipment. May plan transportation route by consulting road and city maps to ensure clearance and load limits of roads, bridges and overhead obstructions, such as power lines and underpasses, utilizing knowledge of state regulations regarding size and weight of loads, traffic speeds, and use of clearance lights. May supervise maintenance and repair of trucks. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: L GED: R4 M3 L4 SVP: 8 DLU: 77

909.663-010 HOSTLER (motor trans.) alternate titles: hook-up driver; yard spotter

Drives trucks or tractors at vehicle parking or docking area to move, position, or park trucks or trailers: Drives trucks to and from service department and around dock area for motor freight transportation company. Spots (positions) loaded and unloaded trailers at assigned dock space for unloading or loading.

using tractor. Connects loaded semitrailers to tractors for TRACTOR-TRAILER-TRUCK DRIVER (any industry). May service trucks and tractors [GAS-AND-OIL SERVICER (motor trans.)]. May drive buses along municipal streets to deliver replacement vehicle to operator with disabled vehicle and be designated Bus Driver, Garage (motor trans.).
GOE: 05.08.03 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

909.687-014 LABORER, GENERAL (motor trans.)
Performs variety of manual tasks around dock area of motor freight transportation company as directed: Sweeps dock area and cleans truck yard, using broom, shovel, and wheelbarrow. May clean interior and exterior of trucks [CLEANER (any industry) II].
GOE: 05.12.18 STRENGTH: H GED: R1 M1 L1 SVP: 2 DLU: 77

91 TRANSPORTATION OCCUPATIONS, N.E.C.

This division includes occupations, not elsewhere classified, concerned with moving people or materials by means of automotive and railway vehicles, aircraft, freshwater or seagoing vessels, pipes, and pumps. Includes loading bulk materials into conveyances; directing course of carrier; routing materials; minor repair and maintenance of carriers; and related activities.

910 RAILROAD TRANSPORTATION OCCUPATIONS

This group includes occupations concerned with transporting passengers and freight by controlling movement of trains, trolleys, and other railway vehicles; collecting fares from passengers and giving information incidental to driving vehicles; supplying fuel; adjusting alignment of tracks; signaling operational information; physically shifting railway cars in classification yards; cleaning and lubricating equipment; and related activities.

910.137-010 BAGGAGE-AND-MAIL AGENT (r.r. trans.)
Supervises and coordinates activities of workers engaged in loading and unloading mail and baggage: Coordinates work schedules in accordance with train schedules to ensure that transfer of mail and luggage is completed in allotted time. Assigns duties to workers. Observes workers serving passengers to ensure workers are courteous and helpful. Supervises workers sorting, loading, and unloading sacks of mail. Notifies STATION AGENT (r.r. trans.) I when transfer of mail and baggage has been completed following prescribed rules and regulations. Recommends new methods of transferring mail and luggage onto and from trains. Reviews workflow and production charts to determine need for additional workers.
GOE: 05.12.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

910.137-014 CAR-CLEANING SUPERVISOR (r.r. trans.) alternate titles: railroad-car-cleaning supervisor
Supervises and coordinates activities of workers engaged in cleaning railroad freight and passenger cars: Assigns daily work schedules to workers. Requisitions supplies, such as hoses, sponges, brushes, shovels, and cleaning solvents from supply room. Inspects cleaned cars to ensure that interior and exterior are washed, protruding nails removed from floor and sides, holes in floor and sides are covered with boards, doors are securely closed, and for worn out parts of defects on railway cars. Prepares report each day indicating number and type of cars cleaned and ready for use, following ICC regulations, and reports areas needing repairs. When supervising workers engaged in cleaning only passenger cars, may be designated Passenger-Car-Cleaning Supervisor (r.r. trans.). Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: L GED: R3 M3 L3 SVP: 6 DLU: 77

910.137-018 CIRCUS-TRAIN SUPERVISOR (amuse. & rec.)
Supervises and coordinates activities of workers engaged in loading and unloading circus animals and equipment on and off train: Verifies train schedules with train officials to determine when train will be ready to load or unload. Arranges for water supply for animals and disposal of rubbish. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

910.137-022 CONDUCTOR, YARD (r.r. trans.) alternate titles: engine supervisor; head switcher; yard supervisor
Supervises and coordinates activities of switch-engine crew engaged in switching railroad cars within yard of railroad, industrial plant, or similar location to facilitate loading and unloading of cars or making up and breaking up of trains: Notifies YARD ENGINEER (r.r. trans.) of switching orders and, whereby, which cars are to be moved to specified locations of yard, using radio, telephone, verbal, or hand signals. Gives instructions to SWITCH TENDER (r.r. trans.) to throw track switches and to YARD COUPLER (r.r. trans.) to couple and uncouple cars. May keep records, number, origin, destination, and cargo of cars switched. May coordinate activities of switching crew from locomotive cab, caboose, or control tower. May assist workers to couple and uncouple cars, throw track switches, or other activities involved in switching railroad cars, as necessary. May supervise workers engaged in maintenance and repair of diesel locomotives and be designated Locomotive-Engine Supervisor (any industry).
GOE: 05.08.02 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

910.137-026 FREIGHT-LOADING SUPERVISOR (r.r. trans.)
Supervises and coordinates activities of workers engaged in loading and unloading incoming and outgoing freight at railroad stations: Determines number of workers and equipment required to load or unload freight, using information obtained from waybills, other shipping records, and personal experience. Examines each item of freight for size and weight to determine sequence of loading so that maximum amount of freight can be loaded into each car. Gives instructions to MATERIAL HANDLER (any industry) to load freight into cars. Records description of each item of freight and number of car in which it is loaded. Compares items of freight loaded or unloaded with listing on waybill or other shipping records to ensure that all freight is routed to specified destination. Informs adjustment department of damaged freight. May notify railway clerical employee to affix door seal when freight car has been loaded. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

910.137-034 ROAD SUPERVISOR OF ENGINES (r.r. trans.) alternate titles: railroad supervisor of engines
Supervises and coordinates activities of train and engine crews on train carrying freight: Measures height and width of special loads to ensure that load limits are in accordance with rules and regulations, and that load will pass through tunnels and over bridges and trestles on scheduled route. Ensures that sufficient number of engines are available to haul load. Notifies LOCOMOTIVE ENGINEER (r.r. trans.) of specified speed and route and special stops. Prepares reports at end of run to explain delays or accidents. Explains mechanical and electrical function of engine to workers, using charts and diagrams. Demonstrates operation of locomotive to workers. Observes workers to evaluate their performance in use of locomotive and in their understanding of operating rules and signals. May recommend hiring, firing, and other personnel actions of train and engine crew workers.
GOE: 05.08.02 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

910.137-038 STATION AGENT I (r.r. trans.) alternate titles: agent-telegrapher; freight and passenger agent
Supervises and coordinates activities of workers engaged in selling tickets and checking baggage at railroad station not served by STATION MANAGER (r.r. trans.): Assigns shift schedules to workers to ensure adequate service to patrons. Keeps daily records of attendance. Sells tickets to patrons [TICKET AGENT (any industry)]. Answers inquiries from patrons concerning schedules and departures and arrivals of trains. Requisitions supplies. Relays train orders and messages [TELEGRAPHER (r.r. trans.)]. Inspects buildings to detect maintenance needs. Verifies records of daily ticket sales and cash receipts. May train new employees. May supervise and coordinate activities of workers engaged in maintaining buildings and grounds of railroad station. May perform duties of EXPRESS CLERK (motor trans.; r.r. trans.).
GOE: 07.01.02 STRENGTH: L GED: R4 M3 L4 SVP: 6 DLU: 77

910.137-046 YARD MANAGER (any industry)
Supervises and coordinates activities of workers engaged in loading, transferring, and operating trains and locomotives in industrial yard. May direct workers engaged in handling and storing objects in yard. May direct workers engaged in inspecting and maintaining rolling stock. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

910.167-010 CAR CHASER (beverage) alternate titles: car spotter
Directs movement of grain-freight cars in plant yard, and selects cars for grain loading: Signals railroad crew and plant workers to move cars in specified sequence to meet grain loading and unloading schedules. Marks or points out cars for use. Walks along tracks on railroad siding to examine empty grain cars to ascertain size, type, and cleanliness. Selects cars for future loading and prepares list of car numbers.
GOE: 05.09.03 STRENGTH: L GED: R3 M2 L3 SVP: 6 DLU: 77

910.167-014 TRAIN DISPATCHER, ASSISTANT CHIEF (r.r. trans.)
Assigns locomotives, cabooses, and crews to trains to obtain most efficient use of equipment and personnel within assigned railroad territory: Determines number of locomotives to be allocated to trains based on type of freight and number and destinations of freight cars to be moved. Assigns locomotives and cabooses to trains and schedules departure and movement of trains on specific tracks and sidings according to ultimate destination of individual freight cars. Schedules and assigns initial, replacement, or emergency crews to trains depending upon available work time of individual crews and purpose of trip. Routes locomotives scheduled for preventive maintenance to destinations in proximity to designated maintenance facility to minimize cost of transfer to service site.
GOE: 05.09.02 STRENGTH: S GED: R4 M2 L3 SVP: 7 DLU: 86

910.263-010 RAIL-FLAW-DETECTOR OPERATOR (r.r. trans.)
Operates rail-flaw-detection machine aboard rail-flaw-detector-railroad car to detect defects in railroad tracks and analyzes graphic recording to determine any and type of defect: Synchronizes electronic recording equipment, meters, and other apparatus of rail-detector car or machine, using handtools. Fills container located at base of rail-detector car with paint so that machine will automatically mark section of defective rail. Starts machine and signals worker to operate rail-detector car along tracks. Analyzes graphic recordings to determine type of defects detected and prepares reports on findings. Replaces rolls of sensitized paper and tubes of ink as necessary. Tests electronic components of rail-flaw-detection machine, using tube and circuit tester.
GOE: 05.07.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

910.362-010 TOWER OPERATOR (r.r. trans.) alternate titles: signal-tower operator

Operates switching equipment in control tower to route train traffic in railroad yard or at switching point, following switching orders, train schedules, and safety regulations: Reads switching orders and schedules of inbound and outbound traffic to ascertain time trains will enter or leave yard, sequence of movement, and tracks on which trains are to be routed. Observes approaching trains and moves switches on control panel to set traffic signals and to activate track switches that regulate traffic. Receives and transmits switching orders by telephone or telegraph. May control track switches and train signals at junction point on rapid-transit or street-railway line and be designated Interlocking Tower Operator (r.r. trans.).
GOE: 05.03.03 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

910.363-010 FIRER, LOCOMOTIVE (r.r. trans.) alternate titles: assistant engineer

Monitors locomotive instruments and watches for dragging equipment, obstacles on right-of-way, and train signals during run: Inventories supplies, such as fuel, water, and sand, to ensure safe, efficient operation during run. Inspects locomotive to detect damaged or worn parts. Observes oil, temperature, and pressure gauges on dashboard to ascertain if engine is operating safely and efficiently. Observes track from left side of locomotive to detect obstructions on tracks. Observes train signals along route and verifies their meaning for LOCOMOTIVE ENGINEER (r.r. trans.). Observes train as it goes around curves to detect dragging equipment and smoking journal boxes. Observes signals from workers in rear of train and relays information to LOCOMOTIVE ENGINEER (r.r. trans.). Signals YARD COUPLER (r.r. trans.) to set handbrakes on cars and to throw track switches when switching cars from train at way stations. Operates locomotive during emergency. May start diesel engine to warm engine before run. May be designated according to kind of locomotive as Firer, Diesel Locomotive (r.r. trans.); Firer, Electric Locomotive (r.r. trans.); or according to type of traffic as Road-Freight Firer (r.r. trans.); Road-Passenger Firer (r.r. trans.).
GOE: 05.08.02 STRENGTH: L GED: R4 M2 L3 SVP: 6 DLU: 77

910.363-014 LOCOMOTIVE ENGINEER (r.r. trans.)

Drives electric, diesel-electric, or gas-turbine-electric locomotive, interpreting train orders, train signals, and railroad rules and regulations, to transport passengers or freight: Inspects locomotive before run to verify specified fuel, sand, water, and other supplies. Syncronizes watch with that of CONDUCTOR, PASSENGER CAR (r.r. trans.) or CONDUCTOR, ROAD FREIGHT (r.r. trans.) to ensure departure time from station or terminal is in accordance with time schedule. Receives starting signal from CONDUCTOR, PASSENGER CAR (r.r. trans.) or CONDUCTOR, ROAD FREIGHT (r.r. trans.) and moves controls, such as throttle and airbrakes to drive locomotive. Interprets train orders, train signals, and railroad rules and regulations to drive locomotive, following safety regulations and time schedule. Calls out train signals to FIRER, LOCOMOTIVE (r.r. trans.) for verification of meaning to avoid errors in interpretation. Confers with CONDUCTOR, ROAD FREIGHT (r.r. trans.) or traffic control center personnel via radiophone to issue or receive information or instructions concerning stops, delays, or oncoming trains. Observes track to detect obstructions. Inspects locomotive after run to detect damaged or defective equipment. Prepares reports to explain accidents, unscheduled stops, or delays. May lubricate moving parts of locomotive. May drive diesel-electric rail-detector car to transport rail-flaw-detecting machine over railroad and be designated Rail-Flaw-Detector-Car Operator (r.r. trans.). May be designated according to type of locomotive driven as Locomotive Engineer, Diesel (r.r. trans.); Locomotive Engineer, Electric (r.r. trans.); or according to type of traffic assigned as Road Engineer, Freight (r.r. trans.); Road Engineer, Passenger (r.r. trans.).
GOE: 05.08.02 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 77

910.363-018 YARD ENGINEER (r.r. trans.) alternate titles: locomotive engineer

Drives switching locomotive within yard of railroad, industrial plant, quarry, construction project, or similar location to switch railroad cars for loading, unloading, and makeup or breakup of trains: Reads switching orders received from CONDUCTOR, YARD (r.r. trans.). Observes traffic signals in yard or in cab and operates locomotive in accordance with railroad rules and regulations. Observes arm or lantern signals from YARD COUPLER (r.r. trans.) or SWITCH TENDER (r.r. trans.) and moves controls to drive locomotive backwards or forwards to switch and couple cars. May assist in cleaning and lubricating engine. May talk to CONDUCTOR, YARD (r.r. trans.) or other yard workers via radio-telephone to give or receive switching information. May be designated according to type of locomotive driven as Locomotive Engineer, Gasoline (any industry). May operate switching diesel engine and be designated Engineer, Remote Control, Diesel (r.r. trans.). When employed by establishment other than railroad to operate switching locomotive at industrial plant, quarry, construction project, or similar location, may be designated Industrial-Locomotive Operator (any industry).
GOE: 05.08.02 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

910.364-010 BRAKER, PASSENGER TRAIN (r.r. trans.)

Performs any combination of following duties on passenger train: Inspects equipment, such as couplings, airhose, journal boxes, and handbrakes, to ensure that they function properly. Assists passengers to board and leave train. Places passengers' baggage in rack above seats on train. Answers questions from passengers concerning train rules, station, and timetable information. Turns knobs and pushes switches on control panel to regulate air-conditioning, heating, and lighting on train for comfort of passengers. Sets warning signals, such as flares, flags, lanterns, or torpedoes, in front of and at rear of train during emergency stops to warn oncoming trains. Makes minor repairs to couplings, airhoses, and journal boxes, using handtools. Reports to CONDUCTOR, PASSENGER CAR (r.r. trans.) any equipment requiring major repair. Collects tickets, fares, and passes from passengers.
GOE: 09.01.04 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 77

910.367-010 BRAKE COUPLER, ROAD FREIGHT (r.r. trans.)

Performs any combination of following duties, working as member of train crew: Inspects couplings and airhoses to ensure that they are securely fastened. Inspects journal boxes to ensure that they are lubricated. Inspects handbrakes on cars to ensure that they are released before run begins. Walks on top of cars and peers down between them to inspect couplings, airhoses, and journal boxes. Sets warning signals, such as flares, flags, lanterns, or torpedoes in front of and at rear of train during emergency stops to warn oncoming trains. Climbs ladder to top of car and turns brakewheel to set car brakes or rides atop car to control its speed when it is shunted. Pulls or pushes track switch to reroute cars during breakup at way stations. Signals LOCOMOTIVE ENGINEER (r.r. trans.) to start or stop train when coupling or uncoupling cars. Rides in cab of engine or cupola of caboose to observe signals from other crewmembers. Makes minor repairs to couplings, airhoses, and journal boxes. Reports to CONDUCTOR, ROAD FREIGHT (r.r. trans.) any equipment requiring major repairs.
GOE: 05.12.05 STRENGTH: M GED: R3 M2 L3 SVP: 4 DLU: 77

910.367-014 CAR DISTRIBUTOR (r.r. trans.) alternate titles: car supplier; chief clerk, yard office

Selects railroad freight cars according to type and amount of cargo to be transported, and directs railroad train and switching crews by radio, telephone, telegraph, and switch-list to segregate specific empty freight cars from trains, and route them to other railroad divisions or designated shippers, according to information received from TRAIN DISPATCHER (r.r. trans.). Keeps record of all transactions.
GOE: 07.04.05 STRENGTH: S GED: R4 M2 L3 SVP: 5 DLU: 77

910.367-018 ENGINE DISPATCHER (r.r. trans.)

Assigns engines to LOCOMOTIVE ENGINEERS (r.r. trans.) for train runs or for switching operations at railroad yard, industrial plant, quarry, construction project, or similar location: Reads train orders or switching orders to ascertain length of run scheduled, type and tonnage of cargo to be transported, or number of switch engines required to complete switching assignments for day. Assigns engine according to size and horsepower and records number and type of engine assigned. Keeps records of number of engines and types of engines available, in use, and in repair or service shops. Notifies HOSTLER (r.r. trans.) when engine can be delivered to switching crew or train crew. When employed by establishment other than railroad, may be designated Dispatcher, Industrial Locomotive (any industry).
GOE: 05.09.02 STRENGTH: S GED: R3 M2 L3 SVP: 4 DLU: 77

910.367-022 LOCOMOTIVE OPERATOR HELPER (r.r. trans.)

Watches for and relays traffic signals from yard workers to YARD ENGINEER (r.r. trans.) in railroad yard, industrial plant, quarry, or other location: Reads switching orders received from CONDUCTOR, YARD (r.r. trans.) or YARD ENGINEER (r.r. trans.) and confirms them with YARD ENGINEER (r.r. trans.). Observes signals and traffic in yard from left side of cab in switch engine and relays information to engineer. Signals YARD COUPLER (r.r. trans.) to set handbrakes on cars or to throw track switches, using arm or lantern signals.
GOE: 05.12.20 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

910.367-026 PASSENGER REPRESENTATIVE (r.r. trans.)

Accompanies CONDUCTOR, PASSENGER CAR (r.r. trans.) through train, verifies tickets and seat reservations, and records information, such as number of passengers scheduled to leave train at each stop. Answers passengers' questions and suggests activities and accommodations available at passengers' destination. May assist or relieve CONDUCTOR, PASSENGER CAR (r.r. trans.) by taking tickets in designated coaches or entire train. May inspect kitchen and dining area to ensure sanitation requirements are maintained. May investigate passenger complaints.
GOE: 09.01.04 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 77

910.367-030 WAY INSPECTOR (r.r. trans.) alternate titles: maintenance inspector; track inspector; track supervisor

Inspects railroad roadbed and equipment to detect damage, wear, or defective equipment requiring repair: Observes condition of roadbed from railcar. Stops car and examines switches, fishplates, and rails to detect damaged, worn, or defective equipment, loose bolts, and rotted ties. Manually operates switches to determine that they are in operating condition. Inspects signals and track wiring to determine continuity of electrical connections. Walks along track to observe condition of roadbed, noting looseness of ballast to determine if it requires repacking. Directs section crews to repair or replace defective equipment or to reballast roadbed. Inspects completed work to verify that repairs conform to governmental regulations. Prepares reports, indicating equipment or roadbed in need of repair, location, nature of damage, and repairs made by section crew.
GOE: 05.07.01 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

910.382-010 CAR-RETARDER OPERATOR (r.r. trans.) alternate titles: railroad-car retarder operator; retarder operator

Controls track switches and car-retarder system from elevated tower to route and regulate speed of freight cars entering railroad classification yard and couple them to make up trains: Reads switching orders to ascertain routing of cars. Ascertains from YARD ENGINEER (r.r. trans.) number of car to be shunted over hump (rise in yard) into classification yard and compares number with switching orders to determine track to which car should be routed. Observes lights on panelboard that indicate if track switches are open or closed. Notifies YARD ENGINEER (r.r. trans.) when to shunt car and presses button on panelboard that throws track switch to route car onto designated track. Observes car as it coasts down decline of hump and presses button on panelboard that activates retarder (braking device) to reduce speed of car as it reaches end of track or car to which it is to be coupled.
GOE: 05.12.05 STRENGTH: S GED: R3 M2 L3 SVP: 5 DLU: 77

910.384-010 TANK-CAR INSPECTOR (petrol. refin.)

Inspects and repairs refinery tank cars: Examines wheels, bearings, brakes, and safety appliances for defects. Replaces defective brakerod pins, tightens safety appliances, and packs bearings with grease. Examines valves, plugs, and tank seams, and seals leaks, using caulking compound.
GOE: 05.10.02 STRENGTH: M GED: R3 M2 L3 SVP: 4 DLU: 77

910.387-010 PERISHABLE-FRUIT INSPECTOR (wholesale tr.)

Adjusts temperature, humidity, and ventilation in railroad cars to control maturing process and minimize spoilage of fruit in transit: Travels with shipment from point of origin to destination, examines fruit, and records dates, time, and conditions of produce at designated points en route. Monitors temperature and humidity gauges, opens or closes car vents, and orders car iced or heaters installed to maintain optimum conditions. Prepares and submits report to consignor at end of trip.
GOE: 05.10.08 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

910.387-014 RAILROAD-CAR INSPECTOR (r.r. trans.) alternate titles: brake inspector; car checker; classification inspector; equipment inspector; journal-box inspector

Inspects railroad cars for structural defects and tests mechanical equipment, such as brakes, airhoses, and couplings to ensure that they are in operating condition: Observes cars from elevated platform or from ground as cars roll by, or climbs aboard train to test equipment and to locate defects. Examines car roofs, ice hatches, brake beams, doors, and floors for structural defects and obstructions. Turns handwheel to test brakes and ascertain that they are in operating condition. Inspects and tests airhoses for leakage. Inspects wheel trucks for dragging equipment. Opens journal boxes to determine that they are filled with grease. Prepares reports on findings, indicating number of car and type of repair required. May inspect electrical circuitry and recommend improvements or repairs to electrical operations. May tag cars in need of immediate repairs. May place lanterns or flags in front and rear of train to warn other workers that inspection is being performed. May inspect locomotives. May be designated according to type of car inspected as Passenger-Car Inspector (r.r. trans.).
GOE: 05.07.01 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

910.583-010 LABORER, CAR BARN (r.r. trans.)

Drives streetcars to designated stations in car barn for servicing and storage, according to odometer reading, maintenance charts, and schedule of anticipated car needs: Compares odometer of streetcar with maintenance charts to ascertain if car requires greasing, cleaning, or replacement of equipment, such as motors or compressors. Reads daily car schedule to ascertain number of cars required for next day's run. Drives streetcars to their designated tracks. Records number of cars sent to repair station, servicing needed, and number of units available for use.
GOE: 05.08.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

910.663-010 TRACK-MOVING-MACHINE OPERATOR (construction; mine & quarry) alternate titles: hydraulic-jack operator; track-laying-machine operator

Operates vehicle that automatically moves and lays track or rails to construct, repair, or maintain railroad tracks or mining car tracks: Drives vehicle over section of track or rail to be moved. Pushes control to close grasping device on track or rail section, raise and move section to specified location. Engages mechanism that lays track or rail to specified gauge.
GOE: 05.11.01 STRENGTH: V GED: R3 M2 L2 SVP: 4 DLU: 77

910.664-010 YARD COUPLER (r.r. trans.)

Switches railroad cars within yard of railroad, industrial plant, quarry, construction project, or similar location to load and unload cars or to make up and break up trains: Receives oral or written instructions from CONDUCTOR, YARD (r.r. trans.) indicating which cars are to be switched and track assignment. Raises coupling lever to uncouple cars. Signals SWITCH TENDER (r.r. trans.) to throw track switches and YARD ENGINEER (r.r. trans.) to move cars, using lantern or arm signals. Climbs ladder to top of car and turns handwheel to set brakes or to control speed of car when it has been shunted. Connects airhose to cars when making up trains, using wrench. Throws track switches where no SWITCH TENDER (r.r. trans.) is stationed to shunt cars to different sections of yard. May talk to CONDUCTOR, YARD (r.r. trans.) or YARD ENGINEER (r.r. trans.) via radiophone to give or receive switching information. May climb onto moving cars to set handbrakes and be designated Car Rider (r.r. trans.). When employed by establishment other than railroad, may be designated Industrial-Yard Brake Coupler (any industry), or according to locomotive involved as Brake Coupler, Dinkey (any industry).
GOE: 05.12.05 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

910.667-010 CAR INSPECTOR (railroad equip.) alternate titles: railroad-car inspector

Inspects railroad cars or streetcars at terminals for damage, such as broken windows, jammed doors, defective locks, worn or damaged seats, and malfunctioning rest room facilities. Notifies train dispatcher if damage requires car to be moved to shop for repair. May make minor repairs.
GOE: 05.07.01 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 77

910.667-014 CONDUCTOR (r.r. trans.)

Performs variety of duties on streetcar, subway, suburban or elevated train, or motorbus: Collects fares or tickets from passengers. Issues transfers. Opens and closes doors. Signals operator to stop or proceed. Announces stops. Answers questions of passengers concerning schedules, routings, and fares. Preserves order among passengers.
GOE: 09.05.08 STRENGTH: M GED: R3 M2 L3 SVP: 4 DLU: 77

910.667-018 LOADING INSPECTOR (r.r. trans.) alternate titles: industrial clerk

Inspects loaded freight cars to ascertain that materials and goods, such as automobiles, lumber, or containers of explosives are securely braced and blocked according to loading specifications. Measures height and width of loads to ensure that they will pass over bridges and through tunnels on scheduled route. Ensures that warning signs are posted on cars containing explosives and radioactive or inflammatory materials. Records discrepancies detected and notifies loading crews to reload cars or insert additional bracing or packing.
GOE: 05.07.01 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 77

910.667-022 PERISHABLE-FREIGHT INSPECTOR (r.r. trans.)

Observes loading of perishable goods, such as drug products, fruits, or fish into railroad cars to ensure that loading crews comply with prescribed handling procedures for each type of shipment. Notifies worker or plant manager of special treatment required for unusual shipments. Records description of freight condition and handling activities.
GOE: 05.12.01 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

910.667-026 SWITCH TENDER (r.r. trans.)

Throws track switches within yard of railroad, industrial plant, quarry, construction project, or similar location to switch cars for loading, unloading, making up, and breaking up of trains: Receives oral or written instructions from CONDUCTOR, YARD (r.r. trans.), YARD COUPLER (r.r. trans.) or YARD MANAGER (r.r. trans.). Observes arm or lantern signal from YARD COUPLER (r.r. trans.) and relays information to HOSTLER (r.r. trans.) or throws track switch to facilitate shunting of cars to different locations in yard. May couple and uncouple cars for makeup and breakup of trains. May ride atop cars that have been shunted and turn handwheel to control speed of car or stop it at specified position. May wave arm or lantern to signal YARD ENGINEER (r.r. trans.) to start or stop engine.
GOE: 05.12.05 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 77

910.667-030 TRANSFER-TABLE OPERATOR HELPER (railroad equip.; r.r. trans.)

Assists TRANSFER-TABLE OPERATOR (r.r. trans.; railroad equip.) in moving railroad cars within railroad yard or railroad car manufacturing establishment: Uncouples car, connects towing cable to car, and removes wheel blocks from behind wheels. Determines that tracks are clear and signals TRANSFER-TABLE OPERATOR (r.r. trans.; railroad equip.) to pull car onto transfer table. Signals TRANSFER-TABLE OPERATOR (r.r. trans.; railroad equip.) to stop motion of car at designated point, or engages handbrake to stop motion of car, releases cable from car and places wheel blocks behind wheels to prevent motion. May tend switches to start and stop oven that dries freshly painted cars. May signal TRANSFER-TABLE OPERATOR (r.r. trans.; railroad equip.) to move cars into and out of drying oven.
GOE: 05.12.04 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

910.677-010 PASSENGER SERVICE REPRESENTATIVE II (r.r. trans.)

Stands at gate in railroad or rapid-transit station to admit passengers holding tickets or tokens, or at an exit to prevent unauthorized entrance of passengers. Tears or punches tickets to prevent their reuse. May count tickets to tally number of passengers boarding train. May give passengers and guests boarding passes.
GOE: 09.05.08 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

910.683-010 HOSTLER (r.r. trans.)

Drives electric, diesel-electric, steam, or gas-turbine-electric locomotive to designated stations in railroad roundhouse to be cleaned, serviced, or repaired: Receives locomotive from LOCOMOTIVE ENGINEER (r.r. trans.) at termination of run. Observes oil, air, and steam pressure gauges and water level to ensure that locomotive is operating efficiently. Pushes or pulls levers to control movement of locomotive. Drives locomotive to various stations in roundhouse to be repaired, cleaned, or supplied with coal, fuel oil, water, lubricating oil, and sand, following instructions from ENGINE DISPATCHER (r.r. trans.). Drives locomotive from roundhouse to switching area and delivers serviced locomotive to engine crew.
GOE: 05.08.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

910.683-014 MOTOR OPERATOR (r.r. trans.)

Drives elevated suburban, or subway train, observing signal system of railroad. Starts, slows, or stops train on signal. May open and close doors.

GOE: 05.08.02 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

910.683-018 TRACK-SURFACING-MACHINE OPERATOR (construction)

Operates one or more machines mounted on flat-bed railroad trucks to spread, shape, and tamp ballast; raise, level, and align track; and prepare track foundation of crushed stone according to specifications: Moves levers and brake pedal to guide machine into position. Adjusts controls to activate jacks, tampers, and scraper blades. Strings wire guidelines through leveling or aligning fixture. Attaches line to rails or trailer extensions (buggies) coupled to machine to set up equipment. Turns wheels to adjust guidelines for track alignments and grades, following specifications. Observes indicator arms to verify level and alignment of track. When concerned with jack-tamping machine, may be designated Jack-Tamp Operator (construction). May control track-lining machine and be designated Track-Liner Operator (construction). May operate machines that lay ties and lay rails to construct, repair, or maintain track [TRACK-MOVING-MACHINE OPERATOR (construction; mine & quarry)].
GOE: 05.11.01 STRENGTH: V GED: R3 M2 L2 SVP: 3 DLU: 77

910.683-022 TRANSFER-TABLE OPERATOR (railroad equip.; r.r. trans.)

Drives transfer table, containing power winch, to move rolling stock within railroad yard: Drives table to area where equipment, such as crane, car, or locomotive is located. Starts table revolving to align track of table with track on which equipment is located. Pulls equipment onto transfer table, using winch. Drives table with rolling stock to transport equipment to specified area. May position table to bridge gap between ends of tracks.
GOE: 05.11.04 STRENGTH: M GED: R3 M1 L2 SVP: 3 DLU: 77

910.684-010 GRINDING-MACHINE OPERATOR, PORTABLE (r.r. trans.) alternate titles: track-grinder operator

Dresses and reshapes worn or damaged railroad switch points and frogs, using portable power grinder: Starts gasoline engine that activates grinding wheel. Holds face or rim of wheel against steel rail parts to remove imperfections and impart appropriate shape, restoring rail for safe, smooth operation. Performs running repairs to grinding machine, lubricates unit, and changes worn or chipped grinding wheels. May repair and adjust track switches, using wrenches and specified replacement parts. May grind ends of newly laid rails to attain smooth joint.
GOE: 05.10.01 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 77

910.684-014 TRACK REPAIRER (r.r. trans.) alternate titles: section-gang worker; track laborer

Installs and repairs railroad track on specified territory of railroad, using portable grinder, spike puller, spike driver, and tie adz, to grind ends of rails, remove old spikes, drive new spikes, cut ties to fit fishplates, and perform related maintenance, working as member of crew: Operates single- or multiple-head spike puller to pull old spikes from tie. Raises rail, using hydraulic jack, to facilitate removal of old tie and installation of new tie. Operates tie-adzing machine to cut portion of tie so that tie plate can be inserted to hold rail. Drills holes through rails, tie plates, and fishplates for insertion of bolts and spike, using power drill. Operates single- or multiple-head spike driving machine to drive spike into tie and secure rail. Operates track-wrench machine to tighten or loosen bolts at joints that hold ends of rails together. Operates rail saw to cut rails to specified lengths. Operates portable grinder to grind worn ends of rails. Sprays ties, fishplates, and joints with oil to protect them from weather. May paint railroad signs, such as speed limits and gate-crossing warnings. May oversee workers and act as section leader.
GOE: 05.12.12 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 81

910.687-010 BAGGAGE HANDLER (r.r. trans.)

Loads and stores baggage on passenger train: Inspects tags on baggage to ensure that baggage is routed to designated train. Loads baggage in car according to destination recorded on tags, placing baggage to be unloaded last in rear of car. Unloads baggage from train onto trailers at destination.
GOE: 05.12.03 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

910.687-014 CAR COOPER (any industry) alternate titles: car whacker

Prepares railroad freight cars for loading with grain, ores, packaged goods, and other items: Opens side drop or hopper-bottom doors of cars. Sweeps, scrapes, and shovels rubbish from floors. Hammers down or removes protruding nails from floors and sides. Closes car doors and hammers wooden wedges through latches to secure them. May line interior of cars and doors with paper or cardboard. May repair holes in floors and sides by nailing boards over them. May mix caulking compound and caulk cracks in cars, using handtools. May patch holes in roofs with asphalt coating. May wash interior and exterior of cars, using water hose, disinfectants, brushes, and brooms [CLEANER (any industry) III]. May seal doors of loaded cars. May move cars on track, using capstan winch or car bar. May spray cars with insecticides to destroy insects and rodents. May record data, such as car number, condition of car for shipment, and date fumigated.
GOE: 05.12.18 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

910.687-018 CAR ICER (food prep., nec; meat products) alternate titles: car ice-bunker filler; icer, air conditioning; refrigerator-car icer

Fills bunkers of railroad refrigerator cars with ice and rock salt to preserve foodstuffs, such as citrus fruits, bananas, and meat, during shipment. Breaks up blocks of ice, using bar and pick. May blow crushed ice over perishable products, using ice crushing machine equipped with blower device.
GOE: 05.12.03 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

910.687-022 FREIGHT-CAR CLEANER, DELTA SYSTEM (r.r. trans.)

Performs any combination of following duties to clean freight cars at Delta system (central cleaning station): Pushes buttons on control panel to activate track switches, conveyors, vacuum cleaner, warning siren, and winch. Hooks cable to string of cars and starts winch to move cars. Removes grain doors and places them on conveyor to storage area. Removes nails, cleats, crate bracings, and shipping paper from walls and floor, using clawhammer and crowbar. Tosses debris onto incinerator conveyor. Sweeps debris out car door into conveyor pit below track, using broom. Pushes and pulls vacuum cleaner nozzle over floor to remove debris, such as wood chips, sawdust, grain, flour, and powdered chemicals. Washes down ceiling and walls with water, using hose, to remove dust. Pushes button to route cleaned cars to side tracks.
GOE: 05.12.18 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

910.687-026 TRACK OILER (r.r. trans.)

Cleans out switches and greases rails around curves on streetcar tracks: Drives three-wheeled motorcycle, equipped with cleaning apparatus and lubricants, along track. Pumps water from electric track-switch box with manually operated suction pump. Sweeps dirt from track switch with broom. Greases curves in rails with grease stick so that flanges on car wheels will be able to adjust to curves without breaking. Throws rock salt over switches during cold weather to counteract freezing.
GOE: 05.12.18 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

911 WATER TRANSPORTATION OCCUPATIONS

This group includes occupations concerned with conveying passengers and cargo by controlling movement of ships, boats, and other vessels; securing vessels in dock; opening and closing canal locks; and related activities.

911.131-010 BOATSWAIN (water trans.)

Supervises ABLE SEAMAN (water trans.) 911.364-010 and DECKHAND (water trans.) 911.687-022 engaged in cleaning decks and lifeboats, and chipping, scraping, wirebrushing, and painting decks, sides, and superstructure: Examines cargo-handling gear and lifesaving equipment and supervises crew engaged in repairing or replacing defective gear and equipment. May be required to be certified by U.S. Coast Guard as ABLE SEAMAN (water trans.) 911.364-010.
GOE: 05.12.18 STRENGTH: H GED: R4 M2 L3 SVP: 7 DLU: 86

911.131-014 LOCK TENDER, CHIEF OPERATOR (water trans.) alternate titles: canal-lock tender, chief operator; chief lock-operator

Supervises and coordinates activities of LOCK OPERATOR (water trans.) to open locks and dams on canal for vessels requiring passage: Assigns to LOCK OPERATOR (water trans.) tasks of mooring boats awaiting passage through canal, raising or lowering water level, opening and closing gates and valves of locks and dams, operating navigation lights and traffic signals, and compiling records of vessels using canal, and of weather and water conditions. Determines which of two locks to use according to needs of traffic. Controls and operates gas, steam, and hydroelectric generating units. Installs mechanical and electrical equipment. Repairs lock machinery motors, generators, power lines, and other electrical equipment [ELECTRICIAN, MAINTENANCE (any industry)]. Operates machinery to open and close locks. Reports needed repairs to lock maintenance department. May observe craft approaching locks to determine size and speed of vessel and issues instructions to vessel operator violating canal regulations.
GOE: 05.05.09 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

911.133-010 CADET, DECK (water trans.)

Learns and performs all deck and navigational duties aboard ship under supervision of deck officer to become eligible for U.S. Coast Guard license and position as MATE, SHIP (water trans.): Observes loading and unloading of cargo holds to learn methods of handling and stowing of cargo. Inspects lifesaving and visual-signaling equipment for defects. Directs crew engaged in repair of defective equipment. Stands watch during specified periods while ship is underway. On graduation from maritime academy and successful completion of license examination, is eligible for position as MATE, SHIP (water trans.).
GOE: 05.04.02 STRENGTH: L GED: R4 M4 L3 SVP: 6 DLU: 77

911.137-010 BARGE CAPTAIN (water trans.) alternate titles: scow captain

Supervises and coordinates activities of workers on towed barge that transports cargo on lakes, bays, sounds, and rivers: Directs workers engaged in loading and unloading barge to ensure that cargo is loaded according to balancing specifications. Inspects barge to ensure that craft is seaworthy. Signals TUGBOAT CAPTAIN (water trans.) to tow barge to destination. Logs barge's movements and ports-of-call. Steers barge when it has steering equipment.
GOE: 05.12.01 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

911.137-014 DERRICK-BOAT CAPTAIN (water trans.) alternate titles: derrick-boat runner

Supervises and coordinates activities of crew operating derrick mounted on barge: Directs placing and mooring of boat. Supervises crew in placing rigging

and operating derrick to lift and move objects and materials. Prepares progress and personnel reports. Must possess license issued by U.S. Coast Guard to operate self-propelled derrick boat or to operate derrick boat outside continental limits of the United States.
GOE: 05.12.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

911.137-018 HEADER (water trans.) alternate titles: dock boss; gang boss; hatch supervisor; ship boss; stevedoring supervisor

Supervises and coordinates activities of STEVEDORE (water trans.) II engaged in loading and unloading ships' cargoes: Assigns duties to workers, and explains methods of handling, stowing, securing cargo, and setting up hoisting equipment. Determines what cargo requires special handling and how it is to be stowed in ship's hold. Signals WINCH DRIVER (water trans.) to raise or lower cargo. May estimate dunnage (paper and timber) required to brace and arrange cargo in ship's hold to prevent cargo damage. May maintain inventory of dunnage. May be designated according to work area as Header, Dock (water trans.); Header, Ship (water trans.); or kind of cargo stowed as Cotton Header (water trans.).
GOE: 05.12.01 STRENGTH: L GED: R3 M3 L3 SVP: 6 DLU: 77

911.137-022 SUPERINTENDENT, STEVEDORING (water trans.)

Supervises and coordinates activities of workers engaged in loading and unloading of ship's cargoes: Studies bills of lading to determine sequence of loading operations, taking into consideration cargo space available, shipping instructions, and knowledge of cargo stowage. Calculates number of hours and personnel required for loading or unloading ship and places order for personnel. Inspects load-test certificates on ship's booms and cargo handling gear to ensure they meet safety regulations, and that cargo will not exceed specified load capacity. Directs activities of workers engaged in loading or unloading materials requiring special handling, such as explosives, locomotives, and other machinery. Supervises workers engaged in checking and loading cargo to ensure that cargo is loaded in specified sequence and in accordance with shipping instructions. Prepares report of stevedoring activities, such as time, hours, personnel, cargo handling gear used, and submits report to accounting department. Inspects dock areas to ensure safety regulations are being observed. May supervise and coordinate activities of workers engaged in loading and unloading barges. May supervise container-handling activities and be designated Stevedoring Superintendent, Container Handling (water trans.).
GOE: 05.11.04 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 81

911.137-026 SUPERVISOR, FERRY TERMINAL (water trans.) alternate titles: ferry-terminal agent

Supervises and coordinates activities of workers engaged in selling tickets and directing pedestrian and vehicular traffic to and from ferry boats at ferry terminal: Schedules and assigns work to subordinates. Interprets tariff regulations and changes in operating procedures to subordinates. Prepares daily revenue reports and receipts for bank deposit. Oversees loading of vehicles aboard ferries to prevent accidents, overloading, and imbalanced loading. Observes vehicles on dock and prohibits loading of excessively large vehicles. Directs receipt and loading of cargo aboard ferry. Notifies contractors of supply shortages, such as ferry fuel and janitorial and office supplies.
GOE: 11.11.03 STRENGTH: L GED: R4 M3 L4 SVP: 5 DLU: 77

911.167-010 DISPATCHER, TUGBOAT (water trans.)

Dispatches tugboats to guide ships entering or leaving port and to tow barges and log rafts: Receives written or oral customer request for services. Determines equipment required, such as tugs, barges, or derricks according to size, location and work performed. Selects tugboat captain from roster and notifies captain of order requirements, using radiotelephone. Obtains ship berthing and bunkering permits from port authorities. Reviews weather data and navigation charts and estimates time required to perform requested services. Maintains records and prepares bills for services. May notify captain of tubgoat by radiotelephone of order changes. May dispatch work crews to tugboats in response to emergency requests from captain.
GOE: 07.04.05 STRENGTH: S GED: R4 M3 L4 SVP: 6 DLU: 77

911.263-010 DEEP SUBMERGENCE VEHICLE OPERATOR (military ser.)

Commands and pilots deep submergence vehicle (small noncombatant submarine) to obtain oceanographic research information, recover other sunken vessels or objects from ocean floor, and to transport passengers, such as scientists, researchers, and technicians to ocean bottom: Conducts predive and postdive inspection of vehicle to ensure vehicle is seaworthy and life support systems are functioning in specified manner. Reads gauges to verify hydraulic fluid, air pressure, and oxygen are at designated levels. Navigates vehicle based on such knowledge as ocean, currents, and vehicle characteristics. Pushes and pulls control levers on console to steer vehicle. Pushes switches to supply power to various units, such as mainpower supply and mechanical arms which are located outside of vehicle and are used to pick up, collect, or move objects on ocean floor. Monitors sonar and navigational aids. Directs subordinates in their activities. Occasionally instructs students in operation of vehicle.
GOE: 05.04.02 STRENGTH: L GED: R3 M2 L2 SVP: 7 DLU: 77

911.362-010 LOCK OPERATOR (water trans.) alternate titles: canal-structure operator

Controls machinery to open and close locks and dams on canal: Observes gauges and turns valves to increase or decrease water level in lock. Observes positions of vessels and tie-up of mooring lines in lock to ensure optimum utilization of lock space and prevent vessel damage. Logs data, such as water levels, weather conditions, and type, number, and destination of vessels. Starts motors to open gates and sections of dams for passage of vessels. Turns on navigation lights and traffic signals along canal. Cleans, oils, and makes minor repairs to equipment. Collects lock slips (vessel identifications slips) from vessel operators and submits slips to supervisor. Ties or slips line-eyes over bitts on lock deck to secure vessels. May direct activities of workers engaged in mooring vessels in lock.
GOE: 05.11.04 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

911.363-010 FERRYBOAT OPERATOR (water trans.) alternate titles: ferry operator

Operates power ferryboat to transport passengers, motor vehicles, and freight across river: Signals passengers to board ferryboat and directs loading of motor vehicles and freight. Signals DECKHAND (water trans.) to raise loading ramp and to pull guard chain across entry. Starts engine to move ferryboat to opposite side of body of water. Collects fares from customers or signals FERRYBOAT-OPERATOR HELPER (water trans.) to collect fares. Determines course and speed of ferryboat, utilizing knowledge of weather conditions and water currents. Reverses engines and steers boat into landing pier. Inspects, lubricates, and performs emergency repairs to railings, pontoons, and winches to ensure safe operation of ferry. May maintain operations log.
GOE: 05.04.02 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

911.363-014 QUARTERMASTER (water trans.)

Steers ship and maintains visual communications with other ships: Steers ship under direction of ship's commander or navigating officer, or directs helmsman to steer, following designated course. Stands by wheel when ship is on automatic pilot and verifies accuracy of course by comparing with magnetic compass. Relays specified signals to ships in vicinity, using visual signaling devices, such as blinker light and semaphore. Gives directions to crew engaged in cleaning wheelhouse and quarter deck (afterpart of upper deck reserved as promenade for officers and sometimes cabin passengers). Maintains ship's log while in port, and stands gangway watch to prevent unauthorized persons from boarding ship. May be required to be certificated by U.S. Coast Guard as ABLE SEAMAN (water trans.).
GOE: 05.04.02 STRENGTH: L GED: R3 M3 L3 SVP: 6 DLU: 77

911.364-010 ABLE SEAMAN (water trans.) alternate titles: able-bodied seaman

Performs following tasks on board ship to watch for obstructions in vessel's path and to maintain equipment and structures: Stands watch at bow or on wing of bridge to look for obstructions in path of vessel. Measures depth of water in shallow or unfamiliar waters, using leadline, and telephones or shouts information to bridge. Turns wheel on bridge or uses emergency steering apparatus to steer vessel as directed by MATE, SHIP (water trans.). Breaks out, rigs, overhauls, and stows cargo-handling gear, stationary rigging, and running gear. Overhauls lifeboats and lifeboat gear and lowers or raises lifeboats with winch or falls. Paints and chips rust on deck or superstructure of ship. Must hold certificate issued by U.S. Government. When working aboard vessels carrying liquid cargoes, must hold tanker operator's certificate. May stow or remove cargo from ship's hold [STEVEDORE (water trans.) II]. May be concerned with only one phase of duties, as maintenance of ship's gear and decks or watch duties, and be known as Deckhand, Maintenance (water trans.); Watchstander (water trans.).
GOE: 05.12.03 STRENGTH: H GED: R3 M2 L2 SVP: 5 DLU: 77

911.364-014 BOAT LOADER I (water trans.) alternate titles: dock hand; pier hand; wharf hand; wharf operator; wharf tender

Connects hose couplings to enable liquid cargo, such as petroleum, gasoline, heating oil, sulfuric acid, and alum liquor, to be pumped from and into barges and tankers: Reads timetable to determine name of ship, location of pier, and number and types of hoses to be connected. Climbs aboard ship and lowers measuring tape and thermometer into each tank to measure depth and temperature of liquid cargo to be unloaded. Positions coupling of pier hose next to valve of ship, using winch and boom, and connects coupling to valve, using wrench. Attaches ground wire to hose to prevent explosion caused by static electricity generated when liquid cargo flows through hose. Opens valve to allow flow of cargo through hose and signals worker aboard ship to start pumps to unload cargo. Signals worker aboard ship to pump ballast from cargo tanks in order to prepare transfer of cargo onto ship. Signals worker on shore to pump liquid cargo onto ship. May be designated according to water vessel loaded as Barge Loader (water trans.).
GOE: 05.12.06 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 77

911.584-010 MARINE OILER (water trans.) alternate titles: oiler; striker

Oils and greases moving parts, such as gears, shafts, and bearings, of engines and auxiliary equipment used to propel maritime vessels: Examines machinery for specified pressure and flow of lubricants. Fills oilcups on machinery with grease and lubricating oil, according to machinery lubrication instructions. Reads pressure and temperature gauges and records data in engineering log. Assists ENGINEER (water trans.) in overhauling and adjusting machinery. May lubricate deck machinery when vessel is unloading cargo.
GOE: 05.12.08 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

911.663-010 MOTORBOAT OPERATOR (any industry)

Operates motor-driven boat to carry passengers and freight, take depth soundings in turning basin, serve as liaison between ships, ship to shore, harbor and

beach area patrol, or tow, push, or guide other boats, barges, logs, or rafts: Casts off securing lines and starts motor. Starts boat and steers boat with helm or tiller. Maintains equipment, such as range markers, fire extinguishers, boat fenders, lines, pumps, and fittings. Services motor by changing oil and lubricating parts. Cleans boat and repairs hull and superstructure, using handtools, paint, and brushes. May tune up, overhaul, or replace engine. May give directions for loading and seating in boat. May be designated according to type of boat operated as Boat Tender (logging); Boomboat Operator (logging); Charter-Boat Operator (amuse. & rec.); Sightseeing-Boat Operator (water trans.); Water-Taxi Driver (water trans.); or operate motor-driven boat to haul fish or other marine life from offshore fishing vessel to buyer and be designated Run-Boat Operator (water trans.).
GOE: 05.08.04 STRENGTH: M GED: R3 M2 L3 SVP: 5 DLU: 77

911.663-014 STEVEDORE I (water trans.)

Operates material-handling equipment, such as power winch, grain trimmer, crane, and lift truck, to transfer cargo into or from hold of ship and about dock area: Operates crane or winch to load or unload cargo, such as automobiles, crates, scrap, and steel beams, using hook, magnet, or sling attached in accordance with signals from other workers. Moves controls to start flow of grain from spouts of grain trimmer, stopping flow and repositioning spout over each hatch when previous hatch is filled. Drives lift truck along dock or aboard ship to transfer bulk items, such as lumber, pallet-mounted machinery, and crated products within range of winch. Drives tractor to transfer loaded trailers from warehouse to dockside. May position and fasten hose lines to ships' cargo tanks when loading or unloading liquid cargo, such as animal fats, vegetable oils, molasses, or chemicals. May perform variety of manual duties, such as lashing and shoring cargo aboard ship, attaching slings, hooks, or other lifting devices to winch for loading or unloading, and signaling other workers to move, raise, or lower cargo. May direct activities of cargo gang consisting of STEVEDORE (water trans.) II. May be designated according to equipment operated as Lift-Truck Operator (water trans.); Tractor Operator (water trans.); Winch Operator (water trans.).
GOE: 05.11.04 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

911.664-010 FERRYBOAT OPERATOR, CABLE (water trans.) alternate titles: ferry operator

Pulls ferryboat guided by overhead cable to transport passengers and freight across river: Signals passengers to board ferryboat and directs workers engaged in loading of freight [FERRYBOAT-OPERATOR HELPER (water trans.)]. Pays out rope on one side of ferryboat and pulls in rope on other side to propel ferryboat across river. Inspects equipment, such as cables, ropes, pontoons, and railings and repairs or replaces defective equipment.
GOE: 05.12.03 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 77

911.664-014 SAILOR, PLEASURE CRAFT (water trans.)

Performs any of following duties to assist skipper to operate and maintain privately owned or charter sailing yacht: Dusts and waxes furniture and polishes wood trim, sweeps floors and decks, and polishes brass and other metal parts. Inspects, repairs, and maintains sails and rigging. Paints or varnishes surfaces. Makes emergency repairs to auxiliary engine. Adjusts sails and rigging and steers boat when underway. May stow supplies and equipment and record data in log, such as weather conditions and distance traveled.
GOE: 05.12.18 STRENGTH: H GED: R3 M2 L2 SVP: 5 DLU: 77

911.667-010 FERRYBOAT-OPERATOR HELPER (water trans.) alternate titles: ferryboat helper

Assists FERRYBOAT OPERATOR, CABLE (water trans.) in operation of cable-guided ferryboat to transport passengers, motor vehicles, and freight across river, by performing following duties: Signals vehicle operators to drive vehicles onto ferryboat, or drives vehicles onto ferryboat. Places blocks under wheels of vehicles. Transfers freight onto ferryboat, using handtruck or power truck. Raises ferryboat gates by hand or by turning windlass. Unties stay ropes from dock. Collects fares from customers. Refuels engines and lubricates mechanical equipment. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.03 STRENGTH: H GED: R2 M2 L2 SVP: 2 DLU: 77

911.667-014 HATCH TENDER (water trans.)

Signals WINCH DRIVER (water trans.) to transfer cargo from dock to ship's hold, or from ship's hold to dock: Observes workers attaching or detaching slings to or from loads to determine moment for signaling. Waves arms to indicate ready signal for transfer of cargo. May alternate jobs with WINCH DRIVER (water trans.).
GOE: 05.12.04 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

911.667-018 SOUNDER (any industry) alternate titles: group leader, river-and-harbor soundings

Measures depth of water at designated points along navigable waterway, using lead-weighted line marked to indicate depth, to facilitate charting of waterways and determine need for dredging or other marine construction activity.
GOE: 05.12.05 STRENGTH: M GED: R3 M2 L2 SVP: 2 DLU: 77

911.677-010 TICKET TAKER, FERRYBOAT (water trans.)

Raises and lowers deck of landing bridge to make bridge level with deck of ferryboat, and collects or punches tickets of passengers at ferryboat terminal: Starts windlass to adjust level of landing bridge for vehicles and pedestrians to board ferryboat, or tosses gangplank pull-ropes to workers who secure gangplank to deck of ferryboat. Inspects security of gangplank fastenings to dock. Opens doors or gates to admit passengers aboard ferryboat, and collects tickets or punches commuter tickets as pedestrians and vehicles go aboard. Closes doors and gates upon whistled signal from ferryboat, pulls gangplank back onto dock, and starts windlass to unhook ferryboat from landing bridge. Provides passengers information about ferryboat schedules. May move stalled or driverless vehicles and freight-loaded wagons on and off ferries, using industrial truck.
GOE: 05.12.04 STRENGTH: M GED: R2 M2 L2 SVP: 2 DLU: 77

911.687-010 BOAT-LOADER HELPER (water trans.) alternate titles: dock helper; pier hand helper; wharf helper; wharf-tender helper

Assists BOAT LOADER (water trans.) I to pump liquid cargo, such as petroleum, gasoline, heating oil, sulfuric acid, and alum liquor, from and into barges and tankers: Catches mooring hawsers and ties them around dock posts to secure vessels. Couples hoses to valves on ship's tanks and turns handwheels to open or close valves. Removes lines from vessels and casts off hawsers. Drains loading hoses and places them on dollies. Cleans oil and waste materials from dock, using squeegees, broom, and rags. May be designated according to vessels loaded as Barge-Loader Helper (water trans.).
GOE: 05.12.06 STRENGTH: V GED: R2 M1 L1 SVP: 2 DLU: 77

911.687-014 CLEANER III (any industry)

Cleans coal or coke from holds of ships, docks, or areas around chutes, conveyors, crushers, coke ovens, and screens, using airhose, brooms, scrapers, shovels, and wheelbarrow. May feed coal, using shovel and wheelbarrow, through crusher to obtain sample for laboratory analysis. May extinguish minor oven door fires, using water hose. May be designated according to work area as Belt Cleaner (steel & rel.); Boat Cleaner (steel & rel.); Dock Cleaner (steel & rel.).
GOE: 05.12.18 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

911.687-018 COAL TRIMMER (water trans.) alternate titles: boat puller

Positions barges to be loaded with coal under coal tipple, using electric winch or hand ropes. May spread coal evenly with shovel in holds of ships.
GOE: 05.12.04 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

911.687-022 DECKHAND (water trans.)

Performs any combination of following duties aboard watercraft, such as dredges, ferryboats, scows, and river boats: Handles lines to moor vessel to wharves, tie up vessel to another vessel, or rig towing lines. Sweeps and washes decks, using broom, brushes, mops, and firehose. Lowers and mans lifeboat in case of emergencies. Stands steering watches or lookout watches while underway. Moves controls or turns handwheels to raise or lower passenger or vehicle landing ramps or kelp-cutter mechanism. Inserts blocks under wheels of vehicles to prevent them from moving on ferryboats. Loads or unloads material from barges, scows, and dredges. Paints lifeboats, decks, and superstructure of vessel, using brush. Lubricates machinery and equipment. Splices and repairs cables and ropes, using handtools. Examines cables that holds vessels in tow and tightens cables to ensure vessels are snug. May tour decks during watch to caution passengers engaged in unsafe practices, and ensures departure of passengers at end of voyage. Deckhands are designated according to type of craft as Barge Hand (water trans.); Dredge Deckhand (water trans.); Ferryboat Deckhand (water trans.); Pilot-Boat Deckhand (water trans.); Scow Deckhand (water trans.); Tugboat Deckhand (water trans.).
GOE: 05.08.04 STRENGTH: H GED: R2 M1 L1 SVP: 4 DLU: 77

911.687-026 LINES TENDER (water trans.) alternate titles: laborer, marine terminal

Secures and removes ship's docking lines to and from dock: Catches lines heaved from ship attempting to dock. Drags lines to bitts on dock and slips eye of docking lines over bitts. Removes lines from bitts when ships depart. May drive vehicle to pull in docking lines.
GOE: 05.12.03 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

911.687-030 ORDINARY SEAMAN (water trans.)

Stands deck department watches and performs variety of duties to preserve painted surfaces of ship and to maintain lines, running gear, and cargo-handling gear in safe operating conditon: Watches from bow of ship or wing of bridge for obstructions in path of ship. Turns wheel while observing compass to steer and maintain ship on course. Mops or washes down deck, using hose to remove oil, dirt, and debris. Chips and cleans rust spots from deck, superstructure, and sides of ship, using hand or air chipping hammer and wire brush. Paints chipped area. Splices wire rope, using marlinespike, wirecutters, and twine.
GOE: 05.12.18 STRENGTH: M GED: R3 M1 L1 SVP: 4 DLU: 77

912 AIR TRANSPORTATION OCCUPATIONS

This group includes occupations concerned with fueling, cooling, heating, and ventilating aircraft; repacking parachutes; and related minor repair and maintenance activities.

912.167-010 DISPATCHER (air trans.) alternate titles: airplane dispatcher; helicopter dispatcher

Authorizes, regulates, and controls commercial airline flights according to government and company regulations to expedite and ensure safety of flight: Analyzes and evaluates meteorological information, such as speed and direction

of winds, visibility, and presence of storms, to determine potential safety of flight and desirable route. Computes amount of fuel needed according to type of aircraft, distance of flight, weather conditions, and fuel regulations prescribed by Federal Aviation Agency. Prepares flight plan containing information, such as maximum allowable gross takeoff and landing weights, weather, and landing field conditions. Signs authorization to release flight for takeoff. Delays or cancels flight if unsafe conditions prevail. Studies weather and pilot's position reports and terrain maps to evaluate progress of flight. Recommends flight plan alterations, such as changing course or altitude, canceling stops, or taking extra fuel. Prepares log of flights, delays, and cancellations, and lists reasons for changes in schedules or flight plans. Must be licensed by Federal Aviation Administration.
GOE: 05.03.03 STRENGTH: S GED: R5 M4 L4 SVP: 8 DLU: 77

912.364-010 AIRPORT ATTENDANT (air trans.)

Performs any combination of following duties in maintenance of small airports and in servicing aircraft: Periodically inspects buildings and hangars to detect fire hazards and violations of airport regulations. Examines firefighting equipment to detect malfunctions and fills depleted fire extinguishers. Performs necessary minor repairs to fire trucks and tractors. Fills light bombs with kerosene and positions bombs on landing field to illuminate danger areas. Cleans, fills, and lights smokepots used to indicate wind direction, and repairs or replaces windsock and other wind indicating devices. Replaces defective bulbs or burnt-out fuses in lighting equipment, such as landing lights and boundary lights. Fills holes and levels low places and bumps in runways and taxiing areas. Cuts grass on airport grounds [LABORER, AIRPORT MAINTENANCE (air trans.)]. Patrols airfield to ensure security of aircraft and facilities. Verifies and reports specified amount of gasoline and oil supplies. Blocks and stakes down airplanes. Records airport data, such as number of planes stored in hangars, plane landings and departures, and number of passengers carried on planes. May wash and clean cabins and exterior surfaces of airplanes. May fill airplane tanks with gasoline and oil [LINE-SERVICE ATTENDANT (air trans.)]. May be required to possess Red Cross first-aid certificate to render emergency treatment to victims.
GOE: 05.10.04 STRENGTH: M GED: R3 M2 L3 SVP: 5 DLU: 77

912.367-010 FLIGHT-INFORMATION EXPEDITER (air trans.)

Determines flight times of airplanes and transmits information to flight operations and Air Traffic Command centers: Evaluates data, such as weather conditions, flight plans, ramp delays, and enroute stopovers, to determine arrival and departure times for each flight, using aids, such as weather charts, slide rule, and computer. Transmits identity and type of airplane, flight locations, time of arrival and departure, and names of crewmembers to Air Traffic Command to obtain clearance for flight over restricted areas. Notifies departments of airline of pending arrival of inbound flight to ensure that personnel are available to load or unload fuel, baggage, and cargo.
GOE: 07.04.05 STRENGTH: L GED: R4 M4 L4 SVP: 5 DLU: 77

912.367-014 TRANSPORTATION AGENT (air trans.) alternate titles: departure clerk; operations agent; service coordinator

Expedites movement of freight, mail, baggage, and passengers through airline terminal by performing following tasks: Prepares airway bill of lading on freight from consignors and routes freight on first available flight. Telephones consignees to report arrival of air freight. Obtains flight number, airplane number, and names of crewmembers from teletyped message of DISPATCHER (air trans.), and records data on airplane's flight papers. Records baggage, mail, and freight weights, and number of passengers on airplane's papers and teletypes data to flight's destination. Positions ramp for loading of airplane. Verifies passengers' tickets as they board plane. Oversees or participates in loading cargo to ensure completeness of load and even distribution of weight. Removes ramp, and signals pilot that personnel and equipment are clear of plane. May load and unload freight and baggage by operating forklift truck.
GOE: 07.05.01 STRENGTH: L GED: R3 M3 L3 SVP: 5 DLU: 77

912.662-010 IN-FLIGHT REFUELING OPERATOR (military ser.)

Operates air refueling systems aboard aircraft tanker to refuel airborne aircraft: Confers with receiver aircraft pilot to direct aircraft into air refueling position, using radio. Presses buttons and switches on control panel to extend in-flight boom and connect tanker and receiver aircraft. Presses button to start refueling process. Monitors control panel light to detect equipment malfunctions. Contacts receiver aircraft pilot, using radio to inform pilot of progress being made during refueling, to advise pilot of action necessary to maintain safe refueling position, and inform pilot of steps to be taken during equipment malfunction or emergencies. Calculates in-flight weight and balance status of aircraft and notifies tanker pilot of necessary flight correction.
GOE: 05.06.03 STRENGTH: S GED: R4 M3 L3 SVP: 6 DLU: 77

912.663-010 AIRPORT UTILITY WORKER (air trans.)

Services aircraft, working as member of crew, performing any combination of following tasks: Directs incoming and outgoing aircraft near terminal area to assist pilot's maneuvering of aircraft, using visual hand or light signals. Operates service vehicles to replenish fuel, water, and waste system chemicals and to remove liquid waste. Cleans exterior or interior of aircraft, using portable platform, ladders, brushes, rags, waterhose, and vacuum. Positions and removes boarding platform to unload or load aircraft passengers. Unloads and loads luggage and cargo from aircraft, using tow truck with luggage carts. Traces lost baggage for customers and prepares lost baggage claims.
GOE: 05.12.06 STRENGTH: H GED: R3 M2 L3 SVP: 4 DLU: 86

912.682-010 AIRCRAFT LAUNCH AND RECOVERY TECHNICIAN (military ser.)

Operates aircraft launching and recovery equipment, such as hydraulic or steam catapults, barricades, arresting gear, and visual landing aids to launch or recover aircraft on aircraft carriers and land based airfields: Operates arresting gear or catapult consoles and controls to fire catapults, raise and lower arresting gear, and blast deflectors and control other launch and recovery equipment. Calibrates, adjusts, and tests launch and recovery equipment, using electrical and mechanical test equipment and handtools. Disassembles catapults, arresting gear, and other equipment and replaces defective parts, using handtools. Splices broken arresting gear cables, using cable splicing tools. Records in log aircraft launches, recoveries, and maintenance performed on equipment. Occasionally directs aircraft launch or recovery operations, using visual hand or light signals.
GOE: 05.10.02 STRENGTH: H GED: R4 M3 L3 SVP: 5 DLU: 77

912.684-010 PARACHUTE RIGGER (air trans.) alternate titles: parachute packer

Folds parachutes according to specifications and packs chutes in bag: Draws canopy of parachute from pack cover to its full length on surface of long bench. Straightens shrouds to eliminate coils or tangles. Folds canopy lengthwise on its seams, one segment over another. Loops each shroud and forces it into retaining clip of pack cover. Folds canopy in fanfold arrangement and places in pack cover. Places pilot chute over parachute canopy, forces spring flat with hands, and secures it in place with release devices, such as ripcord, barometric pressure release, electromechanical release, or explosive charge. Inspects canopy, shroud, buckles and harness straps for damage or wear. Must be licensed by Federal Aviation Administration. May be designated Master Rigger (air trans.) when additionally qualified through experience to meet Federal Aviation Administration requirements.
GOE: 06.04.38 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

912.687-010 LINE-SERVICE ATTENDANT (air trans.)

Services aircraft prior to flight according to specifications: Fills fuel and oil tanks and examines tires for specified air pressure. Adds water and other cooling agents as required to batteries and liquid-cooled engine radiators. Fills landing gear struts with hydraulic fluid. May clean exterior and interior of aircraft. May load and unload containers of food, beverages, and dishes for in-flight meal services. May clean aircraft wings and assemblies, using glycol mixture. May assist mechanics in repair of aircraft.
GOE: 05.12.06 STRENGTH: M GED: R3 M2 L2 SVP: 2 DLU: 77

913 PASSENGER TRANSPORTATION OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with conveying passengers by driving automobiles and buses; assigning vehicles and drivers to routes; and directing arrivals and departures of vehicles.

913.133-010 ROAD SUPERVISOR (motor trans.) alternate titles: superintendent, drivers

Supervises BUS DRIVERS (motor trans.) and coordinates bus schedules to maintain service: Gives instructions to BUS DRIVERS (motor trans.) in operation of various types of buses. Observes and records number of passengers on buses. Studies reports and devises new schedules according to passenger traffic patterns. May adjust complaints of passengers regarding service.
GOE: 09.03.03 STRENGTH: L GED: R4 M3 L4 SVP: 6 DLU: 77

913.133-014 SUPERVISOR, CAB (motor trans.)

Supervises and coordinates activities of workers engaged in operation department of taxicab company: Hires workers, such as TAXI DRIVERS (motor trans.), TAXICAB STARTER (motor trans.), and TAXICAB COORDINATOR (motor trans.) and supervises their activities. Drives automobile around city to investigate honesty and operating efficiency of TAXI DRIVERS (motor trans.). May investigate accidents and robberies and settle claims, following company policy. May aid drivers in locating difficult addresses, utilizing maps and knowledge of city.
GOE: 09.03.03 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

913.167-010 BUS DISPATCHER, INTERSTATE (motor trans.) alternate titles: dispatcher

Dispatches interstate or long-distance buses according to schedule and oversees BUS DRIVERS (motor trans.) and BUS ATTENDANTS (motor trans.) while they are at terminal: Issues orders for station departure of buses at specified hours, according to schedule. Arranges for extra buses and drivers in case of accidents or heavy traffic. Announces incoming and outgoing buses over public address system in bus terminal. May supervise loading, unloading, and checking of baggage or express shipped by bus. May inspect drivers' appearance and physical condition prior to dispatch.
GOE: 07.04.05 STRENGTH: L GED: R4 M3 L3 SVP: 5 DLU: 77

913.167-014 DISPATCHER, BUS AND TROLLEY (motor trans.) alternate titles: transit-operations supervisor

Supervises and coordinates activities of operators of buses, transit coaches, and trolleys in city or urban transportation system to convey passengers according to schedule: Records movement and location of vehicles and road crews to inform other departments or public regarding current schedules and routes.

Receives telephone or radio reports of accidents, delays, fires, equipment breakdowns, and other operating or maintenance difficulties. Reports difficulties and dispatches orders to other divisions to maintain or restore service and schedules. Dispatches extra vehicles and emergency crews to scene of accident or breakdown, advising them of location of trouble and proximity of feeder lines and power circuits. Maintains log of scheduled runs, numbers of vehicles, and names of drivers. Records calls and emergencies. Makes report of all accidents. May suspend or call in operators for infractions of operating regulations.
GOE: 07.04.05 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

913.167-018 SCHEDULE MAKER (motor trans.)
Prepares schedules for local or long-distance transportation systems, such as bus or streetcar lines: Studies changing traffic situations and schedules of competing lines. Determines number of vehicles and trips to be run. Assigns vehicle operators to runs. Prepares schedules indicating times of arrival and departure of vehicles or cars at crosslines or junction points where transfer passengers can be picked up. Studies passenger riding patterns and traffic conditions. Establishes emergency and regular routes according to land topography and existing hazards. Arranges number of stops, length of route, and runs per shift for route, according to union-management contract and cost per mile. Prepares drafts of new schedules. Estimates costs of revised schedules.
GOE: 07.05.01 STRENGTH: L GED: R4 M3 L4 SVP: 5 DLU: 77

913.363-010 BUS DRIVER, DAY-HAUL OR FARM CHARTER (agriculture)
Drives bus to transport workers between recruiting point and agricultural work area: Ascertains from employer work to be performed, number of workers required, and area or field where workers are required. Parks bus at loading area for workers to board according to referral information furnished by recruiting agency, or selects workers from group applying for work. Admonishes individuals to be seated and orderly while en route to job. May assign duties to youthful day workers and supervise their activities in field and be designated Day-Haul Youth Supervisor (agriculture).
GOE: 09.03.01 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 77

913.367-010 TAXICAB STARTER (motor trans.) alternate titles: cab starter; dispatcher
Dispatches taxicabs in response to telephone requests for service: Maintains operational map showing location of each cab. Contacts drivers of assigned sector by radio or telephone to relay request for service. Logs calls relayed to each driver and address of patron. Arranges for relief cab or driver.
GOE: 07.04.05 STRENGTH: S GED: R3 M2 L2 SVP: 3 DLU: 77

913.463-010 BUS DRIVER (motor trans.) alternate titles: chauffeur, motorbus; coach operator
Drives bus to transport passengers over specified routes to local or distant points according to time schedule: Assists passengers with baggage and collects tickets or cash fares. Regulates heating, lighting, and ventilating systems for passenger comfort. Complies with local traffic regulations. Reports delays or accidents. Records cash receipts and ticket fares. May make repairs and change tires. May inspect bus and check gas, oil, and water before departure. May load or unload baggage or express checked by passengers in baggage compartment. May transport pupils between pickup points and school and be designated Bus Driver, School (motor trans.). May drive diesel or electric powered transit bus to transport passengers over established city route and be designated Motor-Coach Driver (motor trans.); Trolley-Coach Driver (motor trans.).
GOE: 09.03.01 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 81

913.463-014 STREETCAR OPERATOR (r.r. trans.) alternate titles: trolley-car operator
Drives electric-powered streetcar to transport passengers, collects fares, and gives information to passengers: Drives streetcar in accordance with traffic regulations and observes traffic lights and other vehicles on street to avoid accidents. Opens and closes doors and starts and stops streetcar to allow passengers to enter or leave vehicle. Collects fares from passengers and issues change and transfers. Answers questions from passengers concerning fare, schedules, and routings. Records readings of coin receptor at beginning and end of shift to verify amount of money received during shift.
GOE: 09.03.01 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

913.463-018 TAXI DRIVER (motor trans.) alternate titles: cab driver
Drives taxicab to transport passengers for fee: Picks up passengers in response to radio or telephone relayed request for service. Collects fee recorded on taximeter based on mileage or time factor and records transaction on log. Reports by radio or telephone to TAXICAB STARTER (motor trans.) 913.367-010 on completion of trip. May drive limousine or custom-built sedan to pick up and discharge airport passengers arriving or leaving on scheduled flights and be designated Chauffeur, Airport Limousine (motor trans.).
GOE: 09.03.02 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 81

913.663-010 CHAUFFEUR (any industry)
Drives automobile to transport office personnel and visitors of commercial or industrial establishment. Performs miscellaneous errands, such as carrying mail to and from post office. May make overnight drives and extended trips requiring irregular hours. May be required to have chauffeurs license. May clean vehicle and make minor repairs or adjustments.
GOE: 09.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

913.663-014 MOBILE-LOUNGE DRIVER (motor trans.)
Drives mobile lounge to transport aircraft passengers between airport terminal building and aircraft on runway.
GOE: 09.03.01 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

913.663-018 DRIVER (motor trans.) alternate titles: shuttle-bus driver; van driver
Drives minibus, van, or lightweight truck to transport clients, trainees, or company personnel: Drives vehicle from individual or central loading area to social services or rehabilitation center, training location, job site, or other destination according to assigned schedule. May assist disabled passengers into and out of vehicle. May secure passengers' wheelchairs to restraining devices to stabilize wheelchairs during trip. May operate radio or similar device to communicate with base station or other vehicles to report disruption of service. May clean and service vehicle with fuel, lubricants, and accessories. May keep records of trips and behavior of passengers. May perform other duties when not driving, such as custodial and building maintenance tasks.
GOE: 09.03.01 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 86

913.683-010 AMBULANCE DRIVER (medical ser.)
Drives ambulance to transport sick, injured, or convalescent persons: Places patients on stretcher and loads stretcher into ambulance, usually with help of AMBULANCE ATTENDANT (medical ser.). Takes sick or injured persons to hospital, or convalescents to destination, using knowledge and skill in driving to avoid sudden motions deterimental to patients. Changes soiled linen on stretcher. Administers first aid as needed. May shackle violent patients. May report facts concerning accident or emergency to hospital personnel or law enforcement officials.
GOE: 05.08.03 STRENGTH: V GED: R3 M2 L2 SVP: 4 DLU: 77

914 PUMPING AND PIPELINE TRANSPORTATION OCCUPATIONS

This group includes occupations concerned with conveying materials, such as oil, gas, water, coal, slurry, and pulp, by operating or tending pipeline pumps, and opening and closing valves. Pipeline construction and repair is included in Group 869. Occupations concerned with pumping activities in the treatment, purification, and distribution of water for irrigation and water supply are found in Group 954.

914.131-010 SUPERVISOR, PUMPING (smelt. & refin.)
Supervises and coordinates activities of workers engaged in maintaining pipelines and in pumping slurry, tailings, water, and other liquids in ore-processing plant. Tours pumping stations and pipelines to ensure removal of slurry, tailings, and water. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

914.132-010 COMPRESSOR-STATION ENGINEER, CHIEF (pipe lines) alternate titles: plant superintendent
Supervises and coordinates activities of workers engaged in operation and maintenance of compressor-station equipment, such as gas compressors, stationary engines, and pipelines to transmit natural gas: Directs workers to start or stop compressors to increase or decrease gas pressure. May operate equipment during emergencies. May supervise workers engaged in operation and maintenance of automobiles, trucks, and related equipment. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.02.01 STRENGTH: L GED: R4 M3 L4 SVP: 8 DLU: 77

914.132-014 STATION ENGINEER, CHIEF (pipe lines) alternate titles: oil-pump-station operator, chief; station chief
Supervises and coordinates activities of workers engaged in operating and maintaining main-line pump station: Directs STATION ENGINEER, MAIN LINE (pipe lines) to start or stop pumping equipment and increase or decrease pumping rates, line pressures, and rate of oil flow. Directs GAUGERS (petrol. & gas; petrol. refin.; pipe lines) in sampling, gauging, and testing oil, and in controlling flow of oil. Reports on oil movements and pipeline operations to DISPATCHER, OIL (petrol. & gas; petrol. refin.; pipe lines), using teletype or telephone. Schedules maintenance and repair of pumps, engines, generators, and corrosion-mitigation and pneumatic-control equipment. Performs other duties as described under SUPERVISOR (any industry) Master Title. May operate pumping equipment and supervise workers and be designated Station Engineer, Operating Chief (pipe lines).
GOE: 05.06.03 STRENGTH: L GED: R4 M3 L4 SVP: 8 DLU: 77

914.132-018 SUPERVISOR, CELLARS (beverage)
Supervises and coordinates activities of workers engaged in storing finished beer and pumping beer to filling machines: Turns valves that regulate flow of refrigerant in cooling equipment to maintain specified temperatures in cellars. Directs PUMPER, BREWERY (beverage) in transferring beer into storage tanks and from tanks to filling machines, following production schedule specifications. Reads meters and records quantity of beer pumped. Verifies type and destination of beer pumped to filling machines against order specifications. Examines tanks, pumps, and lines for cleanliness. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: L GED: R4 M2 L2 SVP: 7 DLU: 77

914.132-022 SUPERVISOR, FIELD PIPELINES (pipe lines) alternate titles: district supervisor; gauger, chief delivery; terminal-gauger supervisor
Supervises and coordinates activities of workers constructing, operating, and maintaining oil field pipeline gathering system: Directs gauging, sampling, test-

ing, and pumping of products from individual wells to central point for dispatch by main pipeline to refineries and terminals. Reviews bids for pipeline repair work from construction firms, and recommends acceptance or rejection of bids. Inspects installation of new pipelines and repair of equipment, such as pumps, engines, tanks, and reservoirs. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.02.01 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

914.134-010 GAUGER, CHIEF (petrol. & gas; petrol. refin.; pipe lines) alternate titles: chief gauger; district gauger

Supervises and coordinates activities of GAUGERS (petrol. & gas; petrol. refin.; pipe lines) controlling flow of oil into pipelines and gauging amount of oil stored in tanks or railroad cars. May oversee loading and shipment of oil and preparation of loading reports and bills of lading. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.06.03 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

914.137-010 DISTRIBUTION SUPERVISOR (pipe lines; wholesale tr.)

Supervises and coordinates activities of workers engaged in loading petroleum products, such as oils, kerosene, and gasoline into tank trucks, and schedules delivery of products to retail service stations or distributors: Reviews written or telephone shipping orders specifying type and volume of product to be loaded, shipping priorities, and delivery dates to prepare delivery schedules for truckdrivers, employing knowledge of routes, time required for loading, and average customer demands. Compiles and submits reports to regional office. Develops and implements preventive maintenance program for tank trucks. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.09.01 STRENGTH: S GED: R4 M3 L4 SVP: 6 DLU: 77

914.137-014 LOADING-RACK SUPERVISOR (petrol. refin.)

Supervises and coordinates activities of workers engaged in loading and unloading petroleum products, such as oils, gasoline, and kerosene into and from tank cars and trucks: Receives shipping orders and instructions as to type, specification, and volume of material to be loaded, loading priorities, dates of incoming and outgoing shipments, shipping destinations, and availability of storage tanks, tank cars, and trucks. Prepares schedules indicating car numbers and specifications and volume of material to be loaded. Directs workers in spotting and moving tank cars and trucks in yard, in inspecting and cleaning tank cars and trucks, and in loading and sampling petroleum products. Inspects condition of cars or trucks rejected for loading and arranges for their repair or cleaning. Reviews loading and laboratory sample records to verify conformity of load to specifications. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

914.137-018 SUPERVISOR, DOCK (petrol. refin.; pipe lines) alternate titles: terminal supervisor; wharf tender, head

Supervises and coordinates activities of workers involved in loading and unloading crude oil and liquid and packaged petroleum products, such as gasoline, kerosene, fuel oil, motor oil, and grease into and from barges, ships, or tankers at marine terminal: Receives instructions pertaining to vessel movements, types and quantities of crude oil and petroleum products to be received or delivered, facilities to be used, and loading schedules. Directs BOAT LOADERS (water trans.) I and STEVEDORES, DOCK (water trans.) in spotting and mooring vessels, in inspecting oil tanks, and in connecting oil pipelines. Orders GAUGERS (petrol. & gas; petrol. refin.; pipe lines) to open or close pipelines and tank valves to control and divert oil flow and to gauge and sample oil. Reads gauging and pumping reports and bills of lading to verify receipt or delivery of specified products. May supervise workers engaged in loading and unloading tank cars and trucks, and receiving, storing, and issuing petroleum products [LOADING-RACK SUPERVISOR (petrol. refin.)]. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

914.167-010 DISPATCHER, CHIEF II (petrol. & gas; petrol. refin.; pipe lines) alternate titles: district superintendent, gas and gasoline; general-office dispatcher; superintendent, pressure

Coordinates activities of GAS DISPATCHER (pipe lines; utilities) to deliver natural gas from oil fields through pipelines to delivery points: Reviews customer purchase requests to gather information for scheduling gas movements from various fields. Prepares schedules and notifies GAS DISPATCHER (pipe lines; utilities) by radio, teletype, or telephone to release specific amount of gas from well. Reviews periodic reports of gas pressures and volume of gas delivered to ensure safe operation of pipelines. Keeps records of deliveries of gas, pressures maintained, and shutdowns of lines. May coordinate transfer of liquid petroleum products by pipeline.
GOE: 05.02.01 STRENGTH: S GED: R4 M3 L4 SVP: 7 DLU: 77

914.167-014 DISPATCHER, OIL (petrol. & gas; petrol. refin.; pipe lines) alternate titles: oil dispatcher

Directs and coordinates field activities of workers who route and control flow of oil and petroleum products through pipelines from point of origin, such as wells and storage tanks to delivery points, such as terminals, carriers, refineries, and tank farms, according to delivery schedules: Reviews oil movement schedules and notifies field personnel, such as DISPATCHER, RELAY (pipe lines); STATION ENGINEER, MAIN LINE (pipe lines); and GAUGERS (petrol. & gas; petrol. refin.; pipe lines), by teletype, telephone, and field radio as to type and quantities of oil to be moved, facilities and storage stock to be used, destinations, operating procedures, and pumping and delivery schedules. Studies data on oil and oil movement, such as temperatures, pressures, specific gravities, sediment and contamination content, and pumping rates, and ensures compliance with schedules and contract specifications by dispatching instructions to field personnel to increase or decrease pumping rates and pressures, to switch and inject feeder streams of crude and blend oil, and to gauge and test oil. Compares pumping reports with delivery reports to ascertain quantity of oil delivered. Computes data for production reports and for instruction changes relative to pumping rates and pressures, using calculator and slide rule. When scheduling and directing movement of petroleum products through processing, storage, and shipping departments of refineries, may be designated Dispatcher, Refinery (pipe lines).
GOE: 05.02.01 STRENGTH: S GED: R4 M4 L4 SVP: 7 DLU: 77

914.362-010 COAL PIPELINE OPERATOR (pipe lines)

Controls, from master panel, semiautomatic processing plant that pulverizes and mixes coal with water and introduces resulting slurry into pipeline for transportation. Moves controls to start and regulate conveyors, pumps, grinding mills, tank agitators, and auxiliary equipment that convert coal to slurry of specified density and acidity, following standard procedures. Reviews laboratory reports and observes panel lights, flowmeters, and recording instruments to maintain standard conditions in plant and pipeline. Gives directions to assistant to open valves that regulate admission of slurry into pipeline and to make manual adjustments to processing and distribution equipment. Maintains operating log from instrument readings. May control booster pumping stations from panel or direct station operations by telephone.
GOE: 06.02.18 STRENGTH: L GED: R3 M3 L3 SVP: 4 DLU: 77

914.362-014 CONSTRUCTION-AND-MAINTENANCE INSPECTOR (petrol. refin.)

Inspects petroleum-dispensing equipment and machinery at wholesale distributing plants of refinery for defects: Operates air-elimination and pumping equipment to detect malfunctions. Pumps petroleum from storage tanks into calibrated cans or tests tank trucks to verify accuracy of recording meters. Compiles reports of inspection data.
GOE: 05.07.01 STRENGTH: L GED: R3 M3 L3 SVP: 5 DLU: 77

914.362-018 STATION ENGINEER, MAIN LINE (pipe lines) alternate titles: pump-station operator; station operator

Operates electric, diesel, gas, or automated pumping equipment to pump and route petroleum products through pipelines at main-line or terminal stations according to instructions and destination: Turns valves and starts engines to pump oil through station. Reads flow and pressure meters, and turns valves to vary pumping rate and line pressure, according to specifications. Turns handwheel or directs GAUGER (petrol. & gas; petrol. refin.; pipe lines) to open or close pipeline valves to direct flow of oil to storage tanks according to grade; to direct flow of oil through station and along pipeline, according to destination; or to switch oil to alternative pipelines to prevent contamination between grades. Inspects pumping equipment to detect malfunctioning and leaks. Lubricates machinery, and repairs and adjusts pumps and equipment, using handtools. Records pressures, temperature, and flow rates, and maintains records of oil stock and oil receipts. May pump natural gas or natural gas liquid products. May gauge and test oil or direct work of GAUGERS (petrol. & gas; petrol. refin.; pipe lines). May use radiotelephone equipment.
GOE: 05.06.03 STRENGTH: L GED: R3 M2 L3 SVP: 7 DLU: 77

914.382-010 OIL PUMPER (petrol. & gas) alternate titles: oil-well pumper; pumper

Operates steam, gas, gasoline, electric, or diesel pumps and auxiliary equipment to restore and control flow of oil from wells: Opens valves to regulate flow of oil from wells to storage tanks or into pipelines. Turns valves to adjust pressure of separator which separates natural gas from oil. Reads flowmeters, gauges oil in tanks with calibrated steel tape, and prepares reports of amount and quality of oil pumped and in storage. Collects and bottles samples of oil for laboratory analysis. Lubricates and repairs pumps, using grease gun, oilcan, and handtools. Examines pipelines for leaks. Reports major breakdowns and well difficulties. May test and treat oil to reduce water and sediment content according to specifications for pipeline transportation of oil.
GOE: 05.06.03 STRENGTH: L GED: R3 M3 L3 SVP: 6 DLU: 77

914.382-014 PUMPER-GAUGER (chemical; petrol. refin.; pipe lines)

Operates pumps and manifold systems to load petro-chemical products, such as caustic soda, methanol, and styrene into trucks, barges, and tank cars: Reads loading order or receives instructions from supervisor. Determines movement of products through lines from storage tanks to tank trucks, barges, and tank cars utilizing knowledge of interconnections, pipeline capacities, manifolds, and pumps. Inspects and weighs vessels to prevent contamination and to satisfy loading procedures. Coordinates product movement activities with other workers to ensure continuous flow of product. Starts pumps, observes pressure and flowmeters, and turns valves to regulate flow of product to loading vessel according to loading procedures. Signals other pumper-gaugers to open and close hatch valves and to gauge, sample, and determine temperature of tank contents. Records operating data, such as products and quantities pumped, storage tank used, gauge readings, and operating time. Inspects valves, flanges, manifolds throughout system and tightens connections, using handtools. Delivers product samples to laboratory and affixes product warning placards onto vessel. Oper-

ates blenders and heaters to mix, blend, and heat products. May perform variety of tests to determine viscosity, specific gravity, and flash point of sample contents.
GOE: 05.06.04 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

914.382-018 PUMPER-GAUGER APPRENTICE (chemical; petrol. refin.; pipe lines)
Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.06.04 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

914.382-022 PUMPER, HEAD (petrol. & gas) alternate titles: field operator
Operates pumps and auxiliary equipment to produce artificial flow of oil or gas from wells in oil field: Starts pumps and opens valves to pump oil from wells into storage tanks. Starts compressor engines and diverts oil from storage tanks into compressor units and auxiliary equipment to recover natural gas from oil. Opens valves to return compressed gas to bottoms of specified wells to repressurize them and force oil to surface. Operates engines and pumping units from central powerplant to shut off wells according to production schedule and to switch flow of oil into unfilled storage tanks. Reads tank gauges and pump meters, and keeps production records. May supervise OIL PUMPERS (petrol. & gas) and other workers engaged in producing oil from wells. May repair gas and oil meters and gauges [INSTRUMENT MECHANIC (any industry)].
GOE: 05.06.03 STRENGTH: L GED: R3 M3 L3 SVP: 7 DLU: 77

914.384-010 GAUGER (petrol. & gas; petrol. refin.; pipe lines) alternate titles: field gauger; pipe-line gauger; tank-farm gauger; terminal gauger
Gauges and tests amount of oil in storage tanks, and regulates flow of oil and, other petroleum products into pipelines at wells, tank farms, refineries, and marine and rail terminals, following prescribed standards and regulations: Gauges quantity of oil in storage tanks before and after delivery, using calibrated steel tape and conversion tables. Lowers thermometer into tanks to obtain temperature reading. Turns bleeder valves, or lowers sample container into tank to obtain oil sample. Tests oil to determine amount of bottom sediment, water, and foreign materials, using centrifugal tester. Calculates test results, using standard formulas. Records readings and test results. Starts pumps, and opens valves on pipelines and tanks to regulate and direct flow of oil from and into tanks, according to delivery schedules. Reads automatic gauges at specified time intervals to determine flow rate of oil into or out of tanks and amount of oil in tanks. Inspects pipelines, valves, and flanges to detect malfunctions, such as loose connections and leaks. Tightens connections with wrenches, greases and oils valves, using grease gun and oilcan. Reports leaks or defective valves to maintenance personnel. Clamps seal around valves to secure tanks. May gauge tanks containing petroleum and natural gas byproducts, such as condensate or natural gasoline. May operate pumps, teletype, and mobile radio. May clean pumps, machinery, and equipment. May issue delivery or receiving tickets. May record meter and pressure readings at gas wells. May regulate flow of products into pipelines, using automated pumping equipment. When gauging oil received from and delivered to terminals, tank farms, and refineries, may be designated Gauger, Delivery (pipe lines).
GOE: 05.06.03 STRENGTH: M GED: R3 M3 L3 SVP: 6 DLU: 77

914.485-010 BARREL FILLER II (beverage)
Tends pumps to transfer wine from storage tanks to barrels: Inserts nozzle of automatic filler stem into vent of barrel, turns switch and observes readings of meter to verify filling of barrel with specified amounts of wine. Weighs wine-filled barrels and deducts tare (weight of empty barrel) to determine weight of wine, using platform scale. Marks or stencils information on barrels, such as weight and type of wine. May load filled barrels on trucks or railroad cars [INDUSTRIAL-TRUCK OPERATOR (any industry)].
GOE: 06.04.37 STRENGTH: H GED: R2 M2 L1 SVP: 3 DLU: 77

914.585-010 GAS-TRANSFER OPERATOR (chemical)
Tends equipment to transfer liquid gases from processing equipment to tank trucks and storage tanks: Connects hose and starts pumps until specified quantity of gas has been transferred, as indicated by gauge. Ensures that specified type of gas is pumped, using portable gas analyzer. Records type and quantity of gas pumped, truck number, and departure time. Positions truck in loading area. May refuel and fill oil well of tank trucks. May fill railway tank cars. May evacuate air space between inner and outer tanks of trucks or railway tank cars, using vacuum pump.
GOE: 06.04.12 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 77

914.665-010 PIGMENT PUMPER (rubber reclaim.) alternate titles: checker; drum filler; pigment supplier; solvent-station attendant
Tends equipment that pumps solvents, pigments, and caustics into storage tanks for use in processing reclaim rubber: Dips pigment samples from tank car or container for laboratory analysis. Connects hose couplings between tank cars and pipelines. Starts pumps and opens valves to direct flow of liquid pigments into specified storage or supply tanks. Reads flowmeter to ascertain quantity of stock entering tank. Directs transfer of drums and bags of material from freight cars to specified storage areas and notifies supervisor when supplies drop to specified levels. May schedule delivery of pigments. May convey dry pigments to production areas, using electric truck.
GOE: 05.12.06 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

914.665-014 PUMPER, BREWERY (beverage) alternate titles: cellar worker
Tends power-driven pumps that transfer wort, beer, or liquified yeast mixture to various sections of brewery: Receives signal from point of destination indicating time of fluid transfer. Connects flexible hose and stationary lines to pumps and vessels containing specified fluid and notifies worker at destination point of line prior to transfer of fluid. Turns valves and starts pump to admit and control flow of liquid through lines. Collects random samples of fluid from vessels for laboratory testing, using beaker. May tend automated equipment to transfer liquids through various processes. May observe thermometers and turn valves to regulate flow of beer through refrigeration unit to maintain specified temperature of product [COOLING-MACHINE OPERATOR (beverage)]. May pump two or more varieties of beer into one tank to blend mixture. May record types and amounts of beer pumped. May clean pumps and lines by flushing with cleansing solutions and water. May be designated according to plant location or product transferred as Bottle-House Pumper (beverage); Cellar Pumper (beverage); Wort Pumper (beverage); Yeast Pumper (beverage).
GOE: 06.04.40 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 77

914.667-010 LOADER I (any industry) alternate titles: car filler; liquid loader; tank-car loader; truck loader
Pumps liquid chemicals, liquid petroleum products, and other liquids into or from tank cars, trucks, or barges: Verifies tank car numbers with loading instructions to ensure accurate placement of cars by crew. Connects ground cable to carry off static electricity. Removes and replaces or gives directions to another worker to remove and replace dome caps, using wrenches. Inspects interior for cleanliness and exterior for leaks or damage. Swings loading spout over dome and turns valve to admit liquids to tank. Lowers gauge rod into tank or reads meter to verify specified volume of liquids loaded. Lowers sample bottle into tank for laboratory testing. Copies load specification on placard and tacks placard to tank. Seals outlet valves on car. When unloading cars, connects hose to outlet plugs on cars and attaches special dome, using wrenches. Starts pumps or turns valves to admit compressed air into tank car and force liquids into storage tanks. May test sample for specific gravity, using hydrometer, and record reading on loading slip. May clean interior of tank cars or tank trucks, using mechanical spray nozzle. May inspect rupture disc, vacuum relief valve, rubber gaskets on valves and cover plates, and replace defective parts, using wrenches. May pump nitrogen or compressed air into car to test for leaks. May be designated according to material loaded and unloaded as Acid Loader (chemical); Caustic Loader (chemical); Fats And Oils Loader (soap & rel.).
GOE: 06.04.40 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

914.682-010 PUMPER (any industry) alternate titles: circulator; pump-machine operator; pump operator; pump runner; pump tender; siphoner
Operates power-driven pumps that transfer liquids, semiliquids, gases, or powdered materials, performing any combination of following duties: Observes pressure gauges and flowmeters, and adjusts valves to regulate speed of pumps and control pressure and rate of flow of materials. Transfers materials to and from storage tanks, processing tanks, trucks, railroad cars, ships, canals, and mines. Pumps crude oil from wells. Maintains pumps and lines by replacing filters and gaskets, tightening connections, and adjusting pumps, using handtools. May transfer liquids by siphoning. May connect pipelines between pumps and containers or storage tanks being filled or emptied. May collect samples of materials for laboratory analysis. May determine density of liquids, using hydrometer. May record quantity of item pumped. May inventory contents of storage tank, using calibrated rod, or by reading mercury gauge and tank charts. Usually receives verbal or written orders from superior as to amount to be pumped and is not responsible for mixing or processing. May be designated according to material pumped or area of work as Acid Pumper (chemical); Glycol-Service Operator (plastic-synth.); Irrigating-Pump Operator (agriculture); Tailings-Dam Pumper (smelt. & refin.); Yard Pumper (any industry).
GOE: 05.06.03 STRENGTH: M GED: R3 M2 L3 SVP: 5 DLU: 77

914.685-010 FISH BAILER (fishing & hunt.)
Tends pumps to unload fish from hold of ship into screening tank on dock: Swings end of suction hose over hold of ship, and clamps hose in position. Forces fish from various parts of hold to point under suction pipe, using water hose. Climbs into hold of ship to guide suction hose into hard-to-reach areas.
GOE: 03.04.03 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

914.687-010 LABORER, PIPELINES (pipe lines)
Maintains area around pump stations and pipelines, and services equipment, performing any combination of following tasks: Loads and unloads materials, tools, and equipment onto and from trucks by hand. Digs drainage ditches, cuts brush, and clears ground around pipe, using pick, shovel, wheelbarrow, and ax. Cleans feeder pipes with scrapers and steel brushes. Paints pipe, using brush and spray gun. Assists in carrying and laying of feeder pipes.
GOE: 05.12.03 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

914.687-014 LOADER HELPER (any industry)
Assists LOADER (any industry) I in pumping liquid chemicals, petroleum products, and other liquids into or from tank cars, trucks, or barges, performing any combination of following duties: Cleans tanks, using brooms, hose, and cleaning compound. Removes and replaces dome caps, using wrenches. Attaches ground cable to truck to prevent sparks due to static electricity when

flammable or volatile material is to be loaded or unloaded. Connects hose to outlet plugs at bottom of tank to prepare car for unloading. Disconnects hose and replaces plugs after unloading, using wrenches. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.06 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

914.687-018 PUMPER HELPER (any industry)
Assists PUMPER (any industry) in pumping liquids from one vessel to another, from storage tanks to processing equipment, or from one process to another: Moves levers to adjust pumping pressure. Cleans pumps, using solvent and rags, lubricates pumps, using oilcan and grease gun. Dismantles pumps to be repaired and reassembles parts, using handtools. Tightens pipe connections between pumps and vessels, using wrenches. May collect random samples of liquid for laboratory analysis. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.06 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

915 ATTENDANTS AND SERVICERS, PARKING LOTS AND AUTOMOTIVE SERVICE FACILITIES

This group includes occupations concerned with parking, cleaning, polishing, lubricating, and refueling trucks, buses, and automobiles, and related servicing activities.

915.133-010 SUPERVISOR, PARKING LOT (automotive ser.)
Supervises and coordinates activities of workers engaged in parking automobiles in parking lot or storage garage: Prepares daily collection report and bank deposit. Performs other duties as described under SUPERVISOR (any industry) Master Title. May actuate parking meters in parking lot, using key. May verify daily reports against meter readings.
GOE: 09.04.02 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 78

915.134-010 TIRE-SERVICE SUPERVISOR (automotive ser.) alternate titles: manager, tire service
Supervises and coordinates activities of workers engaged in servicing and repairing automobile and truck tires and tubes: Examines damaged, defective, or flat tires to determine feasibility of repair and assigns workers to tasks, such as removing nails, changing tubes, installing boots, and changing tires on vehicles. May direct activities of workers engaged in repairing, relining, and adjusting vehicle brakes. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

915.137-010 CAR-WASH SUPERVISOR (automotive ser.)
Supervises and coordinates activities of workers engaged in washing and polishing automobiles and performing related services in automatic car wash: Inventories supplies, such as detergents, brushes, and tire-blacking compound. Quotes prices to customers desiring such services as automobile waxing and polishing. Accepts payment and makes change. Supervises personnel engaged in polishing and washing automobiles or parts of vehicles not washed by automatic mechanism. Inspects equipment for wear and arranges for repair or replacement as necessary. Resolves customer complaints. Keeps records of daily receipts, employee time and wage data, and supplies used. May participate in washing, polishing, and performance of other services during peak periods.
GOE: 05.12.01 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

915.467-010 AUTOMOBILE-SERVICE-STATION ATTENDANT (automotive ser.) alternate titles: filling-station attendant; gas-station attendant; gas tender; service-station attendant
Services automobiles, buses, trucks, and other automotive vehicles with fuel, lubricants, and accessories: Fills fuel tank of vehicles with gasoline or diesel fuel to level specified by customer. Observes level of oil in crankcase and amount of water in radiator, and adds required amounts of oil and water. Adds necessary amount of water to battery, and washes windshield of vehicle. Lubricates vehicle and changes motor oil [LUBRICATION SERVICER (automotive ser.) 915.687-018]. Replaces accessories, such as oil filter, air filter, windshield wiper blades, and fan belt. Installs antifreeze and changes spark plugs. Repairs or replaces tires [TIRE REPAIRER (automotive ser.) 915.684-010]. Replaces lights, and washes and waxes vehicle. Collects cash from customer for purchases and makes change or charges purchases, using customer's credit card. May adjust brakes [BRAKE ADJUSTER (automotive ser.) 620.684-018]. May sell batteries and automobile accessories usually found in service stations. May assist in arranging displays, taking inventories, and making daily reports.
GOE: 05.10.02 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 81

915.473-010 PARKING-LOT ATTENDANT (automotive ser.) alternate titles: automobile parker; parking attendant; parking-lot chauffeur; parking-station attendant; spotter
Parks automobiles for customers in parking lot or storage garage: Places numbered tag on windshield of automobile to be parked and hands customer similar tag to be used later in locating parked automobile. Records time and drives automobile to parking space, or points out parking space for customer's use. Patrols area to prevent thefts from parked automobiles. Collects parking fee from customer, based on charges for time automobile is parked. Takes numbered tag from customer, locates automobile, and surrenders it to customer, or directs customer to parked automobile. May service automobiles with gasoline, oil, and water. When parking automobiles in storage garage, may be designated Storage-Garage Attendant (automotive ser.). May direct customers to parking spaces.
GOE: 09.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 81

915.477-010 AUTOMOBILE-SELF-SERVE-SERVICE-STATION ATTENDANT (automotive ser.) alternate titles: cashier, automobile services; gasatería attendant; station attendant
Sells fuel, lubricants, and accessories, at self-service station to operators of automobiles, buses, trucks, and other automotive vehicles: Allows customer to fill fuel tank of automotive vehicle with fuel, such as gasoline or diesel fuel, to desired level. Checks level of oil in crankcase and amount of water in radiator, and adds oil and water as requested by customer. Collects cash from customer for purchases and makes change or charges purchases, using customer's credit card. Prepares daily report of fuel, oil, and accessories sold. May lubricate vehicle, change motor oil, and replace accessories, such as oil filter, air filter, windshield wiper blades, and fan belt. May install antifreeze, change spark plugs, make minor brake adjustments, and repair or replace tires. May fill fuel tanks for customers. May service fishing boats and pleasure craft or drive tow boat vehicle to haul boats to and from dock and parking area and be designated Marine-Service-Station Attendant (water trans.)
GOE: 09.04.02 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 81

915.583-010 LOT ATTENDANT (retail trade)
Verifies receipt of new cars delivered to dealer and parks cars in new car lot in orderly manner: Compares serial numbers of incoming cars against invoice. Inspects cars to detect damage and to verify presence of accessories listed on invoice, such as spare tires and radio and stereo equipment. Records description of damages and lists missing items on delivery receipt. Parks new cars in assigned area according to model. Assigns stock control numbers to cars, and catalogs and stores keys. Reparks cars, following sales, to maximize use of space and maintain lot in order. Delivers sold cars to new car preparation department. Services cars in storage to protect tires, battery, and finish against deterioration.
GOE: 05.08.03 STRENGTH: L GED: R3 M2 L3 SVP: 3 DLU: 86

915.587-010 GAS-AND-OIL SERVICER (motor trans.) alternate titles: gas-and-oil checker
Refuels and oils motor vehicles, such as trucks and buses, in company garage: Refills vehicle radiator and washes windows of vehicle. Transports materials, such as filled and empty oil drums, using forklift. Compiles mileage records, fuel consumption log, and storage tank inventory.
GOE: 05.12.06 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 86

915.667-010 CAR-WASH ATTENDANT, AUTOMATIC (automotive ser.)
Performs any combination of following duties in automatic car wash: Directs patron to entrance of wash station or guides automobile onto wheel track of automatic mechanism. Cleans front and rear of vehicle, using brush and detergent. Activates wash mechanism and observes operation to detect equipment malfunctions. Notifies supervisor when malfunctions occur. Receives payment from customer or issues change for coin-operated equipment. Fills detergent and wax tanks, lubricates equipment, and replaces spray jets and hoses as needed. May vacuum interior of automobile.
GOE: 09.04.02 STRENGTH: L GED: R2 M2 L1 SVP: 2 DLU: 81

915.667-014 PARKING LOT SIGNALER (automotive ser.) alternate titles: general lot attendant
Directs vehicle drivers to specific parking spot, using hand signals: Lifts, positions, and removes barricades to open or close parking areas at direction of SUPERVISOR, PARKING LOT (automotive ser.) 915.133-010. Signals vehicle drivers with hands or flashlight to parking area or to spot within parking area at activities, such as sporting events, concerts, and expositions.
GOE: 09.04.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 86

915.684-010 TIRE REPAIRER (automotive ser.) alternate titles: tire-and-tube repairer; tire-and-tube servicer; tire fixer; tire servicer
Repairs damaged tires of automobiles, buses, trucks, and other automotive vehicles: Raises vehicle, using hydraulic jack, and unbolts wheel, using lug wrench. Removes wheel from vehicle by hand or, when repairing giant tires of heavy equipment, by use of power hoist. Locates puncture in tubeless tire by visual inspection or by immersing inflated tire in water bath and observing air bubbles emerging from puncture. Seals puncture in tubeless tire by inserting adhesive material and expanding rubber plug into puncture, using handtools. Separates tubed tire from wheel, using rubber mallet and metal bar or mechanical tire changer. Removes inner tube from tire and inspects tire casing for defects, such as holes and tears. Glues boot (tire patch) over rupture in tire casing, using rubber cement. Inflates inner tube and immerses it in water to locate leak. Buffs defective area of inner tube, using scraper, and patches tube with adhesive rubber patch or seals rubber patch to tube, using hot vulcanizing plate. Reassembles tire onto wheel, and places wheel on balancing machine to determine counterweights required to balance wheel. Hammers required counterweights onto rim of wheel. Cleans sides of white wall tires and remounts wheel onto vehicle. Responds to emergency calls to make repairs or replacements of damaged tires at customer's home or on road. May be designated according to specialty as Giant-Tire Repairer (automotive ser.); Tire Changer (automotive ser.); Tire Changer, Aircraft (air trans.); Tire Changer, Road Service (automotive ser.). May rotate tires to different positions on vehicle, using tire changing machine, handtools, and tire balancing machine.

GOE: 05.12.15 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 81

915.687-010 AUTOMOBILE-SEAT-COVER INSTALLER (automotive ser.)

Installs prefabricated seat covers in automobiles: Places covers over seats and backs, smoothing them by hand to remove wrinkles. Fastens covers by closing zippers, joining snap fasteners, or securing them to cushion frame or springs.
GOE: 05.12.12 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

915.687-014 GARAGE SERVICER, INDUSTRIAL (any industry)

Services trucks, buses, automobiles, and other automotive equipment used in industrial or commericial establishments: Inspects equipment to ascertain gasoline, oil, and water requirements. Tests batteries and tires. Changes oil and lubricates automotive equipment [LUBRICATION SERVICER (automotive ser.) 915.687-018]. May keep record of gas and oil supplied to each vehicle and gasoline and oil supplies in storage tanks.
GOE: 05.12.08 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 86

915.687-018 LUBRICATION SERVICER (automotive ser.) alternate titles: greaser; lubrication technician; oiler

Lubricates moving parts of automotive vehicles, such as automobiles, buses, and trucks: Injects grease into units, such as springs, universal joints, and steering knuckles, using hand or compressed-air powered grease gun. Inspects fluid level of steering gear, power steering reservoir, transmission, differential, rear axle housings, and shackles. Checks air pressure of tires. Lubricates moving parts with specified lubricants. Drains oil from crankcase and refills crankcase with required amount of oil. Sprays leaf springs with lubricant, using spray gun. Adds water to radiator and battery. Replaces oil and air filters. May sell lubrication and safety inspection services and maintain related records on regular customers, following up periodically with telephone, mail, or personal reminders.
GOE: 05.12.08 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

915.687-022 PORTER, USED-CAR LOT (retail trade; wholesale tr.) alternate titles: car cleaner; car porter; used-car-lot attendant

Cleans and services used cars at used-car lot: Cleans interior and exterior of cars being offered for sale. Repairs and changes tires. Keeps used-car lot neat and orderly. May clean and change spark plugs or replace windshield wiper blades and arms. May pick up and deliver cars to customers. May clean new cars. May replenish fluids for battery, radiator, crankcase, transmission, and brakes. May replace battery.
GOE: 05.12.18 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 82

915.687-026 STEAM CLEANER (automotive ser.) alternate titles: automobile washer, steam

Cleans engines, bodies, and chassis of automotive vehicles, using high pressure steam hose and detergent solution: Starts boiler to generate steam. Sprays steam and detergent solution over vehicle chassis, engine, or parts, to remove dirt and grease. Lowers engine or chassis parts into tank of detergent solution, by hand or by use of hoist, to clean inaccessible surfaces. Scrapes off adherent grime and grease, using wire brush or putty knife. May spray vehicle body with steam and caustic compound to remove paint. May clean forging dies and be designated Steam-Clean-Machine Operator (forging).
GOE: 05.12.18 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

915.687-030 TAXI SERVICER (motor trans.)

Services taxicab fleet and maintains terminal yard and office in orderly condition: Refuels and lubricates taxicabs [GAS-AND-OIL SERVICER (motor trans.)]. Changes and repairs tires [TIRE REPAIRER (automotive ser.)]. Cleans parking area and removes rubbish. Cleans offices and equipment [CLEANER, COMMERCIAL OR INSTITUTIONAL (any industry)].
GOE: 05.12.18 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

915.687-034 AUTOMOBILE DETAILER (automotive ser.)

Cleans and refurbishes new and used automobiles, performing any combination of following duties: Washes vehicle exterior to clean cars, using cleaning solution, water, cloths, and brushes. Applies wax to auto body, and wipes or buffs surfaces to protect surfaces and preserve shine, using cloth or buffing machine. Vacuums interiors of vehicles to remove loose dirt and debris, using vacuum cleaner. Cleans upholstery, rugs, and other surfaces, using cleaning agents, applicators, and cleaning devices. Applies revitalizers and preservatives to vinyl or leather surfaces, and treats fabrics with spot and stain resistant chemicals to preserve and protect interior components. Cleans engine and engine compartment with steam cleaning equipment and various cleaning agents to remove grease and grime. Applies special purpose cleaners to remove foreign materials which do not respond to normal cleaning procedures, utilizing experience and following recommendations of product manufacturer. Paints components and related parts, using spray gun or aerosol can and material. Applies paint to chipped body surfaces of vehicle, using contouchup paint. Applies dyes and reconditioning chemical to vinyl tops cle to restore color and condition.
GOE: 05.12.18 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 86

919 MISCELLANEOUS TRANSPORTATION OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with transportation. Occupations, not elsewhere classified, concerned with transportation and involving extensive record keeping activities are found in Group 248.

919.162-010 DISPATCHER, TRAFFIC OR SYSTEM (motor trans.; r.r. trans.)

Dispatches workers and equipment to prevent or rectify service disruptions of local transit system, using radiophone equipment: Receives reports of actual or anticipated disruptions and determines action required to rectify condition. Issues instructions to workers for maintenance and repair of roadway and structures. Coordinates movement of workers and equipment throughout system, using telephone communications system. Listens to radio traffic reports to alert TRAFFIC INSPECTOR (motor trans.; r.r. trans.) of conditions affecting schedules. Records service disruptions, time, and action taken. May supervise activities of maintenance crews.
GOE: 07.04.05 STRENGTH: S GED: R4 M3 L3 SVP: 7 DLU: 77

919.223-010 INSTRUCTOR, BUS, TROLLEY, AND TAXI (motor trans.; r.r. trans.)

Instructs students in driving buses, trolleys, or taxicabs, and evaluates their progress: Explains mechanical and electrical functions of various vehicles, using diagrams, charts, and jacked-up chassis. Demonstrates operation of vehicles to students. Observes students while driving to evaluate their performance and progress. Instructs students in methods of keeping records of cash receipts and accident reports. May instruct students in operating monorail trains.
GOE: 09.03.03 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

919.363-010 NEW-CAR INSPECTOR (motor trans.)

Inspects new cars prior to loading onto carriers: Examines car for scratches, dents, and broken glass. Drives car to detect motor noises, transmission malfunctions, and brake failure. Records findings. Drives cars onto trailer truck. Keeps record of cars until delivery.
GOE: 06.03.01 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

919.663-010 DELIVERER, CAR RENTAL (automotive ser.; retail trade) alternate titles: washer driver

Delivers rental cars to customers, and services them prior to delivery: Sweeps out and vacuum cleans interior of rental automobile. Washes windows and exterior of automobile, using water and other cleansing compounds and cloth. Regulates tire pressure and adds gasoline and oil. Adds water to battery and radiator. Delivers automobile to customer at specified pickup point. Collects rental payment and deposit from customer; and observes that customer reads and signs rental contract. May deliver new or used automobiles to customer from automobile dealership.
GOE: 05.08.03 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

919.663-014 DINKEY OPERATOR (any industry) alternate titles: larry-car operator; trammer

Controls dinkey engine powered by electric, gasoline, steam, compressed air, or diesel engine to transport and shunt cars at industrial establishment or mine: Controls movement of dinkey that transports coal, rock, timber, slag, or supplies by moving power controls and brake levers. Signals BRAKE HOLDER (any industry) by hand or whistle to couple cars. Positions cars for loading or unloading according to signals of DUMPER (any industry). Inspects engine at beginning and end of shift. May move levers to open or tilt cars to dump materials. May throw switches and couple cars. May fuel and lubricate engine. May inspect track for defects and assist in repairing track and installing additional rails and ties. May be designated according to kind of power used as Dinkey Operator, Compressed Air (any industry); according to work area as Dinkey Operator, Mine (mine & quarry); or material hauled as Dinkey Operator, Slag (smelt. & refin.); Dinkey Operator, Slate (mine & quarry). May operate flatcar equipped with derrick and be designated Derrick-Car Operator (r.r. trans.). May operate railcar to transport personnel and equipment in area of logging camp and be designated Rail-Car Operator (logging).
GOE: 05.11.04 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

919.663-018 DRIVER-UTILITY WORKER (auto. mfg.; automotive ser.)

Demonstrates, and delivers to purchasers, new and reconditioned buses, trucks, tractors, fire engines, and other heavy vehicles. Picks up and delivers parts, using light truck.
GOE: 05.08.03 STRENGTH: M GED: R3 M1 L1 SVP: 4 DLU: 77

919.663-022 ESCORT-VEHICLE DRIVER (motor trans.)

Drives vehicle equipped with warning lights and signs to escort trucks hauling mobile homes on public thoroughfares: Precedes escort and maintains specified distance between pilot vehicle and escort to provide warning to other motorists and to clear traffic at locations. Communicates by two-way radio with truck and other pilot vehicle drivers to coordinate changes in speed and route, emergencies, or traffic congestion.
GOE: 05.08.03 STRENGTH: S GED: R2 M1 L2 SVP: 2 DLU: 77

919.663-026 TOW-TRUCK OPERATOR (automotive ser.) alternate titles: tow-car driver; wrecker operator

Drives tow-truck to move motor vehicles damaged by accident, stalled, or ticketed by police for traffic violation: Receives call or is dispatched to location by repair garage, automobile association, or police department by radio or telephone. Attaches antisway bar to vehicle by means of cable, chains, or other grappling devices, and hoists one end of vehicle, using hand or powered winch, to tow vehicle to repair garage or to police department's impounding area. May make minor repairs to vehicles along highway, such as replacing spark plugs, batteries, and light bulbs, and connecting loose wires. May perform other duties when not engaged in towing, such as AUTOMOBILE-SERVICE-STATION

ATTENDANT (automotive ser.); TIRE REPAIRER (automotive ser.). May dismantle vehicles to salvage parts, using such handtools as wrenches, pry bar, and hacksaws [AUTOMOBILE WRECKER (wholesale tr.)]. May remove, bend, or cut parts of damaged vehicles preparatory to towing.
GOE: 05.08.03 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

919.664-010 TEAMSTER (any industry) alternate titles: freighter; hauler; skinner; team driver; toter

Drives one or more draft animals to pull materials, vehicles, or implements, such as logs, wagons, grading scrapers, fertilizer spreaders, plows, or scoops: Jiggles, pulls, and slackens reins, and gives oral commands to control movement of team. May harness and hitch team to material, vehicle, or implement. May load and unload vehicle or manipulate levers, pedals, or holding devices to release material. May groom, feed, and water team and clean stable [STABLE ATTENDANT (any industry)]. May repair harness. May drive one or team of horses to skid logs from forest and be designated Snaker (logging). May be designated according to type of vehicle driven as Cart Driver (any industry); Dray Driver (any industry); Wagon Driver (any industry); or according to kind of animals driven as Horse-And-Wagon Driver (any industry); Mule Driver (any industry); or according to number of animals driven as Four-Horse Hitch Driver (any industry); Six-Horse Hitch Driver (any industry); Long-Line Teamster (any industry).
GOE: 03.04.05 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

919.682-010 BRIDGE OPERATOR, SLIP (r.r. trans.) alternate titles: bridge tender; slip tender

Controls horizontally and vertically adjustable bridge, between wharf and scow lashed to wharf, to allow railroad cars to be driven from land to scow: Moves bridge controls to extend and align bridge tracks with tracks on barge. Controls vertical movement of bridge in accordance with sinking of scow during loading. May lash scow to wharf with steel cable drawn taut by winch or windlass when tugboat brings scow into position.
GOE: 05.11.04 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

919.683-010 DOCK HAND (air trans.)

Operates motorboat to transport passengers or cargo to and from anchored amphibious airplanes and operates tractor to remove planes from water: Loads cargo or directs passengers aboard motorboat. Pilots boat to plane or dock and discharges cargo or passengers. Positions wheeled beaching gear at end of ramp in water and, standing in water, pushes and pulls plane over ramping gear. Drives tractor to draw plane and gear up ramp onto shore for removal to hangar. Cleans plane interiors and exteriors.
GOE: 05.08.04 STRENGTH: H GED: R2 M2 L2 SVP: 4 DLU: 77

919.683-014 DRIVER (auto. mfg.; automotive ser.) alternate titles: car driver

Drives completed motor vehicle off assembly line to specified repair, shipping, or storage area. May test performance of parts, such as lights, horn, and windshield wipers. May drive completed vehicle onto railroad freight car and secure vehicle for shipping. May drive customer's vehicle to and from service area of repair shop and be designated Car Jockey (automotive ser.).
GOE: 05.08.03 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 90

919.683-018 RAIL-TRACTOR OPERATOR (steel & rel.) alternate titles: ingot buggy operator

Drives electric car mounted on rails, to transport ingots and slabs from soaking pits to mill-approach-conveyor table: Moves lever controls to position car for receiving material from soaking pit. Drives car to mill-approach-conveyor table. Pulls lever to raise tilting cradle of car and deposit material on table. May operate car by remote control from pulpit and be designated Table Operator (steel & rel.).
GOE: 05.11.04 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

919.683-022 STREET-SWEEPER OPERATOR (government ser.) alternate titles: tractor-sweeper driver

Drives sweeping machine that cleans streets of trash and other accumulations: Fills water tank of machine from hydrant. Drives sweeper along street near curb. Moves controls to activate rotary brushes and water spray so that machine automatically picks up dust and trash from paved street and deposits it in dirt trap at rear of machine. Pulls lever to dump refuse in piles at curb for removal. May be employed by industrial plant, shopping center, or other establishment to drive modified sweeper through parking lots, factory aisles, or along private roads and be designated Power-Sweeper Operator (any industry). May drive machine that sucks leaves into vacuum chamber and be designated Leaf-Sucker Operator (government ser.). May drive vehicle equipped with rotating brushes to remove sand and litter from newly constructed highways and be designated Sweeper Operator, Highways (construction).
GOE: 05.11.01 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

919.683-026 TRACKMOBILE OPERATOR (any industry)

Operates trackmobile to transport railcars or trailers to designated station areas: Drives trackmobile onto track and aligns steel wheels with rails. Moves lever that activates hydraulic device to raise rubber tires allowing steel wheels of vehicle to rest onto rails. Moves levers to couple trailers or railcars. Drives trackmobile to move railcars or trailers to specified areas, such as weighing, loading, and cleaning.
GOE: 05.08.02 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

919.683-030 DRIVER, STARTING GATE (amuse. & rec.)

Steers vehicle equipped with rear folding barrier (gate) that allows alignment and positioning of horses abreast of gate prior to official start of sulky (harness) race. Accepts control of vehicle acceleration from HORSE-RACE STARTER (amuse. & rec.) 153.267-010 who simultaneously actuates folding of gate at starting point of race. Drives vehicle off track to clear path for race.
GOE: 05.08.03 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 86

919.687-010 CHECKER (motor trans.)

Counts and herds cattle, hogs, or sheep as they are unloaded from shipping trucks in stockyard and verifies information on ticket, such as number of head, identifying markings on livestock, and designated commission agency: Marks time of arrival on ticket and gives it to shipper as receipt. Herds livestock into separate pens according to markings which identify commission agency to which stock is assigned. May mark identification on stock, using shears or chalk.
GOE: 05.09.01 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

919.687-014 CLEANER II (any industry)

Cleans interiors and exteriors of transportation vehicles, such as airplanes, automobiles, buses, railroad cars, and streetcars: Cleans interior of vehicle, using broom, cloth, mop, vacuum cleaner, and whisk broom. Cleans windows with water, cleansing compounds, and cloth or chamois. Replenishes sanitary supplies in vehicle compartments. Removes dust, grease, and oil from exterior surfaces of vehicles, using steam-cleaning equipment, or by spraying or washing vehicles, using spraying equipment, brush or sponge. May polish exterior of vehicle. May fumigate interior of vehicle, using fumigating gases or sprays. May be designated according to type of vehicle cleaned as Airplane Cleaner (air trans.); Automobile Washer (automotive ser.); Bus Cleaner (automotive ser.); Car Cleaner (r.r. trans.); Coach Cleaner (r.r. trans.); Truck Washer (dairy products). When cleaning aircraft interiors may be designated Cabin-Service Agent (air trans.).
GOE: 05.12.18 STRENGTH: M GED: R2 M1 L1 SVP: 1 DLU: 77

919.687-018 SAFETY INSPECTOR, TRUCK (automotive ser.; motor trans.)

Inspects diesel and gasoline motortrucks to ensure that trucks are equipped with accessories prescribed by law: Inspects truck for accessories, such as tools, chains, flares, and first aid kit. Inspects air lines and electric circuits, and reports needed repairs. May drive truck inside terminal yard and garage and position trailer for repair, loading, or unloading. May service vehicle with fuel and water.
GOE: 05.07.01 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

919.687-022 SUPPLIES PACKER (any industry) alternate titles: pack-train driver

Transports supplies and equipment by pack animals to places inaccessible by other means of transportation. Assembles equipment, loads and straps it on animals to prevent dislodgment during transit. Leads animals to destination.
GOE: 03.04.05 STRENGTH: H GED: R3 M2 L2 SVP: 5 DLU: 77

92 PACKAGING AND MATERIALS HANDLING OCCUPATIONS

This division includes occupations concerned with preparing and arranging materials and products in bulk and nonbulk forms for distribution or storage; moving and loading or unloading equipment, materials, and products; operating or tending filling, packing, and wrapping machines or conveyors; driving forklifts, lumber carriers, and related material-handling machinery and equipment; and using scoops, handtrucks, and wheelbarrows to load and move materials.

920 PACKAGING OCCUPATIONS

This group includes occupations concerned with assembling containers; pouring and placing materials and products into containers; covering articles or goods with cellophane, paper, and other wrapping materials; cleaning, closing, labeling, stenciling, and stacking articles and containers; and operating or tending filling, packing, or wrapping machines.

920.130-010 SUPERVISOR, PACKING (sugar & conf.)

Supervises and coordinates activities of workers engaged in packing sugar: Reads job order schedules to ascertain grist, type of containers, and packing priority. Directs changing of screens and machine setup according to work order specifications. Observes process stations to verify conformance of packaging, sugar sampling, and package weighing to quality control standards. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.04.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

920.132-010 PACKAGING SUPERVISOR (any industry)

Supervises and coordinates activities of workers engaged in packaging products and materials for storage or shipment: Studies production order to ascertain type and quantity of product, containers to be used, and other packaging requirements. Inspects products prior to packaging and returns rejected products to production departments. Observes packaging operations and inspects containers to verify conformance to specifications. Starts, adjusts, and repairs packaging machinery, or notifies maintenance department. Trains workers in operation of equipment. Requisitions containers and other supplies for delivery to work stations. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be designated according to type of container filled as Barrel

Filler, Head (any industry); Bottling Supervisor (any industry); Can Supervisor (any industry).
GOE: 06.04.01 STRENGTH: L GED: R4 M2 L3 SVP: 6 DLU: 86

920.132-014 SUPERVISOR, CARTON AND CAN SUPPLY (beverage)
Supervises and coordinates activities of workers engaged in forming cartons and stamping date on beer cans: Adjusts conveyors and can dating and carton forming machines. Verifies cans, can dates, and cartons against order specifications. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

920.137-010 PACKING-HOUSE SUPERVISOR (agriculture; wholesale tr.) alternate titles: house supervisor; packing-shed supervisor
Supervises and coordinates activities of workers engaged in receiving, grading, storing, and shipping fruits and vegetables: Trains workers in grading and packing procedures in accordance with customers' specifications. Inspects storage area to determine freshness of produce and indicates produce to be packed and removed. Inspects packaged produce for conformance to customers' specifications. Directs workers engaged in icing loaded railroad cars or trucks. Performs other duties as described under SUPERVISOR (any industry) Master Title. May repair packing equipment and machinery. May supervise workers engaged in constructing packing crates and boxes. May specialize in packing specific produce, such as apples, citrus fruit, or potatoes, or be designated according to produce packed as Banana-Ripening-Room Supervisor (wholesale tr.).
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 79

920.137-014 SORTING SUPERVISOR (brick & tile)
Supervises and coordinates activities of workers engaged in sorting tile and brick according to color and grade and in packing materials in cartons. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R4 M2 L3 SVP: 6 DLU: 77

920.137-018 SUPERVISOR (sugar & conf.)
Supervises and coordinates activities of workers engaged in inspecting boxes of packaged chewing gum, wrapping boxes in cellophane, packing boxes in cartons, or unwrapping packages of defective gum. Trains new employees and evaluates work performance. Performs duties as described under SUPERVISOR (any industry) Master Title. May be designated according to process as Supervisor, Inspection Room (sugar & conf.); Supervisor, Unwrapping Room (sugar & conf.); Supervisor, Wrapping Room (sugar & conf.).
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 5 DLU: 77

920.137-022 SUPERVISOR, FILLING-AND-PACKING (paint & varnish)
Supervises and coordinates activities of workers engaged in filling, coding, labeling, and packaging containers of paints and related products. Plans filling and labeling methods, according to knowledge of operations and type and quantity of product. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.04.01 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

920.137-026 SUPERVISOR, PACKING AND WRAPPING (any industry)
Supervises and coordinates activities of workers engaged in packing or wrapping products and materials to protect them from damage during storage or shipment: Studies production orders and confers with other department supervisors to ascertain type and quantity of product to be shipped and packing requirements, such as containers or wrapping material to be used, and to coordinate department's activities with other departments. Inspects products prior to packing and wrapping and places rejected products aside or returns them to production departments. Observes packing and wrapping operations to verify conformance to specifications. Trains workers in packing and wrapping procedures. Performs other duties as described under SUPERVISOR (any industry) Master Title. May supervise workers engaged in cleaning upholstered furniture of foreign material prior to packing and be designated Supervisor, Inspect, Clean-Up, And Wrap (furniture). May supervise workers engaged in final assembly of mirrors before packing and be designated Supervisor, Packing (glass products).
GOE: 06.04.01 STRENGTH: M GED: R4 M2 L3 SVP: 7 DLU: 86

920.380-010 SETTER, JUICE PACKAGING MACHINES (can. & preserv.)
Sets up and adjusts can filling and sealing machines and caser machines to package juice in juice processing establishment: Selects filler tubes according to size of cans to be filled and installs and adjusts tubes in filling and sealing machines, following production specifications and using wrench. Adjusts tension controls on filling and sealing machines to regulate pressure of filling, capping, and sealing mechanisms, following operation manual and using screwdriver. Sets and adjusts caser machine controls that position feed hopper, folding and pressure rollers, and conveyor guides to encase products in conformity with size and shape specifications, using mechanic's handtools. Starts machines, monitors filling, sealing, and casing operations, and adjusts machines to conform with operations specifications and production requirements. Replaces worn or damaged machine parts. Dismantles, cleans, and reassembles machines. Cleans machines and lubricates moving parts [MACHINE CLEANER (any industry) 699.687-014]. Occasionally installs cables to connect machines to power source, using electrician's handtools.
GOE: 06.01.02 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 86

920.387-010 INSPECTOR, PACKAGING MATERIALS (pharmaceut.) alternate titles: packaging inspector
Examines, measures, and tests containers and materials used to package drug and cosmetic products for conformity to specifications: Examines and rejects tubes, bottles, cartons, caps, stoppers, and related materials containing such flaws as chips, cracks, torn labels, or discoloration. Measures containers and cap samples to verify specified dimensions, using micrometer, gauge, or caliper. Fills containers with liquid and pours into graduate to verify container capacity. Records inspection or test results. May test components, such as stoppers and seals, using hardness tester. May count, pour, or weigh out contents of sample containers to verify data on label. May determine viscosity of fluids, using viscometer. May convert liquid measure to avoirdupois weight, using calculating machine or slide rule.
GOE: 06.03.01 STRENGTH: L GED: R3 M3 L2 SVP: 4 DLU: 78

920.482-010 ICICLE-MACHINE OPERATOR (dairy products)
Operates machine to form, fill, and seal tubelike cellophane container with flavored sweet water to make icicle: Adds flavor extract to sweet water in tank according to formula. Connects hose lines from tank to icicle machine. Mounts roll of cellophane on spindle of machine and threads end of cellophane through guide rollers into feed mechanism. Adjusts spindle counterweights to regulate tension on cellophane. Starts machine and turns valves to admit sweet water into spout of machine. Turns on heating element that fuses seams of cellophane. Moves levers to control flow of icicle fluid into machine. Removes packaged icicles from discharge end of machine. Places icicles into containers and places containers on conveyor.
GOE: 06.02.15 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

920.586-010 MASKING-MACHINE FEEDER (plastic-synth.)
Feeds machine that covers plastic sheets with paper to protect sheets during final processing and shipping: Feeds sheets between rollers of masking machine. Lifts masked sheets from discharge end of machine and places sheets on trucks. Segregates masked sheets according to quality as indicated on tickets. Places masked sheet over lighted table or rack to make previously marked defective areas visible, and traces outlines onto masked surface, using crayon.
GOE: 06.04.02 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

920.587-010 CLOTH-BOLT BANDER (textile) alternate titles: backer and bander, cloth; folded-cloth taper; taper
Fastens paper bands around bolts of cloth preparatory to wrapping or shipping: Places bolt of cloth on table over paper bands stacked in slots. Folds edge of cloth under and fastens band near each end of bolt, using tape or glue. Marks yardage on end of center board and records yardage according to lot number. May wrap cloth. May paste labels on center board.
GOE: 06.04.38 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

920.587-014 LABEL CODER (any industry) alternate titles: label marker
Cuts notches in container or bottle labels to indicate data, such as type, batch, date, and destination of product, following predetermined code: Turns setscrews to space and lock blades of notching device according to coding guide, using ruler. Clamps stack of labels on bed of notching device and pushes bed forward to force labels against blades. Prepares label-coding report. May insert or remove symbols, using tweezers to set up carton-coding wheels. May wash defective labels from bottles.
GOE: 06.04.26 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

920.587-018 PACKAGER, HAND (any industry) alternate titles: hand packager
Packages materials and products manually, performing any combination of following duties: Cleans packaging containers. Lines and pads crates and assembles cartons. Obtains and sorts product. Wraps protective material around product. Starts, stops, and regulates speed of conveyor. Inserts or pours product into containers or fills containers from spout or chute. Weighs containers and adjusts quantity. Nails, glues, or closes and seals containers. Labels containers, container tags, or products. Sorts bundles or filled containers. Packs special arrangements or selections of product. Inspects materials, products, and containers at each step of packaging process. Records information, such as weight, time, and date packaged. May stack, separate, count, pack, wrap, and weigh bakery products and be designated Bakery Worker (bakery products). May apply preservative to aircraft and spaceship parts, package parts for shipment, and be designated Wrapper and Preserver (aircraft mfg.). May be designated according to whether high-production or small-lot packaging as Fancy Packer (retail trade; wholesale tr.); Packaging-Line Attendant (any industry); specific packaging duty performed as filling, wrapping, packing, labeling, and container cleaning as Sack Sewer, Hand (any industry); kinds of equipment used or product packaged as Candle Wrapper (fabrication, nec); Carton Stapler (any industry); or whether packager performs associated duties as final assembly before packaging product as Novelty-Balloon Assembler And Packer (rubber goods). May weigh and package meat in retail store and be designated Meat Wrapper (retail trade). May be designated: Bagger (any industry); Bow Maker, Gift Wrapping (any industry); Box Maker, Cardboard (any industry); Box Wrapper (any industry); Bundler (any industry); Candy Packer (sugar & conf.); Caser, Rolled Glass (glass mfg.); Coil Strapper (steel & rel.); Container Filler (any industry); Filler (any industry); Furniture Packer (retail trade); Grader, Sausage And Wiener (meat products); Guncotton Packer (chemical); Inserter, Promotional Item (any industry); Inspector-Packager (any industry); Lidder (any industry); Mattress Packer (furniture); Packager, Meat (meat products); Packer, Dried Beef (meat products); Packer, Foamed-In-Place (any industry); Packer, Sausage And Wiener (meat products); Piece-Goods Packer (textile); Scaler, Sliced Bacon (meat products); Sponge Packer (wholesale tr.); Stamper (any industry); Table Worker (any industry); Tube Packer (rubber tire); Wrapper (any industry); Wrapper,

Hand (can. & preserv.); Wrapping Remover (any industry). Workers who tend packaging machines are classified under PACKAGER, MACHINE (any industry) 920.685-078.
GOE: 06.04.38 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 88

920.587-022 SAMPLE CLERK, HANDKERCHIEF (garment)

Packs sample kits containing specified handkerchief styles for sales personnel. Records samples assigned to each salesperson. Sends soiled samples to be cleaned and returns samples to sales personnel.
GOE: 06.04.38 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

920.587-026 MARKER, SEMICONDUCTOR WAFERS (electron. comp.)

Scribes identifying information onto semiconductor wafer, using metal stylus (scribe): Obtains container loaded with semiconductor wafers and removes wafers from container, using tweezers. Marks lot number and description number in designated area of wafers, following specifications and using metal stylus. Records production data. Cleans containers, using soap and water.
GOE: 06.04.37 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 86

920.665-010 CARTON-PACKAGING-MACHINE OPERATOR (tobacco) alternate titles: packing-machine inspector

Tends machine that packs and seals packaged tobacco products into cartons: Examines packaged products on conveyor to detect defects, such as defective folds or seams in wrappers or tear tape, offcentered stamps, or dents in cans. Removes defective packages and notifies CIGARETTE-PACKING-MACHINE OPERATOR (tobacco) or TOBACCO-PACKING-MACHINE OPERATOR (tobacco). Observes flow of cartons into machine and removes defective cartons. Notifies MACHINE ADJUSTER (tobacco) of machine malfunction. May form and place cartons on machine. May turn setscrews to set carton-holding guides to accommodate cartons of various sizes. May be known according to product packaged as Cigarette-Boxing-Machine Operator (tobacco). Workers who package product by hand are classified under PACKER (tobacco).
GOE: 06.04.38 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

920.665-014 RACK-ROOM WORKER (beverage) alternate titles: corker; filler; racker; stacker; stamper

Tends machines that fill metal kegs with beer in keg-filling (racking) room of brewery: Pushes metal keg or barrel onto conveyor leading to racking machine. Lifts barrel from conveyor and positions barrel on machine. Lowers filling arm of counter-pressure filling machine (racker), and fits nozzle into bung. Turns valves that pressurize barrel and start flow of beer. Turns valve that releases filling arm when sight glass indicates barrel is full and raises arm. Pounds wooden plug into bung, using mallet. Presses pedal to roll barrel onto conveyor. Affixes revenue stamp over taphole, using staples or glue. Rolls barrel from conveyor to loading chute or storage area. Washes machine and floor, using hose.
GOE: 06.04.38 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

920.667-010 CIGARETTE-PACKAGE EXAMINER (tobacco) alternate titles: cellophane-wrapping examiner; package reinspector; packing-machine inspector

Examines packages of cigarettes to detect packing or wrapping defects: Gathers sample package from each packing and wrapping machine and weighs package to determine whether weight of cigarettes and package conforms to standards. Pulls tear tape, removes cellophane wrapper, and examines glue line to detect defective gluing. Opens packages with defective folding, printing, or stamp alignment and returns cigarettes for rewrapping. Records weight and number of defective packages from each machine. Notifies CELLOPHANE WRAPPER, MACHINE (any industry) or CIGARETTE-PACKING-MACHINE OPERATOR (tobacco) of defects.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 4 DLU: 77

920.667-014 SNUFF-CONTAINER INSPECTOR (tobacco)

Examines filled snuff containers, such as cans, tumblers, and casings to determine if weight of container and wrapping conform to company standards. Weighs random containers on scales to detect variations from weight tolerances. Examines containers for defects, such as loosely sealed or misplaced labels and stamps. Discards defective containers for salvage, and notifies packing worker of defects. May replace missing labels on containers.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

920.680-010 FILLING-MACHINE SET-UP MECHANIC (food prep., nec)

Sets up filling and sealing machines to pack potato chips in bags: Selects spouts according to size of bags being filled and attaches spouts to circular conveyor of filling machine, using handtools. Adjusts height of conveyor that moves filled bags from spouts of circular conveyor. Sets filling-machine scales according to weight specified for filled bags. Starts heating unit of sealing machine and sets date on stamping unit of sealing machine. Fills inkwell of stamping unit and regulates flow of ink onto stamp pad. Places container under conveyor to catch chips from overflow of filling machine and dumps chips into filling-machine hopper. Distributes supplies, such as bags and boxes, to workers engaged in tending machines. Transports boxes of potato chips to storage area, using handtruck.
GOE: 06.01.02 STRENGTH: M GED: R3 M1 L2 SVP: 3 DLU: 77

920.684-010 CRATER (any industry) alternate titles: boxer; carpenter, packing; case maker

Fabricates wooden crates or boxes, using woodworking handtools and powered tools, and packs such items as machinery, vehicles, or other large or odd-shaped products: Reads blueprints, shipping notices, and other specifications, and inspects product to determine size and shape of container, materials to be used, and types of supports and braces to be used. Lays out dimensions on materials with ruler, measuring tape, and pencil. Saws materials to size, using handsaws and powered saws. Assembles materials, using nailing or stapling machine, screws, bolts, glue, and handtools. Places product in container, manually or using hoist. Bolts heavy pieces to bottom of container or skid. Wraps and pads product with excelsior, paper or other packing material. Builds crate around large or odd-shaped articles. Nails cover on crate. Wraps and tightens metal bands around crate, using banding equipment. Attaches identification labels or stencils containing such information as shipping destination, weight, and type of product contained on crate. Repairs broken crates. May cover military tanks and other equipment with neoprene or other protective covering to protect them during shipment. May count items to be packed to ensure compliance with shipping orders. May weigh loaded crate. May move container to shipping area, and move lumber, paper, and other wrapping supplies to crating area, using hand or industrial truck. May sharpen saw blades, using file. May be designated according to item crated as Machinery Crater (machinery mfg.); Refrigerator Crater (svc. ind. mach.); or specific duty performed as Crate Repairer (any industry).
GOE: 06.04.38 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 87

920.685-010 BALING-MACHINE TENDER (any industry) alternate titles: baler operator; baling-press operator; press operator; tie puller; waste baler

Tends machine that compresses and binds paper, cloth, or other loose materials to facilitate handling: Trucks or carries materials to baling machine. Places materials in compression chamber of baling machine. Moves lever or electric switch, causing ram to compress material. Threads tie bands around bale and twists or clamps ends of bands to tighten bands. Opens compression chamber doors and removes bale from machine. May truck bales to storage place, weigh bales, and record weight. May line compression chamber of baling machine with paper, burlap, or other covering before baling. May sew or tie wrapping in place after baling, and stencil bales. May be designated according to material baled as Cloth Baler (textile); Feather Baler (text. prod., nec); Metal Baler (any industry); Paper Baler (paper goods); Rag Baler (laundry & rel.); Tobacco Baler (tobacco); Corn-Husk Baler (grain-feed mills); Hair Baler (leather mfg.); Leather Baler (leather mfg.); Offal Baler (leather mfg.); Scrap Baler (nonfer. metal; steel & rel.).
GOE: 06.04.38 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 81

920.685-014 BANDER-AND-CELLOPHANER, MACHINE (tobacco)

Tends machine that wraps trademark band and cellophane wrapper around cigars: Loads hopper with cigars and magazine with trademark bands. Places roll of cellophane on spindle and threads cellophane through guides and tension rollers into machine. Starts heating unit that seals cellophane wrapper. Starts machine and turns thumbscrews to set guides and regulate tension of cellophane fed into machine. Inspects cigars for defective banding or wrapping. Packs wrapped cigars in boxes.
GOE: 06.04.38 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

920.685-018 BB SHOT PACKER (ordnance) alternate titles: shot-tube-machine tender

Tends machine that automatically fills paper tubes with BB shot for air rifles and crimps tube ends: Starts machine and observes action to detect malfunctioning. Fills stations on dial plate manually with tubes from hopper when automatic feed skips. Removes damaged tubes from feeder plate. Examines BB shot tubes for grease smears, tears, and malformed ends. Stamps cardboard box flats with identifying data. Folds flats into boxes and fills with shot-filled tubes. Places filled boxes on rollers for sealing.
GOE: 06.04.38 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

920.685-022 BLOCKER (tex. prod., nec)

Tends machine that automatically fastens cardboard disks to sides of core or tube to form reel: Places bottom half of disk on machine bed. Places filled roll of ribbon on disk, and top half of disk on roll. Trips pedal to bring hammer down and press disk on core to complete reel. Stamps and packs reels in boxes. May adjust machine.
GOE: 06.04.38 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

920.685-026 BOTTLE PACKER (beverage) alternate titles: caser

Tends machine that inserts filled beer bottles into cardboard cartons: Positions empty carton on platform below automatic packer. Presses pedal to raise platform to packer level and to deposit bottles in carton. Releases pedal and pushes full carton onto conveyor. Straightens or resets partitions in carton.
GOE: 06.04.38 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

920.685-030 CANDLE WRAPPING-MACHINE OPERATOR (fabrication, nec)

Tends machine that wraps candles in plastic material, decorative paper or foil: Installs roll of wrapping material in machine, and threads end of roll through machine guides. Moves controls to set suction pickup mechanism for specified vacuum to produce uniformly wrapped product without damage to wrapper. Places candles in cups of rotating machine table, replenishing supply as candles are automatically wrapped. May pack candles in box.
GOE: 06.04.38 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

920.685-034 CARDER (any industry) alternate titles: card assembler; carding-machine operator

Tends machine that stitches articles, such as hairpins, hooks and eyes, knitting needles, and snap fasteners, onto cards for sales presentation: Mounts cones

of threads onto spindles and threads ends through guides. Stacks cards in gravity fed hopper. Starts machine and observes machine for jams as articles drop down feeder tubes and are stitched onto moving card. Cuts stitching between cards to separate cards, using scissors, and stacks filled cards. May attach articles on cards, using staples, elastic, or metal fasteners. May be designated according to type of article mounted as Metal-Hairpin Carder (any industry); Pin Inserter (any industry).
GOE: 06.04.38 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

920.685-038 CASE PACKER AND SEALER (tobacco) alternate titles: container-packer operator

Tends machine that packs and seals cartons of cigarettes in shipping cases: Starts machine and conveyor belt and observes flow of cartons on conveyor to determine whether cartons are filled and sealed according to specifications and that date stamp is legible. Removes defective cartons. Shapes collapsible cases and places open end of case over mouthpiece of packing unit, or loads blank shipping cases onto feed magazine. May adjust counting and weighing mechanism on packing machine.
GOE: 06.04.38 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

920.685-042 CASE-LOADER OPERATOR (beverage) alternate titles: can-bander operator; six-pack-loader operator; six-pack packer

Tends machines and equipment that pack cartons with beer containers for shipment, using any of following methods: (1) Stacks flattened six-pack cartons in rack of machine. Starts machine that automatically opens carton, loads carton with cans of beer, and closes and moves carton onto conveyor. Clears jams when machine automatically stops and presses button to restart machine. (2) Opens and places cartons on conveyor of machine that automatically loads and seals cartons with four six-packs. (3) Folds back flaps of carton bottom and holds carton against chute of loading machine. Moves lever of machine to load carton with four six-packs and drops filled carton onto conveyor for transfer to sealing machine. (4) Starts machine that automatically receives, assembles, loads, and seals cartons. May turn setscrews to adjust such devices as carton opener and gluer.
GOE: 06.04.38 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

920.685-046 CIGAR BRANDER (tobacco)

Tends machine that stamps trademark on cigar wrapper: Fills ink well on machine. Positions cellophane-wrapped cigars on conveyor leading into machine and starts machine. Places trays at delivery end of machine to catch branded cigars and removes filled trays. Observes machine operation to determine that stamping conforms to specifications. Cleans ink roller and type, using ink solvent and rags. May tend similar machine that brands directly on cigar.
GOE: 06.04.37 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

920.685-050 CIGARETTE-PACKING-MACHINE OPERATOR (tobacco) alternate titles: packaging operator

Tends machine that forms cigarette packages, fills packages with cigarettes, wraps packages with cellophane, and attaches stamps: Pulls lever to lock tray of cigarettes over hopper and removes bottom of tray to allow cigarettes to fall into hopper. Fills label hopper and stamp hopper, and pours paste into receptacle. Places spool of paperbacked foil on spindle and threads foil through rollers and guides. Starts machine and inspects packages for defects in folding, centering of labels, or gluing of stamp and wrapper. Cleans machine, using brush, and turns thumbscrews to adjust guides and rollers. May tend machine with cellophane-wrapping attachment [CELLOPHANE WRAPPER, MACHINE (any industry)].
GOE: 06.04.38 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

920.685-054 COTTON-ROLL PACKER (protective dev.)

Tends machine that rolls absorbent surgical cotton into rolls and packs rolls in cardboard cartons for shipment: Places empty shipping cartons on conveyor rollers. Pushes button to start automatic cotton-layer machine that rolls absorbent cotton between paper. Inserts rolled cotton in cardboard containers. Fills shipping cartons with containers and places glued paper tape on tops to seal cartons.
GOE: 06.04.38 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

920.685-058 FEED WEIGHER (grain-feed mills) alternate titles: feed elevator worker

Tends machine that fills and sews tops of sacks of stockfeed: Shakes bag open, places bag under chute, and presses pedal that releases preweighed batch of feed into sack. Lifts filled sack on bag-closing machine conveyor, folds end of sack, and clamps sewing unit in place. Starts sewing device which automatically sews tops of bag. May hand sew tops of filled sacks. May weigh filled sacks, using platform scales.
GOE: 06.04.38 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

920.685-062 HYDRAULIC-PRESS OPERATOR (tobacco) alternate titles: hogshead-press operator; prize jacker

Tends hydraulic press that packs tobacco into hogsheads (containers) for storage or shipment: Reads scales to determine whether specified amount of tobacco has been packed in hogshead and *charger*. Pulls hogshead and charger from chute or packing line, using metal hook, and positions hogshead under ram of press. Pushes lever to lower ram or to raise hogshead against ram to press tobacco into hogshead. Removes hogshead from press and pulls charger from hogshead onto rack, using hook, or raises charger from hogshead, using electric hoist. May place metal reinforcement corset around hogshead to prevent staves from bursting under pressure. [Workers who tend machines that fill and ram-pack hogsheads are classified as PACKER OPERATOR, AUTOMATIC (tobacco)].
GOE: 06.04.38 STRENGTH: H GED: R2 M1 L2 SVP: 2 DLU: 77

920.685-066 LABELING-MACHINE OPERATOR (recording)

Tends machine that attaches gummed identification labels to phonograph records: Places labels on machine spindle and turns on heating element in ram of machine. Positions record on machine bed and presses pedal to start labeling mechanism. Removes labeled record while simultaneously positioning unlabeled record on machine. Repeats operations to label reverse side of record. May tend machine that attaches labels and punches hole in center of records in same operation.
GOE: 06.04.37 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

920.685-070 LACE-ROLLER OPERATOR (leather prod.) alternate titles: belt roller

Tends machine that winds leather belting or shoelaces onto cardboard or wooden spool for shipment: Mounts and clamps roll of leather stripping on spindle of winding machine. Slides empty spool onto winding axle, and threads leather between pressure rollers, under machine counter, and onto spool. Starts machine that winds leather onto spool. Observes machine counter and stops machine after specified amount of leather has been wound onto spool. Cuts leather from roll, using knife. Removes spool from winding axle and packs spool in shipping container or wraps spool in paper.
GOE: 06.04.05 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

920.685-074 PACKAGE SEALER, MACHINE (any industry)

Tends machines that seal filled cardboard boxes, cartons, paper, cellophane, or plastic bags: Fills glue and water reservoir. Inserts rolls of paper tape into holders. Starts sealing machine and observes operation to detect faulty sealing and prevent conveyor jamming. Feeds cartons into machine and removes cartons from discharge conveyor. Feeds filled cellophane or glassine bags into machine that heats and seals top of bag. May adjust holding guides and conveyor line tripping mechanism that regulates movement of carton through gluing and flap-turning mechanism. May pack containers. May stamp identifying data on carton. May inspect contents of package to verify size, color, or brand of article. May be designated according to product packaged as Cigarette-Carton Sealer (tobacco); type of machine operated as Box-Sealing-Machine Catcher (any industry); Hot-Sealing-Machine Operator (any industry); or task performed as Box-Sealing-Machine Feeder (any industry).
GOE: 06.04.38 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 81

920.685-078 PACKAGER, MACHINE (any industry) alternate titles: machine operator, packaging

Tends machine that performs one or more packaging functions, such as filling, marking, labeling, banding, tying, packing, or wrapping containers: Starts machine and observes operation to detect malfunctions of machine. Stops machine and reports malfunction to supervisor. Makes minor adjustments or repairs, such as opening valves, changing forming and cutting dies, setting guides, or clearing away damaged product containers. Inspects filled container to ensure that product is packaged according to specifications. May feed product to conveyors, hoppers, or other feeding devices, and unload packaged product. May replenish packaging supplies, such as wrapping paper, plastic sheet, boxes, cartons, glue, ink, or labels. May mount supplies on spindles or place supplies in hopper or other feeding devices. May position and hold container in machine and depress pedal, press button, or move lever to clean, glue, label, sew, or staple container. May cut stencils and stencil information on container, such as lot number or shipping destination. May tally number of units of product packaged or record information, such as size, weight, and type of products packaged. May be designated according to specific function or functions performed by machine tended as Bottle Washer, Machine (any industry) II; Capping-Machine Operator (any industry); Container-Maker-Filler-Packer Operator (any industry); Filling-Machine Operator (any industry); Labeler, Machine (any industry); Wrapping-Machine Operator (any industry). May be designated: Aerosol-Line Operator (any industry); Bag Printer (chemical); Blister-Packing-Machine Tender (any industry); Bread-Wrapping-Machine Feeder (bakery products); Candy-Wrapping-Machine Operator (sugar & conf.); Carton-Gluing-Machine Operator (any industry); Cellophane Wrapper, Machine (any industry); Cover Marker (paint & varnish); Glassine-Machine Tender (any industry); Packing-Machine Tender (any industry); Palletizer Operator (any industry) II; Sack Sewer, Machine (any industry); Silk Screener (optical goods); Spring Crater (furniture); Stencil Cutter, Machine (any industry); Tea-Bag-Machine Tender (food prep., nec); Tire Wrapper (automotive ser.; rubber tire); Tube-Filling Machine Operator (can. & preserv.; chemical); Tying-Machine Operator (any industry); Wrapping-And-Packing-Machine Operator (any industry). Workers who package products by hand are classified under PACKAGER, HAND (any industry) 920.587-018. May act as lead worker.
GOE: 06.04.38 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 86

920.685-082 PACKER OPERATOR, AUTOMATIC (tobacco) alternate titles: press operator, automatic

Tends packing machine and press that fill containers with tobacco: Positions empty container under *charger* and pushes button to lower charger onto container. Starts flow of tobacco into container and observes signal lights to determine stage of filling-packing. Reads scales to determine when specified weight

is attained. Pushes buttons to lower hydraulic ram into container to press tobacco and to divert flow of tobacco to another container. Raises ram and charger and removes container. May record grade and district (locality where grown) on ticket and staple ticket onto container. [Workers who tend machines that only ram-pack hogsheads (containers) are classified as HYDRAULIC-PRESS OPERATOR (tobacco)].
GOE: 06.04.15 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

920.685-086 PACKING-MACHINE-PILOT CAN ROUTER (tobacco) alternate titles: pilot-can router

Tends machine that fills chute of snuff-filling or pipe-tobacco-filling machine with cans. Shifts lever to direct flow of cans into chutes.
GOE: 06.04.38 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

920.685-090 ROLL FINISHER (paper & pulp) alternate titles: roll wrapper

Tends machines to wrap and seal rolls of paper for shipment: Places paper roll and wrapping roll on steel rollers opposite each other, using hoist. Glues end of wrapping roll on paper roll, moves lever to wind wrapping paper around paper roll, and cuts and glues wrapping paper at end of wrap, using knife and brush. Crimps wrapping paper over ends of paper roll and glues paper heads and caps over ends to seal. Pushes wrapped-paper roll between electrically heated pressure plates of capping machine and pulls lever to move plates against ends to seal heads. May insert wooden plug in ends to maintain contour of wrapped roll. May stencil shipping information on wrapped roll and attach labels. May roll or truck wrapped roll to weighing scale. May wrap and seal pony (small) rolls of paper and be designated Pony-Roll Finisher (paper & pulp).
GOE: 06.04.38 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

920.685-094 SNUFF-PACKING-MACHINE OPERATOR (tobacco)

Tends machine that fills cans with snuff and seals lids on cans: Presses buttons to start or stop machine. Observes operation of machine for malfunctions and to determine if cans are filled and sealed according to specifications. May fill hopper of machine with lids. May weigh random sample of filled can to determine if weight specifications are met. May turn handwheel to increase or decrease rate of feed when filled cans deviate from weight specifications.
GOE: 06.04.38 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

920.685-098 TOBACCO-PACKING-MACHINE OPERATOR (tobacco) alternate titles: packing-and-stamping machine operator

Tends machines that fill packages with tobacco: Fills wrapper magazine with wrappers or mounts roll of paper on machine spindle and pulls end of paper through rollers to folding mechanism. Turns screw or wheel to set automatic weighing mechanism to feed specified amount of tobacco into each package. Notifies FEEDER-CATCHER, TOBACCO (tobacco) and PACKING-MACHINE CAN FEEDER (tobacco) to start feeding tobacco and tins to machine. Observes filling of packages to ensure each pack is filled with tobacco. Inspects packages for defects, such as torn paper, dents in tins, loose tops on tins, and defective sealing. Weighs packages periodically to verify accuracy of weighing mechanism. May be designated according to tobacco or container packed as Bag-Filler-Machine Operator (tobacco); Can-Filling-Machine Operator (tobacco); Pouch-Making-Machine Operator (tobacco); Smoking-Tobacco-Packing-Machine Hand (tobacco).
GOE: 06.04.38 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

920.685-102 WRAPPER (metal prod., nec) alternate titles: rewinder

Tends rewinding machine that winds wire-screen cloth from loose rolls into tight rolls for shipment: Attaches end of roll of wire to winding mechanism. Starts machine and examines screens for defects during operation. Stops machine and removes roll when meter indicates specified footage has been wound.
GOE: 06.04.38 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

920.685-106 CUBING-MACHINE TENDER (concrete prod.)

Tends machine that stacks and binds cured concrete blocks into packages of specified dimensions for shipping: Places strapping tape on machine feed spindles and threads tape through guides and rollers of machine. Presses buttons to activate conveyor that positions blocks under binding mechanism of machine, and flips switch to start machine that automatically wraps strapping tape around specified number of blocks to form cube-shaped packages. Presses buttons to set machine pressure gauges that regulate tension of strapping tape. Observes blocks on conveyor to detect imperfections, such as chips, cracks, or discolorations, and replaces defective blocks. Manually rearranges blocks on conveyor, when required, to maintain prescribed order. Stops conveyor and machine when jams occur and clears jams, using metal bar. Adjusts machine guides to package blocks of different styles and sizes, using wrench. May attach identification tags to packages. May tend machine that stacks and binds brick into packages and be designated Strapping-Machine Tender (brick & tile).
GOE: 06.04.38 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 86

920.685-110 BUNDLE TIER AND LABELER (saw. & plan.)

Tends bundling machine that ties and labels stacks of lumber: Fills machine hoppers with labels and staples. Depresses pedal to activate conveyor that brings stacks of lumber to machine. Slides stack of lumber onto machine conveyor. Pushes stack into machine that automatically clamps boards together and staples label on end of boards. Ties cord around stack while stack is clamped in machine to form bundle. Pushes bundle along conveyor after bundle is automatically released from machine. May tally number of bundles on production sheet.
GOE: 06.04.38 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 81

920.685-114 COTTON BALER (agriculture) alternate titles: presser, cotton ginning

Tends hydraulic press that bales ginned cotton: Spreads piece of burlap or jute bale covering on bed of chamber in press. Starts equipment that dumps and tamps bulk cotton in chamber. Observes level of cotton in chamber and stops loading equipment when chamber contains required amounts of cotton. Positions loaded chamber under ram of press. Starts press to compress cotton. Fastens bands around bale and loads bale on handtruck. Moves handtruck onto platform of scale and records weight of bale. May determine number of compressed bales to be obtained from bulk cotton, according to total weight of cotton.
GOE: 03.04.01 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 80

920.686-010 BANDER-AND-CELLOPHANER HELPER, MACHINE (tobacco) alternate titles: banding-and-cellophane-wrapping-machine-operator helper

Assists BANDER-AND-CELLOPHANER, MACHINE (tobacco) in wrapping trademark band and cellophane wrapper around cigars. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 06.04.38 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

920.686-014 COTTON-BALL BAGGER (protective dev.)

Removes absorbent cotton surgical sponges from automatic balling machine, observes sponges for size and shape, and fills bags with specified number of sponges. Places filled bags in cartons for shipment. May fold and seal plastic bag tops, using electric iron.
GOE: 06.04.38 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

920.686-018 FOLDING-MACHINE FEEDER (tex. prod., nec)

Feeds pillowcases, towels, or other articles into machine that folds articles for wrapping. May start, stop, and adjust machine.
GOE: 06.04.05 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

920.686-022 ORDER FILLER, LINSEED OIL (oils & grease)

Fills cans, drums, and other containers with linseed oil for shipment: Connects hose from oil storage tank to scale hopper. Places empty container beneath hopper outlet. Adjusts scales and opens oil storage tank valve to permit flow of oil into scale hopper (flow of oil automatically stops at specified weight). Opens hopper valve to fill container with oil. Screws bung in place or seals cover on container manually. May fill empty containers with oil directly from storage tank and weigh filled containers, using platform scales. May stencil shipping information, such as oil blend, weight, and consignee's name and address on containers. May move filled containers to storage area.
GOE: 06.04.36 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

920.686-026 PACKING-FLOOR WORKER (tobacco)

Unloads boxes of cigars from handpresses and keeps packed cigar containers in order: Turns handscrews to relieve pressure on press and lifts packing box to rack. Prepares identifying labels and attaches labels to boxes in rack. Transfers rack to stockroom, using lift truck. Attaches labels to press to prevent mixing different types of cigars during packing. Turns handwheel to move pressing head against stacked boxes. Supplies CIGAR PACKER (tobacco) with empty boxes and moves material to and from bench.
GOE: 06.04.40 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

920.686-030 PACKING-MACHINE CAN FEEDER (tobacco) alternate titles: can feeder; tin-can feeder

Places cans, paper packs, or glass tumblers on conveyor belt of machine that automatically fills containers with tobacco products. May inspect containers for defects.
GOE: 06.04.38 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

920.686-034 PAD-MACHINE FEEDER (saw. & plan.)

Feeds machine that compresses and wraps excelsior to make pads used in packing furniture and other products: Spreads excelsior on feed conveyor and observes operation to detect jamming of material and packaging defects. May fill glue reservoir, mount roll of paper on machine, and adjust conveyor guides and speed controls.
GOE: 06.04.09 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

920.686-038 POLY-PACKER AND HEAT-SEALER (protective dev.)

Feeds machine that seals sterilized dressings into plastic bags and packs bags in cardboard cartons: Inserts sterilized dressing into plastic bag and folds open end to prepare for sealing. Feeds folded end into machine that seals bag. Presses and examines bag for airtight seal. Packs specified number of bags in cardboard cartons.
GOE: 06.04.38 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

920.686-042 PRESS BUCKER (any industry)

Removes pressed bales of material, such as cotton, hay, wastepaper, waste metals, and rags from baling machine, using hook. May push bales to storage area, using handtruck. When removing pressed bales of materials by shoving steel band through press platen, is designated Band Shover, Press (agriculture).
GOE: 05.12.03 STRENGTH: H GED: R1 M1 L1 SVP: 1 DLU: 77

920.686-046 SPOOLER, SEQUINS (plastic prod.) alternate titles: sequins winder

Winds strings of plastic sequins on spools preparatory to shipment: Pulls string of sequins through yardage indicator and cuts off specified length. Exam-

tines string for broken threads, knots, and irregular lay of sequins. Feeds string into winding machine that winds string on spool.
GOE: 06.04.38 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

920.686-050 TRAY FILLER (tobacco) alternate titles: packing presser; tray packer

Fills trays with cigars and loads press that compresses cigars into square shape for packing: Places cigars previously sorted for color onto packing trays, and carries trays to press. Stacks trays on bed of press and places paper between trays. Turns handwheel to lower head of press that compresses cigars.
GOE: 06.04.15 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

920.687-010 APPLE-PACKING HEADER (agriculture)

Affixes lids on apple-filled barrels, using foot-operated or power-driven press, or hand mallet and cooper's iron. May rearrange top layer of fruit to make lid fit properly. May fasten lids on other containers.
GOE: 03.04.01 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

920.687-014 BAGGER (retail trade) alternate titles: grocery packer

Bags groceries at grocery store: Packs grocery items in sacks or cartons, arranging heavy and bulky items at bottom of sack or carton. Verifies price of grocery item in question against price of items on stock shelf, upon request. Carries packed sacks, or places sacks in grocery cart, and pushes cart to customer's vehicle, upon request. Places groceries into customer's vehicle. Collects shopping carts from parking lot and surrounding areas and returns carts to store. Replaces cleaning and packing supplies used at grocery checkout counter. Returns grocery items left at checkout counter to specified stock shelves. Cleans work area and carries empty bottles and trash to storeroom. May price and place grocery articles on shelves. May assist in unloading delivery trucks.
GOE: 09.05.10 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 82

920.687-018 BAGGER (garment; laundry & rel.)

Covers garments or household articles with plastic or paper bags by any of following methods: (1) Hangs garment or article on stand and covers with plastic bag. (2) Pulls plastic from rolls, sliding plastic material over article and tearing plastic at perforations to form bag of desired size. (3) Hangs garment on holder in machine and pulls plastic from roll to envelop garment. Pushes button or moves lever to close heating irons that cut and seal plastic to form bag of desired dimensions. Hangs bagged article on slide rail or rack. (4) Drops shirts or folded articles into machine that automatically envelops articles in plastic bags and drops articles into box. Removes boxes from beneath machine when filled and replaces boxes.
GOE: 06.04.35 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

920.687-022 BALE SEWER (agriculture)

Sews burlap covering on baled agricultural produce, such as cotton or hops: Pulls edges of covering material together, folds in end flaps and secures end flaps temporarily with awl. Threads spring-eye sack needle with twine and sews seams. May weigh, stencil, and tag bales. May wrap double compressed bales with metal bands for export shipment. May be designated Sewer, Head (agriculture) when working in bed of press. May sew burlap covering on baled produce, using portable sewing machine.
GOE: 06.04.38 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

920.687-026 BANDER, HAND (paper goods)

Wraps printed paper bands (labels), plain unprinted bands, or ribbons, around specified number of prestacked paper items, such as napkins, envelopes, towels, or notebook paper. Brushes glue on one end of band and presses ends together. Stacks banded packages on table or places packages in containers. May be designated according to type of paper item banded as Napkin-Band Wrapper (paper goods); Papeterie-Table Assembler (paper goods); Towel Bander (paper goods).
GOE: 06.04.38 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

920.687-030 BANDER, HAND (tobacco) alternate titles: cigar bander, hand

Wraps trademark band around cigars: Moistens or applies paste to tip end of band and presses ends of band together around cigars. Places banded cigars aside for further processing.
GOE: 06.04.38 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

920.687-034 BANDOLEER PACKER (ordnance)

Packs small arms ammunition in bandoleer belt pockets: Compares ammunition identification data stenciled on belt with work order to ensure packing of specified caliber cartridges. Places cardboard separator between two filled ammunition clips and slides clips into cardboard packet. Holds bandoleer pocket open with spoonlike tool and inserts packet into pocket. Closes pocket flaps and piles belt on handtruck.
GOE: 06.04.38 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

920.687-038 BLUEPRINT TRIMMER (any industry) alternate titles: blueprint assembler; cutter; trimmer

Cuts blueprints, measures print margins, punches holes in prints, and folds, staples, and labels blueprints for shipment: Cuts individual print from continuous strip of processed prints, using shears. Verifies dimensions of blueprint margins, using ruler, and cuts off excess, using shears. Punches holes in blueprint, using paper punch, and folds prints. Staples specified number of prints to folded edges of wrapping paper to form bound set. Writes name and address of customer on wrapping. May sort prints according to numerical code. May examine blueprints for defects, such as clarity and double image.
GOE: 06.04.26 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

920.687-042 BOTTLING-LINE ATTENDANT (beverage) alternate titles: line operator

Prepares filled whiskey bottles for packing and shipping, performing any combination of following duties: Pastes labels and tax stamps on filled whiskey bottles as bottles pass on conveyor. Examines bottles to ascertain that labels and stamps have been correctly applied. Straightens labels and stamps on bottles. Presses stamps on necks of bottles. Wipes excess glue and moisture from bottles. Packs whiskey bottles into cartons. Pastes identification labels on cartons. May be known according to task performed as Bottle-Label Inspector (beverage); Stamp Presser (beverage); Strip-Stamp Straightener (beverage).
GOE: 06.04.38 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

920.687-046 BUNDLER, SEASONAL GREENERY (forestry)

Bundles decorative greens (forest greenery) and Christmas trees for shipments, performing combination of following tasks: Examines greens and discards branches with discolored or sparse leaves. Arranges greens into bundles as specified, weighs greens, ties greens into bundles, and records number and type of bundles. Sorts Christmas trees on conveyor belts according to size and quality of trees. Ties specified number, size, and quality of trees into bundles and affixes tags to bundles. May trim greens or trees, using hatchet. May be designated according to task performed as Baler (forestry); Buncher (forestry); Tagger (forestry); Trimmer (forestry).
GOE: 03.04.04 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

920.687-050 CAN INSPECTOR (beverage; can. & preserv.) alternate titles: seam checker

Inspects lid seams of closed food or beverage cans to ascertain if lids conform to sealing specifications: Collects random samples of filled cans discharged by closing machine. Cuts out center of lid, using can opener, and empties contents. Measures thickness of lid seam, using micrometer. Removes crimped edge of lid (lid hook), using pliers, and measures thickness of crimped edge of can wall (can hook), using micrometer. Records measurements of seam and can hook. May measure thickness of bottom seam prior to filling operations. May empty contents of defective cans into new cans and place on closing-machine conveyor.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

920.687-054 CAN PATCHER (can. & preserv.)

Places rejected can on scale to ascertain amount of off-weight, and adjusts contents to bring weight to standard. Places repacked cans on lidding machine conveyor. May repack contents of cans improperly packed by machine.
GOE: 06.04.28 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 77

920.687-058 CAN RECONDITIONER (can. & preserv.)

Examines and reconditions rusted and soiled cans containing food: Taps cans with mallet to determine if cans meet vacuum specification and sets rejects aside [VACUUM TESTER, CANS (can. & preserv.)]. Removes rust from cans, using revolving wire brush and buffer. Immerses cans in washing solution to remove dirt. Stacks or packs reconditioned cans. May relabel cans.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 77

920.687-062 CARDBOARD INSERTER (knitting)

Inserts cardboard in stretchable socks to shape socks for display: Places cardboard insert through opening in sock form and pulls sock over form. Removes sock containing insert from form. May be designated Tissue Inserter (knitting).
GOE: 06.04.27 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

920.687-066 CARRIER PACKER (protective dev.)

Packs military gas masks into canvas carriers: Inserts gas-mask canisters into carriers, using manually operated table jig. Ties facepieces around cardboard forms, using string, and inserts facepieces and hose tubes of masks into carriers. Tightens straps in buckles of carriers to obtain compact units for military use. Places gas masks on conveyor for transfer to shipping rooms.
GOE: 06.04.38 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

920.687-070 CARTON INSPECTOR (tobacco) alternate titles: carton searcher

Inspects cartons filled with packaged tobacco products to determine whether flaps or wrappers are sealed and cartons are printed or marked as specified. May observe cartons passing on conveyor and remove lightweight carton at signal from electronic checking device. May maintain inspection records.
GOE: 06.03.02 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

920.687-074 COTTON TIER (agriculture) alternate titles: tie-out worker

Fastens metal bands around bales of cotton that are compressed in press: Inserts metal band through channel in upper ram of press to worker on opposite side of compressed bale who returns band through channels in lower ram to encircle bale. Bends end of band and fastens band to hook of buckle on opposite end of band. When working on opposite side of compressed bale to return metal bands through channels, may be designated Returner (agriculture).
GOE: 03.04.01 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

920.687-078 CRATE LINER (furniture)

Lines crates and boxes used to pack furniture with protective lining to protect furniture during shipment: Spreads wrapping paper in crate box. Cuts corrugated paperboard and fits paperboard in crate. Lays excelsior pads in crate for packing specified units. Glues cardboard pads in corner of crate to make cushions for furniture. Assists PACKAGER, HAND (any industry) to place fur-

niture in box or crate. Transfers packed crates and boxes to loading platform, using handtruck.
GOE: 06.04.38 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

920.687-082 DENTAL FLOSS PACKER (protective dev.)
Assembles dental floss packages: Mounts dental floss cutter in container top, using jig, and locks cutter in place, using cap. Cuts away excess floss from roll, using scissors. Positions roll in bottom half of container and mounts cutter top. Threads end of dental floss through cutting mechanism. Places completed unit in shipping container.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

920.687-086 FISH PACKER (can. & preserv.) alternate titles: fish-house worker
Packs dressed fish in ice and records weight: Reads orders to determine quantity, size, and variety of fish to be packed. Selects and weighs fish and records weights. Shovels layer of ice in box and fills body cavity of each fish with ice. Places fish in box and fills remainder of box with ice. May assemble boxes, stencil addresses on boxes, and band packed boxes with metal straps.
GOE: 06.04.28 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

920.687-090 FLOOR WORKER (sugar & conf.)
Performs any combination of following tasks to facilitate wrapping and packing of chewing gum: Copies from registers (counters) on machines number of cartons of chewing gum filled by each packing machine. Empties containers of scrap gum into barrel for reprocessing. Distributes packaging materials to workers. Replaces packages of gum that were previously removed from carton for inspection. Scans stacks of cellophane-wrapped cartons passing on conveyor belt to detect defective wrapping. Removes cellophane from defectively wrapped cartons and returns cartons for rewrapping.
GOE: 06.04.38 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

920.687-094 GREENS TIER (wholesale tr.)
Ties bunches of forest greenery together for eventual sale to consumer by placing greenery in pressure clamp and presses pedal to hold bunches together while tying. Releases pedal and removes bunch from clamp.
GOE: 06.04.38 STRENGTH: M GED: R1 M1 L1 SVP: 1 DLU: 77

920.687-098 HANDKERCHIEF FOLDER (garment)
Folds handkerchiefs prior to packaging. May fold fancy handkerchiefs, such as men's dress handkerchiefs, into specified shapes and place handkerchiefs in cellophane envelopes.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

920.687-102 HOGSHEAD OPENER (tobacco) alternate titles: hogshead hand; hogshead stripper; hogshead unpacker; hogshead wrecker
Opens sealed hogsheads of tobacco, using hammer, hatchet, and wire clippers: Removes nails from headbands and cuts metal band and wooden liner. Raises hogshead to upright position, using hoist. Cuts wire bands and remaining headband, removes head, and allows staves to fall on floor or cuts wire bands and lifts hogshead from packed tobacco. On patented hogsheads, cuts tie wire and headbands or removes pins from eyelets, catches sections of staves as staves fall from hogshead, and removes head.
GOE: 06.04.28 STRENGTH: H GED: R2 M1 L2 SVP: 2 DLU: 77

920.687-106 LABEL REMOVER (beverage)
Removes damaged or improperly applied labels from filled whiskey bottles: Places bottles into container of warm water to loosen labels. Rubs or scrapes labels from bottles, using fingers or blade. Wipes bottles with cloth to remove excess moisture and glue. Places bottles on conveyor for relabeling.
GOE: 06.04.39 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

920.687-110 LINE-OUT WORKER I (tobacco) alternate titles: head-out worker; hogshead liner
Nails heads onto hogsheads of tobacco prior to shipment or storage: Fits precut boards into hogshead to form head and nails wooden crossbar to assembled pieces to secure pieces. Inserts metal rim in hogshead, places prefabricated head within rim, and lowers hydraulic ram to force head into hogshead. Inserts and nails liner (thin wooden strip) to inside top edge of hogshead to hold head in place. Nails head through side of hogshead to secure head. May weigh hogshead prior to shipment.
GOE: 06.04.38 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 77

920.687-114 LINE-OUT WORKER II (tobacco)
Seals hogsheads of tobacco prior to shipment or storage: Places prefabricated head in hogshead and climbs onto hogshead to press head down. Forces head into hogshead, using metal bar, body weight, and foot pressure. Positions metal band around top edge of hogshead, inserts ends of band into ratchet tool, and moves lever to tighten band. Secures band to hogshead, using clamps and crimping tool, or by inserting fasteners through perforations in band into hogshead. Bends end of band to break off excess band. Removes metal reinforcement from hogshead and rolls or pushes hogshead from work area.
GOE: 06.04.38 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

920.687-118 LINEN-SUPPLY LOAD-BUILDER (laundry & rel.)
Assembles laundered uniforms and linen for DRIVER, SALES ROUTE (retail trade; wholesale tr.) of linen supply establishment, according to load sheet showing quantity, description, size, or color of articles requisitioned. May attach labels, emblems, and monograms to articles, such as industrial uniforms, using sewing machines.
GOE: 05.09.01 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

920.687-122 MACHINE-PACK ASSEMBLER (ordnance)
Places small arms cartridges nose-to-head for packaging: Positions cartridge-filled shaker plate over double transfer plate and releases catch to drop cartridges nose-down into alternate holes in transfer plate. Turns transfer plate over and repeats to fill remaining holes. Pulls slides in transfer plate that release cartridges in nose-to-head arrangement into packaging-bench fixture.
GOE: 06.04.38 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

920.687-126 MARKER II (any industry) alternate titles: labeler; stamper
Marks or affixes trademarks or other identifying information, such as size, color, grade, or process code, on merchandise, material, or product, using one or more methods, such as metal punch and hammer, crayon, rubber stamp and ink, electric pencil, branding iron, acid and stencil, sand-grit and stencil, or tags. May inspect items before marking. May attach gummed labels to merchandise, material, or product, using tag dispensing machine. May clean items. May use printing mechanism or labeling press. When marking is performed as task of packaging duties, worker should be classified according to type of packaging performed as PACKAGER, HAND (any industry) 920.587-018; PACKAGER, MACHINE (any industry) 920.685-078; or BALING-MACHINE TENDER (any industry) 920.685-010.
GOE: 06.04.37 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 84

920.687-130 PACKER (tobacco) alternate titles: carton filler; case packer; case sealer
Packs wrapped or packaged tobacco products into cartons or packs filled cartons in shipping containers: Examines tobacco products for defects, such as excess moisture in chewing tobacco plugs, loosely sealed wrappers, coupons, or labels, or misplaced stamps. Seals and loads container onto handtruck or skid or onto conveyor leading to case-sealing machine or shipping room. May form shipping container or attach label onto container. May weigh product to verify accuracy of packing machine scales. May hand stamp or stencil identifying information on cartons or shipping containers. May be designated according to product packed as Cut-Plug Packer (tobacco); Smoking-Tobacco Packer, Hand (tobacco); Twist Packer (tobacco). Workers who tend machines to package products are classified under CARTON-PACKAGING-MACHINE OPERATOR (tobacco).
GOE: 06.04.28 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

920.687-134 PACKER, AGRICULTURAL PRODUCE (agriculture) alternate titles: packer
Packs agricultural produce, such as bulbs, fruits, nuts, eggs, and vegetables, for storage or shipment, performing any combination of following duties: Lines box, barrel, basket, carton, or crate with treated paper, cardboard, excelsior, or prepared padding, or inserts paper trays or separators in container. Places rows of produce in layers in containers, and inserts excelsior, shredded cellophane, or paper trays after each layer and over top layer of produce, or scoops produce into container. Wraps produce in treated paper, foil, or plastic film wrap before placing produce in container. Packs exposed top layer of produce, arranging produce in successive rows in container. Positions basket liner upside down over ring of produce on pallet and fills basket liner with specified amount of produce. Places basket upside down over filled liner on pallet. Pushes basket and pallet over conveyor rollers onto table of turning frame, clamps basket and pallet in place, and moves lever to turn basket upright. Fits lid on container and nails, wires, or tapes in place. Stamps grade, brand, and date of packing on container. Washes and trims produce, such as lettuce and carrots, preparatory to packing, working in warehouse or on harvesting machine in field. Sorts produce according to size, color, and grade before packing. May weigh packed produce and add or remove produce from container to obtain specified weight. May be designated Apple Packer (agriculture; wholesale tr.); Basket Turner (agriculture); Face-And-Fill Packer (agriculture); Lettuce Trimmer (agriculture); Ring Packer (agriculture; wholesale tr.); Topper Packer (agriculture); Apricot Packer (agriculture; wholesale tr.); Avocado Packer (agriculture; wholesale tr.); Boxer (agriculture); Capper (agriculture); Cherry Packer (agriculture; wholesale tr.); Citrus-Fruit Packer (agriculture; wholesale tr.); Crater (agriculture); Crate Tier (agriculture; wholesale tr.); Culled-Fruit Packer (agriculture); Egg Packer (agriculture; wholesale tr.); Fruit Packer, Face-And-Fill (agriculture; wholesale tr.); Fruit Packer, Wrap-And-Place (agriculture; wholesale tr.); Header (agriculture; wholesale tr.); Lider (agriculture; wholesale tr.); Make-Up Market Worker, Truck Garden (agriculture); Melon Packer (agriculture); Mushroom Packer (agriculture); Pear Packer (agriculture; wholesale tr.); Plant Packer (agriculture); Plant Wrapper (agriculture); Plum Packer (agriculture; wholesale tr.); Ring Facer (agriculture); Seed Packer (agriculture); Tobacco Packer (agriculture); Tree Wrapper (agriculture).
GOE: 03.04.01 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 81

920.687-138 PAPER INSERTER (glass mfg.)
Pulls *lites*, stacked on end, slightly forward while simultaneously inserting paper between lites to protect glass from surface damage. Pastes labels on lites, preparatory to packing.
GOE: 06.04.38 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

920.687-142 PRIZER (tobacco) alternate titles: hogshead filler; hogshead packer; loose-hand packer; packer
Packs tobacco into hogsheads for storage or shipment, performing any combination of following tasks: Climbs into hogshead and pulls hands of tobacco from stick held by FEEDER-CATCHER, TOBACCO (tobacco) or receives

hands of tobacco and packs tobacco into hogshead. Tramples tobacco hands, strips, or stems fed into hogshead by chute. Pulls charger from movable rack onto top of hogshead so tobacco can be packed above top of hogshead. Opens chute to feed tobacco into hogshead until specified weight is indicated by scale. Stands on platform above hogshead and packs tobacco, using T-shaped stick, as tobacco is fed into hogshead by chute. May be designated according to stage at which packed as Green-Prize Packer (tobacco).
GOE: 06.04.38 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

920.687-146 REPACK-ROOM WORKER (beverage)
Repacks cartons of beer or distilled liquor damaged in packaging: Removes containers, such as bottles or cans, from damaged or unclean cartons and places containers in another carton. Replaces damaged containers with containers of identical size, label, and crown. Seals top flaps of carton, using glued tape. Duplicates identification, code, and date number found on damaged cartons, using hand stamps. Positions letters and numbers in hand stamps, using picks and tweezers. Sets repacked carton on conveyor or stacks in storage area. May move carton to storage area, using handtruck. Maintains supply of various-sized bottles and cans, using different types of labels, crowns, and lids. May keep records of material used. May pack orders for shipping.
GOE: 06.04.38 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

920.687-150 ROSIN-BARREL FILLER (chemical)
Fills barrels with rosin: Places pipe through opening in barrel head to direct flow of rosin. Hammers hoops down on barrel to tighten staves. Seals leaks in barrels, using clay.
GOE: 06.04.36 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

920.687-154 SAMPLE WORKER (any industry)
Prepares articles, such as curtains, draperies, rugs, or towels, for use as display samples, performing any combination of following duties: Assembles garments or articles into sets, and folds articles. Pins or glues identification tickets or labels to articles. Wraps paper bands around article, securing ends of band with glue, or inserts articles into plastic or cellophane bags. Arranges articles in boxes in attractive display and stores samples according to style, size, and color. Fills customer or sales orders, following order ticket. Records number of articles received, sample sets prepared, and samples shipped. Inventories samples in stock and requisitions replacement articles. May tend machine to print identification tickets or labels.
GOE: 06.04.38 STRENGTH: L GED: R3 M1 L2 SVP: 3 DLU: 77

920.687-158 SHINGLE PACKER (saw. & plan.) alternate titles: shingle weaver
Packs shingles or shakes into bundles for shipment: Lays shingles or shakes in jig with small ends interwoven to form bundle. Counts shingles or shakes to ensure specified quantities. Binds bundles with shingle bands or steel band, using stapler or crimping tool. When packing shakes, may be designated Shake Packer (saw. & plan.).
GOE: 06.04.38 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 78

920.687-166 SHOE PACKER (boot & shoe) alternate titles: shoe handler
Packs paired shoes, according to case number, in cartons for shipment. May inspect shoes for defects prior to packing.
GOE: 06.04.38 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

920.687-170 SHOT BAGGER (ordnance) alternate titles: shot packer; volumetric weigher
Fills canvas bags with lead shot for shipment, using dispenser with volumetric measuring chamber: Pushes wheeled packing stand beneath bin containing size shot ordered. Hooks feed pipe from dispenser to bin spout. Pulls levers to permit shot to flow from storage bin through pipe into volumetric measuring chamber and from chamber into bag. Closes mouth of bag with wire, using wire-twisting tool. Weighs sample bags at prescribed intervals and turns knob to adjust measuring chamber capacity to produce specified weight.
GOE: 06.04.36 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

920.687-174 SNUFF-BOX FINISHER (tobacco)
Glues covers and labels on paper boxes of snuff: Places cardboard disk in opening of round box and applies glue to inner edge of box extending beyond disk. Folds edges over and presses edges onto disk. Glues labels onto top and sides of box.
GOE: 06.04.38 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

920.687-178 STENCILER (any industry) alternate titles: marker, shipments
Marks size, lot number, contents, or other identifying information or symbols on containers or directly on article by placing stencil on container or article and rubbing ink or paint brush across open lettering, or by spraying paint on stencil. May mix paints or lacquers. May be designated according to type of container stenciled as Carton Stenciler (any industry); Drum Stenciler (beverage); Sack Stenciler (any industry).
GOE: 06.04.37 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

920.687-182 STERILIZER (beverage) alternate titles: sterilizer operator
Sterilizes wine containers, such as barrels or metal tanks: Hammers and pulls bungs from barrels or unscrews cap from tank, using handtools, such as mallet and wrench. Inserts nozzle of steam pipe through vent and flushes steamed container with water, to clean container. Ignites and inserts sulfur stick (candle) into container to kill bacteria. Repaints barrelheads, using brush, lacquer, or paint. Removes sulfur fumes from container, using compressed air.
GOE: 06.04.39 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

920.687-186 TABLE-COVER FOLDER (tex. prod., nec)
Folds tablecloths preparatory to packaging, using table equipped with rollers: Places cover on table with one edge on rollers. Lays cardboard tube on cover at rollers and winds cover around tube. Pulls tube from cover, smooths cover flat, and folds cover to specified size to fit into bag. Stacks folded table covers. May fold tablecloths without using rollers.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

920.687-190 TIE BINDER (garment) alternate titles: bander; bundler
Binds neckties together prior to packing: Places cardboard forms beneath and on top of stack of folded neckties. Binds stack of ties, using rubberbands, paper strips, or tape. May stamp information, such as number of ties and tie style on cardboard forms. May slide paper or plastic identification bands onto ties or insert labels into pretied knot.
GOE: 06.04.38 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

920.687-194 VACUUM TESTER, CANS (can. & preserv.) alternate titles: cap inspector
Taps lids of cans or jars with stick as they pass on conveyor to determine if container is vacuum sealed. Removes defective containers for reprocessing. May feed containers into vacuum chamber to determine if cans are sealed.
GOE: 06.03.02 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

920.687-198 WOOL SACKER (agriculture) alternate titles: tromper; wool tamper
Packs wool fleeces in burlap bags preparatory to shipping: Fastens bag around device that holds bag open. Tosses tied fleeces into sack and tramps on bundles to compact. Removes sack from holder and sews open end with needle and twine. Ties ears (hand grips) on each bag.
GOE: 03.04.01 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

920.687-202 WORM PACKER (agriculture) alternate titles: worm sorter
Packs earthworms into containers according to size: Scoops growth media and specified number of worms of designated sizes into containers, and date stamps containers for delivery to sales outlet. May dry worms under heat lamps, and grind and package worms for sale as tropical fish food.
GOE: 03.04.01 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

921 HOISTING AND CONVEYING OCCUPATIONS

This group includes occupations concerned with lifting and moving materials, machines, and products, and stacking and dumping materials and products, using power-operated equipment, such as cranes, hoists, winches, conveyors (including pneumatic conveyor systems), stackers, rotary dumpers, and industrial trucks; attaching ropes, chains, slings, and other devices to objects being moved; signaling machine operators and guiding moving loads; and related activities.

921.130-010 RIGGING SUPERVISOR (construction)
Supervises and coordinates activities of workers engaged in erecting and operating machines to hoist and convey machinery and equipment, such as structural beams, metal tanks, and wall and floor slabs, at construction site: Specifies locations for movement and erection of derricks, hoists, and cranes, using knowledge of various methods of sliding and lifting equipment. Directs workers engaged in splicing ropes and metal cables to form hoisting slings. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.11.01 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

921.131-010 HOOK TENDER (logging) alternate titles: hooker
Supervises and coordinates activities of workers engaged in yarding and loading logs in *high lead*, slack line, or similar cable yarding system: Determines location of blocks, guy lines, spar, and yarding and loading equipment, according to location and size of landing and type of terrain. Inspects rigging for defects and unsafe conditions, and oversees repair or replacement. Directs rigging crew in setting side and tail blocks, rigging spars, notching anchor stumps, raising guy lines, and installing running tackle. Observes yarding system in operation, and directs relocation of rigging to relieve equipment strain or to extend range of system. Informs RIGGING SLINGER (logging) of log removal sequence, capacity of yarding system and equipment, and related factors. Coordinates dismantling and moving of equipment to new site. Trains workers in safety regulations and activities, such as splicing cable, maintaining equipment, and rigging and operating yarding systems. May supervise crew of tractor yarding workers. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.04 STRENGTH: L GED: R3 M2 L2 SVP: 7 DLU: 77

921.132-010 TRACK SUPERVISOR (grain-feed mills)
Supervises and coordinates activities of workers engaged in loading and unloading railroad cars at grain elevator and operates equipment that unloads railroad cars: Confers with SUPERINTENDENT, GRAIN ELEVATOR (beverage; grain-feed mills) to obtain daily work schedule and resolve operating problems. Confers with GRAIN MIXER (grain-feed mills) to coordinate loading and unloading activities with blending and weighing activities. Assigns workers to duties and issues instructions regarding sequence of activities and railroad cars to be loaded and unloaded. Directs workers to connect car puller cables to railroad cars and pulls lever to start winding mechanism that pulls cars into position

for loading or unloading. Signals weigher when cars are in position and observes lights to detect signal to commence loading or unloading, using signal-light system. Pushes and pulls levers and pushes buttons to control rotary dumping equipment that clamps cars in place and tilts and jogs car to dump grain into receiving chute [CAR-DUMPER OPERATOR (beverage)]. Directs DUMPER (any industry) to open hopper doors on railroad cars and presses button to start conveyor that elevates grain to weigh station. Directs workers to position spout into railroad cars for loading of grain, signals weigher to commence loading, and observes signal lights to detect when specified amount of grain has been loaded. May drive tractor to pull railroad cars onto side tracks. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

921.133-010 CRANE-CREW SUPERVISOR (any industry)

Supervises and coordinates activities of OVERHEAD CRANE OPERATOR (any industry) 921.663-010 engaged in unloading steel, machinery, timbers, and other heavy cargo from trucks or railway cars at construction site or yard of industrial establishment. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.11.04 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 77

921.133-014 LOAD-OUT SUPERVISOR (mine & quarry)

Supervises and coordinates activities of workers engaged in operating machines and equipment to separate sand and gravel according to size, and in testing, stockpiling, and loading sand and gravel into railroad cars and trucks: Reviews car loading orders and issues directions to workers to expedite railroad car and truck loading. Notifies CAR CLEANER (mine & quarry) and YARD ENGINEER (r.r. trans.) to clean and position specified railcars for loading. Determines causes of malfunctioning equipment and notifies MAINTENANCE-MECHANIC SUPERVISOR (any industry). Orders changes in ratio of material, according to test results, to conform to plant or customer specifications. Coordinates changes in plant setup to maintain production specifications. Collects railroad car loading records at specified intervals and submits records to office. Maintains record of vibrating screen setup in plant. Trains new workers. May make minor repairs to machinery and equipment, using handtools. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: M GED: R3 M2 L3 SVP: 4 DLU: 77

921.133-018 MATERIAL-HANDLING SUPERVISOR (any industry) alternate titles: stock supervisor; traffic supervisor; warehouse supervisor

Supervises and coordinates activities of workers engaged in lifting, transporting, storing, and loading materials and products by use of conveyors, cranes, hoists, or industrial trucks, applying knowledge of plant layout and material-handling equipment and procedures: Studies receiving or shipping notices, requests for movement of raw materials and finished products, and reports of warehousing space available to develop schedule for material handling activities. May confer with supervisors of other departments to coordinate flow of materials or products. May verify or prepare records, such as routing slips, material requisitions, and job orders. May supervise activities of shipping and receiving personnel. May train new workers. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 77

921.137-010 COAL-YARD SUPERVISOR (any industry) alternate titles: coal-and-ash supervisor; millroom supervisor; supervisor, coal handling

Supervises and coordinates activities of workers engaged in receiving, weighing, and unloading coal in yard of industrial plant, in unloading coal from barges into coal hoppers, and in blending, pulverizing, and conveying coal to various processing units or storage areas. May supervise loading of ashes. May supervise unloading of coal from boats and be designated Supervisor, Dock (steel & rel.). Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

921.137-014 MATERIAL-CREW SUPERVISOR (construction; mfd. bldgs.) alternate titles: supervisor, loading

Supervises and coordinates activities of workers engaged in loading materials or prefabricated house components for use on construction projects. Selects materials to be loaded according to size and type specified in orders, and specifies sequence of loading. Directs workers in loading and unloading materials on trucks, dinkey cars, or barges, attaching slings and other lifting devices to facilitate handling with cranes. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.11.04 STRENGTH: M GED: R4 M2 L3 SVP: 7 DLU: 77

921.260-010 RIGGER (any industry) alternate titles: crane rigger; hook tender; slinger; yard rigger

Assembles rigging to lift and move equipment or material in manufacturing plant, shipyard, or on construction project: Selects cables, ropes, pulleys, winches, blocks, and sheaves, according to weight and size of load to be moved. Attaches pulley and blocks to fixed overhead structures, such as beams, ceilings, and gin pole booms, with bolts and clamps. Attaches load with grappling devices, such as loops, wires, ropes, and chains, to crane hook. Gives directions to OVERHEAD CRANE OPERATOR (any industry) 921.663-010 or HOISTING ENGINEER (any industry) engaged in hoisting and moving loads to ensure safety of workers and material handled, using hand signals, loudspeaker, or telephone. Sets up, braces, and rigs hoisting equipment, using handtools and power wrenches. Splices rope and wire cables to make or repair slings and tackle. May direct workers engaged in hoisting of machinery and equipment into ships and be designated Machinery Erector (ship-boat mfg.). When hoisting and moving construction machinery onto truck beds, may be designated Machine Mover (construction).
GOE: 05.11.04 STRENGTH: H GED: R4 M2 L2 SVP: 6 DLU: 77

921.364-010 RIGGING SLINGER (logging)

Directs CHOKE SETTERS (logging) in *high lead*, slack line, or similar log yarding system: Determines sequence of logs to be yarded, according to guidelines established by HOOK TENDER (logging). Issues directions to crew regarding logs to be yarded, positioning and securing of *chokers*, and position of crew during movement of logs. Signals YARDING ENGINEER (logging) to control positioning of choker cables for setting and yarding of logs over cutting area, using portable radio transmitter. Signals to inform others of fire, injuries, need for repairs or revisions to rigging, and other conditions. Trains new workers in choker setting techniques, safety practices, and whistle signals. May perform choker setting duties. May lead workers in installing, moving, and dismantling yarder rigging.
GOE: 05.12.04 STRENGTH: M GED: R3 M1 L2 SVP: 5 DLU: 77

921.365-010 GRAIN RECEIVER (grain-feed mills) alternate titles: elevator tender

Tends conveyors and weighs carload shipments of grain, such as corn or milo, and routes grain to steep tanks: Weighs car spotted on scales to record and verify weight against consignment sheet. Notifies MATERIAL HANDLER (any industry) that car is ready for unloading. Weighs empty car. Starts conveyor to move grain from unloading pit to elevator. Sets batching scale at specified weight and starts conveyor that transfers grain to scale bin until balance is achieved. When notified, pulls lever to empty bin and starts conveyor to transfer grain to steep tanks. Maintains batch records.
GOE: 06.03.01 STRENGTH: L GED: R2 M2 L1 SVP: 2 DLU: 77

921.382-010 CONVEYOR OPERATOR, PNEUMATIC SYSTEM (food prep., nec) alternate titles: bulk-system operator; flour distributor; pneumatic-systems operator

Operates panelboard to control pneumatic conveyor system that transfers flour from railroad cars, through blending, sifting, and weighing units to storage bins for subsequent processing into macaroni products: Opens hatch of railroad hopper car to admit air, and connects pneumatic hose to car outlet and to intake pipe of specified bin. Sets timing devices, turns switches, and pushes buttons on panelboard to start and control movement of material through specified processing units to storage bins. Observes lights on board to follow progress of material, or to detect need for changing or bypassing operations. Diverts material flow by pressing button governing specific bin or processing unit. Records car number, weight, and type of material in car, name of sender, and location of material in storage bin or unit. Operates pneumatic air compressor [AIR-COMPRESSOR OPERATOR (any industry)] in conjunction with panelboard, to transfer and distribute flour. May dump bags of special flour into hopper for distribution through processing units.
GOE: 05.06.04 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

921.563-010 COKE LOADER (steel & rel.)

Operates equipment, such as conveyor or winch to transfer coke to railroad cars and trucks: Notifies switching department to deliver specified type of car. Estimates and records amount of coke in bins. Starts conveyor and operates winch to position car under boom-conveyor for loading. Inspects boarding and locking of open-top box cars and wedging of side drop and hopper cars to prevent loss of coke in transit. Observes and records car number, carrier, customer, tonnage, and grade and condition of coke. Signals INDUSTRIAL-LOCOMOTIVE OPERATOR (any industry) to move loaded cars. Oils, lubricates, and adjusts conveyors, crushers, and other equipment, using handtools and lubricating equipment. Cleans spillage from tracks, walks, driveways, and conveyor decking, using airhose, broom, and shovel. Cleans hoppers, using bar.
GOE: 05.11.04 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

921.565-010 CEMENT LOADER (cement) alternate titles: bulk cement loader; bulk loader

Tends pneumatic conveyor, or belt, auger, or bucket conveyor to load and unload bulk cement onto tank trucks or railroad tank and hopper cars: Inserts loading nozzle in opening on tank trucks. Starts pump and turns lever to open slide on storage bins. Observes weight indicator on scale and regulates speed of feed to fill tank in truck. Records weight on sales slip. Tends winch to position railroad tank cars under loading nozzles. Inserts nozzles in loading ports of car and turns on pump to feed in cement. Records weight loaded on manifest. May tend equipment that inserts flexible pipe into railroad tank and hopper cars and tank trucks. May bag cement [PACKAGER, MACHINE (any industry)]. May be designated according to vehicle loaded as Cement-Railroad-Car Loader (cement); Cement-Truck Loader (cement).
GOE: 06.04.40 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

921.583-010 TRANSFER-CAR OPERATOR, DRIER (nonmet. min.) alternate titles: drie. unloader

Operates transfer car to move carloads of pipe and boiler covering moldings from driers to work and storage areas: Presses button to raise door of drier. Pulls and pushes carloads of moldings along track out of drier to loading plat-

form. Weighs moldings for moisture content and compares weight to wall chart. Places wet moldings onto car to be returned to drier. Pushes car of dry moldings onto transfer car. Operates transfer car to move moldings to production departments or storage. Records identification number of each car removed from each drier on production sheet. May tend machine that automatically cuts boiler moldings to specified size and packages moldings.
GOE: 05.11.04 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

921.662-010 CAR-DUMPER OPERATOR (beverage) alternate titles: car unloader; dumper

Controls equipment that tilts railroad cars to dump grain into receiving hopper for transfer to storage elevator: Pulls lever to activate clamp that fastens car into position on dumping platform. Breaks car seal and pushes open sliding door. Starts conveyor leading from receiving hopper into elevator, and energizes electromagnet which removes metal from grain. Receives signals, and pushes and pulls levers of dumping machinery in sequence to tilt and jog car until car is empty. Returns car to upright position and releases holding mechanism. May remove wood and paper falling from tipped car, using grappling hooks. May guide grain from car, using wood or metal plank. May pull box cars onto and off of dumping platform, using winch and cable.
GOE: 05.11.04 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

921.662-014 CHARGE-MACHINE OPERATOR (chemical)

Operates machine to recharge nuclear reactor in nuclear plant: Reads work orders and confers with supervisor to determine reactor tube loading sequence. Reads thermometer to ensure that water temperature is at level specified for charging operation. Pushes button to raise charge-discharge machine to specified height for removal of loaded *monotubes* from wall-storage racks. Turns levers to position machine in horizontal alignment with specified wall rack, and moves transfer-arm controls to remove tubes from rack. Pushes buttons to move charging machine and align serially-numbered monotube with specifically-numbered reactor-wall opening. Activates charging machine pump to force water into monotube and push piston forward to fill reactor tube with fuel elements and to clear irradiated elements out of reactor.
GOE: 06.02.11 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

921.662-018 CONVEYOR-SYSTEM OPERATOR (any industry) alternate titles: conveyor console operator

Operates console to control automated conveyor system that receives, sorts, distributes, and conveys bulk or packaged materials or products to and from loading dock and storage area, and between departments or processes: Reads production and delivery schedules and confers with supervisor to determine sorting and routing procedures. Presses buttons and turns dials to start conveyor system and regulate speed of conveyors. Observes materials or products moving on conveyors, or observes lights on control panel to monitor flow and operation of system. Moves switches or pushes buttons to route order to designated areas and to raise, lower, and align conveyor with specific adjoining conveyors. Contacts work stations by telephone or intercom to request movement of order or to notify work stations of shipment enroute and approximate delivery time. Stops equipment and clears jams, using handtools. Observes operation to detect equipment malfunction and informs supervisor when malfunction occurs. May operate elevator system in conjunction with conveyor system. May weigh trucks and railroad cars before and after loading, or read scale that continually weighs product on conveyor to ascertain when specified tonnage has been loaded and record weight on loading ticket. May join sections of conveyor frames at temporary working areas and connect power units. May collect samples of materials for analysis. May lubricate moving parts of conveyors. May operate scoop to load materials onto conveyor. May record data, such as weight and type of material moved and condition of equipment. May be designated according to product moved as Bulk-Loader Operator (water trans.); Coal-Conveyor Operator (any industry); Grain Distributor (grain-feed mills); or according to type of equipment as Grain-Elevator Operator (grain-feed mills); Screen Operator (cement); Suction Operator (agriculture).
GOE: 05.12.04 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 82

921.662-022 MARINE RAILWAY OPERATOR (ship-boat mfg.) alternate titles: ways operator

Operates power-driven winches to pull boats, yachts, and barges from water to repair or reconditioning areas: Attaches cables to dolly on marine railway and pulls lever on winch to lower dolly into water. Signals boat operator to align boat to dolly. Positions block under boat for support and pulls winch lever to haul boat from water to specified area. May repair winch and hauling equipment.
GOE: 05.11.04 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 77

921.662-026 TIPPLE OPERATOR (saw. & plan.)

Operates tipple chain conveyor to move presorted lumber from holding racks to stacking platform: Moves control buttons to align tipple with holding racks which hold lumber requested. Pulls levers to release stops at ends of holding racks, allowing lumber to move down to tipple conveyor chain which transfers lumber to stacking platform. Straightens lumber as it moves on conveyor to prevent jams.
GOE: 05.12.04 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

921.663-010 OVERHEAD CRANE OPERATOR (any industry) alternate titles: crane operator, cab; crane operator, ground control; traveling-crane operator

Operates traveling or stationary overhead crane (cab- or ground controlled) to lift, move, and position loads, such as machinery, equipment, products, and solid or bulk materials, using hoisting attachments, such as hook, sling, electromagnet, or bucket: Observes load hookup and determines safety of load. Manipulates or depresses crane controls, such as pedals, levers, and buttons, to regulate speed and direction of crane and hoist movement according to written, verbal, or signal instructions. Cleans and maintains crane and hoisting mechanism. Inspects crane for defective parts and notifies supervisor of defects or malfunctions. May attach load to hook or other crane accessory prior to operating crane and be designated Crane Operator-Hooker (steel & rel.) or Crane Operator-Hooktender (aircraft mfg.). May be designated by type of crane operated or material handled as Bridge Crane Operator (any industry); Charging Crane Operator (foundry; steel & rel.); Cinder Crane Operator (foundry; steel & rel.) I; Gantry Crane Operator (any industry); Hot-Metal Crane Operator (foundry; nonfer. metal; steel & rel.) I; Ingot Stripper (steel & rel.) I; Scrap Crane Operator (steel & rel.) I; Tower Whirler Operator (any industry); Wall Crane Operator (foundry).
GOE: 05.11.04 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 87

921.663-014 CHERRY-PICKER OPERATOR (construction) alternate titles: car changer

Operates cherry picker (pneumatic hoist attached to structural framework) which moves on rails along tunnel side to hoist loaded dinkey cars from mucking machine to front of train: Hooks hoist line into lift-hooks on dinkey car. Moves lever to activate pneumatic hoist that lifts car. Pushes hoist block and car to side of frame and signals DINKEY OPERATOR (any industry) to move train to position empty car at mucking machine. Pushes hoisting frame along rails to front of train and operates hoist to place car in position on rails.
GOE: 05.11.01 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

921.663-018 CHIP UNLOADER (paper & pulp)

Unloads wood chips from railroad cars or trucks, using materials-handling equipment: Drives rail-mounted trackmobile to spot railroad cars on scale and on ramp above chip storage bins for unloading. Records gross and net weight of car. Releases bottom doors of car, allowing chips to fall into bin. Starts conveyor that carries chips to stockpile or to inside storage bins [CHIP-BIN CONVEYOR TENDER (chemical; paper & pulp)]. Gathers sample of chips from each car for analysis. Shunts empty cars to spur tracks. Signals driver to position truck for unloading. Attaches hoist cable and hook and starts hoist to lift loaded trailer from tractor bed. Opens tailgate of trailer, allowing wood chips to fall into bin. Lowers trailer onto tractor bed and secures tailgate. May attach electric vibrator to side of railroad cars to dislodge chips that have become tightly packed in transit. May unload barges.
GOE: 05.11.04 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

921.663-022 DERRICK OPERATOR (any industry) alternate titles: crane operator

Operates electric-, diesel-, gasoline-, or steam-powered guy-derrick or stiff-leg derrick (mast supported by fixed legs or tripod), to move products, equipment, or materials to and from quarries, storage areas, and processes, or to load and unload trucks or railroad cars: Pushes and pulls levers and depresses pedals to raise, lower, and rotate boom and to raise and lower load line in response to signals. May inspect and lubricate cables, pulleys, guides, and drums. May be known according to material moved as Log-Yard Derrick Operator (saw. & plan.); or equipment controlled as Stiff-Leg Derrick Operator (wood prod., nec).
GOE: 05.11.04 STRENGTH: M GED: R3 M1 L1 SVP: 4 DLU: 77

921.663-026 HOIST OPERATOR (mine & quarry)

Controls hoisting machinery to raise and lower cages (elevators), skips (box-like containers), and mine cars at mines or quarries: Moves levers and pedals to operate hoist in response to arm, bell, or buzzer signals. Observes dial indicator and marks on cable or drum to ascertain that desired position has been reached. Applies hand or foot brake and moves lever to lock hoist. Inspects, lubricates, and adjusts brakes and equipment. May be designated according to type of machinery controlled as Chain-Hoist Operator (mine & quarry); Electric-Hoist Operator (mine & quarry); Steam-Hoist Operator (mine & quarry); Tugger Operator (mine & quarry); or according to location of machinery as Slope-Hoist Operator (mine & quarry); Tower-Hoist Operator (mine & quarry).
GOE: 05.11.02 STRENGTH: M GED: R3 M1 L2 SVP: 4 DLU: 77

921.663-030 HOISTING ENGINEER (any industry) alternate titles: hoisting-machine operator

Operates compressed air, diesel, electric, gasoline, or steam drum hoists to control movement of cableways, cages, derricks, draglines, loaders, railcars, or skips to move workers and materials for construction, logging, mining, sawmill, and other industrial operations: Starts hoist engine and moves hand and foot levers to wind or unwind cable on drum. Moves brake lever and throttle to stop, start, and regulate speed of drum in response to hand, bell, telephone, loud-speaker, or whistle signals or by observing dial indicator or marks on cable. May fire boiler on steam hoist. May operate hoist with more than one drum. May repair, maintain, and adjust equipment. May be designated according to equipment controlled as Cableway Operator (any industry); Cage Operator (any industry); Gin-Pole Operator construction); Inclined-Railway Operator (any industry); Skip-Hoist Operator (any industry). May transfer logs from trucks to railroad cars and be designated Transfer Engineer (logging).
GOE: 05.11.04 STRENGTH: M GED: R3 M1 L1 SVP: 4 DLU: 77

921.663-034 IRRADIATED-FUEL HANDLER (chemical)

Operates machines and equipment to package, store, and convey irradiated fuel elements in underwater storage basin of nuclear reactor plant: Operates

crane to pull tram cars along underwater track and position cars under discharge outlets of nuclear reactor to be loaded with irradiated fuel elements. Pulls loaded tram cars from discharge outlets to mechanism that automatically tilts cars to unload irradiated elements onto underwater table. Manipulates handgrips of mechanical arms to place fuel elements into baskets and operates crane to transfer baskets to prepackaging storage area. Moves specified baskets from prepackaging storage area to packaging area and unloads baskets of irradiated elements onto packaging machine that automatically inserts fuel elements into canisters and secures lids on canisters. Operates crane to transfer loaded canisters to two-year, underwater, storage cubicles. Records number of canisters in each cubicle. Operates crane to remove specified canisters from storage, transfer canisters to lead cask, raise lead shipping cask to surface, and load cask onto railroad car for shipment.
GOE: 05.11.04 STRENGTH: M GED: R3 M1 L1 SVP: 5 DLU: 77

921.663-038 LOCOMOTIVE-CRANE OPERATOR (any industry) alternate titles: railroad-crane operator

Operates crane that travels on railroad tracks to lift and move objects: Starts gasoline or diesel engine. Pushes pedals and pulls levers to move, control speed, and stop crane, turn crane boom, and raise or lower cables attached to load. Inspects and compares weight of load with lifting capacity of crane to ensure against overloading crane. Moves controls to move and position load by sight or at direction of LABORER, HOISTING (any industry). Inspects cables and grappling devices for wear. May install or replace cables. May perform maintenance tasks, such as oiling machine. May direct helpers engaged in placing blocking and outrigging under crane when lifting loads. May operate crane in which hoisting mechanism is pneumatically powered. May be designated by type of power unit as Diesel-Locomotive-Crane Operator (any industry); Electric-Locomotive-Crane Operator (any industry); Gasoline-Locomotive-Crane Operator (any industry).
GOE: 05.11.04 STRENGTH: M GED: R3 M1 L2 SVP: 5 DLU: 77

921.663-042 MONORAIL CRANE OPERATOR (any industry)

Operates electrically powered monorail crane to lift, move, and load machinery, equipment, and materials: Moves foot and hand controls to guide crane along overhead rail and to raise and lower load cable. Raises, moves, and lowers load following signals of worker on floor. May switch crane between rails by signaling other workers to throw switches. May operate crane from hand held control box. May inspect, clean, and lubricate crane. May be designated by material moved as Acid-Crane Operator (steel & rel.); Cinder-Crane Operator (foundry; steel & rel.) II; Scrap-Crane Operator (steel & rel.) II; Stock-Crane Operator (steel & rel.); or operation performed as Charging-Crane Operator (foundry; steel & rel.) II; Cold-Roll Packer, Sheet Iron (steel & rel.); Hot-Metal-Crane Operator (foundry; smelt. & refin.; steel & rel.) II; Ingot Stripper (steel & rel.) II.
GOE: 06.04.40 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

921.663-046 PNEUMATIC-HOIST OPERATOR (construction; mfd. bldgs.)

Operates pneumatic hoist to lift concrete panel walls of modular buildings: Hauls concrete wall panels to installation site, using handtruck. Lifts panel with aid of coworker to position panel for hoist hookup. Positions hoisting bracket on panel to align holes in panel and bracket, and inserts locking pin to secure linkage for hoisting. Pulls chain to activate hoist to raise panel for lateral movement. Operates hoist to raise and lower panel between grooved columns as signaled by coworkers. Removes any rough spots from panel or grooves, using hammer and chisel. Disconnects hoisting bracket from panel.
GOE: 05.11.01 STRENGTH: V GED: R2 M1 L1 SVP: 3 DLU: 77

921.663-050 SCRAPER-LOADER OPERATOR (mine & quarry) alternate titles: dragger; slusher operator

Operates hoisting engine and cable-drawn scraper or scoop, to load coal, ore, or rock into mine cars or onto conveyor in underground mine: Moves hoist into working place on car and sets up on timber foundation. Sets up snatch blocks (pulleys) and eyebolt, and anchors firmly to post or wall. Connects electric power lines and starts hoist. Moves levers to activate cable which drags scraper into face of ore, then drags full scraper to mine car for dumping. Moves hoist from place to place, using mine car. Lubricates, adjusts, and repairs engine and auxiliary equipment.
GOE: 05.11.02 STRENGTH: H GED: R3 M1 L2 SVP: 4 DLU: 77

921.663-054 TOWER-CRANE OPERATOR (construction)

Operates tower crane to lift and move building materials from ground storage areas and trucks to top of building under construction: Climbs ladder inside vertically mounted tower to gain access to control pad suspended under crane boom. Pushes or pulls levers on control console to rotate counter-balanced horizontally mounted boom to extend or retract trolley along boom, and to raise and lower hook to which loads are attached. Controls crane movement in response to hand signals or radio commands by supervisor or signaler. May operate crane from remote console on top of building. May operate radio-controlled crane.
GOE: 05.11.01 STRENGTH: L GED: R3 M1 L2 SVP: 5 DLU: 77

921.663-058 TRACTOR-CRANE OPERATOR (any industry) alternate titles: crawler-crane operator; tractor-crane engineer

Operates diesel-, gasoline-, or electric-powered crane mounted on crawler treads to lift and move material and objects: Starts engine and drives crane to work site, steering crane by moving levers and pressing pedals that control motion of crawler treads. Pushes and pulls levers and presses pedals in response to hand signals to rotate crane on chassis and raise and lower crane boom and loadline. May lubricate motor and moving parts of crane. May be designated according to attachment as Clamshell Operator (any industry) I; Demolition-Crane Operator (any industry) I; Electromagnet-Crane Operator (any industry) I; Orange-Peel Operator (any industry) I.
GOE: 05.11.04 STRENGTH: M GED: R3 M1 L1 SVP: 4 DLU: 77

921.663-062 TRUCK-CRANE OPERATOR (any industry) alternate titles: mobile-crane operator

Operates gasoline- or diesel-powered crane mounted on specially constructed truck chassis to lift and move materials and objects: Drives truck to work site and directs activities of LABORER, HOISTING (any industry) in placing blocks and outriggers to prevent capsizing when lifting heavy loads. Starts crane engine. Moves levers and pedals to rotate crane on chassis, to raise and lower crane boom, and to raise and lower loadline. May operate crane according to signals from helper. May bolt boom sections together to extend or modify boom for pile driving or high lifting. May be designated according to type of power used as Diesel-Truck-Crane Operator (any industry); Gasoline-Truck-Crane Operator (any industry); or according to attachment as Clamshell Operator (any industry) II; Demolition-Crane Operator (any industry) II; Electromagnet-Crane Operator (any industry) II; Orange-Peel Operator (any industry) II.
GOE: 05.11.04 STRENGTH: M GED: R3 M1 L1 SVP: 5 DLU: 77

921.663-066 YARDING ENGINEER (logging) alternate titles: yarder operator

Operates yarding machine to pull logs from cutting area to landing: Controls direction, speed, and braking of cable drums to position *chokers* or grapples over logs, pull logs across cutting area, lift logs over tree trunks and other obstructions, and position logs for loading onto trucks, using pedals and hand levers in response to whistle or horn code signals. May drag blocks, cable, and other equipment to rigging crew. May raise steel tower, or prerigged spar, and tension guy lines. May drive self-propelled yarder between yarding sites. May be designated according to type of yarding system used as High-Lead Yarder (logging); Sky-Line Yarder (logging); Slack-Line Yarder (logging); or according to type of equipment operated as Grapple-Yarder Operator (logging); Steel-Spar Operator (logging); Triple-Drum Operator (logging). May control machinery on deck of pullboat in cypress forest and be designated Pullboat Engineer (logging).
GOE: 05.11.04 STRENGTH: L GED: R3 M1 L2 SVP: 6 DLU: 77

921.663-070 TRUCK LOADER, OVERHEAD CRANE (nonfer. metal)

Operates overhead crane with hand held control box to load trucks with bundles of aluminum extrusions: Reviews daily truck-delivery schedules to determine information, such as description of orders, sequence of deliveries, and special loading instructions. Weighs bundles, using floor scale, and records weight for company records. Attaches hook or sling of crane to bundles, and presses buttons on control box to hoist and move bundles to loading area or onto trucks, according to unloading sequence. Inspects bundle packaging for conformance to customer requirements. Removes and batches packing tickets. Occasionally loads, restacks, or unloads bundles from trucks by hand or using industrial truck. Directs truck drivers backing vehicles into loading bays and uncovers, covers, and secures loads for delivery.
GOE: 05.11.04 STRENGTH: M GED: R2 M1 L2 SVP: 4 DLU: 86

921.664-010 LINE MOVER (railroad equip.)

Spots railroad cars and railroad-car-truck assemblies on production lines for further processing in locomotive and car building establishment using one of following methods: (1) Attaches one end of push-pole against tractor and other end against assemblies on rails. Signals TRACTOR OPERATOR (any industry) vocally or by hand to push car or car-trucks on rails to specified location. (2) Attaches chain and clevises to assemblies and tractor and signals operator to pull assemblies to specified location.
GOE: 05.12.04 STRENGTH: M GED: R3 M1 L1 SVP: 3 DLU: 77

921.664-014 RIGGER (logging) alternate titles: second rigger

Installs blocks and guy lines for *high lead*, slack line, or similar log yarding system: Cuts notch around anchor stumps specified by HOOK TENDER (logging), using chain saw and ax. Wraps cable around stump and secures it in position with spikes and U-bolts. Installs block, pulls winch cable through block, and secures cable to yarding blocks and guy lines. Signals winch operator to haul yarding blocks and guy lines to anchor stumps, and secures them to anchor stumps. Splices cable to make rigging parts or repair broken or worn cable, using marlin spikes, vise, hammer, and wire cutters. Dismantles yarding system and loads rigging onto trucks for removal to new yarding site. May install yarding cables, *choker* cables, cable swivels, carriages, and related rigging. May rig and erect wooden spars. May climb wooden spars, using climbing spurs and safety rope, to install or repair rigging. May lead activities of crew and be designated Head Rigger (logging).
GOE: 05.12.04 STRENGTH: V GED: R3 M2 L2 SVP: 5 DLU: 77

921.665-010 CEMENT-BOAT-AND-BARGE LOADER (cement)

Tends pipeline system that conveys dry cement from storage silos to ships and barges at cement plant loading dock: Screws flexible hose to dock pipeline and inserts and secures hose to loading port of ship or barge. Ties lines to hose to support hose during loading operation. Turns handwheels to open or close valves and route cement from designated silos through pumps and to vessel.

according to loading orders. Signals SILO TENDER (cement) to start and stop pumps. Monitors movement of cement through pipelines and tightens couplings or repairs loose connections, using handtools. Observes movement of tide, vessel, and hose hookup in relation to pier, and adjusts ship mooring and hose support lines to ensure continuous and safe operation. Observes cargo hold of vessel to determine completion of loading. Disassembles ship-to-shore hookup, and cleans pipes, hoses, and fittings.
GOE: 05.12.06 STRENGTH: V GED: R2 M1 L1 SVP: 2 DLU: 77

921.667-010 BOAT-HOIST-OPERATOR HELPER (retail trade)
Assists BOAT-HOIST OPERATOR (retail trade) to move, lift, and lower yachts and cruisers into and out of water and performs related job tasks: Guides hoist operator by hand and voice signals to maneuver wheeled hoist around obstructions and into loading position above boat. Positions and connects hoist slings for lifting boats. Signals hoist operator to lift or lower boat and guides hoist operator to safely maneuver suspended boat to launching slip, display area, or repair shop. Manually steadies boat as vessel is raised from or lowered into water to prevent bumping into pilings. Positions keel and hull support blocks to support boat being lowered to ground or onto skid. Disconnects and stows slings. Directs stream of water under high pressure from hose against exterior of boat to clean hull of silt, mud, and marine growth. Sands boat surfaces by hand in preparation for painting. Paints boat bottoms, using brush. Assists in mechanical servicing and repairing of boats. Assists other workers in boat repair facility.
GOE: 05.12.04 STRENGTH: H GED: R1 M1 L1 SVP: 2 DLU: 77

921.667-014 CHASER (logging)
Directs placement of logs brought to landing by *high lead* rig or tractor and unhooks *chokers* from logs: Hand signals YARDING ENGINEER (logging) or LOGGING-TRACTOR OPERATOR (forestry; logging; saw. & plan.) where to drop logs on landing for reloading onto logging trucks. Pulls end of choker from bell (sliding fastener) on choker cable to open noose. Signals operator to pull choker free of logs. Cuts knots and limbs from logs, using ax and chain saw. Attaches equipment, such as chokers, lines, blocks, and fire equipment, to outbound rigging as indicated by whistle signals from RIGGING SLINGER (logging). May mark logs [LOG MARKER (logging)]. May be designated Cat Chaser (logging) in tractor logging operations or Water Chaser (logging) when working on floating logs.
GOE: 05.12.04 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

921.667-018 DUMPER (any industry) alternate titles: bulk loader
Dumps materials, such as coal, chemicals, flue dust, grain, ore, sugar, and salt, into and from railway cars, trucks, or other vehicles, according to specific instructions: Positions and blocks vehicles by signaling LOCOMOTIVE ENGINEER (r.r. trans.) 910.363-014 or TRUCK DRIVER, HEAVY (any industry) 905.663-014, or by using winch and car jack or powered tractor to spot cars and set brakes. Positions spout, chute, and conveyor over or into car, truck, bin, or storage pile and opens slide in spout or chute to start flow of material into or from vehicles. Positions vehicle over storage bin and opens air valve, side door, or car hopper door, starts conveyors, pneumatic conveyors, or elevators, and adjusts dampers to feed materials to specified bin. May use power scoop to pull grain from car into receiving chute. May collect grain sample, using probe. May drive truck onto ramp, secure it with blocks, and attach hook from electric hoist to front end of trailer or truck and push button to activate hoist or move lever of hydraulic lift to elevate front end of truck as tailgate is opened to dump material. May vibrate hopper to facilitate flow into slurry pit, using airhammer. May open solvent tank valve and start pump to wash and transfer residue of materials to saturator and other tanks. May observe pressure gauges and adjust valves to maintain specified pumping pressure. May record car identifying information, such as weight and volume of material loaded and number of cars dumped or filled. May be designated according to kind of vehicle unloaded as Car Dumper (any industry); according to kind of material unloaded as Grain Unloader (grain-feed mills); or according to type of equipment used as Spout Positioner (any industry); Wincher (any industry).
GOE: 05.12.03 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 82

921.667-022 LABORER, HOISTING (any industry) alternate titles: crane follower; crane hooker; hitcher; hooker; oiler; signaler
Assists workers engaged in operating derricks, cranes, power shovels, or other hoisting machines used to lift and move machinery, equipment, or materials, such as concrete, castings, structural steel, stone slabs, mill rolls, scrap metal, pipe, dirt, and logs, performing any combination of following duties: Couples and uncouples railroad cars and throws railroad track switches. Affixes hook, bucket, electromagnet, or demolition ball to crane, or affixes rope, cable, chain, sling, or other grappling equipment or attachments to object being lifted or to lifting mechanism. Places blocking, out-riggers, or screw-jacks in position to hold crane or shovel upright when lifting heavy loads. Places supports in position to receive load. Signals operator, vocally or with hand signals, to guide operator in lifting and moving loads when view from crane or shovel cab is obstructed. Pushes or pulls load as it is lowered, until it is deposited in desired place. Secures load to trucks or railcars, using ropes, chains, or bands. Lubricates moving parts of crane or shovel with grease gun or oilcan. May install extension sections to boom, using pins and cotter keys, or nuts and bolts. May lay track or timber runways on which tread-wheeled machines move. May drive truck-mounted crane from one work location to another. May be designated according to equipment used, attachments made, or area worked in as Concrete-Bucket Hooker (construction); Floor Worker, Transfer Bay (nonfer. metal); Locomotive-Crane-Operator Helper (any industry); Log Hooker (millwork-plywood; saw. & plan.); Magnet Placer (steel & rel.); Pit-Worker, Power Shovel (any industry); Power-Shovel-Operator Helper (any industry); Truck-Crane-Operator Helper (any industry). Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.04 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 78

921.667-026 WHARF WORKER (water trans.)
Moves grain spouts to load grain into holds of ships: Unlashes grain spout, and lowers, raises, and changes direction of spout to test operation of guide ropes and hand winches. Lowers spout into hold of ship and directs spout toward specified compartment. Signals CONVEYOR-SYSTEM OPERATOR (any industry) to start flow of grain. Moves spout in various directions to load grain evenly into compartment.
GOE: 05.12.03 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

921.682-010 LOADER, MALT HOUSE (beverage) alternate titles: kiln loader; malt loader
Controls equipment to transfer steeped or malted barley to or from germinating compartments or drying kilns in malt house: Presses switch to position overhead spout under chute, and pulls handle to open chute and dump barley onto compartment or kiln floor. Lifts and removes compartment door to permit entrance of power shovel, using winch. Moves levers and presses pedals of power shovel to transfer malted barley from compartment onto conveyor. Climbs ladder into compartment to clean interior, using scraper, shovel, and high-pressure water hose.
GOE: 05.12.04 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

921.682-014 PALLETIZER OPERATOR I (any industry)
Operates console that controls automatic palletizing equipment to sort, transfer, and stack on pallets containers of finished products, such as sugar, canned vegetables, citrus juice, and cigarettes: Reads production and delivery schedules and stacking pattern to determine sorting and transfer procedures, arrangement of packages on pallet, and destination of loaded pallet. Observes packages moving along conveyor to identify packages and to detect defective packaging, and presses console buttons to deflect packages to predetermined accumulator or reject lines. Turns selector switch on palletizer to control stacking arrangement of packages on pallet and to transfer loaded pallet to storage or delivery platform. Supplies loading equipment with empty pallets. Stops equipment to clear jams. Informs supervisor of equipment malfunction. May keep record of production and equipment performance. May operate depalletizing equipment and be designated Depalletizer Operator (any industry).
GOE: 06.04.40 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

921.682-018 STACKER-AND-SORTER OPERATOR (saw. & plan.)
Operates machines to sort and stack lumber: Activates conveyor chain that positions lumber stack over hoist. Moves controls to lift hoist and slide single layers of lumber onto chains of sorting machine where boards drop into storage pockets according to length. Starts chain conveyor in bottom of pocket to transfer lumber onto powered rollers for machine stacking preparatory to kiln drying or shipping. Records number of pieces removed from storage, using mechanical hand counter.
GOE: 05.12.04 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

921.682-022 TRANSFER CONTROLLER (saw. & plan.) alternate titles: jump-roll operator; separator
Operates conveyor system in sawmill to route lumber, cants, and timber to processing operations according to size, grade, and specie, or type of processing required: Raises and lowers cross chains by moving levers and pedals to shift boards, timbers, or cants from one set of conveyor rolls to another or from rolls to platform. Raises stop blocks to stop lumber at specified points along rolls. Stops and reverses conveyors to re-route cants for further processing. May operate electric hoist to move cants to stockpile. May operate cut-off saw to cut cants to specified lengths.
GOE: 05.12.04 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

921.683-010 BOAT-HOIST OPERATOR (retail trade)
Operates mobile boat hoist to lift and lower yachts and cruisers in and out of water, and to move boats to designated work or storage areas: Starts hoist engine and pushes and pulls levers to move and maneuver four-wheeled boat hoist to straddle boats for moving. Passes sling ends under straddled boat hull, shackles sling ends to winch span, and moves levers to operate power-winch to raise boat clear of support blocks or skids. Drives hoist to move suspended boat to designated location or to hoisting dock to lower boat into water. Operates winch to lower boat to point just above ground surface. Places keel blocks under keel and lowers boat onto keel blocks. Slides and positions hull support blocks and frames against boat bottom for vertical support. Loosens and pulls slings from underneath boat. Drives hoist to dock and lowers boat until slings are slack and signals boat operator to back boat out to clear slings and dock. Operates winch to raise slings out of water or leaves slings in water to pick up another boat. Operates truck to tow empty skids around display or shop areas. Jacks up skids and cradled boats and places dollies under skids to facilitate moving boats in display area. Mounts propellers on shafts to prepare new boats for launching. Operates boats to maneuver boats in and out of slips. Performs related boat handling duties.
GOE: 05.11.04 STRENGTH: H GED: R3 M1 L1 SVP: 3 DLU: 77

921.683-014 BOOM-CONVEYOR OPERATOR (any industry) alternate titles: loader-head operator; stacker attendant
Controls boom conveyors to move materials, such as coal, ore, and gravel, to and from railroad cars or processing station, and storage piles: Starts speci-

fied boom conveyor and conveyor belts, and adjusts height, swing, and extension of boom according to size of storage pile or position of car. Opens side gates of railroad cars or gates of processing station to dump material onto conveyor that carries it to storage pile. Positions boom conveyor over railroad car and starts flow of materials from plant or storage pile to load car. Regulates conveyor speed to prevent spilling or weight variations among cars. Observes gauges and lights on control panel to detect malfunctions of conveyor system. Diverts materials to storage bins or notifies plant or tipple operator to stop supply of materials during emergency. Lubricates machine, using grease gun and oilcan. May drive mobile boom conveyor to designated work area. May be known as Stacker Operator (any industry).
GOE: 05.12.04 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 79

921.683-018 CANTILEVER-CRANE OPERATOR (water trans.) alternate titles: container crane operator

Operates electrically powered crane equipped with cantilevers (structural-steel framework which can be lowered to horizontal position and extended over deck or hold of vessel) on which hoisting gear is supported to load or unload container cargo from vessels: Moves controls or levers and presses pedals to activate electrical power, move tower in position alongside vessel, and lower cantilever over deck or hold of vessel. Moves controls to lower hoisting gear for attachment of sling to container, lift and move container along cantilever, and lower and position container on dock, or on vessel deck or hold. Raises cantilever to vertical position when positioning crane to avoid hitting superstructure of vessel. May follow hand signals of other worker. May operate cantilever crane equipped with clamshell to load or unload bulk materials.
GOE: 05.11.04 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

921.683-022 COAL-EQUIPMENT OPERATOR (utilities)

Operates locomotives and bulldozers and controls conveyor systems to transport and pile coal for use in boilers of generating plant: Operates locomotive to haul coal car over unloading bins. Pushes lever of car shaker or car turner to empty coal from car into bins. Starts and controls conveyor that transfers coal to and from bins, bunkers, and storage pile. Operates bulldozers and front-end loaders to shape and compact coal storage pile to minimize possibility of spontaneous combustion. Lubricates and adjusts conveyor systems, bulldozers, and other coal-moving equipment. May loosen frozen coal in gondolas, using steam hose or blowtorch. May collect coal samples for laboratory tests. May tend crusher that reduces size of coal. May operate tugboat to move and position barges for unloading. May read meters and record weight of coal in logbook.
GOE: 05.11.02 STRENGTH: M GED: R3 M2 L3 SVP: 4 DLU: 78

921.683-030 CUPOLA HOIST OPERATOR (foundry)

Operates skip hoist, using levers and foot brakes, to lift pig iron, coke, and limestone to top of cupola furnace for CUPOLA CHARGER (foundry). Maintains and lubricates hoisting machinery.
GOE: 06.04.40 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

921.683-034 DERRICK-BOAT OPERATOR (water trans.) alternate titles: barge-crane operator; deck-engine operator; derrick-barge operator; floating-derrick operator; scow-derrick operator

Operates derrick mounted on boat or barge to lift and move heavy objects: Moves control levers and pedals of hoist to rotate, raise, or lower derrick boom and to raise or lower loadline and load attached to it. May move controls of small engines or hoists to push against bottom of body of water with spuds (heavy poles) to move barge from place to place. When derrick boat is self-propelled, operator may be required to possess Master's license issued by U.S. Government.
GOE: 05.11.04 STRENGTH: L GED: R3 M1 L2 SVP: 5 DLU: 77

921.683-038 ELEVATOR OPERATOR, FREIGHT (any industry) alternate titles: elevator operator, service

Operates elevator to transport materials and equipment between floors of industrial or commercial establishment: Moves control levers, or pushes buttons to control movement of elevator. Opens and closes safety gate and door of elevator at each floor where stop is made. May load and unload elevator. May transport freight from elevator to designated area, using handtruck. May transport passengers.
GOE: 05.12.04 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

921.683-042 FRONT-END LOADER OPERATOR (any industry) alternate titles: loader operator; wheel loader operator

Operates straight or articulated rubber-tired tractor-type vehicle equipped with front-mounted hydraulically powered bucket or scoop to lift and transport bulk materials to and from storage or processing areas, to feed conveyors, hoppers, or chutes, and to load trucks or railcars: Starts engine, shifts gears, presses pedals, and turns steering wheel to operate loader. Moves levers to lower and tilt bucket and drives front-end loader forward to force bucket into bulk material. Moves levers to raise and tilt bucket when filled, drives vehicle to work site, and moves levers to dump material. Performs routine maintenance on loader, such as lubricating, fueling, and cleaning.
GOE: 05.11.04 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 81

921.683-046 HYDRAULIC-BOOM OPERATOR (smelt. & refin.)

Operates hydraulic boom to lift copper anodes from casting mold and place anodes in cooling tank: Moves levers to position hydraulic boom and cable line over cast anode, lift copper anode from mold, and place anode into slot of rack in cooling tank. Lifts filled rack from tank and places rack on railroad flatcar. Records number of anodes cast. Cleans mold, changes pouring ladles, and sweeps work area, as part of work crew.
GOE: 06.04.40 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

921.683-050 INDUSTRIAL-TRUCK OPERATOR (any industry)

Drives gasoline-, liquefied gas-, or electric-powered industrial truck equipped with lifting devices, such as forklift, boom, scoop, lift beam and swivel-hook, fork-grapple, clamps, elevating platform, or trailer hitch, to push, pull, lift, stack, tier, or move products, equipment, or materials in warehouse, storage yard, or factory: Moves levers and presses pedals to drive truck and control movement of lifting apparatus. Positions forks, lifting platform, or other lifting device under, over, or around loaded pallets, skids, boxes, products, or materials or hooks tow trucks to trailer hitch, and transports load to designated area. Unloads and stacks material by raising and lowering lifting device. May inventory materials on work floor, and supply workers with materials as needed. May weigh materials or products and record weight on tags, labels, or production schedules. May load or unload materials onto or off of pallets, skids, or lifting device. May lubricate truck, recharge batteries, fill fuel tank, or replace liquefied-gas tank. May be designated according to article moved as Lead Loader (smelt. & refin.); process in which involved as Stripper Truck Operator (smelt. & refin.); or type of truck operated as Electric-Truck-Crane Operator (any industry); Fork-Lift-Truck Operator (any industry); Tier-Lift-Truck Operator (any industry). May be designated: Burnt-Lime Drawer (concrete prod.); Casting Trucker (foundry); Electric-Freight-Car Operator (r.r. trans.); Electric-Truck Operator (any industry); Gasoline-Truck Operator (any industry); Metal-Storage Worker (nonfer. metal); Package-Lift Operator (any industry).
GOE: 06.04.40 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 82

921.683-054 JAMMER OPERATOR (logging) alternate titles: stiff-neck loader

Operates gasoline- or diesel-powered jammer (A-frame hoist mounted on truck chassis) to load logs on truck and to lift trailer from logging truck to ground.
GOE: 05.11.04 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

921.683-058 LOG LOADER (logging) alternate titles: grapple operator; heel-boom operator

Operates heel-boom log loader equipped with cable, hydraulic, or pneumatically controlled grapples to load logs onto log trucks. Selects logs to be loaded according to specie and size required to attain balanced and compact load. May be designated according to type of machine operated as Shovel-Loader Operator (logging).
GOE: 05.11.04 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 78

921.683-062 SKIP OPERATOR (steel & rel.) alternate titles: scale-and-skip-car operator

Controls scale car (larry car) and skip hoist to transfer raw materials from storage bins to blast furnace: Moves controls of scale car to position car under chute of storage bin. Pulls lever to open bin filling car with raw materials, such as iron ore, coke, limestone, or sinter. Drives car onto scale to weigh materials in car. Positions car on skip pit and pulls lever to dump contents into skip car. Moves control of skip hoist to transport skip car up inclined ramp and dump contents into charging bell of furnace. Records data, such as number of charges, weight of materials, and stock levels in furnace.
GOE: 06.04.40 STRENGTH: L GED: R2 M2 L2 SVP: 4 DLU: 77

921.683-066 SORTING-GRAPPLE OPERATOR (logging)

Operates mobile crane equipped with heel-boom and hydraulic grapples to sort and stack logs in sorting yard according to species, grade, size, and designated use markings on log: Starts crane engine and moves levers and pedals to move and position machine boom and grapple to pick up individual logs. Moves levers to grasp log with grapples, force log against heel of boom, raise log to horizontal position, and rotate boom to position log on specified pile.
GOE: 05.11.04 STRENGTH: L GED: R3 M1 L2 SVP: 6 DLU: 77

921.683-070 STRADDLE-TRUCK OPERATOR (any industry) alternate titles: straddle buggy operator

Drives four-wheeled vehicle that carries loads of materials beneath its elevated frame for short hauls within or near plant: Starts vehicle and drives astride load of materials, such as lumber, bundled sheet metal, cased citrus juice, or empty skids. Pushes and pulls levers to raise and lower lifting mechanism equipped with hook, or to control hydraulic systems equipped with clamps (attached to underside of frame) that grasp, lift, and hold material or products for transport to designated area. Drives machine to specified delivery point, and moves levers to lower load to ground. Makes minor adjustments to vehicle. When conveying lumber, may be designated Lumber-Carrier Driver (saw. & plan.).
GOE: 06.04.40 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

921.683-074 TOWER-LOADER OPERATOR (water trans.) alternate titles: coal-tower operator

Operates mechanical loading tower to load ships and barges with bulk raw materials, such as coal, iron ore, or iron pellets: Moves controls, levers, and depresses pedals to position tower for loading operations, to lower conveyor directly over vessel hatch, and to position chute to guide materials into hold of ship. Starts conveyor belt to convey materials from stockpile or gondola cars

into hold of vessel. Moves chute controls to spread materials evenly throughout hold of vessel. Adjusts and makes minor repairs to tower and accessory equipment.
GOE: 05.11.04 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

921.683-078 TRANSFER-CAR OPERATOR (brick & tile)
Drives electrically powered transfer car on railroad tracks to transport carloads of brick or tile to and from loading station, drying tunnel, kiln, sorting area, or other designated area: Flips switches, moves levers, and depresses pedals to move transfer car to loading station and aligns rails on transfer car with rails on loading platform. Hooks winch cable to carload of brick or tile and operates winch to pull loaded drier car or kiln car onto transfer car. Drives transfer car to specified drier or kiln and aligns transfer car rails with rails into kiln or drier. Hooks cable to loaded car and operates winch to pull car into drier or kiln. Pulls car of dried or fired brick or tile from drying tunnel or kiln and transfers car to sorting area, processing department, or storage area. May manually push or pull loaded or empty cars onto or off transfer car. May open and close drying tunnel or kiln doors, using hook or by pressing button or moving lever. May move dried brick from drier cars to kiln cars, using hoist. May operate automated system that loads brick onto drier cars and moves cars through drying tunnel.
GOE: 05.11.04 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 78

921.683-082 WINCH DRIVER (water trans.)
Operates steam or electric winch to hoist or lower cargo in or out of ship's hold: Inspects booms, lashings, and wire rope to assure safe operation. Moves levers to raise, lower, and turn load. Follows hand signals of HATCH TENDER (water trans.) to control movement of load when it is obscured. May alternate work with HATCH TENDER (water trans.).
GOE: 05.11.04 STRENGTH: L GED: R3 M1 L2 SVP: 4 DLU: 77

921.683-086 YARD WORKER (ship-boat mfg.)
Operates winch to move towboats or other vessels from shop to yard, and launches vessels, using winch: Pushes buttons or levers of automatic or hand jacks to raise vessel off ground. Positions dolly on tracks under ship. Releases jacks to lower vessel onto dolly. Pushes button or turns crank to actuate winch that pulls dolly and vessel into yard. Transfers vessel from dolly to cradle on launching rails, using jacks and other supports. Lowers cradle and vessel into water, using winch.
GOE: 05.12.04 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

921.685-010 BOAT LOADER II (water trans.)
Tends winch and loading chute to load boats and barges with iron ore at dock: Selects pocket of ore from list submitted by dock supervisor. Starts power winch that moves boat, by means of cables looped over dock pilings at bow, along rail and stern of boat until hatch is opposite ore pocket. Pulls overhead cables to lower ore chute, allowing ore to flow into hatch. Trims or evens distribution of ore in hold by raising and lowering chute to prevent listing of boat.
GOE: 05.12.04 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

921.685-014 BULL-CHAIN OPERATOR (saw. & plan.) alternate titles: deck worker; log-deck tender
Tends chain conveyor that hauls logs up chute from pond to saw or barker deck. May activate kicker arms that push log conveyor to deck.
GOE: 05.12.04 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

921.685-018 CAGER OPERATOR (can. & preserv.)
Tends stacking machine that loads sealed cans or jars of baby food into metal baskets for processing in retorts: Pushes basket, mounted on dolly, onto hydraulic lift mounted at floor level and located at discharge platform of filling machine. Presses button and moves lever to activate lift that raises adjustable bottom of basket up to level of platform. Presses button to activate device that slides jars of baby food from platform into basket. Places divider over each layer of jars in basket. Activates lift that lowers adjustable bottom of basket for subsequent layers of jars until basket is filled. Attaches tag to basket to identify type of baby food packed.
GOE: 06.04.40 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

921.685-022 CHIP-BIN CONVEYOR TENDER (chemical; paper & pulp) alternate titles: chip deliverer; chip-silo tender
Tends equipment that conveys wood chips from chippers, cleaning machines, or yard storage to storage tanks and digester bins: Starts conveyor belts and elevators to convey specified wood chips to designated bins and tanks. Adjusts feed mechanism by valve or lever control to regulate flow of wood chips to prevent overloading of belt. Cleans belts, using shovel, broom, and airhose, and lubricates machinery. May set trippers or slides to divert chips from belt into specified bins. May measure tanks to determine amount of chips in storage. May unload chips from railroad cars or trucks, using pneumatic tube.
GOE: 06.04.40 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

921.685-026 CONVEYOR TENDER (any industry) alternate titles: belt tender; conveyor monitor; receiver, bulk system
Tends conveyor or conveyor system that moves materials or products by belt, auger, or bucket conveyors to and from stockpiles, bins, silos, processing operations, or departments, or to load and unload railroad cars and trucks: Moves levers or pushes buttons to start conveyor. Loads conveyor by hand, lift, or hoist, or by opening gates, chutes, or hoppers. Observes movement of materials or products on conveyor and dislodges jams, using pole, bar, handtools, or by hand. Notifies supervisor of equipment malfunction. Lubricates moving parts, using grease gun and oilcan. May position deflector bars, gates, chutes, or spouts to divert flow of materials from one conveyor onto another conveyor. May move and assemble portable conveyor sections and plug in electric cords to start conveyors. May clean work area, using shovel and broom. May tend conveyor motors in grain elevator and be designated Grain-Elevator-Motor Starter (grain-feed mills).
GOE: 06.04.40 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 81

921.685-030 COOKER LOADER (oils & grease) alternate titles: charge loader; tank charger
Tends conveyor that feeds offal, bone, or meat into cookers: Opens cooker lid and conveyor chute above cooker. Starts conveyor and observes ammeter or marker in cooker to determine when to stop conveyor, or sets timer to stop conveyor automatically. Cleans working area, using broom and water hose. May tend related equipment that breaks and chops material prior to cooking. May tend conveyor that feeds horizontal, steam-heated melters (cooking vessels) and be designated Melter Loader (meat products).
GOE: 06.04.40 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

921.685-034 DRIER-TAKE-OFF TENDER (elec. equip.)
Tends conveyor that regulates movement of storage-battery plates through drying machine. Removes dried plates emerging from drier on conveyor and stacks plates on dollies or skids. Moves loaded dollies or skids to stockroom and empty ones to takeoff station, using electric lift truck.
GOE: 06.04.40 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

921.685-038 DUMP OPERATOR (any industry) alternate titles: car-dumper operator; tipple worker
Tends mechanical or electrical dumping equipment to dump materials, such as grain, raw materials, coal, or ore, from mine cars, railroad cars, or trucks into bins or onto conveyor for storage, reloading, or further processing, using either of following methods: (1) Observes that car or truck is spotted accurately on bed of rotary dump. Moves controls to secure clamps over couplings that hold car while being tipped. Starts motor or pulls lever that tips car and dumps contents. Releases clamps to remove car. (2) Opens bottom or side doors of car or truck spotted over gravity dump. Moves controls to lower car shakeout device into car and to start vibration that loosens remaining coal or ore. May hook winch cables to cars to draw them onto dumping bed. May couple and uncouple cars. May be required to maintain records of unloading operations. May be designated according to type of equipment tended as Car-Shakeout Operator (cement; mine & quarry); Rotary-Dump Operator (mine & quarry; steel & rel.); or according to material unloaded as Grain Unloader, Machine (grain-feed mills).
GOE: 05.11.04 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 80

921.685-042 ELECTRIC-FORK OPERATOR (agriculture)
Tends powered hoist to load vine crops, such as green peas or lima bean vines onto conveyor of viner (pea or bean-shelling machine): Pushes hoisting fork into pile of vine crops, and starts hoist that lifts vine crops and drops vines into viner. Rakes up scattered vines and pitches vines into viner, using pitchfork.
GOE: 03.04.01 STRENGTH: H GED: R1 M1 L1 SVP: 2 DLU: 77

921.685-046 FRUIT DISTRIBUTOR (agriculture)
Tends conveyor to distribute citrus fruit to packers' work stations: Tends conveyor, patrols catwalks beside conveyors and monitors flow of fruit passing to each packing station. Reroutes flow of fruit to maintain adequate supply to each packer. Turns wing nut on rail of conveyor to loosen deflector bar. Pushes or pulls on rod to move longitudinal deflector bar regulating flow of fruit to approximate packing speed of each worker. Turns wing nut to clamp rod attached to deflector bar in place. Repeats task to adjust all deflector bars necessary to obtain desired flow of fruit to packers.
GOE: 05.12.04 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

921.685-050 PRODUCTION-SUPPLY-EQUIPMENT TENDER (food prep., nec) alternate titles: production helper
Tends equipment that conveys shelled corn and vegetable oil between processes in plant producing foods, such as corn chips and cheese puffs: Starts bucket-type conveyor or pneumatic conveyor that transfers shelled corn from freight cars and trucks to corn storage elevator. Moves levers to control flow of corn from elevator to hoppers of cleaning and grinding machines. Connects pipe, tightens coupling with wrenches, and starts pumps to transfer vegetable oils from tank cars to storage tanks. Opens valves to transfer oils from storage tanks to cooking vats in production areas of plant. Collects oil and corn grain samples for laboratory analysis. Sprays corn storage elevators and conveyor belts with insecticide and seals elevator for specified period to eliminate insects. May weigh trucks before and after unloading [GRAIN RECEIVER (grain-feed mills)].
GOE: 06.04.15 STRENGTH: M GED: R3 M1 L2 SVP: 4 DLU: 77

921.685-054 SORTER OPERATOR (saw. & plan.) alternate titles: lumber sorter, machine
Tends sorting mechanism and grades green lumber as lumber passes on conveyor to designated racks: Determines length and thickness of board by comparing board with gauged marks on machine table. Lifts end of board and feels wood to estimate moisture content. Routes board to appropriate holding rack by pressing specified button on control panel. May grade and route veneer to designated bin and be designated Veneer Sorter (millwork-plywood).

GOE: 05.07.06 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

921.685-058 SPOUT TENDER II (chemical)

Tends railcar loading devices to load bulk material, such as phosphatic fertilizer, into hopper cars and boxcars: Presses buttons on hand held control box to position loading spout and feed conveyor over compartment of hopper car. Presses buttons to start spout feed conveyor and to start flow of material from overhead bin onto feed conveyor. Observes flow of material into hopper car and presses buttons on control box to change position of spout to assure equal weight distribution in hopper car. Collects sample of material from spout as each compartment is filled to make up composite sample for laboratory analysis. Closes hinged hatch covers on top of hopper car. Attaches grain doors (wooden inner doors) to contain material in boxcar, using hammer and nails. Moves lever to position hydraulically powered loading chute into boxcar. Presses buttons to start flow of material from overhead bin and to start slinger unit (high speed conveyor in curved end of chute) which throws material to ends of boxcar. Moves levers to swivel slinger to distribute load evenly. Cleans boxcars and hopper cars to eliminate product contamination, using broom and shovel.
GOE: 05.12.04 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

921.685-062 STACKER TENDER (millwork-plywood)

Tends control panel that controls raising and lowering of stacking tables in veneer bins, and conveyor that conveys stacks of veneer sheets from filled bins for further processing: Observes control panel lights to determine status of each bin being loaded and pulls lever to lower veneer stacking table of respective bin to unloading position when panel light indicates bin is full. Paints identifying information on end of veneer stack, using paint spray can. Pushes buttons to open bin gate and to activate conveyor to convey veneer stack from bin for further processing. Pushes lever to raise veneer stacking table to loading position. Observes control panel lights to detect faulty operation of stacking machine and stops conveyor and machine when malfunction occurs. Pulls lever on control panel or releases valve manually at bin to lower stacking table and pulls jammed veneer sheet into bin. Pushes button to start timer whenever machine breakdowns occur and records downtime according to type of machine breakdown.
GOE: 06.04.40 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

921.685-066 TRANSFER OPERATOR (paper & pulp)

Tends equipment that distributes logs and wood-blocks to saws, barkers, washers, splitters, chippers, and grinders according to size and species of wood: Observes logs and blocks to determine wood species and to estimate diameter and length of logs and condition of wood and bark. Pushes button kickers, or moves lever or pedal controls to start transfer chains and conveyors to distribute and convey logs and blocks to appropriate machines. Breaks up jams on conveyors, using pike pole, or *picaroon*. May remove oversized blocks or those having knots or decayed portions. May saw or split oversized blocks.
GOE: 06.04.40 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

921.685-070 UNSCRAMBLER (can. & preserv.)

Tends machine that automatically unscrambles cans or jars of cooked food products from retort baskets into straight line to facilitate further processing: Lowers retort basket to top of hydraulic lift, using hoist, and clamps basket onto lift. Adjusts conveyor sides to permit passage of cans or jars, and pushes button to activate conveyor. Moves levers to activate lift that raises tiers of cans or jars to conveyor height and to activate arm which moves containers from retort basket to conveyor. Observes flow on conveyor and removes warped or bent cans and repositions cans causing bottlenecks. Repeats operation for each layer of cans or jars in basket. Moves empty basket to designated area, using overhead hoist.
GOE: 06.04.40 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

921.686-010 CARTON-COUNTER FEEDER (tobacco)

Sorts and feeds cartons of damaged or stale cigarettes according to brands into tracks of conveyor that carries cartons through automatic counting device and down chute for reprocessing.
GOE: 06.03.02 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

921.686-014 CONVEYOR FEEDER-OFFBEARER (any industry) alternate titles: carton catcher; dumper-bulk system

Feeds and off bears conveyor or conveyor system performing any of following tasks: Picks up materials or products from pallet, handtruck, or dolly, and places materials or products onto conveyor, or opens bins or chutes to dump bulk materials onto conveyor, or hangs products on chain or overhead conveyor, or transfers materials or products from one conveyor to another conveyor, and aligns materials or products on conveyor to prevent jams. Dislodges jams by hand or pole. Removes materials or products from discharge end of conveyor and stacks materials or products on trays, pallets, or handtrucks. May feed and off bear conveyor that conveys material or products through machines or equipment operated or tended by another worker. May inspect materials or products for damage or for conformity to specifications. May push material or products between machines or departments on roller conveyor. May move materials or products to or from conveyor, using handtruck, dolly, or electric handtruck. May start or stop conveyor. May open cartons or shipping containers and place contents on conveyor. May use hoist to load or unload conveyor. May stencil, tag, stamp, or write identifying information on packaged products. May record production. May keep work area clean and orderly.
GOE: 06.04.40 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 86

921.686-018 LOG-HAUL CHAIN FEEDER (paper & pulp; saw. & plan.)

Rolls logs from railroad cars onto moving log-haul chain: Cuts wires and stakes that bind load to car. Breaks jam of logs on car and rolls them one by one on log-haul chain. Cleans log haul and car.
GOE: 05.12.04 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

921.686-022 POND WORKER (millwork-plywood; paper & pulp; saw. & plan.) alternate titles: chute feeder; jacker feeder; log-chain feeder; poler; sinker puller; slip feeder

Feeds logs onto conveyor that moves logs from pond to saw or barker deck: Stands on catwalk, flatboat, raft, or floating logs and guides logs onto conveyor, using pike pole. Raises sunken logs, using hoist. May operate powered winch to raise sunken logs. May be designated according to work station as Boat Worker (saw. & plan.); Log Rider (saw. & plan.).
GOE: 05.12.04 STRENGTH: H GED: R1 M1 L1 SVP: 2 DLU: 77

921.687-010 CAR-DUMPER-OPERATOR HELPER (beverage) alternate titles: car-unloader helper

Performs following tasks in dumping grain from railroad cars: Slides open and secures car doors. Removes wood and paper from grain flowing from tipped cars, using grappling hooks. Positions metal plank in car to guide grain dumped into hopper. Sweeps empty car and closes door. May lower road crossing gates at rail and road intersection.
GOE: 05.12.04 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

921.687-014 CHOKE SETTER (logging)

Fastens *choker* cables around logs for yarding from cutting area to landing: Pulls choker cables from tractor winch or main-line of yarding machine, passes ball (one end) under and around log, and secures end to bell (sliding fastener) to form noose. May clear brush and earth from under log, using ax and shovel. May assist RIGGING SLINGER (logging) in installing and dismantling rigging of high lead or similar yarding system. May be designated Cat Hooker (logging) in tractor yarding.
GOE: 05.12.04 STRENGTH: V GED: R1 M1 L1 SVP: 2 DLU: 77

921.687-018 LOADER (mfd. bldgs.)

Loads prefabricated home components and modular home units on trucks for shipment to construction site: Loads components in reverse order of house construction sequence and according to size, using electric hoist. Straps completed shipment stacks, using banding tool and clamps. Lifts modular home units from assembly line trailer and lowers unit onto truck bed for shipment, using hydraulic jacks.
GOE: 05.12.04 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

921.687-022 LOG LOADER HELPER (logging) alternate titles: second loader

Loads logs onto trucks or railroad cars, performing any combination of following tasks: Hand signals directions for hoisting of trailer from truck chassis and positioning of truck for loading. Connects brake and electrical lines and trailer to truck. Positions railcars for loading, using power winch, pinchbar, and car hand brakes. Secures tongs, slings, or other attachment to log, guides loading of logs by hand and using hand signals, and releases attachments. Trims protruding limbs and knots, using ax and chain saw. Marks log with specified symbols, using paint spray can or branding hammer. Secures load with chains, cables, or steel straps. May roll logs up ramp and position logs on truck, using peavey or cant hook. May be designated according to type of loading equipment involved as Jammer Operator Helper (logging); Grapple Operator Helper (logging); or work location as Loader Helper, Sorting Yard (logging).
GOE: 05.12.04 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

921.687-026 RIGGER HELPER (any industry)

Assists RIGGER (any industry) in setting up, bracing, and rigging hoisting equipment, performing duties as described under HELPER (any industry) Master Title.
GOE: 05.12.04 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

921.687-030 RIGGER, THIRD (logging)

Carries blocks (pulleys) and cable to RIGGER (logging), threads cables through blocks, and performs similar tasks while working as member of crew engaged in installing blocks, cables, and other rigging used in skidding logs.
GOE: 05.12.04 STRENGTH: V GED: R1 M1 L1 SVP: 2 DLU: 77

921.687-034 WOOD HANDLER (paper & pulp)

Monitors flow of wood in chute and conveyors, and breaks up jams to maintain uninterrupted supply of wood to grinders: Stands beside conveyor and pushes and pulls crossed or interlocked blocks into alignment on belt, using pike pole. Picks up fallen blocks of wood and tosses wood back onto conveyor.
GOE: 05.12.04 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

922 OCCUPATIONS IN MOVING AND STORING MATERIALS AND PRODUCTS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with loading and moving materials and products, using work aids, other than machines, such as handtrucks, electric handtrucks or dollies, and wheelbarrows; shoveling, carrying, sorting, and stacking materials and products; and stock checking or records keeping not included in Division 22. Loading and moving materials and products by means of pumping equipment is included in Group 914.

922.137-010 SENIOR-COMMISSARY AGENT (air trans.)

Supervises and coordinates activities of workers engaged in receiving, storing, preparing, assembling, and loading supplies aboard aircraft, such as linens, glasses, emergency kits, and beverages for airline commissary: Reads shipping documents and inspects storage areas to determine space available for storage. Plans commissary supply schedule according to number and type of flights scheduled for departure. Directs workers as to amount and type of supplies to be assembled and loaded on each flight. Conducts inventories to determine supply requirements and orders replacements from main warehouse. Compiles receipt and disbursement data and computes balance. Contacts catering service, supply vendors, and other flight stations to coordinate equipment and supply balance. Trains new workers. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.09.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

922.137-014 SUPERVISOR, HIDE HOUSE (leather mfg.)

Supervises and coordinates activities of workers engaged in inspecting, storing and unloading incoming hides or skins. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: M GED: R3 M2 L2 SVP: 7 DLU: 77

922.137-018 SUPERVISOR, LOADING AND UNLOADING (any industry)

Supervises and coordinates activities of workers engaged in loading and unloading cargo from conveyances, such as railroad cars, trucks, and ships, and in moving and storing materials or products: Assigns job tasks to worker according to loading and unloading schedules, and observes loading of conveyance to determine conformance to loading patterns and to prevent shifting or damage to materials or products during transit. Verifies materials loaded or unloaded against work order or bill of lading. Directs workers to move materials or products to storage areas or production departments. Trains new employees in job duties. Performs duties as described under SUPERVISOR (any industry) Master Title. May schedule sequence of transportation usage, routes of transportation vehicle operators, or movement of materials into and out of storage area. May be designated according to materials handled, work location, or specialization as Bull-Gang Supervisor (tobacco); Munitions-Handler Supervisor (ordnance); Platform Supervisor (any industry); Supervisor, Case Loading (beverage); Supervisor, Loading (any industry); Supervisor, Shipping (bakery products); Supervisor, Shipping Room (beverage); Supervisor, Unloading (any industry).
GOE: 05.12.01 STRENGTH: M GED: R4 M2 L2 SVP: 6 DLU: 82

922.137-022 SUPERVISOR, OPEN-HEARTH STOCKYARD (steel & rel.)

Supervises and coordinates activities of workers engaged in stocking raw materials and scrap used for open-hearth furnace charging operations. Directs workers in filling charging boxes with scrap, loading boxes on charging buggies (low flatbed railroad car), weighing scrap, and positioning buggies on charging floor. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: M GED: R4 M2 L2 SVP: 8 DLU: 77

922.137-026 WAREHOUSE TRAFFIC SUPERVISOR (wholesale tr.)

Supervises and coordinates activities of workers engaged in unloading and placing tobacco on auction warehouse floor and directs traffic to and from warehouse: Directs drivers of loaded vehicles to unloading site, and empty vehicles to exits, to expedite unloading of vehicles and avoid traffic congestion. Directs workers to place loads of tobacco in designated areas on warehouse floor. May estimate amount of floor space available to prevent overcrowding of warehouse floor. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

922.137-030 YARD SUPERVISOR (forestry)

Supervises and coordinates activities of workers engaged in receiving and shipping Christmas trees: Inspects operations of yard to ensure that orders for trees are filled and company standards regarding processing of trees are adhered to. Inspects trees received from SUPERVISOR, CHRISTMAS-TREE FARM (forestry) and private individuals, and writes invoices to indicate number and sizes of trees accepted. Confers with MANAGER, CHRISTMAS-TREE FARM (forestry) regarding shipping schedules, tree production, and size of work force required. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.09.01 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

922.587-010 PRIMING-MIXTURE CARRIER (ordnance)

Moves explosive priming mixture from isolated storage houses to primer and rimfire charging departments: Supplies outside window boxes, near charging stations, with containers of various type mixtures according to work order. Records type and quantity of mixtures received and distributed. Turns valves to replenish water in humidifying trays in wet mixture houses and reports abnormal temperature in dry mixture houses. May flush storage houses, using hose, to prevent accumulation of explosive dust. May wash residue from empty containers with neutralizing solution.
GOE: 05.12.03 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

922.665-010 FLUMER I (sugar & conf.) alternate titles: beet flumer

Tends equipment that conveys water and sugar beets from storage bins through flume to washroom: Pushes button to start equipment and turns steam and water valves to admit heated water into flume. Turns crank to raise storage bin gate to start flow of sugar beets into flume. Turns valves to increase or decrease flow of water and beets through flume into washroom according to bell, telephone, or light signals. Observes flow of beets in flume to detect jamming and loosens jams, using bar. Notifies supervisor of equipment malfunction. May maintain equipment, using handtools.
GOE: 06.04.40 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

922.665-014 BIN TRIPPER OPERATOR (steel & rel.)

Tends discharge end of conveyor system that moves raw materials in blast furnace to storage bins: Inspects bins and notifies CONVEYOR-SYSTEM OPERATOR (any industry) 921.662-018 of required material, such as iron and manganese ore, limestone, clay, or sinter. Moves control to position tipper over bin. Opens valve to turn on water spray to settle dust. Notifies CONVEYOR-SYSTEM OPERATOR (any industry) when bin is full. Presses switch to stop conveyor for malfunctions. Scrapes and cleans bins and bin areas, using bar, scraper, shovel, and broom.
GOE: 06.04.40 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 86

922.667-010 YARD WORKER, USED BUILDING MATERIALS (retail trade)

Salvages and stores used building materials: Stacks cleaned lumber according to size and condition. Sorts and stores used millwork, plumbing fixtures, heating equipment, and structural steel. Cuts lumber to customer's specifications, using power saw. Fills customer's order and loads materials on car or truck.
GOE: 05.09.01 STRENGTH: M GED: R2 M2 L2 SVP: 3 DLU: 77

922.684-010 LOCKER-PLANT ATTENDANT (retail trade; wholesale tr.)

Performs any combination of following duties in frozen-food locker plant: Wraps food in protective paper or plastic film and ties package by hand or machine. Stamps identifying label and weight on package. Packs wrapped packages in baskets and places them in freezing room until frozen, then transfers them to designated storage lockers. Records items packed, weight, and locker numbers, and sends data to business office. Fills orders from customers' lockers on written request and retail orders from stock. Slices, grinds, and cubes meat by machine. Cleans work area in processing room. May cut beef, pork, or other meat into roasts, chops, steaks, or other forms as requested by customer [MEAT CUTTER (retail trade; wholesale tr.)]. May sell containers for freezing fruits and vegetables. May issue receipts for foods left for freezing. May collect service fees from customers.
GOE: 05.09.01 STRENGTH: M GED: R3 M1 L2 SVP: 4 DLU: 77

922.686-010 DUMPER (chemical)

Dumps nitrocellulose into trough for transfer to explosives-manufacturing equipment: Rolls barrels of nitrocellulose from railroad car to dumping room over wooden rails. Removes lock rims and lids of barrels, using handtools. Upturns barrels over water jet in trough and strikes bottom with rubber mallet to loosen contents. May pump slurry to agitating and blending tubs.
GOE: 06.04.40 STRENGTH: H GED: R1 M1 L1 SVP: 1 DLU: 77

922.686-014 LOWERATOR OPERATOR (fabrication, nec)

Removes wrapped felt-base rugs and felt-base floor coverings from machine that automatically conveys them to lower floor for final processing. Weighs rugs and coverings, using floor scale, and sorts them according to grade. Moves products to storage rooms, using handtruck. Records weights and grades of products.
GOE: 06.03.02 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

922.687-010 BIN FILLER (tobacco) alternate titles: bin packer; leaf binner; leaf tinner

Packs tobacco filler leaves in storage bin, positioning leaves in rows to prevent breakage. Covers leaves with rubber sheet and closes bin.
GOE: 06.04.38 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

922.687-014 BINDER-AND-WRAPPER PACKER (tobacco)

Packs binder and wrapper tobacco leaves in cases preparatory to storage: Picks up leaves by stems and places them in case. Places burlap covering over leaves, climbs into case, and walks on covering to compact tobacco, removing burlap for use in repeating process for subsequent layers. Nails boards over top of case and conveys case to storage room, using handtruck.
GOE: 06.04.38 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

922.687-018 BOBBIN SORTER (glass mfg.; plastic-synth.; textile) alternate titles: bobbin salvager; spool salvager

Sorts bobbins or spools according to type or number and places bobbins in specified bin or box. Inspects bobbins or spools for defects. Removes waste yarn from bobbins or spools [BOBBIN CLEANER, HAND (any industry)]. May remove identification stickers or disks from cleaned bobbins or spools. May convey sorted bobbins or spools to specified work station, using handtruck.
GOE: 06.03.02 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

922.687-022 BOLT LOADER (saw. & plan.) alternate titles: car loader

Loads and stacks halved or quartered stave-logs in cars that are rolled into steam tunnel [STEAM-TUNNEL FEEDER (saw. & plan.)].
GOE: 06.04.40 STRENGTH: H GED: R1 M1 L1 SVP: 2 DLU: 77

922.687-026 BULL-GANG WORKER (tobacco) alternate titles: hogshead roller; load-out worker; roller

Moves hogsheads of tobacco, between departments, onto scales, and onto truck or boxcars by rolling or using handtruck. Stacks hogsheads in tiers or re-

moves hogsheads from stack, using skids and stick or iron bar. Works as member of team when stacking and loading hogsheads. May call hogshead number and grade stenciled on hogshead to BOOKING PRIZER (tobacco) as hogsheads are rolled onto scale.
GOE: 06.04.40 STRENGTH: V GED: R1 M1 L1 SVP: 2 DLU: 77

922.687-030 CAN FILLER (tobacco)
Fills carrying cans with tobacco leaves from storage bins: Removes tobacco leaves from storage bins and spreads tobacco on table to separate leaves stuck together. Places tobacco in can in manner that prevents leaves from being compressed. Places cover on can and carries can to scales to be weighed.
GOE: 06.04.36 STRENGTH: M GED: R1 M1 L1 SVP: 1 DLU: 77

922.687-034 CAR PINCHER (steel & rel.) alternate titles: car shifter
Moves railroad cars or tank cars in yard or at loading dock, using pinchbar inserted under car wheel to position domes of railcars under loading spouts. May place planks between coke ovens and top of railroad car to provide path for wheelbarrows. May daub coke oven doors with clay to regulate air intake.
GOE: 05.12.03 STRENGTH: H GED: R1 M1 L1 SVP: 1 DLU: 77

922.687-038 COAL SAMPLER (utilities)
Collects coal samples from hopper cars or coal bunkers preparatory to testing: Inserts specified size of pipe in car or bunker, using sledgehammer, to facilitate gathering coal sample. Dumps coal from pipe into container and records sample source. Carries sample to testing laboratory.
GOE: 05.12.03 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

922.687-042 COTTON SAMPLER (agriculture; textile) alternate titles: sampler
Removes samples of cotton from bales for classification purposes: Cuts bale band and burlap covering, using shears and knife. Opens outside layers of cotton, and pulls or cuts samples from interior of each side of bale. Tears stub from bale identification tag, places stub in sample, and wraps samples in paper. May transfer bales of cotton to platform scales, using handtruck.
GOE: 06.04.27 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

922.687-046 ICER (wholesale tr.) alternate titles: top icer
Deposits layer of crushed ice on fresh food products packed in barrels, boxes, or crates, to refrigerate them during shipment: Scrapes off surplus ice and passes crate along conveyor system, slides crate to LIDDER (any industry), or places lid on container and moves container to storage or shipping area, using handtruck. May shovel ice into ice compartment of food distribution trucks. May be designated according to container in which product is packed as Box Icer (can. & preserv.); Crate Icer (can. & preserv.); or according to product iced as Fish Icer (can. & preserv.; wholesale tr.).
GOE: 05.12.03 STRENGTH: H GED: R1 M1 L1 SVP: 1 DLU: 77

922.687-050 INSTALLER (museums)
Moves, installs, and stores paintings, statuary, and other art objects in art museum: Places protective pads on handtruck platform and lifts paintings, statuary, or other art objects onto handtruck and places protective pads between and around objects to ensure against damage. Pushes handtruck from shipping-receiving area to storage or display gallery as directed by supervisor. Places objects to be stored in designated sections of storage area. Removes objects to be displayed from handtruck, hangs paintings, and positions statuary and other objects in cabinets or on stands as directed. Dismantles exhibit components, as directed, and moves art objects, cabinets, and other display items to storage area. Moves designated objects from storage area to shipping room.
GOE: 05.12.03 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

922.687-054 LABORATORY-SAMPLE CARRIER (any industry) alternate titles: sample gatherer; sampler
Collects samples of products or raw materials for laboratory analysis, performing any combination of following tasks: Turns valves or dips sample containers to transfer liquid samples from pipeline, processing equipment, tanks, or other vessels to test tubes, bottles, or buckets. Transfers dry samples, such as ore, grain, crystals, powder, or granular material to containers, using shovel, hand scoop, sample stick, or handtool. Labels sample containers with identifying data, location of sample, and time collected. Delivers samples to laboratory for analysis. Cleans sample containers, using specified cleaning agents and brushes or scrapers. Gathers samples at specified locations, stages of processing, and time interval. May collect samples of radioactive waste, following prescribed safety procedures, and be designated Sampler, Radioactive Waste (chemical).
GOE: 05.09.03 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 78

922.687-058 LABORER, STORES (any industry) alternate titles: order picker; parts picker; stock selector; warehouse worker
Performs any combination of following tasks to receive, store, and distribute material, tools, equipment, and products within establishments: Reads production schedule, customer order, work order, shipping order, or requisition to determine items to be moved, gathered, or distributed. Conveys materials and items from receiving or production areas to storage or to other designated areas by hand, handtruck, or electric handtruck. Sorts and places materials or items on racks, shelves, or in bins according to predetermined sequence, such as size, type, style, color, or product code. Sorts and stores perishable goods in refrigerated rooms. Fills requisitions, work orders, or requests for materials, tools, or other stock items and distributes items to production workers or assembly line. Assembles customer orders from stock and places orders on pallets or shelves, or conveys orders to packing station or shipping department. Marks materials with identifying information, using stencil, crayon, or other marking device. Opens bales, crates, and other containers, using handtools. Records amounts of materials or items received or distributed. Weighs or counts items for distribution within plant to ensure conformance to company standards. Arranges stock parts in specified sequence for assembly by other workers. May use computer to enter records. May compile worksheets or tickets from customer specifications [ORDER DETAILER (clerical) 221.387-046]. May drive vehicle to transport stored items from warehouse to plant or to pick up items from several locations for shipment. May complete requisition forms to order supplies from other plant departments. May prepare parcels for mailing. May maintain inventory records. May restock aircraft commissary supplies, such as linens, glasses, emergency kits, and beverages, and be designated Commissary Agent (air trans.). May be known according to specific duty performed as Cloth-Bin Packer (textile); Cooler Worker (dairy products); Order Filler (any industry); Produce Clerk (retail trade) II; Tool Chaser (any industry).
GOE: 05.09.01 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 88

922.687-062 LABORER, WHARF (can. & preserv.) alternate titles: dock worker; fish pitcher; lumper; wharf hand
Unloads catch from fishing vessels and conveys fish from wharf to fish-dressing or storage area, performing any combination of following tasks: Loads cargo net, crane bucket, or conveyor with catch from hold of boat, by hand or with shovel or pew (hooked prong). Dumps catch from cargo net or crane bucket onto dock platform and sorts catch according to species, size, or grade. Pushes cart of fish to fish-cleaning tables and dumps fish on table, or piles fish on floor and covers them with chipped ice for temporary storage. Shovels fish scrap into cart and pushes cart to disposal area. May assist boat crew in mooring boat at dock. May clean fish [FISH CLEANER (can. & preserv., fishing & hunt.)].
GOE: 06.04.40 STRENGTH: H GED: R1 M1 L1 SVP: 2 DLU: 77

922.687-066 LAST PUTTER-AWAY (boot & shoe; rubber goods) alternate titles: dead header; returner, lasts
Sorts and stores lasts (shoe molds) in numbered bins, in racks, or on skids, according to size and style. Picks up lasts in assembly area and transports them to storage room for sorting and placing in bins, using handtruck.
GOE: 05.09.01 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

922.687-070 LUMBER HANDLER (woodworking) alternate titles: lumber piler; lumber racker; lumber stacker; lumber sticker
Stacks lumber on kiln cars, in yard, or in shed to dry or store, performing any combination of following tasks: Places lumber piece by piece in layers, leaving space between edges of adjacent pieces. Places sticks between layers as stack rises to permit circulation of air and bind stack together. Stands on ground and hands lumber to another worker on top of stack. Positions timbers on kiln car, ground, or shed floor to build foundation for lumber stacks. Places blocks against wheels of loaded kiln car in dry kiln to prevent movement of car. Unloads lumber from stacks or kiln cars. Places lumber, veneer, or plywood on conveyor for further processing. Loads and unloads stacking machine, working in teamwork with other workers [STACKER, MACHINE (woodworking) 569.685-066]. May stack bundles of laths or barrel staves. May attach identity card to stacks of lumber and record number of stacks by species for supervisor. May carry materials, such as lumber, mortar mix, and nails to sales counter or load materials onto delivery trucks. May be designated according to purpose of stacking as Kiln Stacker (woodworking).
GOE: 05.12.03 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 81

922.687-074 LUMBER SORTER (woodworking) alternate titles: lumber puller; racker; separator
Sorts lumber or veneer according to grade markings and size: Removes boards from sorting table, handtruck, or conveyor and stacks in piles or places boards in rack or on conveyor, according to grade marking, length, or use of boards. Gauges length of boards by sight, by marks on sorting table, or by measuring with rule. May remove defective lumber from conveyor and stack lumber according to grade, length, species, and color. May hand stamp grade markings on boards or stack of lumber. May be designated according to sorting equipment used as Racker (saw. & plan.).
GOE: 06.03.02 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

922.687-078 PAPER STRIPPER (paper goods; print. & pub.)
Reads work order to determine amount and type of paper required for printing. Strips outside wrapper from rolls of printing paper or wallpaper stock and cuts away torn, soiled, or creased sections, using knife, to prepare stock for printing. Conveys stock to printing machines, using handtruck. May move raw materials, such as pigment and chemicals to other departments, using handtruck.
GOE: 05.12.19 STRENGTH: H GED: R1 M1 L1 SVP: 2 DLU: 77

922.687-082 PULP PILER (logging) alternate titles: pulp roller
Stacks pulpwood logs in pile at skidway or landing near logging road or stream. Places logs on pile by hand, or guides logs into position with cant hook as log is lifted by mechanical means.
GOE: 05.12.03 STRENGTH: H GED: R1 M1 L1 SVP: 2 DLU: 77

922.687-086 RETURNED-GOODS SORTER (textile)
Sorts defective cloth returned to textile mill or processing establishment. Opens shipping cases, using claw hammer, knife, and wirecutters. Lifts cloth from cases and deposits it in specified bins preparatory to cutting, inspection, or other processes.

GOE: 06.03.02 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 77

922.687-090 STEVEDORE II (water trans.)
Loads and unloads ships' cargoes: Carries or moves cargo by handtruck to wharf and stacks cargo on pallets or cargo boards to facilitate transfer to and from ship. Stacks cargo in transit shed or in hold of ship as directed by HEADER (water trans.). Attaches and moves slings used to lift cargo. Guides load being lifted to prevent swinging. Shores cargo in ship's hold to prevent shifting during voyage. May be designated according to area in which work is performed as Stevedore, Dock (water trans.); Stevedore, Front (water trans.); Stevedore, Hold (water trans.).
GOE: 05.12.03 STRENGTH: V GED: R2 M1 L1 SVP: 2 DLU: 77

922.687-094 TIMBER PACKER (saw. & plan.)
Loads logs or sawed lumber onto flatcars, trucks, and boats, packing tightly and securing load with stakes, chains, and cables so that load will not shift in transit.
GOE: 05.12.03 STRENGTH: H GED: R1 M1 L1 SVP: 2 DLU: 77

922.687-098 TIN STACKER (tinware)
Carries punched blanks from scroll shear to punch press, by hand or on handtrucks. Picks up scrap from scroll shear and punch press, using shovel, scrap fork, or by hand, and deposits it in bins or in scrap chute. May weigh scrap tin and record weight in logbook.
GOE: 06.04.40 STRENGTH: H GED: R1 M1 L1 SVP: 1 DLU: 77

922.687-102 YARD LABORER (paper & pulp)
Moves and stores material and maintains yard and grounds of paper and pulp plant by performing any combination of following tasks: Shovels wood chips, pulpwood, sulfur, and limerock into trucks or onto conveyors. Cleans chips or bark from conveyors; bark, leaves, and twigs from water canal, and burns refuse. Removes driftwood from canal, using hoist. May load waste paper from paper machines into carts. May stack bundles of woodpulp and dump pulp and waste paper into beaters. May dig ditches and install pipelines from railroad tank cars to facilitate unloading of chemicals used in paper manufacture.
GOE: 05.12.03 STRENGTH: H GED: R1 M1 L1 SVP: 1 DLU: 77

929 PACKAGING AND MATERIALS HANDLING OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with packaging and materials handling.

929.131-010 SUPERVISOR, SALVAGE (petrol. refin.) alternate titles: reclamation supervisor
Supervises and coordinates activities of workers engaged in salvaging valves, flanges, pipefittings, tubes, and traps, and in sorting, storing, and issuing reclaimed articles. Determines salvageability of defective parts, based on knowledge of availability and cost of replacements. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

929.132-010 SUPERVISOR, REACTOR FUELING (chemical)
Supervises and coordinates activities of workers engaged in receiving and storing reactor fuel elements, recharging reactor, loading *monotubes*, packaging, storing, and shipping irradiated fuel elements in a nuclear reactor plant: Reads production schedules to determine time and sequence of reactor recharging, monotube loading, packaging, and storing activities. Reads exposure-availability (amount of exposure to radiation permitted individual workers) and personnel rosters to compile work schedules. Explains and demonstrates work tasks to new workers and assigns them to experienced workers for further training. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

929.133-010 YARD SUPERVISOR (woodworking)
Supervises and coordinates activities of workers engaged in unloading, storing, and distributing materials, such as coal, logs, lumber, wastepaper, and sulfur in yard of industrial plant: Confers with plant personnel and plans and allocates use of materials handling equipment, such as conveyors, cranes, tractors, and trucks, according to material to be moved and production requirements. Directs workers engaged in keeping records of materials received and used. Trains new workers. May inspect incoming materials and verify invoices. May inspect machines and equipment and direct workers engaged in maintenance and repair work. May supervise workers engaged in drying lumber in kiln [KILN OPERATOR (woodworking) 563.382-010]. May supervise workers engaged in booming (gathering) and sorting logs in log pond. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 78

929.137-010 GENERAL-HANDLING SUPERVISOR (smelt. & refin.)
Supervises and coordinates activities of workers engaged in sorting, stacking, and weighing metal pigs and metal scrap, and in receiving, checking, storing, and distributing raw materials, such as coke, chlorine, and gasoline. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: L GED: R4 M2 L2 SVP: 6 DLU: 77

929.137-014 POLEYARD SUPERVISOR (utilities)
Supervises and coordinates activities of workers engaged in receiving, grading, sorting, framing, and storing wooden poles used to support electric power transmission lines. Directs workers engaged in peeling, bucking, boring, and painting poles. Examines poles for conformance to specifications. May direct workers to recondition poles. May prepare requisitions and collect money from sale of poles from yard. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 77

929.137-018 WAREHOUSE SUPERVISOR (motor trans.) alternate titles: labor-gang supervisor
Supervises and coordinates activities of workers engaged in loading, unloading, recording, arranging, routing, and delivery of incoming and outgoing freight in a freight storage warehouse of a motor transportation firm. Performs duties as described under SUPERVISOR (any industry) Master Title. May be designated according to activity as Supervisor, Car-Loading-And-Unloading (motor trans.).
GOE: 05.12.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

929.137-022 WAREHOUSE SUPERVISOR (any industry)
Supervises and coordinates activities of workers engaged in receiving, transporting, stacking, order filling, shipping, and maintaining stock records in warehouse. Supervises labeling and casing or packing of materials or products. Trains new workers. May be known by specific area worked as Cooler Supervisor (dairy products). Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.09.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 81

929.137-026 YARD SUPERVISOR (smelt. & refin.)
Supervises and coordinates activities of workers engaged in receiving, storing, issuing, and shipping equipment, materials, and supplies, such as machinery, lumber, chemicals, fuel oils, scrap iron, and ore concentrate: Weighs railroad cars and trucks containing shipments, and verifies shipments against delivery records. Inspects incoming shipments, notifies freight agent of damages, and compiles claim reports. Informs railroad crews of spotting site for incoming cars. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 77

929.137-030 YARD SUPERVISOR, BUILDING MATERIALS OR LUMBER (retail trade; wholesale tr.)
Supervises and coordinates activities of workers engaged in loading and unloading materials and in using and maintaining machines and equipment in lumber yard or building materials yard: Coordinates shipments in and out of yard and inspects for specified quantity and quality. Directs workers in loading and unloading materials and in use and care of machines and equipment, such as stackers, carriers, planes, saws, and concrete mixers. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

929.137-034 YARD SUPERVISOR, COTTON GIN (agriculture)
Supervises and coordinates activities of workers engaged in receiving bulk cotton in cotton ginning establishment: Directs workers engaged in unloading bulk cotton and routing it to storage bins or to ginning stands through vacuum conveyor pipes. Maintains records of quantity and location of stored cotton. May assist in repairing equipment, such as conveyor systems, trailers, and storage bins. May sample cotton [COTTON SAMPLER (agriculture; textile)]. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

929.367-010 PRESERVATION INSPECTOR, MARINE EQUIPMENT (government ser.) alternate titles: equipment processer, storage
Directs or participates in preparation of equipment, such as naval guns and other ordnance materiel for mothballing (storage): Inspects materiel for condition to determine feasibility of storage, type of preservative application required, and degree of dismantling necessary. Identifies materiel and parts according to knowledge of equipment function and comparison with catalog specifications to select preservative treatment best suited to each piece of equipment. Ascertains condition to determine need for scraping, washing, brushing, or other treatment preparatory to storage. Directs or assists in moistureproofing of materiel, using preservative agents applied by brushing, spraying, or dipping.
GOE: 05.03.09 STRENGTH: M GED: R4 M2 L2 SVP: 6 DLU: 77

929.381-010 CARPET CUTTER (retail trade)
Measures, marks, and cuts carpeting and linoleum, using measuring and marking devices and knife, or cutting machine, to get maximum number of usable pieces from standard sized rolls, following floor dimensions or diagrams. May be designated according to type of floor covering cut as Linoleum Cutter (retail trade).
GOE: 05.10.01 STRENGTH: H GED: R3 M2 L2 SVP: 5 DLU: 77

929.382-010 LOAD-TEST MECHANIC (aircraft mfg.) alternate titles: proof-load mechanic
Sets up and operates equipment to load-test tooling and material handling apparatus, such as jigs, fixtures, cables, metal and fabric slings, chains, binders, and tie rods: Reads specifications to determine load-test procedures. Positions and secures tooling or apparatus to be tested in holding devices, manually or using crane or forklift. Attaches load-test equipment to test specimen, according to specifications. Adjusts test equipment controls to apply specified weight or

pressure to test specimen to determine holding or handling capacity or to determine maximum load at which item fatigues or breaks. Examines tooling and handling apparatus for structural failure or misuse. Records test information. Attaches inspection tags to tooling or apparatus.
GOE: 06.03.01 STRENGTH: H GED: R3 M2 L3 SVP: 6 DLU: 89

929.583-010 YARD WORKER (agriculture)
Drives tractor to move spots (trailers of cotton) to suction shed, storage building, or other designated areas of cotton gin yard. Loads bales of cotton into trailer and unloads and stores bales. Keeps record of supplies issued from warehouse and delivers supplies to gin workers. May clean gin yard as directed.
GOE: 05.11.04 STRENGTH: M GED: R3 M2 L1 SVP: 3 DLU: 77

929.587-010 NUT-AND-BOLT ASSEMBLER (nut & bolt) alternate titles: nutter-up
Couples and packages nuts and bolts. Screws nut on bolt by hand and holds nut in chuck of nut-turning machine that spins and tightens nut on bolt. Weighs or counts specified amounts of nuts and bolts, and records number of units on production form. Pushes box or carton along bench or onto conveyor. May tie long bolts into bundles, using wire. May feed nuts and bolts into hopper of machine that automatically couples and packages nuts and bolts.
GOE: 06.04.38 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

929.663-010 LOGGING-TRACTOR OPERATOR (forestry; logging; saw. & plan.)
Drives straight or articulated tractor equipped with one or more accessories, such as bulldozer blade, grapple, logging arch, cable winches, hoisting rack, and crane boom, to skid, load, unload, or stack logs, pull stumps, or clear brush. Gives or receives signals from coworkers regarding moving logs. May build or repair logging and skid roads. May drive logging tractor equipped with crawler treads. May saw felled trees into lengths [BUCKER (logging) 454.684-010]. May be designated according to accessory equipment operated as Logging-Arch Operator (logging); Logging-Tractor Operator, Swamp (logging); Log-Stacker Operator (logging; saw. & plan.); Skid-Grapple Operator (logging); Skidder Operator (forestry; logging).
GOE: 03.04.02 STRENGTH: M GED: R3 M1 L1 SVP: 4 DLU: 79

929.683-014 TRACTOR OPERATOR (any industry)
Drives gasoline or diesel powered tractor to move materials, draw farm implements, tow trailers, pull out objects imbedded in ground, or pull cable of winch to raise, lower, or load heavy material or equipment. Fastens attachments, such as graders, plows, and rollers, to tractor with hitchpins. Releases brake, shifts gears, and depresses accelerator or moves throttle to control forward and backward movement of tractor. Steers tractor by turning steering wheel and depressing brake pedals. May lubricate and repair tractor and attachments. May be designated according to type of power utilized as Diesel-Tractor Operator (any industry); Gasoline-Tractor Operator (any industry); Tractor Operator, Battery (mine & quarry). May operate tractor mounted with wide spread pneumatic or metallic treads to transport materials over marshes or swamps and be designated Marsh-Buggy Operator (construction). May operate tractor equipped with laser leveling equipment to level large fields for farming or industrial purposes and be designated Tractor Operator, Laser Leveling (any industry).
GOE: 05.11.04 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 80

929.684-010 PACKER (ordnance)
Packs rocket-motor cases in special containers for shipment. Paints shipping containers, using spray gun. Transports motor cases from curing oven on overhead conveyor and lowers cases into shipping container, using hoist. Removes handling rings or slings from case, using hand or power wrenches. Clamps or bolts cover plates over ends of motor case. Clamps cover on shipping container, using wrenches.
GOE: 06.04.38 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

929.685-010 CRATE OPENER (furniture)
Tends machine that restrains compressed bedsprings to permit uncrating in mattress manufacturing establishment. Moves crates of compressed bedsprings to bed of uncrating machine, using handtruck. Presses button to lower hydraulic press onto compressed bedsprings and cuts shipping wires and bands, using wire cutters. Presses button to raise press, expanding bedsprings from compressed state. Removes shipping wires and bands from bedsprings and moves bedsprings to processing area, using handtruck.
GOE: 06.04.24 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

929.685-014 TYING-MACHINE OPERATOR (paper goods; tex. prod., nec)
Tends tying machine that automatically wraps and ties string around bundles of products, such as cardboard boxes and finished canvas goods. Threads string through machine wrapping arm. Positions specified number of items to be tied on machine table. Depresses pedal that passes wrapping arm around items, ties knot, and cuts off string. May visually inspect products for defects. May keep production records.
GOE: 06.04.38 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

929.685-018 TYING-MACHINE OPERATOR, LUMBER (woodworking) alternate titles: binder; bundler
Tends machine that wraps and ties bundles of lumber with wire or twine. Places roll of wire or twine on machine spindle and threads through guides to knotter and cutter. Stacks specified number of boards or furniture parts on machine table and clamps pile in place. Starts machine and depresses pedal that actuates machine to wrap and tie wire or twine around pile and cut wire or twine free from roll. Stacks bundled stock on dolly or sets bundles on conveyor belt. May wrap ends of bundle with paper or fabric before tying.
GOE: 06.04.38 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

929.686-014 BAND SALVAGER (agriculture) alternate titles: band straightener
Salvages tie bands from uncompressed cotton bales for reuse on compressed cotton bales. Straightens bands, using rubber mallet, or feeds bands through powered rollers that flatten and straighten them. Cuts bands to required length for tying compressed bales, using tablemounted cutting device with preset cutting blades. Deposits excess pieces of banding into container for splicing by BAND MAKER (agriculture). May bend end of each band and attach fastening buckle onto bent end.
GOE: 06.04.24 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

929.686-018 CRAYON-SORTING-MACHINE FEEDER (pen & pencil)
Loads crayons and pencils of various colors into hopper of machine, starts machine, and observes operation as machine sorts them into specified quantities for packing. Clears jams in machine. Keeps record of boxes completed.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

929.686-022 FEED-IN WORKER (grain-feed mills)
Opens damaged sacks of flour and meal and dumps contents into chutes that carry it to feed department for resacking. Cleans sacks, using suction-pipe cleaner. Turns sack inside out and repeats operation. Places cleaned sacks on handtruck and conveys them to supply room.
GOE: 05.12.01 STRENGTH: H GED: R1 M1 L1 SVP: 2 DLU: 77

929.687-010 CUTTER, BANANA ROOM (wholesale tr.)
Cuts hands of bananas from stalks for packing preparatory to shipment. Counts bananas. Determines, according to ripeness, room in which bananas will be stored.
GOE: 06.04.28 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

929.687-014 KILN DRAWER (brick & tile) alternate titles: drawer
Removes burned clay products, such as sewer pipe, brick, refractories, and roofing tile, from tunnel kiln cars or periodic kilns, by hand or using hoist. Places pallet on drawing dock and lifts and stacks product on pallet. Examines products for defects, such as cracks, chips, and distortions. Grades and sorts products. Removes and places kiln furniture, such as tie brick, clamp, and holders, in box for reuse. Discards setting rings in waste bin. Cleans used kiln and door brick. May load clay products onto kiln cars prior to firing process. May stock clay products on pallets or place products in carton for shipment.
GOE: 05.12.03 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 78

929.687-018 LABORER, HIGH-DENSITY PRESS (agriculture) alternate titles: hoist worker
Loads compressed bales of cotton onto handtrucks or tractor-drawn trailers. Secures hooks to bale and lifts bale onto trailer or handtruck, using hoist. May stencil identifying information on bale, using brush and stencil.
GOE: 06.04.40 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

929.687-022 LABORER, SALVAGE (any industry) alternate titles: reclaimer; salvager; trash collector; waste collector
Salvages materials in industrial or commercial establishment, performing any combination of duties: Collects reusable items or waste materials, such as lumber, paper, rags, fiber, yarn, rubber, beer and soft drink bottles, chemicals, and scrap metal, in scrap gondolas, barrels, or other containers, using handtruck, industrial truck, or wheelbarrow. Inspects materials and sorts items or materials into piles or places in bins or barrels according to type, size, condition, coloring, marking, or other characteristics. Salvages reusable materials and disposes of waste by pouring into sewer or waste containers, loading onto vehicle, or by burning or baling waste. Moves reusable materials to production department or storage. Separates metal particles from waste, using wire screen or magnet. Attaches labels to waste and salvage containers to identify contents. Weighs materials and containers and keeps records of total amount of waste collected. Dumps waste material, such as broke (waste paper and pulp), into machine tank for reprocessing. Makes minor repairs to scrap containers, such as bumping out dents, using handtools. May be designated according to kind of material salvaged as Broke Handler (paper & pulp); Lumber Salvager (any industry); Metal Sorter (any industry); Rag Sorter (any industry); Sack Sorter (any industry); Scrap Sorter (any industry); or specialized assignment as Scrap Burner (any industry).
GOE: 06.04.40 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

929.687-026 LINER INSERTER (tobacco)
Pulls plastic liner over carton-shaped or hogshead-shaped form. Lowers form, suspended from ceiling into open containers, using rope and pulley, working as member of two-person team. Overlaps edges of plastic liner over top edge of container and removes form. May insert paper liner into containers.
GOE: 06.04.38 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

929.687-030 MATERIAL HANDLER (any industry) alternate titles: distributor; floor worker; line supply; loader and unloader; servicer; stacker; utility worker
Loads, unloads, and moves materials within or near plant, yard, or work site, performing any combination of following duties: Reads work order or follows

oral instructions to ascertain materials or containers to be moved. Opens containers, using steel cutters, crowbar, clawhammer, or other handtools. Loads and unloads materials onto or from pallets, trays, racks, and shelves by hand. Loads materials into vehicles and installs strapping, bracing, or padding to prevent shifting or damage in transit, using handtools. Conveys materials from storage or work sites to designated area, using handtruck, electric dolly, wheelbarrow, or other device. Secures lifting attachments to materials and conveys load to destination, using hand-operated crane or hoist, or signals crane or hoisting operators to move load to destination [LABORER, HOISTING (any industry) 921.687-022]. Counts, weighs, and records number of units of materials moved or handled on daily production sheet. Attaches identifying tags or labels to materials or marks information on cases, bales, or other containers. Loads truck for INDUSTRIAL-TRUCK OPERATOR (any industry) 921.683-050. Stacks or assembles materials into bundles and bands bundles together, using banding machine and clincher. Clamps sections of portable conveyor together or places conveyor sections on blocks or boxes to facilitate movement of materials or products. Removes samples of materials, labels with identifying information, and takes samples to laboratory for analysis [LABORATORY-SAMPLE CARRIER (any industry) 922.687-054]. Lifts heavy objects by hand or using power hoist, and cleans work area, machines, and equipment, using broom, rags, and cleaning compounds, to assist machine operators. Makes simple adjustments or repairs, such as realigning belts or replacing rollers, using handtools. Assembles crates to contain products, such as machines or vehicles, using handtools and precut lumber. Shovels loose materials, such as sand, gravel, metals, plastics, or chemicals, into machine hoppers or into vehicles and containers, such as wheelbarrows, scrap truck, or barrels. May occasionally operate industrial truck or electric hoist to assist in loading or moving materials and products. May be designated according to material handled as Filling Hauler, Weaving (textile); according to method of conveying materials as Lugger (agriculture); according to machine or equipment loaded or unloaded as Blunger Loader (pottery & porc.); Vehicle Unloader (any industry); or according to work station as Outside Trucker (any industry); Platform Loader (any industry). May be designated: Bale Piler (textile); Batch Trucker (rubber tire); Bobbin Handler (textile); Car Loader (any industry); Cloth Hauler (textile); Coal Passer (any industry); Compress Trucker (agriculture); Hogshead Dumper (tobacco); Kiln Car Unloader (brick & tile); Laborer, Yard (any industry); Loader (any industry) II; Lumber-Yard Worker (woodworking); Merchandise Carrier (any industry); Mold Mover (toy-sport equip.); Oven Stripper (any industry); Oven Unloader (any industry); Packaging-Machine-Supplies Distributor (tobacco); Slab Picker (saw. & plan.); Powder Trucker (chemical; ordnance); Rack Carrier (paper goods); Racker (any industry); Retort Loader (chemical); Roper (agriculture); Roving Stock Handler (textile); Scrap Wheeler (machine shop); Segregator (agriculture; wholesale tr.); Sugar Trucker (grain-feed mills); Tire Trucker (rubber tire); Trucker, Hand (any industry).
GOE: 05.12.03 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 89

929.687-034 MUNITIONS HANDLER (ordnance)
Loads, unloads, and stores ammunition and ammunition components in magazines (storage areas): Moves materials between magazines and carries materials by hand, handtrucks, and roller conveyors. Secures cargoes in carriers, using blocks and stays. Cleans magazines and adjacent area. Crates and cases materials for specific orders. Inspects packaging and materials.
GOE: 06.04.40 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

929.687-038 RETURNED-CASE INSPECTOR (beverage)
Reconditions and cleans used beer cartons, performing any combination of following tasks: Removes carton from conveyor. Lifts out partitions and discards damaged ones. Dumps out dirt or foreign matter. Places dirty or damaged carton on conveyor or into chute for disposal or repair. Inserts bottom pad and partitions in usable cartons and places carton on conveyor for transfer to box or packaging room. May wash cartons, using sponge and cleaning solution.
GOE: 06.04.39 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

929.687-042 ROLL COVERER, BURLAP (textile) alternate titles: burlapper; wrapper-and-bagger, sheeting
Wraps or ties pieces of burlap around rolls of cloth or inserts rolls into burlap bag to protect cloth during shipment. Trims excess twine and burlap, using scissors. May sew burlap [CLOTH-BALE HEADER (textile)].
GOE: 06.04.38 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

929.687-046 SCALER-PACKER (meat products)
Weighs and packs meat cuts and meat byproducts: Weighs hams, butts, ribs, loins, skins, and inedible meat products on scales by truckload, cartons, boxes, or individual cuts. Wraps or packs cuts or carcass parts according to weight, grade, or customer order. May trim cuts. May form boxes, close flaps, or tend strapping (carton closing) machine. May inspect products for quality. May record quantity, type product, and weight for quality control. May stencil shipping information on cartons.
GOE: 06.03.02 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

929.687-050 WRAPPER COUNTER (tobacco)
Counts specified number of tobacco wrapper leaves and ties leaves in bundle. Attaches ticket to bundle showing number of leaves in bundle. Wraps bundle in cellophane to preserve moisture content until tobacco is used in making cigars.
GOE: 06.04.38 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

929.687-054 PALLETIZER (nonfer. metal)
Secures battens (grooved strips of wood) around bundles of packaged metal extrusions to form protective shipping pallets, using *strapping tool*. Presses conveyor controls to position packaged extrusions under strapping tool. Measures dimensions of bundles, using ruler, and cuts battens to required size, using power saw. Positions battens, cardboard strips, and metal or plastic strapping around bundles in specified fashion, according to written instructions. Threads strapping through strapping tool and secures battens with strapping, using strapping tool, to form protective pallet around extrusions. Removes palletized bundles from conveyor for further processing, using pneumatic hoist.
GOE: 06.04.38 STRENGTH: L GED: R2 M2 L2 SVP: 2 DLU: 86

929.687-058 BANDER, HAND (any industry) alternate titles: baler; load clerk; packager and strapper
Fastens plastic or metal bands around stacks, bundles, or palletized articles prior to storage or shipment, using *strapping tool* and clamps: Counts number of articles to be banded to verify number specified on work order. Unwinds plastic or metal banding material from reel, wraps band around stack or bundle, inserts loose end of banding material into strapping tool, and cinches and crimps banding material and clamp with strapping tool to secure articles during storage or shipment. Counts and records number of banded bundles. May operate hydraulic jack lift or truck to move articles before or after bundling. May cut lumber or other reinforcing material, using handsaw or power saw, and include reinforcing material in bundle or nail lumber together to protect articles during storage or shipment. May stack bundled articles on pallet by hand. May band articles to pallet to secure articles for moving. May mark or stencil size of article, customer's name, order number, address, or other identifying data on visible portion of bundle or shipping ticket with markers, brushes, or paint.
GOE: 06.04.38 STRENGTH: H GED: R2 M2 L2 SVP: 2 DLU: 86

929.687-062 WEIGHER, PRODUCTION (any industry)
Weighs quantities of materials for use in production processes, using balance, platform, or floor scales: Places loose or packaged material on scales and adds or removes portions of material to obtain specified weight. Reads work order or formula to determine types and quantities of materials to weigh. Records weight of materials used for production records, or maintains perpetual inventory of materials used and on hand. May dump materials in prescribed sequence into chute or hopper or onto conveyor belt. May transfer weighed materials to production or storage areas, using handtruck or power truck. May sort weighed materials into designated bins or containers, according to weight or type. May be designated according to type of scale used or material weighed as Batch Weigher (chemical); Compounder (rubber reclaim.); Feather Grader (tex. prod., nec); Operator, Scales (plastic-synth.); Rubber Compounder (nonfer. metal; plastic-synth.; rubber goods; rubber tire); Shadow-Graph-Weight Operator (toy-sport equip.); Stock Mixer (textile; tex. prod., nec); Weigher-And-Charger (fabrication, nec). May weigh plant products as part of packing process and be designated Weigher, Packing (any industry).
GOE: 06.03.02 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 81

93 OCCUPATIONS IN EXTRACTION OF MINERALS

This division includes occupations concerned with quarrying and with the extraction of minerals, such as coal, ores, crude petroleum, and natural gas. Includes crushing, screening, washing, flotation, and other processes of extracting materials at or near the mining site.

930 EARTH BORING, DRILLING, CUTTING, AND RELATED OCCUPATIONS

This group includes occupations concerned with drilling wells, undercutting coal seams, sawing and splitting virgin rock, and related activities involved with tapping water- or mineral-bearing formations, obtaining samples of subsurface strata, and loosening or removing materials, using handtools, and hydraulic, electric, or pneumatic power tools, cutting and drilling machines, and other devices. Occupations concerned with construction excavating are found in Groups 850 and 859.

930.130-010 TOOL PUSHER (petrol. & gas) alternate titles: superintendent, drilling
Supervises and coordinates activities of workers engaged in drilling oil and gas wells in area consisting of one or more wellsites: Directs workers to erect, dismantle, and move drilling rigs, and drilling crews in setting up and operating power units, draw works and other drilling equipment. Plans delivery of drilling tools, fuel, water, and other supplies for use at drill site. Orders type of drilling bits to be used, according to type of strata encountered. Directs workers in mixing drilling mud and circulating mud in borehole, and in use of special drilling mud to prevent blowouts from gas pressure. Orders installation of control head (valve device) to control flow when well begins to produce gas or oil. May supervise operations at producing wells to maintain and regulate flow of gas or oil [SUPERVISOR, PRODUCTION (petrol. & gas)]. Performs other duties as described under SUPERVISOR (any industry) Master Title. May supervise PROSPECTING DRILLERS (petrol. & gas) drilling shallow boreholes for use in seismic prospecting or to obtain core samples and be designated Tool Pusher, Shallow-Exploratory Drilling (petrol. & gas).
GOE: 05.02.05 STRENGTH: L GED: R4 M2 L3 SVP: 8 DLU: 77

930.131-010 FIELD SUPERVISOR, OIL-WELL SERVICES (petrol. & gas)

Supervises and coordinates activities of workers engaged in setting up, testing, and servicing equipment at oil or gas wells, or boreholes, running instruments in and out of wells, electrical well logging, gun perforating, and temperature surveying. Orders maintenance and repair of equipment, such as cables, vehicles, and test instruments. Performs duties as described under SUPERVISOR (any industry) Master Title.

GOE: 05.02.05 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

930.134-010 QUARRY SUPERVISOR, DIMENSION STONE (mine & quarry)

Supervises and coordinates activities of workers engaged in quarrying dimension stone: Schedules production or maintenance assignments of workers. Marks area or dimensions of blocks to be removed from stone mass, using chalkline. Fills blast holes with blasting agents and detonator, and notifies workers to evacuate area. Detonates explosive, using blasting machine, to separate block from stone mass [BLASTER (mine & quarry)]. Signals HOISTING ENGINEER (any industry) to lift blocks from pit to stockpile area. Inspects blocks for defects such as cracks or discolorations. Computes dimensions of and marks identifying data on blocks. Fastens dogs into drilled holes in stone to facilitate loading on truck. Compiles production and shipping records. Performs other duties as described under SUPERVISOR (any industry) Master Title.

GOE: 05.11.02 STRENGTH: H GED: R4 M3 L3 SVP: 6 DLU: 77

930.167-010 TECHNICAL OPERATOR (petrol. & gas) alternate titles: drilling inspector

Charts pressure, temperature, and other characteristics of oil and gas well boreholes or producing wells, using special subsurface instruments, and interprets findings for use in determining further drilling or producing procedures: Directs workers in assembling wire line hoisting gear and attaching line to instruments. Gives directions to HOIST OPERATOR (petrol. & gas) to lower clinograph into well to determine variation of well from vertical (instrument records variation on chart). Informs ROTARY DRILLER (petrol. & gas) of variation from vertical. Lowers weighted wire into well and reads depth of well from recording wheel. Lowers depth bomb into well that records pressure at various depths to determine rate of natural flow of oil from well. Lowers thermometers and other instruments with accompanying recording devices through tubing, casing, drill pipe, or open borehole. Raises instruments from well and removes chart recordings. Measures, converts, records, and interprets data for use by engineering personnel and management in determining drilling or production procedures. May calibrate recording devices. May repair and maintain instruments. May be designated according to specialty as Bottom-Hole-Pressure-Recording Operator (petrol. & gas).

GOE: 05.03.04 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

930.261-010 FISHING-TOOL TECHNICIAN, OIL WELL (petrol. & gas) alternate titles: oil-well-fishing-tool operator

Analyzes conditions of unserviceable oil or gas wells and directs use of special well-fishing tools and techniques to recover lost equipment and other obstacles from boreholes of wells: Confers with SUPERINTENDENT, DRILLING AND PRODUCTION (petrol. & gas) to gather information regarding size of pipes and tools and borehole conditions in wells. Plans fishing methods and selects tools for removing obstacles, such as liners, broken casing, screens, and drill pipe from wells. Directs drilling crew in applying weights to drill pipes, in using special tools, in applying pressure to circulating fluid (mud), and in drilling around lodged obstacles or specified earth formations, using whipstocks and other special tools. Observes load variations on strain gauge, mudpump, and motor pressure indicators, and listens to sounds of engines and rotary chains to detect signs of faulty operations or unusual conditions in wells. Quotes prices to customer and prepares reports of services rendered, tools used, and time required, to serve as basis for billing customer. May direct drilling crew in installation of well-bottom equipment.

GOE: 05.03.04 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

930.261-014 FORMATION-TESTING OPERATOR (petrol. & gas) alternate titles: oil-well formation tester; testing-tool operator

Analyzes samples of fluids from specified formations in oil well to determine productivity of strata, using special testing equipment: Assembles valve device and automatic pressure recorder on drilling floor, using handtools. Directs ROTARY DRILLER (petrol. & gas) to lower section of drill pipe containing instruments into well to specified depth. Opens valve by surface control to obtain sample of fluids in valve device and to chart pressure of fluid-giving formation. Closes valve and directs ROTARY DRILLER (petrol. & gas) to raise pipe and equipment. Analyzes chemical content of sample and interprets pressure readings to determine presence and quantity of oil, gas, water, or other materials in formation. May send sample of fluids from formation to laboratory for analysis. May perforate boreholes [PERFORATOR OPERATOR, OIL WELL (petrol. & gas)].

GOE: 05.07.05 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

930.267-010 OIL-PIPE INSPECTOR (petrol. & gas) alternate titles: pipe inspector

Inspects steel tubing, casing, drill pipe, and other tubular oil well equipment for defects, using magnetic and optical inspection equipment: Positions scanner (ring-shaped object containing induction coils) around pipe and connects wire to automatic graph recorder. Presses switch to start self-propelled scanner along pipe length and observes lines on graph that indicate location, type, and extent of metal blemishes, cracks, and molecular weakness. Inspects interior of pipe for surface imperfections, using optical instrument. Reports findings to engineering personnel.

GOE: 05.07.01 STRENGTH: L GED: R4 M3 L4 SVP: 6 DLU: 77

930.361-010 SERVICE-UNIT OPERATOR, OIL WELL (petrol. & gas) alternate titles: oil-well-sounding-device operator

Operates equipment to increase oil flow from producing wells, or to remove stuck pipe, casing, tools, or other obstructions from drilling wells, using specialized subsurface tools and instruments: Directs SAMPLE-TAKER OPERATOR (petrol. & gas) to assemble and connect pipe and hydraulic lines of flushing equipment to wellhead. Starts pumps which circulate water, oil, or other fluid through well, removing sand and other materials obstructing free flow of oil. Perforates well casing or sidewall of borehole with explosive charge [PERFORATOR OPERATOR, OIL WELL (petrol. & gas)]. Assembles and lowers detection instruments into wells having drill pipe, drilling tools, or other obstructions wedged in well. Interprets instrument readings to ascertain depth of obstruction. Directs lowering of specialized equipment to point of obstruction and pushes switches or pulls levers to back-off pipe by chemical or explosive action, or to sever pipe at point of obstruction, permitting recovery of pipestring and resumption of drilling operations. Assembles and operates sound wave generating and detecting mechanisms for determining fluid level in wells. May operate hoist to lower and raise tools [HOIST OPERATOR (petrol. & gas)].

GOE: 05.11.03 STRENGTH: L GED: R3 M2 L2 SVP: 7 DLU: 77

930.363-010 CLEAN-OUT DRILLER (petrol. & gas) alternate titles: well cleaner

Operates truck-mounted hoist equipped with derrick to clean out and restore old and damaged oil or gas wells: Moves lever to raise derrick over wellhead. Directs CLEAN-OUT-DRILLER HELPER (petrol. & gas) to jack up truck body and to center hoisting cable over borehole. Assembles and attaches cleanout tools to cable, using handtools. Moves winch lever to lower tools into well. Cleans sand, paraffin, or pipe scale from well, using special scaling and bailing tools. Removes debris from well, using bailer. Lowers blocks composed of soft lead or covered with wax, tar, or soap to take impression of broken equipment in well. Lowers grappling tools into well to probe for and remove obstruction, using hoist. Lowers and raises swabbing tool that creates vacuum and draws well fluids through pipe screens and well perforations, using hoist. May be designated according to specific activity as Bailer (petrol. & gas); Swabber (petrol. & gas).

GOE: 05.11.03 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

930.364-010 OIL-PIPE-INSPECTOR HELPER (petrol. & gas)

Inspects tubular metal equipment as assistant to OIL-PIPE INSPECTOR (petrol. & gas) by performing any combination of following tasks: Inspects interior and exterior of tubing, casing, drill pipe, and other tubular metal equipment used in drilling and producing oil or gas wells to detect incrustations, cracks, or other defects, using mechanical and electronic instruments. Interconnects electric conductor cables to instruments, control panels, and generator sets, using wrenches and screwdrivers. Rolls and segregates pipe on rack for inspection. Inserts magnetic poles (shooting prods) into ends of pipe and sprinkles magnetic powder on magnetized pipe to reveal exterior defects. Observes surface of pipe and paints colored bands on pipe to indicate nature and location of defect. Inserts tubular instrument through interior of pipe. Clamps self-propelled electronic instrument to pipe, observes instrument moving lengthwise on pipe, and marks location and nature of defect on pipe. Cleans and repairs equipment. Performs other duties as described under HELPER (any industry) Master Title.

GOE: 05.07.01 STRENGTH: H GED: R3 M2 L1 SVP: 5 DLU: 77

930.382-010 DRILLER, MACHINE (construction; mine & quarry) alternate titles: driller operator

Sets up and operates self-propelled or truck-mounted drilling machine to bore blasting holes in overburden at strip mine, open pit, quarry, or construction site: Positions and stabilizes machine, using jacks, and lowers drill shaft into position. Moves levers to start and advance drill into overburden, ore, or rock formation. Stops drill to install additional drill stems. Observes operation to detect binding or stoppage of drill. Removes drill when specified depth has been reached. Replaces broken or worn parts, using handtools, and lubricates equipment. May charge and set off explosives in blasting holes. May be assisted by DRILLER HELPER (construction; mine & quarry). May be designated according to type of drill operated as Tractor-Drill Operator (construction; mine & quarry); Rotary-Drill Operator (construction; mine & quarry); Wagon-Drill Operator (construction; mine & quarry).

GOE: 05.11.02 STRENGTH: H GED: R3 M2 L2 SVP: 5 DLU: 77

930.382-014 PIPE TESTER (petrol. & gas)

Operates hydraulic pump and auxiliary equipment to test oil well tubing or casing for high-pressure leaks: Attaches wire line pulley to crown block of rig, and hydraulic hose to testing tool, pump, and source of water, using wrenches. Lowers testing tool and high-pressure packing device into pipe to seal it and retain water in specified section, using winch. Moves lever on hydraulic pump to fill section with water under specified pressure and observes gauge to detect leaks [HYDRO-PNEUMATIC TESTER (any industry)].

GOE: 05.07.01 STRENGTH: M GED: R3 M3 L2 SVP: 5 DLU: 77

930.382-018 PROSPECTING DRILLER (petrol. & gas) alternate titles: core driller; driller; rotary driller, prospecting; shot-hole driller

Operates portable rotary drilling rig to drill shallow boreholes to obtain samples of earth formations, for placement of explosives in seismic prospecting, or for other tests to discover petroleum: Positions truck-mounted derrick at drilling area specified on field map. Starts rig and moves throttles and clutches to raise and lower drilling pipes. Counts sections of drill rod to determine depth of borehole. Selects coring bit and barrel. Withdraws core barrel from hole and extracts core from barrel. Records depths at which samples were taken. Repairs equipment, using handtools.
GOE: 05.11.03 STRENGTH: M GED: R3 M3 L2 SVP: 6 DLU: 77

930.382-022 ROTARY DERRICK OPERATOR (petrol. & gas)

Rigs derrick equipment and operates pumps to circulate mud through drill hole: Sets and bolts crown block to posts at top of derrick. Strings cables through pulleys and blocks. Clamps holding fixture on end of hoisting cable. Weighs clay, and mixes drilling mud, using portable power mixer. Starts pumps that circulate mud through drill pipe and borehole to cool drill bit and flush out drill-cuttings. Cleans and oils pulleys, blocks, and cables. May repair pumps [PUMP SERVICER (any industry)].
GOE: 05.11.03 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

930.382-026 ROTARY DRILLER (petrol. & gas) alternate titles: core driller; driller; well driller

Operates gasoline, diesel, electric, or steam draw works to drill oil or gas wells: Observes pressure gauge and moves throttles and levers to control speed of rotary table which rotates string of tools in borehole, and to regulate pressure of tools at bottom of borehole. Connects sections of drill pipe, using handtools and powered wrenches and tongs. Selects and changes drill bits according to nature of strata, using handtools. Pushes levers and brake pedals to control draw works which lowers and raises drill pipe and casing into and out of well. Examines operation of slush pumps to ensure circulation and consistency of mud (drilling fluid) in well. Examines drillings or core samples from bottom of well to determine nature of strata. Fishes for and recovers lost or broken bits, casing and drill pipes from well, using special tools attached to end of drill pipe or cable. Keeps record of footage drilled, location and nature of strata penetrated, and materials used. Caps well or turns valves to regulate outflow of oil from well. Repairs or replaces defective parts of machinery, using handtools. May lower and explode charge in borehole to start flow of oil from well. May specialize in drilling underwater wells from barge-mounted derricks or drilling platforms and be designated Rotary Driller, Marine Operations (petrol. & gas).
GOE: 05.11.03 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

930.382-030 WELL PULLER (petrol. & gas) alternate titles: casing puller; pipe puller; pulling-machine operator; rig operator; tube puller; work-over rig operator

Controls power hoisting equipment to pull casing, tubing, and pumping rods from oil and gas wells for repair and to lower repaired equipment, testing devices, and servicing tools into well: Attaches cable clamp to top of pump rod or casing and starts winch or hydraulic jack that raises rod or casing. Disconnects sections of rod or casing, using hand and power wrenches and tongs. Runs packer (plug device) into well to control flow of oil, water, or gas during well-pulling operations. Lowers swabber into well to clear mud from screens at bottom of well and to establish flow of oil. Lowers pressure-recording device into well and interprets charts. Lowers special tools into well to fish for broken rods and tubing and to scrape paraffin and incrustations from casing or tubing. Plugs well with cement [CEMENTER, OIL WELL (petrol. & gas)]. Tests pipe for leaks, using hydraulic-testing equipment. May drive truck equipped with portable hoisting equipment. May be designated according to type of equipment used as Hydraulic Oil-Tool Operator (petrol. & gas).
GOE: 05.11.03 STRENGTH: H GED: R3 M2 L2 SVP: 5 DLU: 77

930.383-010 CHANNELING-MACHINE RUNNER (mine & quarry) alternate titles: channeling-machine operator

Operates track-mounted steam or electrically powered machine to cut channels in quarry stone to facilitate separating stone blocks from mass: Lays track for machine along line at which stone is to be split. Moves levers to start machine moving across face of stone, and to control vertical reciprocating drills which cut shallow channel by shattering action applied to surface of stone. Lubricates machine and replaces dulled bits and worn or damaged parts. May operate portable channeling equipment.
GOE: 05.11.02 STRENGTH: M GED: R3 M2 L1 SVP: 4 DLU: 77

930.482-010 DRILLING-MACHINE OPERATOR (mine & quarry) alternate titles: horizontal-drill operator

Operates mobile drilling machine to drill blastholes horizontally in underground mine or in face of strip mine: Drives machine into room where coal, salt, or ore has been undercut. Measures undercuttings with steel rod to determine depth of undercut and location of holes to be drilled. Marks hole locations and boundaries of cut on ribs and face, using chalk. Moves controls to position drill. Starts drill and advances it into rib or face to specified depth. Repositions machine to drill additional holes in specified pattern. Observes electric power cable when moving machine to avoid damage to cable. May drill blastholes in roof to prepare for blasting.
GOE: 05.11.02 STRENGTH: M GED: R3 M2 L1 SVP: 6 DLU: 77

930.662-010 LONG-WALL SHEAR OPERATOR (mine & quarry)

Operates equipment to shear coal from long-wall face in mine: Moves levers to control movement of equipment and to adjust speed and height of cut into coal face during initial pass and during subsequent clean-up passes. Signals other crew members to communicate need to adjust speed of equipment to rate of installation of roof supports and to adjust speed of conveyor to volume of coal needing removal. Listens for unusual sounds that indicate equipment malfunctions. Assists in routine lubrication and maintenance of equipment.
GOE: 05.11.02 STRENGTH: H GED: R3 M2 L2 SVP: 5 DLU: 86

930.663-010 SHALE PLANER OPERATOR (mine & quarry)

Operates track-mounted machine to cut shale from wall face of pit and tends continuous conveyor system used for loading shale in dinkey car or dump truck: Guides and assists crew in resetting planer rails, supports, and blocking from back to front of planer, using jacks, shovel, sledgehammer and pinch bar. Drives machine over rails to pit face. Moves planer levers to control depth of cut and to rotate swivel cutting boom as shale is depleted from area. Presses button to activate conveyor belt and pushes or pulls chain handles to regulate conveyor movement. Lubricates and maintains machine, using handtools, replacement parts, and grease gun.
GOE: 05.11.02 STRENGTH: M GED: R3 M2 L3 SVP: 4 DLU: 77

930.664-010 CASER (petrol. & gas)

Performs any combination of following tasks as member of casing crew: Removes thread protectors from casing sections, using pipe wrenches. Attaches pull-in cable to section of casing and signals crew member to hoist casing onto derrick platform. Attaches cable clamp on casing. Signals rig operator to hoist casing. Pushes or pulls suspended casing to position and align casing section for coupling. Tightens threaded casing sections, using spin rope or spin chain and casing tongs. Removes handslips (curved metal wedges) from casing section to enable rig operator to lower string of coupled casing into borehole. Places handslips around casing at wellhead (after rig operator lowers casing string into borehole to position casing for further coupling) to prevent string of casing from falling into borehole during change or addition of casing sections. Pushes or pulls suspended casing sections while on casing board on derrick tower to assist crew members on derrick floor in stabbing (aligning) casing sections.
GOE: 05.12.12 STRENGTH: V GED: R1 M1 L1 SVP: 3 DLU: 77

930.664-014 CLEAN-OUT-DRILLER HELPER (petrol. & gas)

Cleans out and restores old or damaged gas or oil wells, using handtools, as assistant to CLEAN-OUT DRILLER (petrol. & gas): Unloads cleanout tools and equipment at well site. Levels truck bed at wellhead and aligns hoist cable over borehole, using hand-operated jacks. Assembles and attaches specified cleanout tools, such as bailers and swabs, to cable, using wrenches. Guides tools into borehole. Pushes filled bailer to dumping position and unscrews bailer gate to dump mud, water, and debris removed from well. Guides cable lifting tools from well onto hoist drum, using pinchbar. Dismantles and cleans tools and equipment, using wrenches. Oils and greases machinery. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.02 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

930.665-010 LONG-WALL-MINING-MACHINE TENDER (mine & quarry)

Tends equipment that plows across face of coal strata in underground or strip mine: Monitors electronic control panel which activates machine. Observes indicator lights and gauges on control panel to detect machine malfunction. Advances plow blade through coal strata by remote control on electronic or radio signal from TAILER (mine & quarry). Listens for unusual sounds that would indicate equipment malfunctions. May assist in routine maintenance or repair of machinery.
GOE: 05.11.02 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

930.666-010 DRILLER HELPER (construction; mine & quarry)

Bores or burn blasts holes in overburden at strip mine, open pit, quarry, or construction site, as assistant to DRILLER, MACHINE (construction; mine & quarry): Signals DRILLER, MACHINE (construction; mine & quarry) to position machine. Adds, positions, and replaces drill stems, burners, casings, cables, and hoses to assist in drilling operation. Pulls electric cables and water hoses clear of machine treads. Observes ground surface and machine operation for indications of unsafe conditions. Collects ore samples for laboratory analysis. Lubricates and cleans equipment. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.02 STRENGTH: H GED: R2 M2 L2 SVP: 2 DLU: 77

930.666-014 TAILER (mine & quarry) alternate titles: long-wall-mining-machine helper

Works at opposite end of coal strata assisting LONG-WALL-MINING-MACHINE TENDER (mine & quarry) to advance plow blade through face of coal in underground or surface mine: Pulls levers to adjust depth of penetration of blade. Signals LONG-WALL-MINING-MACHINE TENDER (mine & quarry) by electronic buzzer or two-way radio when machine plow blade is properly positioned. Adjusts and makes minor repairs to equipment, using handtools. May assist in positioning jacks, timbers, or roof supports to prevent cave-ins when working underground.
GOE: 05.12.02 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

930.667-010 SHALE PLANER OPERATOR HELPER (mine & quarry)

Cuts and moves shale from open pit, performing any combination of following laboring tasks to assist SHALE PLANER OPERATOR (mine & quarry): Shovels loose shale from travel area of planer. Signals truck driver to posi-

tion vehicle for receiving shale from planer hopper. Monitors movement of shale along conveyor leading from hopper to truck or railcar. Frees jams in planer hopper, using metal pinch bar. Assists in laying tracks and bed supports for planer, using pick, shovel, sledgehammer, and other handtools.
GOE: 05.12.02 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

930.682-010 CORE-DRILL OPERATOR (any industry) alternate titles: shot-core-drill operator; test borer; test-hole driller; wash driller

Sets up and operates drilling equipment to obtain solid core samples of strata for analyzing geological characteristics of ground, nature of ore, or strength of foundation material: Drives or guides truck-mounted drilling equipment onto metal or wood foundation, or assembles equipment in position. Connects power lines to equipment. Attaches diamond churn, alloy, or percussion bit to drill rod, and fastens rod in machine, using wrench or other handtools. Starts power unit. Moves clutch and throttle to control rotation and feed of drill bit into ground. Couples additional lengths of drill rod as bit advances. Withdraws drill rod from hole after specified depth has been reached and extracts core from hollow barrel located behind drilling bit. Records depths from which core samples are taken. Lubricates machine, using grease gun, and replaces parts, such as worn winch cables. May replace diamonds in bit as they become worn, chipped, or lost, where diamond drill is used [DIAMOND MOUNTER (machine tools)]. May operate water pump to pump water down borehole to cool drill bit. May be designated according to type of drill used as Diamond Driller (any industry).
GOE: 05.11.02 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

930.683-010 CONTINUOUS-MINING-MACHINE OPERATOR (mine & quarry)

Operates self-propelled continuous mining machine to mine coal in underground mine: Drives machine into position at working face. Moves levers to sump (advance) ripper bar or boring head into face of coal seam. Starts machine to gather coal and convey it to floor or shuttle car. May repair, oil, and adjust machine and change cutting teeth, using wrench. May move lever to raise and lower hydraulic safety bar that supports roof above machine until ROOF BOLTERS (mine & quarry) or TIMBER FRAMER (mine & quarry) complete their work.
GOE: 05.11.02 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

930.683-014 CUTTER OPERATOR (mine & quarry) alternate titles: coal-cutting-machine operator; cutting-machine operator; undercutter

Operates self-propelled machine to saw channel along working face of coal, salt, or other nonmetal mine to facilitate blasting: Drives unit into working area on tracks or crawler treads. Starts endless chain equipped with teeth that travel around edge of cutter bar and cut into working face. Moves levers to advance cutter bar into face and across bottom or down side of face to complete horizontal or vertical cut. May adjust and repair machine and replace dull teeth, using wrench and pry bar. May shovel debris from channel to facilitate blasting. May cut entries between rooms and haulageways and be designated Entry-Driver Operator (mine & quarry). May cut slots along working face of salt mine deposits and be designated Side-Shearing-Machine Operator (chemical).
GOE: 05.11.02 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

930.683-018 DERRICK WORKER, WELL SERVICE (petrol. & gas)

Operates power hoist in truck-mounted, pulling-machine derrick to transfer rod sections to and from derrick racks to rod lifting clamps as sections are removed or returned to oil well: Climbs ladder attached to side of derrick to rod platform. Presses rod hoist control pedal on rod platform to lower *rod transfer device* (rod bottle) to proximity of rod sections suspended in derrick. Attaches transfer device to rod sections and releases pedal to raise rod sections for disconnection of rod lifting clamp (rod elevator). Unlatches lifting clamp and presses pedal to lower rod sections while manually guiding sections into rod holding slots attached to derrick. Descends derrick ladder to tubing platform and fastens safety belt to prepare to transfer tubing sections. Disconnects lifting clamp (tubing elevators) from tubing sections that have been raised into derrick, disconnected from subsequent sections in wellhole, and lowered onto *ground racking board*. Guides tubing sections into slots of tubing rack to stand sections in derrick. Guides tubing sections from tubing rack slots to tubing platform and attaches lifting clamp to sections after defective tubing is replaced, casing repaired, or other oil well service performed. Aligns tubing sections perpendicularly over wellhole to assist in connection of tubing sections and prevent damage to threads of sections. Unfastens safety belt and climbs ladder to rod platform to prepare to transfer rod sections. Presses rod control pedal to lower rod transfer device to rods in holding slots. Attaches device to rod sections and releases pedal to lift rod sections from holding slots. Guides sections over wellhole and presses pedal to lower sections to wellhole for connection to rods in wellhole. Connects lifting clamp to rod sections and disconnects transfer device. Periodically turns adjustment screw on rod hoist control stand to regulate power of hoist. Occasionally operates pump to circulate fluid or mud into wellhole. Occasionally connects oil well head attachments, loads tools, and performs similar duties.
GOE: 05.11.03 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

930.683-022 HARVESTER OPERATOR (chemical)

Drives and controls specially equipped tractor to harvest salt from granulator beds: Drives machine to designated bed. Positions discharge spout over gondola car, and depresses clutch to engage harvester. Moves handles to lower scraper equipped with revolving fingers that break up salt and load it onto conveyor for transfer to discharge spout. Moves levers and throttle to control speed of tractor to harvest maximum quantity of salt according to thickness of salt in bed.
GOE: 05.11.04 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

930.683-026 ROOF BOLTER (mine & quarry) alternate titles: bolting-machine operator; raise driller

Operates self-propelled machine to install roof-support bolts in underground mine: Positions safety jack to support roof until bolts can be installed. Drives machine into position, inserts bit in drill chuck, and starts drill. Moves lever to advance bit into roof at specified distance from rib or adjacent bolt. Removes bit from chuck and replaces with bolt. Starts hydraulic action which forces bolt into hole. Starts rotation of chuck to turn bolt and open expansion head to exert pressure upon rock formation. Tests bolt for specified tension, using torque wrench. May install truss bolts traversing entire ceiling span and tighten ends of anchored truss bolts, using turnbuckle.
GOE: 05.11.02 STRENGTH: M GED: R3 M1 L1 SVP: 4 DLU: 77

930.684-010 FLAME CHANNELER (construction; mine & quarry) alternate titles: jet channeler; jet-piercer operator

Cuts holes or channels in rock masses to separate block from quarry mass, using jet-piercing torch: Ignites oxygen-kerosene burner and connects water hoses. Positions boom and lowers jet burner to burn or cut hole or channel in rock formation. Adjusts valves and controls to regulate descent or progress of burner as specified. Repairs and replaces parts, using handtools. Keeps production records. May install casing to prevent cave-ins. May use acetylene torch to ignite burner. May lay out pattern for hole or channels to be cut.
GOE: 05.11.02 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

930.684-014 FLOOR WORKER, WELL SERVICE (petrol. & gas)

Rigs well service pulling machine on oil well and assembles and disassembles rod and tubing sections, using hand wrenches or power tongs: Pulls lever or turns handle to extend hydraulic or screw-type jacks to support and level pulling machine and derrick. Fastens derrick guy lines to ground-anchors to stabilize derrick. Unloads handtools and power tools from truck and attaches power tools to cables hanging from derrick. Connects pulling machine hydraulic hoses to rod and tubing tongs and other power tools. Unscrews connections on wellhead, using handtools and removes pumping unit head. Attaches lifting clamp (rod elevator) to rod sections in wellhole and places lifting clamp on hook of hoist line. Disconnects rod sections as they are removed from wellhole, using hand wrenches or power tongs. Disconnects and removes hook from hoist line after rod sections have been removed from wellhole and attaches tubing lifting clamp (tubing elevator). Attaches lifting clamps to tubing in wellhole. Disconnects tubing sections as they are removed from wellhole, using hand wrenches or power tongs. Guides uncoupled tubing sections from wellhole to racking board to stand pipe in derrick or guides end of tubing section to ground rack and pushes section to slide it down rack and lay it on ground. Guides tubing and rod sections from derrick or ground rack to wellhole and connects to sections in wellhole, using hand wrenches or power tongs, after repairing oil well pump, replacing defective tubing, or performing similar oil well service. Detaches lifting clamps from sections lowered into wellhole. Assembles and tightens wellhead connections, using hand wrenches and replaces pumping unit head. Disconnects hydraulic hoses and cables from power tools and loads on truck. Unfastens derrick guy lines from ground-anchors and pushes lever or turns handle to contract hydraulic or screw-type jacks. Performs minor maintenance on tools and equipment, such as changing dies in tongs and hand wrenches and changing worn hydraulic hoses on power equipment. Washes tools, equipment, and pulling machine with diesel fuel or other cleaning solution. Shovels dirt around well location to cover spilled oil and cleans oil from wellhead connections.
GOE: 05.12.02 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

930.684-018 JACKHAMMER OPERATOR (mine & quarry) alternate titles: air-drill operator; air-hammer operator; plug-drill operator

Drills holes in ore or rock in mine or quarry to facilitate blasting and quarrying, using jackhammer: Connects steam or compressed-air and water lines to hammer. Inserts drill in chuck, trips trigger to start hammer, and leans on hammer to force drill into solid mass. Changes drill or adds lengths as depth of hole increases. Replaces or sharpens bits. Lubricates hammer. May lay steam, compressed-air, or water pipelines. May be designated according to type of drill operated as Tripod-Drill Operator (mine & quarry).
GOE: 05.12.02 STRENGTH: H GED: R2 M2 L1 SVP: 2 DLU: 77

930.684-022 QUARRY PLUG-AND-FEATHER DRILLER (mine & quarry) alternate titles: rock splitter

Separates blocks of rough dimension stone from quarry mass, using jackhammer, wedges, and feathers (shims): Marks desired dimensions on stone, using rule and chalkline, and cuts groove along outline, using chisel. Drills holes along outline with jackhammer [JACKHAMMER OPERATOR (mine & quarry)]. Inserts wedges and feathers into holes and drives wedges with sledgehammer to split stone from mass. May set charge of explosives to split rock [BLASTER (mine & quarry)]. May drill holes into side of stone broken from mass, insert dogs or attach sling, and direct movement of stone from area. May be designated according to type of stone separated as Sandstone Splitter (mine & quarry).

GOE: 05.12.02 STRENGTH: H GED: R2 M1 L1 SVP: 4 DLU: 77

930.684-026 ROTARY-DRILLER HELPER (petrol. & gas) alternate titles: driller helper; rotary helper; roughneck

Assists ROTARY DRILLER (petrol. & gas) in operating machinery to drill oil or gas wells, using handtools and power tongs and wrenches: Assembles and disassembles casings and pipe sections, using hand and power wrenches and tongs. Sets curved metal wedges around pipe string at wellhead to prevent string from falling into well during change or addition of pipe sections. Tightens or loosens threaded joints between sections, using tongs or chain wrenches. Guides lower end of pipe sections to or from well opening. Loosens or tightens joints, using cathead (winch). Mixes drilling mud (clay and sand slush), using power agitators. Reads gauge to ascertain pressure on drilling tools at bottom of well and reports irregularities to ROTARY DRILLER (petrol. & gas). Repairs drilling machinery, slush pumps, and derricks. Digs drainage ditches, racks tools, and cleans drilling floor around rig. May assist in erecting and dismantling rigs. Performs other duties as described under HELPER (any industry) Master Title. May be known according to specific duty performed as Back-Up Worker (petrol. & gas); Cathead Worker (petrol. & gas); Lead-Tong Worker (petrol. & gas); Pipe Racker (petrol. & gas).
GOE: 05.12.02 STRENGTH: H GED: R2 M1 L1 SVP: 4 DLU: 77

930.685-010 MUD-PLANT OPERATOR (petrol. & gas)

Tends machine that mixes mud for use in drilling oil and gas wells: Weighs sand, clay, and other dry materials on scale and dumps materials into hopper of mixing machine. Turns water valve and opens hopper gate to admit specified quantity of water and dry mix into mixing chamber of machine. Tests mud sample for viscosity, using viscometer. Starts pumps that force mud to drilling wells. Lubricates, adjusts, and repairs machinery, using handtools and grease gun. Replaces defective parts of mud pumps and hoisting equipment, using handtools and following repair orders.
GOE: 05.11.03 STRENGTH: H GED: R3 M2 L2 SVP: 4 DLU: 77

930.687-010 BOTTOM-HOLE-PRESSURE-RECORDING-OPERATOR HELPER (petrol. & gas)

Unloads recording equipment at well site for use in determining pressure in oil or gas wells: Attaches conductor cable to instrument and tightens clamps, fittings, and electrical connections, using wrenches and screwdrivers. Observes coiling of conductor cable on hoist drum to prevent damage to cable. Dismantles equipment after use. May drive truck to and from well site when working as member of crew.
GOE: 05.12.03 STRENGTH: M GED: R2 M2 L1 SVP: 3 DLU: 77

930.687-014 CORE-DRILL-OPERATOR HELPER (any industry) alternate titles: drill-runner helper; shot-core-drill-operator helper; test-bore helper; wash-driller helper

Assists CORE-DRILL OPERATOR (any industry) in setting up and operating drilling equipment to obtain core samples used in determining geological character of ground, nature of ore, or strength of foundation material: Labels samples of strata indicating area and depth from which sample was obtained. Lubricates machines and assists in making repairs to machine and equipment, such as replacing worn winch cables, or adjusting drill stems, engines, and pumps. May be designated according to type of drill used as Diamond-Driller Helper (any industry).
GOE: 05.12.02 STRENGTH: H GED: R2 M2 L2 SVP: 2 DLU: 77

930.687-018 CUTTER-OPERATOR HELPER (mine & quarry)

Undercuts coal, salt, or nonmetallic ore in underground mine to assist CUTTER OPERATOR (mine & quarry): Shovels loose material to clear working area for machine. Observes movement of machine to prevent damage to electric power cable. Braces machine from rear, using pole or bar as lever, to prevent sideways sliding of machine due to pressure on cutter bar. Lubricates cutter bar and performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.02 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

931 BLASTING OCCUPATIONS

This group includes occupations concerned with preparation, placement, and detonation of explosives to shatter, dislodge, or move earth, coal, ore-bearing material, and stone in open pit or underground mines and quarries. Occupations concerned with blasting for construction purposes are found in Group 859.

931.261-010 BLASTER (mine & quarry) alternate titles: dynamiter; firer; shooter; shot firer; shot lighter

Determines strength and pattern of blast required and charges and detonates explosives in surface or underground mine, pit, or quarry to fracture or separate stone or minerals from solid formations: Studies formation to determine amount, type, and location of explosive charge required. Marks pattern of drill holes or issues drilling instructions for depth and placement of blast holes. Inserts, packs, or pours explosives, such as dynamite, ammonium nitrate, black powder, or slurries into blast holes and compacts charge, using tamping rod. Positions assembled primer and blasting cap in hole at depth that will cause most effective explosion. Connects electric wire to primer and covers charge or fills blast hole with clay, drill chips, sand, or other material. Tamps material to secure charge and prevent force of blast from escaping through blast hole. Inspects blasting area to ensure that safety laws are observed and signals workers to clear area. Connects wires to electrical firing device and pushes plunger, turns dial, or presses buttons to set off single or multiple blasts. May compile record of blasts. May keep inventory of blasting agents on hand. May transport blasting agents to blasting area, using light truck [EXPLOSIVES-TRUCK DRIVER (ordnance)].
GOE: 05.10.06 STRENGTH: M GED: R4 M3 L2 SVP: 7 DLU: 77

931.361-010 SAMPLE-TAKER OPERATOR (petrol. & gas) alternate titles: oil-well-electrical-wall-sampling-device operator

Obtains sample of earth formations in sidewalls of oil well boreholes, using electrically exploding device: Loads explosives into gun chambers of tubular firing device. Connects gun chambers to electric detonating cable, using handtools. Signals HOIST OPERATOR (petrol. & gas) to lower sample-taking gun into well. Observes wire line measuring device, weight indicator, and instrument panel of control equipment in truck to position sample-taking gun at specified point in well. Moves controls to set off electrical igniters that fire cylinders into sidewall of rock formation to obtain sample of earth. Signals HOIST OPERATOR (petrol. & gas) to raise equipment and sample from well. May be required to have license for handling explosives. May operate hoist to lower and raise tools and equipment from well.
GOE: 05.12.02 STRENGTH: M GED: R3 M2 L1 SVP: 5 DLU: 77

931.361-014 SHOOTER (petrol. & gas) alternate titles: oil-well shooter; torpedo shooter; well shooter

Detonates torpedoes in bored oil wells to start or renew flow of oil in wells: Connects torpedo and electric cable terminals, using wrench. Signals HOIST OPERATOR (petrol. & gas) to lower torpedo into well. Presses switch or drops go-devil (detonating device) down well to detonate charge. May load torpedoes with explosives. May be required to have license for handling explosives.
GOE: 05.10.06 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

931.361-018 SHOOTER, SEISMOGRAPH (petrol. & gas) alternate titles: shot-hole shooter

Detonates dynamite or other explosive charges in shallow boreholes to set up seismic waves that are recorded by seismic instruments and interpreted to reveal subsurface rock formations likely to contain petroleum deposits: Lowers explosives into borehole and pushes switch to detonate charge [SHOOTER (petrol. & gas)]. Moves, stores, and maintains inventories of high explosives. Repairs and services electric wiring and other shooting equipment and automotive equipment. Sets up shortwave radio or field telephone equipment to transmit and receive shooting information. May drive truck to transport explosives and shooting equipment. May admit water into borehole to serve as tamping for explosive charge. May be required to be licensed by federal government to handle explosives.
GOE: 05.10.06 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

931.382-010 PERFORATOR OPERATOR, OIL WELL (petrol. & gas) alternate titles: gun perforator; oil-well gun-perforator operator

Operates truck-mounted hoisting equipment and electrical control panel to position and explode charges in oil or gas wells to pierce drill pipes, casings, tubings, and fracture earth formations: Assembles tools and equipment at well site, using handtools. Lowers perforating gun into well, using hoist. Observes odometer, weight indicator, and instrument panel in truck, and positions gun at predetermined point in well. Moves controls at panelboard to detonate charge in gun which propels bullets through wall of bore to pierce or fracture oil- or gas-bearing formations, or to ignite chemical charge which burns fissures in rock formations for passage of oil or processing fluid, such as mud or cement. Observes instrument on control panel to verify detonation of charge in gun. Repairs electrical instruments, using electrician's handtools. Loads perforating guns at well site for special shots.
GOE: 05.11.03 STRENGTH: H GED: R3 M2 L2 SVP: 6 DLU: 77

931.384-010 GUN-PERFORATOR LOADER (petrol. & gas)

Loads explosive powder or chemicals into gun perforators and carriers used in shooting or burning holes through tubing, casings, and earth formations: Assembles perforators, using special handtools. Cleans, gauges, and lubricates gun ports distributed along barrel. Removes gun port, using special wrench. Inserts waterproof sealer and bullet into gun port. Places specified powder charge in powder chamber and screws gun port in place. Screws igniting charge (booster) in place on gun barrel and connects lead wire to cable connection with screwdriver. Inserts special fuse (prima-cord) into carrier of jet perforators. Threads jet-shaped charge on fuse and inserts it into carrier and through port, using special tongs. Inserts specified powder charge in chamber of sidewall sample-taking cylinder and assembles cylinders, using special wrenches. Packs cylinders into boxes for field loading into core barrels. Stores loaded guns, explosives, and related materials in storeroom according to established safety procedures. Maintains inventory records and orders new supplies. May keep gun and explosive records in compliance with local and federal laws.
GOE: 05.10.06 STRENGTH: V GED: R3 M2 L2 SVP: 5 DLU: 77

931.664-010 TIER-AND-DETONATOR (mine & quarry)

Wires and detonates explosives in specified sequence to blast overburden in open pit copper mine: Lays main line of *primacord* between rows of charged blastholes and ties cord into main line to form blast pattern. Ties specified lengths of delaying fuses into pattern to time sequence of explosions. Connects blasting cap and flips switch on electronic blasting device to detonate charge upon signal from SUPERVISOR, BLASTING (mine & quarry).

GOE: 05.12.02 STRENGTH: M GED: R2 M2 L2 SVP: 2 DLU: 77

931.667-010 POWDER LOADER (mine & quarry)

Loads explosives into blastholes to prepare for blasting overburden in open pit copper mine, working as member of crew: Measures depth of blasthole, using weighted tape measure, and consults SUPERVISOR, BLASTING (mine & quarry) to determine amount of explosives needed. Cuts specified lengths of *primacord* and attaches primer to end of cord. Lowers cord into hole and ties upper end to stake. Signals EXPLOSIVES-TRUCK DRIVER (ordnance) to drive truck into position near blasthole. Positions hopper funnel over hole and admits specified amount of explosives. Shovels drill cuttings to fill and tamp hole. Places safety cones around blast area to alert other workers.
GOE: 05.12.02 STRENGTH: M GED: R2 M2 L2 SVP: 2 DLU: 77

931.684-010 DUMPER-BAILER OPERATOR (petrol. & gas)

Dumps sand and cement over shot of nitroglycerine in oil or gas wells to provide tamp and bridge (protective shielding) over area to be shot, using special bailer and hoist: Determines amount and consistency of tamping materials and cement according to size, depth, and similar characteristics of borehole. Selects tools, such as packers for use in borehole. Assembles and attaches tools and bailer to hoist line. Loads sand or other tamping materials into bailer and lowers bailer and tamping tools into borehole, using hoist. Mixes cement to specified consistency, using portable mixer. Loads cement in bailer, using bucket. Lowers and dumps cement in borehole, using hoist. Cleans and repairs equipment.
GOE: 05.11.03 STRENGTH: H GED: R3 M2 L1 SVP: 5 DLU: 77

932 LOADING AND CONVEYING OPERATIONS

This group includes occupations concerned with moving workers, equipment, and extracted materials, using motor cars, chutes, hoists, elevators, conveyors, shovels, picks, and other devices.

932.132-010 BANK BOSS (mine & quarry)

Supervises and coordinates activities of workers operating machinery, such as front-end loaders, bulldozers, and conveyors used in loading bank coal into trucks and railroad cars. Assists workers with faulty equipment. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.11.04 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

932.132-014 SURFACE SUPERVISOR (mine & quarry)

Supervises and coordinates activities of workers engaged in operating equipment to move personnel, machinery, and supplies to various levels of underground mine: Consults with supervisory personnel to establish daily work schedule. Coordinates use of hoisting devices to raise or lower equipment that transports personnel, machinery, and supplies to and from various mine levels. Directs workers who load and unload materials from trucks or railroad cars. Inspects equipment to detect malfunctions and schedules repairs as needed. Conducts safety meetings and resolves grievances.
GOE: 05.11.02 STRENGTH: L GED: R4 M3 L4 SVP: 8 DLU: 77

932.167-010 DISPATCHER (mine & quarry) alternate titles: car distributor; haulage boss; motor boss; passing boss; turn keeper

Coordinates movements of haulage trips (trains) in underground mine to or from working force or dump area: Schedules movements of trains hauling coal, ore, refuse, personnel, or supplies in accordance with capacity of system, interval between trains, and length and direction of trains. Directs movements of special vehicles, such as emergency and repair railcars, to minimize interference with scheduled operations, using telephone, radio, or track signals. Reroutes trains in event of emergency, such as power failure, explosion, fire, or accident. Investigates cause of train delays, using telephone, and reschedules subsequent operations. Transmits reports of accidents or system malfunctions to repair crew and SAFETY ENGINEER (profess. & kin.). Keeps records of train movements, or monitors movements on lighted panelboard showing location of each train in system. May move controls to throw track switches and regulate movement of trains.
GOE: 07.04.05 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

932.363-010 HOIST OPERATOR (petrol. & gas) alternate titles: winch operator

Operates truck-mounted hoist to lower and raise instruments and tools into and out of oil or gas wells on electric conductor cable, used to perform well services and surveys, such as directional drilling, electric well logging, perforating, sidewall sample taking, and free-point shooting: Signals and assists other workers in loading and unloading truck; assembling and connecting instruments and tools to conductor cable, using wrenches and special handtools; and in attaching cable pulley to hoist block of drilling rig or to special pulley-mount placed in position over borehole (rigging up). Operates hoist to lower and raise instruments and tools in well [HOISTING ENGINEER (any industry)], observing signals of engineering personnel. Loads log recorder with film to prepare for logging of oil or gas well boreholes. Observes indicator to verify depth of instruments in borehole. Drives truck to and from well site when working as member of crew. Repairs and maintains truck and other mobile equipment. May repair cables and hoisting equipment. May load explosive charges in such tools as gun or jet perforators.
GOE: 05.11.02 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

932.664-010 BRAKE HOLDER (any industry) alternate titles: car rider; coupler; dukey rider; gang rider; nipper; patcher; rope rider; set rider; swamper; tail-end rider; trailer; train conductor; trip rider; tub rider

Throws switches and couples, or attaches to cable, cars being hauled by locomotive or hoisted by cable or chain in mines, quarries, or industrial plants: Uncouples loaded cars at their destination or uncouples and distributes empty cars to sidings or to loading areas. Moves switches to route cars and signals DINKEY OPERATOR (any industry) to start or stop cars. May open and close ventilation doors in mines. May open or close chute gates to load or unload cars. May crush oversize rock or ore on grizzly to prevent clogging, using sledgehammer. May remove and tag ore samples for laboratory analysis. May be designated according to type of hauling machine as Dinkey-Operator Helper (any industry).
GOE: 05.12.03 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

932.664-014 SPOUT TENDER I (chemical)

Pulls cable to regulate flow of salt from harvesting machine into gondola cars: Observes position of gondola passing loading spout and pulls cable to position deflector plate for loading salt into gondola. Pulls cable to reverse plate position and change salt flow to next spout to complete loading of car. Signals HARVESTER OPERATOR (chemical) to stop conveyor when cars are filled.
GOE: 05.12.03 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 77

932.667-010 BOTTOMER I (mine & quarry) alternate titles: foot tender

Works at foot of haulage slope or plane leading to surface of mine: Engages clips or grips by means of which mine cars are attached to hoisting cable for haulage to surface, working at foot of haulage slope or plane leading to surface of mine. Disengages clips or grips as cars are lowered to landing and moves cars onto track sidings for distribution in mine. Signals HOIST OPERATOR (mine & quarry) with bell or buzzer to raise cars.
GOE: 05.12.04 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 77

932.667-014 LOADING-SHOVEL OILER (mine & quarry)

Lubricates diesel or electric loading shovel at strip mine or quarry: Oils and greases bearings, cables, gears, and other friction areas, using grease gun and oilcan. Assists in routine maintenance and repair of machine. May shovel dirt and coal to keep bench (top of exposed coal or ore seam) clear. May keep power cable clear of treads as shovel moves into position. May guide trucks into loading position, using hand or voice signals.
GOE: 05.12.08 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

932.683-010 CAR DROPPER (mine & quarry) alternate titles: car pincher; car runner; spragger

Controls movement of railroad or mine cars to position cars for loading or unloading at sidings, loading chutes, tipples, or scales, performing any combination of following tasks: Pushes or rides cars down slope. Guides and stops cars by switching, applying brakes, or placing scotches (wooden wedges) between wheel and rail. Uncouples and positions railroad car under loading chutes by inserting pinch bar under car wheels, using bar as fulcrum and lever to move car. Hooks cable to car and controls cable drum brake to ease car down incline. Opens and closes bottom doors of cars to dump contents. May assist in cleaning and preparing cars for loading.
GOE: 05.12.03 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

932.683-014 LOADING-MACHINE OPERATOR (mine & quarry) alternate titles: loader, machine

Drives self-propelled electric loading machine equipped with gathering arms and conveyor to load shattered coal, rock, or ore into shuttle or mine cars in underground mine: Drives machine into pile of material blasted from working face. Moves levers to raise and swivel multisectioned conveyor boom and to start conveyor boom and gathering-arm motors. Advances machine to gather material and convey it into car at rear. Stops gathering arms when car is full. Pries off loose material from roof and moves it into path of machine with crowbar. Moves trailing electrical cable clear of obstructions, using rubber safety gloves. May replace hydraulic hoses, headlight bulbs, and gathering-arm teeth.
GOE: 05.11.02 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

932.683-018 MECHANICAL-SHOVEL OPERATOR (mine & quarry) alternate titles: loader operator; mucking-machine operator; shovel operator

Operates power shovel that loads coal or rock into mine cars or onto conveyors in underground mines: Drives rubber-tired, crawled-tread, or rail-mounted machine into working place. Makes power connections and starts machine. Moves levers to force shovel into pile, lift and revolve shovel, and dump contents into mine car or onto conveyor. Advances machine into pile as digging progresses. Lubricates, adjusts, and repairs machine.
GOE: 05.11.02 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

932.683-022 SHUTTLE-CAR OPERATOR (mine & quarry)

Drives diesel or electrically powered shuttle car in underground mine to transport materials from working face to mine cars or to conveyor: Positions shuttle car under discharge conveyor of loading machine and observes that materials are loaded according to specifications. Maneuvers shuttle car to keep its nose under discharge conveyor. Controls conveyor which runs entire length of shuttle car to apportion load as loading progresses. Drives loaded shuttle car to ramp and moves controls to discharge load into mine car or onto conveyor. May move mine cars into position to be loaded from shuttle car. May charge batteries when operating battery-powered vehicle.

GOE: 05.11.02 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 80

932.685-010 AERIAL-TRAM OPERATOR (mine & quarry)

Tends aerial tramway (buckets attached to overhead cables and pulleys supported by towers) to convey refuse, coal, ore, and other materials from plant or mine to spoil pile, conveyor, railroad car, boat, or plant: Pushes buttons to start reel and winding cable, causing tram buckets to move between loading and dumping areas. Pulls levers to position buckets for loading and pushes button to dump load, or observes signal panel and listens for malfunction of automatic dumping equipment. Lubricates and repairs machinery. May remove or replace buckets.
GOE: 05.11.04 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

932.687-010 CHUTE LOADER (mine & quarry) alternate titles: loader; railroad-car loader

Loads trucks, railroad cars, or conveyors with sand, gravel, coal, crushed stone, or other minerals: Pulls levers or presses buttons to open and close chute of storage bin to regulate flow of materials. Loosens clogged material, using metal bar or compressed air. May position cars under chute [CAR DROPPER (mine & quarry)]. May spray water on materials to settle dust. May keep record of materials loaded. May pry and blast loose mined coal impounded behind battery (stop gate) of storage chute in steeply pitching seams, to load mine cars, and be designated Battery Starter (mine & quarry).
GOE: 05.12.03 STRENGTH: M GED: R1 M1 L1 SVP: 1 DLU: 77

933 CRUSHING OCCUPATIONS

This group includes occupations concerned with reducing bulky materials to convenient sizes, using sledgehammers and crushing machines.

933.664-010 CRUSHER SETTER (mine & quarry)

Adjusts gaps of cone crushers used to reduce taconite ore to specified size: Lowers head cone into operating crusher that compresses cone to size of crusher gap. Measures compressed cone with rule to determine amount of adjustment of crusher opening. Signals OVERHEAD CRANE OPERATOR (any industry) 921.663-010 to turn threaded crusher bowl to set gap at specified opening. Drives wedges and bolts locking links to secure bowl, using sledges, pliers, and pry bars.
GOE: 06.01.02 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

933.687-010 GRIZZLY WORKER (mine & quarry; smelt. & refin.) alternate titles: chute blaster; chute tapper; sorter

Prods and breaks ore or rock in underground mine or quarry to keep it moving through grizzly and chute leading to storage, crusher, or loading station: Loosens clogged ore, using bar or pick. Pushes ore dumped from mine cars or trucks through grizzly with bar, and breaks boulders with hydraulic ram or sledgehammer. May discard oversized lumps. May move levers to dump ore from cars. May remove samples of ore for laboratory analysis.
GOE: 05.12.07 STRENGTH: H GED: R1 M1 L1 SVP: 2 DLU: 77

934 SCREENING AND RELATED OCCUPATIONS

This group includes occupations concerned with cleaning, separating, and sizing coal, ore, stone, and related materials, using gravity and centrifugal separators, vibrating screens, and related equipment.

934.685-010 CONE OPERATOR (mine & quarry)

Tends cone (gravity device) to separate slate and rock from coal: Presses buttons to start conveyor and regulate flow of material into top of cone. Turns valve to regulate flow of water into bottom of cone and maintain specified pressure to carry coal off with overflow while rock and slate fall to bottom. Pulls lever to open slate gate at bottom and draw off impurities.
GOE: 05.12.07 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

934.685-014 SAND PLANT ATTENDANT (concrete prod.; mine & quarry)

Tends equipment that separates sand according to texture and grade: Presses buttons or flips switches on control panel to start conveyors, washing, and separating (classifying) units. Adjusts controls of classifying tanks to obtain specified grade of sand. Observes color of sand to determine clay content and notifies supervisor when excess clay or equipment malfunction is detected. Lubricates conveyor idlers, using grease gun, and assists in routine equipment maintenance. Shovels sand spillage clear of moving equipment parts and work area.
GOE: 05.12.07 STRENGTH: M GED: R2 M2 L1 SVP: 2 DLU: 77

934.685-018 SHAKER TENDER (concrete prod.; mine & quarry)

Tends shaker (vibrating or reciprocating screen) that sizes crushed coal, ore, or rock for industrial use or for further processing: Opens and closes chute gates to regulate flow of materials onto shaker table. Picks out refuse and impurities. Unclogs conveyors and screens, and shovels spillage onto conveyors or screens. May change screens. May collect and label batch samples for quality control inspection.
GOE: 05.12.07 STRENGTH: M GED: R2 M2 L1 SVP: 3 DLU: 77

934.685-022 SPIRAL RUNNER (mine & quarry)

Tends battery of spirals (mechanical devices that separate minerals from other materials by centrifugal force): Starts equipment and opens feedlines admitting material into spirals. Examines samples and regulates spirals so that excessive amount of minerals is not lost.

GOE: 05.12.07 STRENGTH: M GED: R2 M1 L1 SVP: 4 DLU: 77

934.687-010 FOOT WORKER (chemical)

Moves levers to adjust chute gate and regulate flow of salt from crusher to vibrating screens that separate salt into various sizes preparatory to shipment or refining. Cleans clogged screens with rod. May tip mine cars to dump rock salt into bins, leading to crusher [CRUSHER TENDER (any industry)].
GOE: 05.12.07 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

939 OCCUPATIONS IN EXTRACTION OF MINERALS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with extraction of minerals.

939.130-010 SUPERVISOR, POND (chemical)

Supervises and coordinates activities of workers engaged in pumping salt water to ponds and testing brine concentrate in production of salt by solar evaporation: Orders pumping sequence for each pond to move salt water through prescribed series of concentrating ponds and into crystallizing ponds according to specified density of water. Specifies density to maintain in each pond and sequence of ponds to use as salt concentration increases. Inspects ponds, floodgates, valves, and pumps, and reports needed repair or maintenance. May compile report on pond operations. May direct workers in draining granulator beds and laying gondola tracks on beds. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

939.131-010 QUARRY SUPERVISOR, OPEN PIT (mine & quarry)

Supervises and coordinates activities of workers engaged in blasting, removing, and crushing mineral ores in open-pit mines (quarries): Plans location and drilling of blast holes to ensure maximum extraction of ore and provide access roads for trucking ores out of mine. Trains workers in drilling blast holes and in loading and shooting explosive charges. Directs POWER-SHOVEL OPERATORS (any industry) and TRUCK DRIVERS (any industry) in stripping new diggings and in loading and removing ores from mine. Directs CRUSHER TENDER (any industry) in breaking ore into pieces preparatory to extraction of valuable minerals. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.02.05 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

939.131-014 SUPERVISOR, PRODUCTION (petrol. & gas) alternate titles: lease supervisor

Supervises and coordinates activities of workers engaged in pumping, gauging, and treating oil from wells within specified oil field area: Directs workers in operation and adjustment of pump engines, pumps, gauges, oil treating units, and control heads (valve devices controlling flow of oil). Inspects work of crews replacing pump rods and casing in wells, treating wells to increase flow or improve quality of oil, and constructing or repairing oil field equipment and buildings. Designates allowable flow of oil from wells in accordance with proration regulations and agreements. May direct drilling of wells. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.02.02 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

939.131-018 WELL PULLER, HEAD (petrol. & gas) alternate titles: head well-puller

Supervises and coordinates activities of WELL PULLER (petrol. & gas) in cleaning and servicing producing oil and gas wells, and in pulling pumping rods, casing, and tubing from wells, for repair or replacement. May oversee installation of tubing in new wells. May swab wells to induce flow of oil [CLEAN-OUT DRILLER (petrol. & gas)]. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.02 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 77

939.132-010 DREDGE OPERATOR SUPERVISOR (mine & quarry)

Operates dredge used to mine metal-bearing sands or gravels from bottom of lakes and streams, and supervises other dredge workers: Operates winch to position dredge. Moves controls to lower endless bucket-conveyor to bottom of lake or stream. Starts conveyor operation to scoop up ore-bearing sand or gravel from bottom and deposit it upon dredge. Directs disassembly, loading, unloading, and reassembly of dredge and related equipment. Supervises and coordinates activities of other workers engaged in primary preparation of ore by screening and amalgamation.
GOE: 05.11.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

939.132-014 OIL-WELL-SERVICES SUPERVISOR (petrol. & gas)

Supervises and coordinates activities of workers engaged in operating pumping and blending equipment to cement, acidize, and fracture oil and gas wells: Confers with SUPERINTENDENT, DRILLING AND PRODUCTION (petrol. & gas) to determine well conditions, pipe sizes, and characteristics of oil-or-gas-bearing rock formations to be treated. Computes amount of cement, acid, or fracturing material to be used and devises procedures to be followed according to conditions of individual wells. Directs workers in mixing and blending of cement, acid, and other chemicals and in assembling and connecting pipe and pipe fittings between pumping equipment and well head. Observes dials and pressure gauges to ensure that specified pump pressure is being maintained and that equipment is functioning properly. Informs workers when adjustments are needed and directs maintenance and repair of equipment. Assigns new em-

ployees to experienced worker for on-the-job training and assists in training. Evaluates job performance of workers and recommends personnel actions, such as promotions, pay raises, or discharges. May operate blending and pumping equipment and connect pipe and pipe fittings between pumping equipment and well head during peak work periods or for training purposes. May contact established customers to solicit work and maintain good will.
GOE: 05.11.03 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

939.137-010 CHIEF DISPATCHER (petrol. & gas)

Supervises and coordinates activities of dispatching and clerical personnel in field offices, and advises on types of oil well services for specific drilling or production problems: Advises customers regarding services best suited for specific drilling or production problems, utilizing knowledge of local conditions gained through field experience, to select type of service required. Computes material quantities and quotes prices for service. Dispatches oil well servicing crews, using telephone or radio, to perform services, and oversees clerical activities in field office. Performs other duties as described under SUPERVISOR (clerical) Master Title.
GOE: 07.04.05 STRENGTH: S GED: R4 M4 L4 SVP: 7 DLU: 77

939.137-014 PIT SUPERVISOR (mine & quarry) alternate titles: dimension-quarry supervisor; strip-mine supervisor

Supervises and coordinates activities of workers engaged in strip or pit mining or in quarrying: Studies contour maps and aerial photographs to determine locations for roads and cuts. Supervises road construction crew and lays out blast pattern. Supervises drilling and shooting crews in drilling blast holes and detonation of charges. Plans location of spoil pile (dump area) to allow maximum room for stripping. Coordinates stripping, drilling, blasting, quarrying, and loading activities, and assists workers with faulty equipment. Determines property lines and legal limits of operations in order to comply with rights of adjoining property owners and mining laws. Schedules running and major repair work on drilling machine and stripping and loading shovels. Requisitions supplies, such as explosives, lubricants, bits, and machine parts. Observes mining operation to detect violation of safety regulations and compiles safety and production records. May supervise crushing operations. May train new workers. May be designated according to specific work performed as Supervisor, Drilling And Shooting (mine & quarry); Supervisor, Blasting (mine & quarry). Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.02.05 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

939.137-018 SECTION SUPERVISOR (mine & quarry) alternate titles: machine boss; mine captain; muck boss; room boss; shift boss

Supervises and coordinates activities of workers engaged in underground, surface, or pit mining in specified section of mine: Coordinates activities, such as timbering, roof bolting, track-laying, undercutting, drilling, blasting, loading, and conveying of coal, ore, or rock. Examines malfunctioning equipment and orders transfer of faulty unit to surface shop or orders repair at work site. Inspects section for hazards, such as gas, falling rock, squeezes, and poor ventilation, using devices, such as safety lamps, anemometer, and crowbar. Maintains records of production, area mined, and location of personnel and equipment. Orders and distributes supplies, such as bits, wire, machine parts, bulbs, and chalk. May evaluate ore in precious-metal mine and be designated Specimen Boss (mine & quarry). May be designated according to specific equipment used as Auger Supervisor (mine & quarry). Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.02.05 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 80

939.137-022 SUPERVISOR, HARVESTING (chemical)

Supervises and coordinates activities of workers engaged in harvesting, transporting, washing, and stockpiling raw salt from crystallization pond beds: Plans shift activities and directs workers to pond beds designated for harvesting. Directs workers in laying of gondola tracks on salt bed. Coordinates harvesting with transporting, washing, and stockpiling activities to ensure continuity in production. Requests field repairs and maintenance of equipment. Directs relocation of conveyor to obtain stockpiles of specified size. Enforces safety regulations. Maintains records of production, pond status, and reasons for production delays.
GOE: 05.12.01 STRENGTH: L GED: R3 M3 L3 SVP: 5 DLU: 77

939.167-010 CONTROLLER, COAL OR ORE (mine & quarry) alternate titles: ore grader

Coordinates loading, dumping, and blending of coal or ore at shipping dock, mill, tipple, or preparation plant: Studies schedules to ascertain required blends, grades, and sizes of material to be processed. Studies analysis sheets and selects materials which will meet specifications. Notifies workers to deliver specified cars for loading, designates loading sequence, and indicates whether cars are to be caulked or plugged to retain powdered coal, oiled to reduce dust, or salted to prevent freezing. Notifies workers to load or dump materials. Prepares control sheet to record loading and dumping activities and variances in production.
GOE: 05.12.01 STRENGTH: S GED: R3 M3 L3 SVP: 6 DLU: 77

939.281-010 MINER I (mine & quarry)

Mines ore, coal, or rock in underground mine, performing any combination of following tasks in areas where high production equipment is limited by economic factors or natural formations: Cuts channel under working face to facilitate blasting, using pick, or by operating cutting machine. Operates mounted or unmounted power drill to bore blasting holes in working face. Charges and shoots (sets off) explosives or air charges to blast down materials. Shovels shattered materials into mine cars or onto conveyor. Installs timbering, roof bolts, or cribs, to support walls and roof. Lays track to accommodate mine cars or track-mounted equipment. May mine rock in coal mine at contract price per ton or footage of advance and be designated Rock Contractor (mine & quarry). May mine ore, coal, or rock, using pick and shovel, and be designated Miner, Pick (mine & quarry). When digging passageways between rooms, may be designated Entry Miner (mine & quarry). May do development work, such as opening up new passageways, air vents, auxiliary tunnels, rooms, and shafts to facilitate mining, and be designated Drift Miner (mine & quarry); Raise Miner (mine & quarry); Shaft Sinker (mine & quarry); Stope Miner (mine & quarry); Tunnel Miner (mine & quarry).
GOE: 05.11.02 STRENGTH: V GED: R4 M3 L2 SVP: 6 DLU: 77

939.362-010 DISPATCHER, OIL WELL SERVICES (petrol. & gas)

Dispatches oil well servicing crews to service assignments and relays communications to crews and other field personnel, using telephone and radio communication equipment: Receives telephone requests for services from customers and relays information to crews and field personnel, using telephone or radio. Dispatches crews to oil well servicing assignments. Prepares time reports and other records. Confers with customer regarding drilling or production problems and outlines types of services available. May compute quantities of materials required and quote prices for services. May refer customer inquiries regarding production problems or available services to sales personnel.
GOE: 07.04.05 STRENGTH: S GED: R3 M3 L3 SVP: 5 DLU: 77

939.362-014 PANELBOARD OPERATOR (mine & quarry; smelt. & refin.) alternate titles: additive-plant operator; conveyor attendant; crusher operator; grinding-mill operator; mill attendant; switch-house operator; wash-box operator

Operates panelboard to control conveying, blending, washing, crushing, and sizing of coal, rock, sand, gravel, or ore to prepare it for commercial or industrial use or for further processing: Pushes levers and buttons to start plant machinery. Studies customer orders or work schedules and adjusts controls to draw specified amounts and proportions of different grades of materials from storage bins onto conveyors. Observes dials and gauges to route materials through series of screens, wash boxes, crushers, and driers. Reads ammeters to determine load on conveyors and regulates loads to adjust blends. Observes panel lights and meters for indication of overloads, malfunctions, or plugged chutes, and shuts down plant, reroutes materials, or adjusts controls to regulate feed. Notifies maintenance and loading personnel of delays or malfunctions. Observes operation to determine that refuse and tailings are removed as specified. May operate equipment to dump material from cars.
GOE: 06.02.18 STRENGTH: L GED: R4 M3 L3 SVP: 5 DLU: 77

939.364-010 OBSERVER HELPER, SEISMIC PROSPECTING (petrol. & gas) alternate titles: observer helper; recorder helper, seismograph; seismograph-operator helper

Performs any combination of following tasks in seismic prospecting for petroleum-bearing rock strata: Drives equipment truck to work sites. Unloads and carries explosives and seismometers to designated locations on terrain. Unreels and connects electrical cables between seismometers and recording equipment in truck. Guides drill pipe and casing into shotholes. Loads shotholes with explosives. Runs water or pours sand into shotholes to tamp charge. Washes printed seismograph records with solutions. Repairs automotive and prospecting equipment. May be designated according to specific duty performed as Prospecting-Driller Helper (petrol. & gas); Shooter Helper, Seismograph (petrol. & gas).
GOE: 05.12.03 STRENGTH: M GED: R2 M2 L1 SVP: 4 DLU: 77

939.382-010 DRY-PLACER-MACHINE OPERATOR (mine & quarry)

Operates trailer-mounted machine to recover gold from sand: Positions conveyor from front-end loader to machine. Connects terminals from portable generator to control panel, using wrench. Starts machine and adjusts speed of feed conveyor to avoid overloading. Observes flow of fine sand from conveyor to screens and inclined riffle tables. Adjusts speed of bellows to force air through sand and float it over riffles, allowing gold-bearing particles to collect. Dries wet sand, using heat lamps.
GOE: 05.11.02 STRENGTH: M GED: R3 M2 L1 SVP: 4 DLU: 77

939.462-010 OIL-WELL-SERVICE OPERATOR (petrol. & gas)

Controls pumping and blending equipment to acidize, cement, or fracture gas or oil wells and permeable rock formations: Consults with SUPERINTENDENT, DRILLING AND PRODUCTION (petrol. & gas) to determine well conditions, pipe sizes, and amounts of acid, cement, or fracturing chemicals to be used. Gives directions to OIL-WELL-SERVICE-OPERATOR HELPER (petrol. & gas) to unload pipes, fittings, and chemicals, and to correct pipes between pumps and well, using handtools. Mixes acids, chemicals or dry cement according to service specified by customer. Observes meters and pressure gauges to regulate quantity and consistency of materials and to control pump pressure. May perform routine maintenance on vehicles and equipment. May be designated according to specialty as Acidizer (petrol. & gas); Acidizer, Water Well (construction); Cementer, Oil Well (petrol. & gas); Formation-Fracturing Operator (petrol. & gas).
GOE: 05.11.03 STRENGTH: H GED: R4 M3 L3 SVP: 6 DLU: 77

939.485-010 SANDFILL OPERATOR (mine & quarry)

Tends equipment that mixes cement, ore residues, and water into slurry and pumps slurry to fill worked out excavations in underground mine: Opens valves

to transfer ore residues (sand) from mill and admit water to mixing tank. Starts mixer that blends slurry to specified consistency. Opens valves to transfer slurry to excavations (stopes) and to flush distribution lines. Adds measured amounts of cement to slurry when hard-surface fill is specified. Washes residue from tanks and records amount of slurry produced and deposited in mine. May be designated according to area worked as Sandfill Operator, Surface (mine & quarry); Sandfill Operator, Underground (mine & quarry).
GOE: 05.12.07 STRENGTH: M GED: R2 M2 L1 SVP: 3 DLU: 77

939.585-010 DUST SAMPLER (mine & quarry)
Tends equipment that measures amount of coal dust suspended in air in underground coal mine: Places sampling devices in predetermined locations in mine at beginning of work shift. Monitors apparatus periodically to ensure that dust suspension remains within safe limits. Removes collected samples at end of shift, records suspension level, and mails sample to central laboratory for analysis. Cleans and maintains equipment daily.
GOE: 05.07.04 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

939.663-010 OBSERVER HELPER, GRAVITY PROSPECTING (petrol. & gas) alternate titles: gravity-prospecting-operator helper; recorder helper, gravity prospecting
Drives truck to transport gravity prospecting personnel and equipment to petroleum-exploration areas. Sets up gravity meter, torsion balance, and other gravity-measuring instruments under direction of OBSERVER, GRAVITY PROSPECTING (petrol. & gas). May read thermometer and barometer and record readings.
GOE: 05.08.03 STRENGTH: M GED: R2 M2 L1 SVP: 3 DLU: 77

939.667-010 CAGER (mine & quarry) alternate titles: lander; skip tender
Pushes mine cars onto and off mine shaft cage and informs workers when cage is used to carry mine personnel: Pushes or pulls loaded cars off cage at surface and replaces with cars that are empty or loaded with supplies. Pulls empty cars from cage at bottom or intermediate levels of mine and moves onto sidings for distribution and loading. Gives directions to workers in loading of cage to ensure conformance to safety regulations. Signals HOIST OPERATOR (mine & quarry) with bell or buzzer when cage is to be moved. May load cage with materials and equipment to be lowered into mine. May record number of containers and estimate production weights. May tend automatic elevator. May be designated according to level in mine shaft at which work is performed as Bottomer (mine & quarry) II; Foot Cager (mine & quarry); Head Cager (mine & quarry); Top Cager (mine & quarry).
GOE: 05.12.04 STRENGTH: H GED: R2 M1 L2 SVP: 3 DLU: 77

939.667-014 QUARRY WORKER (mine & quarry)
Performs any combination of following tasks in rock quarry: Removes mud and muck from surface of stone, using pick, shovel, and steam hose. Chips irregularities from stone slabs to produce uniform, rectangular shapes and reduce shipping weights, using pick. Loosens blasted stone, using pick and crowbar. Cuts notches (dog-holes) in blocks of stone with pick and hammer, and attaches hoisting cables, hooks, or slings to stone. Breaks stone into pieces, using sledgehammer. Loads broken rock into boxes to be hoisted from quarry, using shovel, stone fork, or hands. Loosens blasted stone with bar or pick and skids rock into position for breaking.
GOE: 05.12.03 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

939.667-018 SHORE HAND, DREDGE OR BARGE (construction; mine & quarry)
Attaches cable to tree, log, or other anchor on shore to permit use of winch to position barge or dredge: Receives signals from barge or dredge. Disengages cable and moves it to new position. Attaches cable to tree, or attaches cable to log and digs hole to bury log. May use explosives to form anchorages. May assist in loading barge. May ferry fuel and supplies to barge or dredge. May perform routine maintenance duties on dredge.
GOE: 05.12.04 STRENGTH: H GED: R2 M1 L1 SVP: 4 DLU: 77

939.682-010 MONITOR CAR OPERATOR (mine & quarry)
Operates monitor car to mix water and phosphate ore into slurry of specified density for further processing: Starts water pump and adjusts rate of water flow from nozzle. Moves levers to aim nozzle that sprays high pressure jet of water at ore pile to increase density of slurry or into sump to dilute slurry to specified consistency. Observes gauges and presses buttons to regulate volume and rate of slurry flow through pipeline to mill for further processing.
GOE: 06.02.18 STRENGTH: L GED: R3 M2 L1 SVP: 6 DLU: 77

939.682-014 PNEUMATIC-JACK OPERATOR (petrol. & gas)
Operates pneumatic jack on offshore oil drilling barge that raises or lowers barge to facilitate drilling: Moves levers to start jack which is lowered to caisson on ocean floor for purpose of lifting barge to facilitate drilling. Coordinates movement of jack with movement of other jacks on barge. Raises jack to lower barge back into water so that barge may be moved to another drilling location.
GOE: 05.11.03 STRENGTH: H GED: R3 M2 L2 SVP: 5 DLU: 77

939.684-010 JACK SETTER (mine & quarry)
Places hydraulic jacks, timbers, and posts in specified locations to form roof support system in underground mine: Examines hydraulic lines and tightens connections, using wrenches. Helps place temporary posts or timbers under roof support beams when hydraulic jack failure occurs, or to supplement jacks in supporting roof. Advances coal conveyors and jack units forward to facilitate making new series of cuts in coal strata, using built-in or portable horizontal jacks.
GOE: 05.12.02 STRENGTH: M GED: R3 M2 L1 SVP: 5 DLU: 77

939.684-014 MINER, PLACER (mine & quarry) alternate titles: sluice tender
Mines precious metals from sand and gravel by placer method: Constructs inclined trough (sluice box) with riffles or cleats at bottom. Shovels ore-bearing sand or gravel into stream of water running through sluice box and observes operation to ensure that loose metals are being caught behind riffles. Removes obstructions and repairs leaks. Diverts flow of water and scoops out accumulated metals. May use high-pressure water system to wash sand and gravel into sluices and be designated Nozzle Worker (mine & quarry); Placer Miner, Hydraulic (mine & quarry).
GOE: 05.12.02 STRENGTH: H GED: R3 M1 L1 SVP: 4 DLU: 77

939.684-018 OIL-WELL-SERVICE-OPERATOR HELPER (petrol. & gas)
Assists OIL-WELL-SERVICE OPERATOR (petrol. & gas) in controlling blending and pumping equipment to treat oil or gas wells and permeable rock formations with cement, acid, or chemicals: Drives truck equipped with acid pumps, mixers and related equipment to well site. Unloads and assembles pipes and pumping equipment, using handtools. Dumps acids, cement, or other treating materials in mixer to blend solution. Opens valve as directed to admit specified amounts of solution into well. Dismantles and loads equipment on truck after treatment. May be designated according to duty performed as Acidizer Helper (petrol. & gas); Cementer Helper (petrol. & gas); Formation-Fracturing-Operator Helper (petrol. & gas).
GOE: 05.12.07 STRENGTH: H GED: R3 M2 L2 SVP: 5 DLU: 77

939.685-010 POND TENDER (chemical)
Tends equipment that pumps brine (sea water) through series of concentrating and crystallizing ponds to produce salt by solar evaporation: Turns valves to open floodgates and fill primary concentration ponds. Starts pumps that fill concentrating ponds in specified sequence to facilitate crystallizing process and to empty primary concentrating pond. Tests samples of brine solution for density, using hydrometer. Dilutes brine by pumping it through ponds and into granulator beds, according to specified time sequence. Records hydrometer readings and pumping operations. Pumps water into granulator beds after salt has been harvested.
GOE: 05.12.06 STRENGTH: M GED: R2 M2 L1 SVP: 4 DLU: 77

939.685-014 WASHER-AND-CRUSHER TENDER (mine & quarry)
Tends battery of machines that convey, wash, crush, and separate quarried stone to produce sand and gravel: Presses button to start belt conveyor that conveys material to blade mill. Pulls lever to start blade mill that washes and separates rock, sand, and gravel from clay and other foreign matter. Starts vibrating screens that separate materials according to size. Presses button to start cone crusher that crushes oversized rocks. Observes flow of materials to detect jams or equipment malfunction. Stops machine and notifies supervisor of malfunction or breakdown.
GOE: 05.12.07 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 77

939.686-010 LOADING-MACHINE-OPERATOR HELPER (mine & quarry)
Loads shattered coal, rock, or ore into shuttle or mine cars in underground mine, to assist LOADING-MACHINE OPERATOR (mine & quarry): Positions machine in proximity of receiving conveyance, such as shuttle car or conveyor. Maintains flow of materials through loading material into conveyance. Frees jams and performs routine maintenance on conveyor. Assists in repair and maintenance of loading machine. May relieve LOADING-MACHINE OPERATOR (mine & quarry) in operation of loading machine.
GOE: 05.12.02 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

939.687-010 BELT PICKER (mine & quarry)
Removes lumps of slate, wood, wire, clay, or other impurities from extracted minerals passing on conveyor belt, picking table, or shaker screen: Throws lumps of usable material into bins for further processing. Routes impurities to disposal area. May assist in changing conveyor belts or screens and repairing plant equipment.
GOE: 05.12.07 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

939.687-014 COMPANY LABORER (mine & quarry) alternate titles: cleaner; digger; laborer, mine; scraper
Works in underground or surface mine, pit, or quarry, or at tipple, mill, or preparation plant, performing any combination of following tasks: Cleans working areas and haulage tracks; digs and maintains drainage ditches; or shovels muck, ore, coal, or rock aside, into cars, or onto conveyors. Pushes loaded mine cars from working face to haulage road and couples cars together for transportation to surface. Positions and adjusts bits on drill shaft and places cables, jacks, roof bolts, and related equipment in specified locations. Trims protrusions from walls and roofs of underground passageways and rooms. Strips (cleans) residue of rock and dirt from exposed coal, ore, or rock formations. Loads, separates, or sorts materials at working face, using shovel or wheelbarrow. Throws calcium or salt around interiors of railroad cars to prevent coal or ore from freezing to cars during winter. May be known according to specific work performed as Car Cleaner (mine & quarry); Car Salter (mine & quarry); Loader (mine & quarry); Mucker (mine & quarry); Shoveler (mine & quarry); Stripper (mine & quarry); Trimmer (mine & quarry).
GOE: 05.12.03 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 80

939.687-018 LABORER (petrol. & gas) alternate titles: roustabout
Performs any combination of following tasks in and about oil fields and pipelines, using handtools: Digs trenches for building foundations or for drainage around oil wells, storage tanks, and other installations. Fills excavations with dirt, using shovels. Loads and unloads trucks by hand or using handtrucks. Mixes concrete, using hoe and shovel. Carries concrete and tamps it into building forms. Bails spilled oil into buckets and barrels. Cleans and performs routine adjustments to machinery, using handtools, solvent, and rags. Cuts down trees and brush around oil field installations to reduce fire hazard or clear way for roads. Rolls and segregates pipe sections on racks in material yard to position pipes for testing. Connects pipe ends and hydraulic hose, using wrenches. Paints oil storage tanks, pumping units, and auxiliary equipment, using brush or spray painting equipment. May clean and service motor vehicles and auxiliary equipment.
GOE: 05.12.03 STRENGTH: V GED: R1 M1 L1 SVP: 1 DLU: 77

939.687-022 LATRINE CLEANER (mine & quarry)
Pushes mine toilet cars or drives self-propelled tank cars onto hoist to be raised to surface. Rolls cars off hoist to disposal area and flushes contents into sewer with water. Refills containers with chemical solution and returns cars to mine.
GOE: 05.12.18 STRENGTH: M GED: R1 M1 L1 SVP: 2 DLU: 77

939.687-026 ROCK-DUST SPRAYER (mine & quarry)
Sprays water or rock dust onto walls, roof, and floor of underground mine workings to mix with coal dust deposits and prevent explosions, using portable compressed-air pump and hose. Mixes rock dust with water and sprays slurry during working hours, to reduce amount of suspended coal dust in air while miners are present.
GOE: 05.12.14 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

939.687-030 SAMPLE WASHER (petrol. & gas)
Pulverizes cuttings and cores removed from oil or gas well boreholes, using hammer or small power crusher. Washes cuttings through various-sized mesh screens to separate samples and fossils from soil and other foreign matter. Places samples in bags and attaches identification tags.
GOE: 05.12.07 STRENGTH: L GED: R1 M1 L1 SVP: 2 DLU: 77

939.687-034 SAND FILLER (mine & quarry)
Fills stopes (underground openings from which ore has been mined) with sand to prevent cave-ins of ground surrounding worked out areas: Opens pipe valves to pump sand, waste minerals, and water resulting from treatment of ore, until stopes are filled sufficiently to support walls and roofs. Switches flow from one stope to another to allow time for water to drain off. Plugs holes and cracks in stope with burlap bags and scrap timber to prevent sand from leaking out when dry. May install temporary pipelines from slurry main to distribute slurry in several stopes consecutively.
GOE: 05.12.03 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

95 OCCUPATIONS IN PRODUCTION AND DISTRIBUTION OF UTILITIES

This division includes occupations concerned with generation, transmission, and distribution of electricity; generation and distribution of steam for heat and power, including marine propulsion; generation of utility gas, and storage and distribution of natural and manufactured gas for power, illumination, or heating purposes; filtration, purification, and distribution of water for domestic, commercial, or industrial consumption; and collection, treatment, and disposal of sewage and refuse.

950 STATIONARY ENGINEERS

This group includes occupations concerned with operation and maintenance of engines, turbines, air compressors, generators, motors, boilers, and auxiliaries to supply light, heat, refrigeration, ventilation, air-conditioning, and mechanical or electrical power for buildings, industrial plants, and mining or oil field operations.

950.131-010 REFRIGERATING ENGINEER, HEAD (any industry) alternate titles: refrigeration operator, head; refrigeration supervisor
Supervises and coordinates activities of REFRIGERATING ENGINEERS (any industry) engaged in operating refrigerating equipment to provide ice or to cool refrigerating rooms in establishments, such as ice cream plants, frozen food warehouses, and meat packing plants: Directs REFRIGERATION MECHANICS (any industry) in repair of equipment. May participate in repair work, using handtools. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.06.02 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

950.131-014 STATIONARY-ENGINEER SUPERVISOR (any industry) alternate titles: boiler house supervisor; station supervisor; steam-station supervisor; watch engineer
Supervises and coordinates activities of STATIONARY ENGINEER (any industry) and other workers operating and maintaining stationary engines and mechanical equipment, such as steam engines, air compressors, vacuum and centrifugal pumps, filters, turbines, boilers, and ventilating and refrigerating equipment. May supervise MAINTENANCE REPAIRER, INDUSTRIAL (any industry). Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.06.02 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

950.362-010 ENGINEER, EXHAUSTER (steel & rel.) alternate titles: engineer, byproduct
Operates turbo-blower or steam-driven exhausters and pumps to draw gas resulting from baking of coal through coolers, and into byproducts and benzol-refining plants: Reads pressure and vacuum gauges, thermometers, and flowmeters, and turns hand valves or regulates speed of exhausters and pumps to maintain specified temperatures and pressures. Inspects and repairs equipment, using handtools. Lubricates equipment. Pumps surplus gas to outside consumers [GAS-PUMPING-STATION OPERATOR (utilities)]. Cleans equipment. Records temperatures and pressures at various process stations. May remove ammonium sulfate from gas [SATURATOR OPERATOR (chemical; steel & rel.)].
GOE: 05.06.04 STRENGTH: L GED: R3 M3 L3 SVP: 7 DLU: 77

950.362-014 REFRIGERATING ENGINEER (any industry) alternate titles: cooling-system operator; operating engineer; stationary engineer, refrigeration
Operates freon, carbon-dioxide, or ammonia gas-cooling systems to refrigerate rooms in establishments, such as slaughtering and meat packing plants and dairies, to air-condition buildings, or to provide refrigeration for industrial processes: Opens valves on equipment, such as compressors, pumps, and condensers to prepare system for operation and starts equipment and auxiliary machinery. Observes temperature, pressure and ampere readings for system and equipment and adjusts controls or overrides automatic controls to obtain specified operation of equipment. Records temperature, pressure, and other readings on logsheet at specified intervals. Measures density of brine, using hydrometer, and adds calcium chloride to lower temperature to specified degree. Connects hose from supply tank to compressor to replace coolant. Makes periodic inspection of equipment and system to observe operating condition and need for repair or adjustment. Adjusts controls to isolate and clear broken lines for repair or shuts down equipment. May repack pumps and compressors, clean condensers, and replace worn or defective parts using hand and power tools. When operating refrigeration or air-conditioning equipment aboard ship, may be known as Reefer Engineer (water trans.) and must have endorsement on Merchant Mariner's document as Refrigerating Engineer.
GOE: 05.06.02 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

950.382-010 BOILER OPERATOR (any industry) alternate titles: boiler house operator; control-room operator; firer, boiler; steam-power-plant operator
Operates automatically fired boilers to generate steam that supplies heat or power for buildings or industrial processes: Lights gas- or oil-fed burners, using torch. Starts pulverizer and stoker to grind and feed coal into furnace of boiler. Observes pressure, temperature, and draft meters on panel to verify specified operation of automatic combustion control systems, feed water regulators, stoker, pulverizer, and burners. Turns valves and adjusts controls to set specified fuel feed, draft openings, water level, and steam pressure of boiler. Observes boiler and auxiliary units to detect malfunctions and makes repairs, such as changing burners and tightening pipes and fittings. May test and treat boiler feed water, using specified chemicals. May maintain log of meter and gauge readings and record data, such as water test results and quantity of fuel consumed. May be designated according to fuel burned, type of boilers, or class of license required.
GOE: 05.06.02 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 81

950.382-014 GAS-COMPRESSOR OPERATOR (any industry) alternate titles: gas-lift engineer
Operates steam or internal combustion engines to transmit, compress, or recover gases, such as butane, nitrogen, hydrogen, and natural gas in various production processes: Moves controls and turns valves to start compressor engines, pumps, and auxiliary equipment. Monitors meters, gauges, and recording instrument charts to ensure specified temperature, pressure, and flow of gas through system. Observes operation of equipment to detect malfunctions. Records instrument readings and operational changes in operating log. May operate purification tanks (scrubbers) to purify air or byproduct gases. May tend pumps to mix specified amounts of acids and caustics with water for use in purifying gases. May perform minor repairs on equipment, using handtools. May conduct chemical tests to determine sulfur or moisture content in gas. May be designated according to type of gas compressed or recovered as Butadiene-Compressor Operator (chemical); Butane-Compressor Operator (petrol. refin.); Ethylene-Compressor Operator (chemical). May operate equipment to control transmission of natural gas through pipelines and be designated Compressor-Station Engineer (pipe lines).
GOE: 05.06.02 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

950.382-018 GAS-ENGINE OPERATOR (any industry)
Operates stationary internal-combustion engines, using natural gas for fuel, to supply power for equipment, such as electrical generators and air or gas compressors: Starts auxiliary air compressor and turns compressed air and fuel valves to start engine. Observes gauges and meters and adjusts controls to regulate ignition, governor, lubrication and cooling systems, and load distribution between engines. Observes operation of equipment, such as generators or com-

pressors to detect malfunctions. May specialize in engines designed for specific processes and be designated Gas-Engine Operator, Compressors (any industry); Gas-Engine Operator, Generators (any industry).
GOE: 05.06.01 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

950.382-022 ROTARY-RIG ENGINE OPERATOR (petrol. & gas) alternate titles: diesel-engine engineer; gas-engine engineer

Operates gasoline, natural gas, or diesel engines to supply power for rotary oil well drilling machinery: Starts engines and observes drilling operations to provide power under operating conditions. Assembles and dismantles pumps and other drilling equipment, using handtools. Loosens and tightens threaded sections of drill pipe and well casing. Lubricates and repairs equipment.
GOE: 05.06.02 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

950.382-026 STATIONARY ENGINEER (any industry) alternate titles: maintenance engineer; operating engineer; power-plant operator; watch engineer

Operates and maintains stationary engines and mechanical equipment, such as steam engines, air compressors, generators, motors, turbines, and steam boilers to provide utilities, such as light, heat, or power for buildings and industrial processes: Reads meters and gauges or automatic recording devices at specified intervals to verify operating conditions. Records data, such as temperature of equipment, hours of operation, fuel consumed, temperature or pressure, water levels, analysis of flue gases, voltage load and generator balance. Adjusts manual controls or overrides automatic controls to bring equipment into recommended or prescribed operating ranges, switch to backup equipment or systems, or to shut down equipment. Visually inspects equipment at periodic intervals to detect malfunctions or need for repair, adjustment or lubrication. Maintains equipment by tightening fittings, repacking bearings, replacing packing glands, gaskets, valves, recorders, and gauges, and cleaning or replacing burners or other components, using handtools and power tools. May be required to hold license issued by state or municipality, restricting equipment operated to specified types and sizes. May oil and lubricate equipment [OILER (any industry) 950.685-014]. May perform water titration tests and pour chemical additives, such as water softener, into treatment tank to prevent scale buildup and to clean boiler lines. May record operation and maintenance actions taken during shift in operators logbook. May specialize in equipment designed for industrial processes and be designated Acid-Concentration-Plant-Equipment Engineer (any industry); Air-Compressor-Station Engineer (any industry); Diesel-Engine Operator, Stationary (any industry); Water-Pumping-Station Engineer (any industry).
GOE: 05.06.02 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 88

950.382-030 STATIONARY-ENGINEER APPRENTICE (any industry) alternate titles: operating-engineer apprentice, stationary; power-plant-operator apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.06.02 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

950.485-010 HUMIDIFIER ATTENDANT (textile; tobacco) alternate titles: humidifier-maintenance worker; humid-system operator

Tends humidifying system that keeps moisture content of air in rooms or departments at specified level: Computes moisture content of air, using hygrometer or chart recorder (pneumatic controller). Sets thermostat controls and adjusts valves controlling waterflow to increase or decrease moisture. Replaces worn or broken parts, such as fans, sprinkler heads, and pipe sections, using handtools. Cleans equipment, using airhose, brushes, and rags. May drain water from pipes and air reservoir. May test electrical system to determine specified voltage, using voltage meter.
GOE: 05.06.02 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

950.562-010 PANELBOARD OPERATOR (chemical) alternate titles: vessel ventilation system operator

Operates panelboard to control ventilation system of nuclear waste processing plant: Adjusts panelboard controls to maintain specified pressure, temperature, and airflow through ventilation pipes and holding vessels, and to regulate level of nuclear radiation in work area. Observes gauges and meters to monitor operation of fans and pumps, and to detect equipment malfunctions. Informs and directs maintenance personnel to area of malfunctioning equipment. Records data to maintain record of operation of ventilation system as related to safety standards established by Atomic Energy Commission.
GOE: 05.06.04 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 77

950.585-010 VENTILATION EQUIPMENT TENDER (any industry) alternate titles: air-control tender; blower-room attendant; exhaust tender; heating-and-ventilating tender; scrubber-system attendant; ventilation mechanic

Tends ventilating and heating equipment, such as fans, vacuum pumps, air compressors, vents and ducts, and lubrication-oil coolers used in buildings or industrial processes: Adjusts valves to regulate temperature of lubrication oil and flow of water through system. Moves controls to regulate speed of fans and to adjust vents and ducts. Records gauge readings, repairs completed, and time lost because of inoperative equipment. Writes repair work order tickets and out-of-order tags preparatory to equipment repair. Inspects equipment to detect excessive noise and heat. Replaces gauges and tightens and caulks leaky fittings, using wrenches, hammers, and caulking tool. Cleans carbon deposits, pitch, and grease from fans, vents, and ducts, using scrapers, hammer, and compressed air or steam.
GOE: 05.06.02 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 77

950.585-014 BOILER-OPERATOR HELPER (sugar & conf.)

Assists BOILER OPERATOR (any industry) 950.382-010 in operation and maintenance of coal-fired boilers: Turns valves that regulate water flow into full ash hoppers to form slurry and flush slurry into ash grinder. Turns switches that activate vacuum pumps to remove fly ash from full fly ash hoppers. Turns valves and flips switches that activate pumps to replace contaminated water in boiler system. Obtains water samples from designated locations of boiler system and carries samples to testing laboratory. Performs chemical and physical water quality laboratory tests according to prescribed standards. Records and gives results of tests to other workers for use in adjustment of equipment operation.
GOE: 05.06.02 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 86

950.685-010 AIR-COMPRESSOR OPERATOR (any industry) alternate titles: compressor engineer; compressor operator

Tends air compressors driven by steam, electric, or gasoline powered units, to generate and supply compressed air for operation of pneumatic tools, hoists, and air lances: Starts power unit to build up specified pressure in compressor. Adjusts controls or sets automatic controls to maintain continuous air supply to pneumatic tools or equipment. Observes temperature and pressure gauges and adjusts controls accordingly. Lubricates and cleans equipment. May connect pipelines from compressor to pneumatic tools or equipment. May repair low pressure steam boilers that furnish power for air compressor units by disassembling unit of boiler and replacing damaged parts, using handtools. May be designated according to type of equipment operated as Air-Compressor Operator, Stationary (any industry); Compressor Operator, Portable (any industry).
GOE: 05.06.02 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

950.685-014 BOILER-ROOM HELPER (any industry) alternate titles: boiler-operator helper; oiler; powerhouse oiler

Assists STATIONARY ENGINEER (any industry) in operation and maintenance of stationary steam boilers and auxiliary steam equipment, such as pumps, compressors, and air-conditioning system, performing any combination of following tasks: Starts auxiliary equipment. Opens valves and adjusts regulators to control flow of steam or water through pipelines, or to blow sludge and scale from pressure system. Cleans and lubricates pumps. Dusts tubes, and removes slag from furnace tubes and brickwork of coal-fired boiler, using steam or compressed air. Opens drains and washes boilers. Performs maintenance tasks, such as packing valves, repairing pipelines, and replacing gauge glasses. May regulate volume of water in boilers and in auxiliary equipment. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.06.02 STRENGTH: L GED: R2 M2 L2 SVP: 4 DLU: 77

951 FIRERS AND RELATED OCCUPATIONS

This group includes occupations concerned with firing coal-, gas-, or oil-fueled boilers and furnaces, and tending auxiliary equipment to supply steam or hot air. Includes marine firers. Process firers are included in Category 5; locomotive firers in Group 910; and fire fighters in Group 373.

951.685-010 FIRER, HIGH PRESSURE (any industry) alternate titles: boiler tender; firer, boiler; stoker

Tends portable or stationary high pressure boilers that supply heat or power for engines, turbines, and steam-powered equipment, such as steam shovels, pile drivers, or cranes, or industrial processes: Shovels fuel, such as coal or coke, into firebox or conveyor hopper, or turns valves and moves controls to regulate flow of fuel, such as gas, oil, or pulverized coal, into firebox. Reads gauges and moves controls to maintain specified steam pressure and water level in boiler. Removes ashes from firebox, using shovel and bucket. May clean and repair boilers. May treat boiler feed water, using specified chemicals. May be required to hold license issued by state or municipality. May be designated according to type of boiler tended as Firer, Automatic Stoker (any industry); Firer, Portable Boiler (any industry); Firer, Stationary Boiler (any industry); or type of equipment supplied with power as Firer, Locomotive Crane (any industry); Firer, Pile Driver (any industry); Firer, Steam Shovel (any industry); or type of installation as Firer, Powerhouse (any industry).
GOE: 05.06.02 STRENGTH: M GED: R3 M2 L3 SVP: 5 DLU: 77

951.685-014 FIRER, LOW PRESSURE (any industry) alternate titles: boiler operator

Tends low pressure boilers that supply steam heat for office buildings, apartment houses, or industrial establishments: Shovels coal or coke into firebox to feed fuel into boiler; turns valves to regulate flow of gas, oil, or pulverized coal into firebox; or moves controls to regulate fuel feeding speed of automatic stoker. Reads gauges and moves controls to maintain specified steam pressure, temperature, and water level in boiler. Cleans burner, using tools, such as shovel, wire brush, and scraper. May perform maintenance duties, such as cleaning boiler room and removing waste from building. May be required to hold license issued by state or municipality.
GOE: 05.06.02 STRENGTH: M GED: R2 M2 L2 SVP: 5 DLU: 78

951.685-018 FIRER, MARINE (water trans.)

Tends boilers aboard vessel to maintain steam at specified pressure: Installs atomizing tips on end of burner barrels with wrench. Inserts barrels in burners. Connects fuel-oil lines to burners. Ignites fuel with torch. Adjusts burners to maintain steam pressure at specified level. Cleans drip pans, atomizing tips,

burner barrels, and work area, using steam connections, solvent, or rags. Must have certificate issued by U.S. Coast Guard. May operate soot-blowers to clean combustion residue on generating tubes. May regulate amount of water in boiler and be known as Firer-Watertender (water trans.).
GOE: 05.06.02 STRENGTH: M GED: R3 M3 L3 SVP: 5 DLU: 77

951.686-010 FUEL-HOUSE ATTENDANT (saw. & plan.)
Opens fuel conveyor chute by moving levers and rakes sawmill waste, such as chips, sawdust, and shavings, into hopper of furnace. May lubricate conveyor system, using grease gun and oilcan. May move panelboard controls to regulate proportions of bark, chips, sawdust, and shavings that are fed to boilers.
GOE: 05.12.04 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

952 OCCUPATIONS IN GENERATION, TRANSMISSION, AND DISTRIBUTION OF ELECTRIC LIGHT AND POWER

This group includes occupations concerned with controlling equipment in powerplants utilizing fossil fuels, hydraulic power, and atomic energy; monitoring and controlling equipment in manned or remote-controlled substations and standby generating plants; and related activities concerned with generation, transmission, and distribution of electricity for utilization by domestic, commercial, and industrial consumers.

952.131-010 SUBSTATION OPERATOR, CHIEF (utilities)
Supervises and coordinates activities of workers engaged in operating and maintaining electrical and mechanical equipment at electrical substation used to control flow of current through transmission lines: Directs switching operations to drop station voltage load under low frequency conditions in order to determine loss of generator sources, and to resynchronize transmission lines after power separation during emergencies. Inspects equipment, such as control and meter boards, relays, circuit breakers, and transformer lines to ensure operating efficiency. Records instrument readings at designated intervals and completes daily and monthly reports to indicate data, such as current loads, voltage loads, outages, and inspections. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.06.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

952.132-010 OPERATIONS SUPERVISOR, NUCLEAR POWER PLANT (utilities)
Supervises and coordinates activities of workers engaged in operation and control of thermonuclear reactor, turbine generator, and auxiliary equipment at electric generating station: Devises and writes operating procedures for reactor, turbine generator, and auxiliary equipment, based on review and interpretation of government regulations, technical manuals, and conferences with manufacturer's representatives. Oversees activities of workers, reviews status reports of station operations, and monitors and analyzes readings of instrumentation systems to ensure that reactor and auxiliary equipment are operated safely and in accordance with Nuclear Regulatory Commission regulations. Confers with supervisory personnel to coordinate activities of operations and maintenance workers engaged in performance of routine and emergency shutdowns and maintenance of equipment and machinery. Prepares training outlines and instructs workers in such subjects as mathematics, reactor physics, and electrical theory, according to federal regulatory requirements. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.06.01 STRENGTH: L GED: R5 M3 L5 SVP: 8 DLU: 86

952.137-010 CHIEF LOAD DISPATCHER (utilities) alternate titles: chief dispatcher; system operator, chief
Supervises and coordinates activities of LOAD DISPATCHERS (utilities) engaged in controlling operations of generating stations, substations, and distribution lines of electric power system. May inspect substations [SUBSTATION INSPECTOR (utilities)] to verify accuracy of instrument readings with load dispatching office. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.06.01 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

952.137-014 HYDROELECTRIC-STATION OPERATOR, CHIEF (utilities) alternate titles: production superintendent, hydro
Supervises and coordinates activities of workers engaged in operating and controlling hydroelectric generating equipment: Analyzes defective operation and directs HYDROELECTRIC-STATION OPERATORS (utilities) to adjust equipment to minimize interruptions of power demands. Inspects equipment and initiates maintenance repair orders. Notifies WATERSHED TENDER (waterworks) when subnormal speed of generating units requires adjustment of reservoir floodgates to increase pressure of water which rotates water wheels. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.06.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

952.137-018 SUPERINTENDENT, LOCAL (utilities) alternate titles: distribution district supervisor
Supervises and coordinates activities of workers located in small communities or rural areas, and engaged in installing, removing, or repairing electric meters and service lines, repairing overhead distribution system, reading meters, and making service collections. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.05 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

952.137-022 TURBINE OPERATOR, HEAD (utilities)
Supervises and coordinates activities of workers engaged in operating turbine-driven generators in steam-electric generating plant: Reviews work orders from STATIONARY-ENGINEER SUPERVISOR (any industry) or SWITCHBOARD OPERATOR (utilities) to determine specified power necessary for allocating load capacity to turbines. Notifies TURBINE OPERATOR (utilities) to increase or decrease power loads to turbines and to transfer loads when equipment malfunctions. Evaluates reports from TURBINE ATTENDANT (utilities) and observes recording instrument readings to determine operating status of equipment.
GOE: 05.06.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

952.137-026 SUPERVISOR, OPERATIONS (utilities)
Supervises and coordinates activities of POWER-PLANT OPERATORS (utilities) 952.382-018, AUXILIARY-EQUIPMENT OPERATORS (utilities) 952.362-010, and other workers engaged in operating and controlling coal-fired electric generating equipment to produce electricity: Confers with SUPERINTENDENT, GENERATING PLANT (utilities) 184.167-166 to resolve electric generating problems and to report work activities and personnel matters. Coordinates repair of malfunctioning equipment with maintenance department, and inspects repaired equipment prior to return to service. Assigns new workers to experienced personnel for training, according to established training procedure. Studies equipment modification and operating procedure materials to improve supervisory skills and techniques and to increase worker productivity. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.06.01 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 86

952.167-010 DISPATCHER, SERVICE OR WORK (utilities) alternate titles: trouble dispatcher
Dispatches workers, such as TROUBLE SHOOTERS (utilities) II; LINE REPAIRERS (utilities); and STREET-LIGHT REPAIRERS (utilities) for normal maintenance or emergency repairs to electric-power transmission and distribution lines and related equipment: Receives trouble calls from police, fire departments, and company offices. Records time, location, and nature of trouble and relays information to workers assigned to area in which work occurs, using telephone or radio. Receives work reports and makes reassignments. Informs work crews of changes in weather conditions and system status affecting safety, and answers questions requiring knowledge of system layout and electric equipment operation and repair. Relays and records all messages between line crews and LOAD DISPATCHER (utilities) concerning switching operations. May requisition supplies. May dispatch workers to answer customer service calls [DISPATCHER, SERVICE (utilities)].
GOE: 07.04.05 STRENGTH: S GED: R4 M3 L3 SVP: 7 DLU: 77

952.167-014 LOAD DISPATCHER (utilities) alternate titles: dispatcher, electric power; power dispatcher; system dispatcher; system operator
Coordinates activities of personnel engaged in operating generating stations, substations, and lines of electric power system or electrified railway system to ensure adequate production and distribution of electricity to meet power demands: In smaller system, calculates load estimates according to corrected weather and consumer-demand records and notifies SWITCHBOARD OPERATOR (utilities) at generating stations of electric power required to meet fluctuating demands; or in larger systems receives load schedule for various generating stations from POWER-PLANT OPERATOR (utilities). Monitors control board showing operating condition of lines and equipment throughout system and makes adjustments or directs workers to make adjustments as conditions warrant. Directs SUBSTATION OPERATOR (utilities) and other workers to deenergize malfunctioning circuits or adjusts switches to ensure safety of maintenance crew and avoid interruptions of service during repairs. Notifies maintenance crew of location and deenergization of troubled sector, and verifies that workers are clear of repaired equipment before directing energization of circuit. Contacts other utilities by telephone to arrange exchange of power according to existing contracts or in emergency and coordinates tie-in with other systems. Compiles operational records. May operate console of computer which is programmed to automatically perform load-control functions. May calculate discharge rate of water in reservoirs utilizing reports of rain, river flow, and water level in reservoirs, and directs setting of watergates at hydroelectric plant to coordinate water flow and power generation with irrigation and flood control requirements. May compute bills for power delivered to interconnected utilities. May be responsible for section of system and be designated Load Dispatcher, Local (utilities).
GOE: 05.06.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

952.261-010 SUBSTATION INSPECTOR (utilities)
Inspects and tests electric current-converting and distribution equipment in attended or unattended substations to verify operating efficiency and accuracy of equipment: Examines transformers, oil switches, fuses, lighting arresters, voltage regulators, and related equipment, and tests circuitry, using standard electrical testing apparatus, to verify that new equipment is correctly installed and wired. Inspects automatic supervisory-controls in unattended stations to verify their performance of supervisory functions, according to specifications and cumulative station-operation records. Performs acceptance and performance tests under direction of engineering personnel to evaluate performance of new and operating equipment. Calculates average and peak load conditions of station from electric recording instrument data and compiles report of load conditions

and test results for equipment performance evaluation and system planning purposes. Repairs or replaces blown fuses and defective switches or wires. Opens switches to deenergize station circuitry and distribution lines preparatory to repairs by maintenance workers or linecrews. May control operation of attended station in absence of regular operator. May patrol power lines [ELECTRIC POWER LINE EXAMINER (utilities)]. When inspecting unattended substations, may be designated Substation Inspector, Automatic (utilities).
GOE: 05.06.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

952.362-010 AUXILIARY-EQUIPMENT OPERATOR (utilities) alternate titles: pump-room operator

Controls and maintains auxiliary equipment, such as pumps, fans, compressors, filters, feedwater heaters, chlorinators, and condensers that supply water, fuel, lubricants, air, and auxiliary power for turbines, generators, boilers, and other power-generating plant facilities: Opens and closes valves and switches in prescribed sequence upon receipt of signal from TURBINE OPERATOR (utilities) 952.362-042 or POWER-PLANT OPERATOR (utilities) 952.382-018 to start or shut down auxiliary units. Reads temperature, pressure, and r.p.m. gauges to verify that units are operating at specified capacity, and listens for sounds from machinery that warn of mechanical malfunction. Replenishes electrolyte in batteries and oil in voltage transformers and resets tripped electric relays. Assists ELECTRICIAN, POWERHOUSE (utilities) 820.261-014 in making electrical repairs. Cleans and lubricates equipment and collects oil, water, and electrolyte samples for laboratory analysis to prevent equipment failure or deterioration. Tightens leaking glands and pipe joints and reports need for major equipment repairs to POWER-PLANT OPERATOR (utilities). When working in nuclear-powered generating station, may help transfer fissionable material between vehicles and storage area. May fire up and shut down automatically regulated boilers [FIRER, HIGH PRESSURE (any industry) 951.685-010].
GOE: 05.06.01 STRENGTH: M GED: R3 M2 L3 SVP: 5 DLU: 80

952.362-014 FEEDER-SWITCHBOARD OPERATOR (utilities)

Operates switchboard to control distribution of electric power over feeder circuits between generating station and substations of electric power system: Selects and moves control switches as directed by LOAD DISPATCHER (utilities) to cut in and cut out feeder circuits. Observes control-board indicators to detect circuits automatically cut off due to line disturbances and turns controls to cut in spare feeder to carry load of cutoff circuit. Tags switches of feeders automatically cut off to warn next operator of defective lines. Records readings of meters indicating temperature of transformers and voltage and frequency of electricity in feeders.
GOE: 05.06.01 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

952.362-018 HYDROELECTRIC-STATION OPERATOR (utilities)

Controls electrical generating units and related mechanical and hydraulic equipment at hydroelectric-generating station: Operates switchboard and manually operated controls to control water wheels, generators, and auxiliary hydroelectric-generating station equipment and distribute power output among generating units, according to power demands [SWITCHBOARD OPERATOR (utilities)]. Operates feeder switchboard to control distribution of electric power over feeder circuits between generating station and substations [FEEDER-SWITCHBOARD OPERATOR (utilities)]. Records control-board meter and gauge readings, inspects operating equipment, and notifies HYDROELECTRIC-STATION OPERATOR, CHIEF (utilities) of conditions indicating abnormal equipment operation. May perform minor maintenance on equipment, such as replacing generator brushes, cleaning insulators, and lubricating machines.
GOE: 05.06.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

952.362-022 POWER-REACTOR OPERATOR (utilities) alternate titles: nuclear plant control operator; reactor operator

Controls nuclear reactor that produces steam for generation of electric power and coordinates operation of auxiliary equipment: Adjusts controls, under supervision, to start and shut down reactor and to regulate flux level, reactor period, coolant temperature, and rate of flow, control rod positions, and other control elements that affect power level within reactor, following standard instructions and prescribed practices. Dispatches orders and instructions to plant personnel through radiotelephone or intercommunication system to coordinate operation of such auxiliary equipment as pumps, compressors, switchgears, and water-treatment systems. May assist in preparing, transferring, loading, and unloading nuclear fuel elements. May be required to hold Nuclear Reactor Operator's license. May be required to hold Radiotelephone Operator's license. May control dual purpose reactors that produce plutonium and steam. May control operation of auxiliary equipment, such as turbines and generators [SWITCHBOARD OPERATOR (utilities); TURBINE OPERATOR (utilities)].
GOE: 05.06.01 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

952.362-026 SUBSTATION OPERATOR (utilities) alternate titles: power-switchboard operator; receiving-distribution-station operator

Controls equipment, such as current converters, voltage transformers, and circuit breakers, that regulate flow of electricity through substation of electric power system and over distribution lines to consumers: Records readings of switchboard instruments to compile data concerning quantities of electric power used for substation operation and amounts distributed from station. Communicates with LOAD DISPATCHER (utilities) to report amount of electricity received into substation, and to receive switching instructions. Observes switchboard instruments to detect indications of line disturbances, such as grounded, shorted, or open circuits. Pulls circuit breaker switch or pushes buttons to interrupt flow of current in disturbed line preparatory to repair, and to connect alternate circuit to carry load of deenergized lines. Records temperature of transformers at specified intervals. May inspect equipment, such as transformers, pumps, fans, batteries, and circuit breakers to detect defects. May calculate average and peak load conditions from electric recording instrument data and compile periodic report of load variations for system planning purposes. May locate and replace defective fuses and switches, using test lamp and handtools. May be designated according to primary function of substation as Substation Operator, Conversion (utilities); Substation Operator, Distribution (r.r. trans.; utilities); Substation Operator, Transforming (utilities). May operate auxiliary generators and be designated Substation Operator, Generation (utilities). May control several remote-controlled substations from central station switchboard and be designated Substation Operator, Automatic (utilities).
GOE: 05.06.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

952.362-030 SUBSTATION OPERATOR APPRENTICE (utilities)

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.06.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

952.362-034 SWITCHBOARD OPERATOR (utilities) alternate titles: generator-switchboard operator

Controls central switchboard in electric generating plant to distribute power output among generators according to generator capacity and power demands, and to regulate flow and distribution of power from generators to transmission power lines: Determines number of generators required to meet power demands according to load estimates received from LOAD DISPATCHER (utilities). Notifies TURBINE OPERATOR (utilities) to start additional generators when switchboard gauges indicate power demands are approaching capacity of operating generators. Observes synchroscope, voltmeters, and frequency indicators, and operates switchboard controls to synchronize speed of incoming generator with operating units, and to adjust generator output voltage and frequency to match output of operating generators. Closes switch to connect incoming generator to *bus bar* at instant when synchroscope indicates generator is in phase with outgoing power lines. Operates switchboard controls to disconnect generators from bus bar as power demand decreases or when equipment malfunctions. Constantly observes switchboard meters and gauges to verify operating status of equipment. Compiles records of switching and generating operations. May operate switches to control distribution of power over feeder circuits between generating station and substations [FEEDER-SWITCHBOARD OPERATOR (utilities)]. May control automatic steam-generating boiler from switchboard during normal operations and direct other workers who shut down and repair equipment [BOILER OPERATOR (any industry)]. May start, shut down, and monitor operation of turbogenerators by remote control from central switchboard [TURBINE OPERATOR (utilities)]. May control feeder circuits that supply power to production or process equipment in industrial establishment which produces its own electric power.
GOE: 05.06.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

952.362-038 SWITCHBOARD OPERATOR (chemical) alternate titles: powerhouse attendant

Controls powerhouse equipment, such as converters, rectifiers, transformers, and generators, to direct, distribute, and maintain power to chemical processing equipment, according to demand: Moves switches on central control panel to regulate converters and rectifiers to convert alternating current or direct current and transmit it to electrolytic cell department, according to production demand. Observes demand meters, gauges, and recording instruments and moves controls to ensure efficient power utilization, equipment operation, and maintain power distribution, according to departmental demands. Monitors gauges, alarms, and oscilloscopes to detect and prevent damage to equipment and disruption of power. Records operational data, such as chart and meter readings, power demand and usage, malfunctions and repairs, and operating time. Cleans, lubricates, repairs, and adjusts equipment, using handtools. May turn valves to regulate pressure on lines drawing chlorine to electrolytic cells. When controlling specific equipment only, may be designated by unit as Motor-Generator-Set Operator (chemical); Rectifier Operator (chemical).
GOE: 05.06.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

952.362-042 TURBINE OPERATOR (utilities) alternate titles: turbogenerator operator

Controls steam-driven turbogenerators in electric or nuclear power generating station: Starts or signals AUXILIARY-EQUIPMENT OPERATOR (utilities) to start turbines and boiler auxiliary units. Adjusts throttle and vacuum-breaker valve to engage governor that regulates speed of turbines and notifies SWITCHBOARD OPERATOR (utilities) that turbine-driven generators can be synchronized with auxiliary units. Monitors panelboard to control operations of turbines to detect equipment malfunctions. Stops turbines when malfunctions occur, following operating instructions. Records instrument readings at specified intervals. May perform minor maintenance or equipment, using handtools. When controlling operation by remote control, may be designated Central-Control-Room Operator (utilities).
GOE: 05.06.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

952.364-010 TROUBLE SHOOTER I (utilities)

Performs variety of duties as assigned by DISPATCHER, SERVICE (utilities) in answer to trouble or service calls of electricity customers: Switches on

or shuts off electricity to installed meters on order for resumption or discontinuance of service. Tests meters to determine absence or presence of current, using portable test lamp. Attaches and removes out-of-service tags for information of METER READER (utilities; waterworks). Attempts to locate source of lesser interruptions to service and makes minor repairs, such as replacing floor plugs, wall switches, or appliance cords. Reports major interruptions to service for repair by other workers. Notifies customer of malfunctioning appliances and advises customer to call electrician.
GOE: 05.10.03 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

952.367-010 LOAD CHECKER (utilities) alternate titles: demand inspector

Surveys electrical equipment and appliances used in industrial plants, commercial establishments, and private homes to compile data for purposes such as forecasting power demands, establishing rates, and improving service: Examines fixtures, appliances, and equipment, and records wattage required for their operation. Attaches meters to appliances and equipment and measures power consumption for specified period. May suggest changes in consumer's equipment to reduce electrical hazards, minimize power loss, and increase efficiency of electric power utilization. May perform minor repairs to meters, wiring, and appliances, using handtools.
GOE: 05.09.01 STRENGTH: L GED: R3 M3 L3 SVP: 6 DLU: 77

952.367-014 SWITCHBOARD OPERATOR ASSISTANT (utilities) alternate titles: generating-substation-operator assistant; power-plant assistant; switchboard-operator helper

Compiles gauge readings and performs other tasks as directed by SWITCHBOARD OPERATOR (utilities) in electric-generating plant: Records gauge and meter readings on switchboard and panelboards at specified intervals. Opens and closes switches to regulate generation and flow of electric power. Cleans and oils mechanical and electrical equipment and reports malfunctions, such as meter fluctuations, abnormal sounds, and overheating. May assist in performing tests to diagnose and locate cause of equipment malfunction. May work in substation that distributes and generates electric power and be designated Substation Operator Helper, Generation (utilities).
GOE: 05.06.01 STRENGTH: L GED: R3 M3 L3 SVP: 7 DLU: 77

952.381-010 SWITCH INSPECTOR (utilities)

Inspects and maintains automatic switches that turn street lights on and off: Climbs pole, using ladder or climbing spurs, and opens switchbox. Examines switch to detect such defects as burned contacts or faulty mercury tubes. Tests switch and circuit to locate short circuits or grounded wires, using test lamp. Repairs or replaces broken or defective parts, using handtools.
GOE: 05.10.03 STRENGTH: M GED: R3 M2 L3 SVP: 5 DLU: 77

952.382-010 DIESEL-PLANT OPERATOR (utilities)

Controls and maintains diesel-electric generating units to produce electric power for distribution or to supply electric power for plant equipment: Starts diesel engines and synchronizes generators with other power sources. Inspects equipment to detect malfunctions. Performs minor repairs and adjustments on equipment, using handtools. Records instrument readings in log. Issues switching orders to open, close, and tag electric circuits [SWITCHBOARD OPERATOR (utilities)].
GOE: 05.06.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

952.382-014 POWER OPERATOR (tel. & tel.) alternate titles: telephone-plant power operator

Operates and maintains central-office equipment such as motors, generators, storage batteries, and motor-driven apparatus, used to furnish or transmit power for telephone or telegraph operation.
GOE: 05.06.01 STRENGTH: M GED: R3 M3 L2 SVP: 7 DLU: 77

952.382-018 POWER-PLANT OPERATOR (utilities) alternate titles: power engineer; powerhouse engineer; power-plant engineer

Operates boilers, turbines, generators, and auxiliary equipment at generating plant to produce electricity: Monitors control board and regulates equipment, according to procedures and information obtained from recording and indicating instruments. Adjusts controls of water and cold feed systems, blowers, and igniters to start up or shut down boilers. Controls operation of boiler auxiliary equipment, such as water and vacuum pumps, coal driers and pulverizers, steam condensers, and soot blowers to ensure efficient operation of boilers. Adjusts boiler controls to provide steam at specified temperature and pressure for turbine loads according to power demands. Adjusts controls to regulate speed, voltage, and phase of incoming turbines to coincide with voltage and phase of power being generated. Synchronizes incoming generating units with units in operation and closes circuit breaker at exact instant of coincidence. Monitors gauges to determine effect of generator load on related equipment, such as *bus bars* and voltage regulators. Adjusts transformer controls to regulate flow of power between generating stations and substations. Operates switchgear to regulate and transfer power loads to protect maintenance workers engaged in repairing or cleaning equipment. Records malfunctions of equipment, instruments, or controls on logsheet.
GOE: 05.06.01 STRENGTH: M GED: R4 M4 L4 SVP: 8 DLU: 77

952.464-010 CABLE MAINTAINER (utilities)

Maintains pressure in oil-filled and gas-filled cables used to transmit high-voltage electricity: Computes amount of oil or gas required for given section of cable, using standard specifications. Pumps oil or gas into cable until specified pressure is attained. Installs relay (regulating devices) used to control pressure inside cables. Attaches temporary reservoirs to ends of cable to maintain pressure during installation of cable. Tests cables with manual pressure gauges. Reports cable sheath defects and joint failure for repair.
GOE: 05.06.01 STRENGTH: L GED: R3 M3 L3 SVP: 5 DLU: 77

952.567-010 TURBINE ATTENDANT (utilities)

Records meter and instrument readings, such as oil and steam temperature and pressure of hydro-electric turbines and related generators that produce electricity. Notifies STATIONARY-ENGINEER SUPERVISOR (any industry) when recording instruments indicate machine malfunctions. Cleans and lubricates equipment.
GOE: 05.09.03 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 77

952.665-010 LABORER, POWERHOUSE (utilities)

Performs any combination of following duties in power plants, such as electrical power companies, industrial plants, and central heating plants: Assists in control and maintenance of coal conveying equipment, using handtools and lubricating equipment. Shovels coal spillage onto conveyors. Takes samples of coal and carries samples to laboratory for analysis. Loads trucks or railcars with fly ash from dust collectors, using suction hose. Starts and stops pumps, opens and closes floodgates, and adjusts valves of ash sluice system. Sweeps, washes, cleans, and paints buildings, floors, and equipment. Assists in inspection, maintenance, and repair of rail tracks, ties, and roadbeds, using shovels, picks, sledgehammers, jacks, and cutting torches. Maintains roads, lawns, shrubs, and flowers, using power mowers and gardener's handtools. Drives, loads, and unloads trucks to transport personnel and equipment. Keeps logs on equipment and materials and submits production reports to supervisor.
GOE: 05.12.04 STRENGTH: H GED: R2 M1 L1 SVP: 3 DLU: 80

952.667-010 STREET-LIGHT CLEANER (utilities) alternate titles: arc trimmer; boulevard-glassware cleaner; boulevard-glassware replacer; carbon-lamp cleaner; lamp cleaner; street-light; street-light changer-and-renewer; street-light inspector

Patrols route to clean and replace street light globes and illuminators. Turns crank to lower street lights suspended from utility poles or stands in hydraulically operated tower-truck bucket to reach lamps installed on top of street light posts. Removes and cleans globe or diffuse (lens). Replaces defective illuminating elements, such as incandescent bulbs, fluorescent tubes, or carbon electrodes. Performs repairs, such as replacing corroded reflectors and connecting loose wires. Reports defects for repair by STREET-LIGHT SERVICER (utilities). May drive truck.
GOE: 05.12.18 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

952.687-010 HYDROELECTRIC-PLANT MAINTAINER (utilities) alternate titles: general utility worker

Performs grounds-keeping and plant maintenance tasks in hydroelectric generating station. Turns handwheel to open alternate water intake and to close clogged intake preparatory to cleaning water intake screens. Removes accumulated logs, weeds, fish, silt, and driftwood from screen or rack, using crab-hoist, rake, shovel, and water hose. Mows lawn, trims hedges, rakes and burns leaves and refuse, and shovels snow from driveways and sidewalks. Cleans and lubricates equipment. Assists in erecting scaffolds, and disassembling and moving heavy equipment.
GOE: 05.12.18 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

952.687-014 SUBSTATION-OPERATOR HELPER (utilities)

Assists SUBSTATION OPERATOR (utilities) in controlling flow of electricity through transmission lines, and in operation of equipment for converting direct current into alternating current: Performs other duties as described under HELPER (any industry) Master Title. May record gauge and meter readings. May clean and lubricate auxiliary equipment, such as rotary converters, transformers, blowers, and circuit breakers.
GOE: 05.06.01 STRENGTH: L GED: R2 M1 L1 SVP: 5 DLU: 77

953 OCCUPATIONS IN PRODUCTION AND DISTRIBUTION OF GAS

This group includes occupations concerned with monitoring and controlling equipment to regulate volume and pressure of gas in city mains and distribution lines; purify, liquefy, store, and regasify natural gas.

953.132-010 SUPERVISOR, LIQUEFACTION-AND-REGASIFICATION (utilities)

Supervises and coordinates activities of workers engaged in operation and maintenance of compressors, scrubbers, evaporators, and refrigeration equipment that liquefy and regasify natural gas. Directs LIQUEFACTION-AND-REGASIFICATION-PLANT OPERATOR (utilities) to initate liquefaction and regasification of gas for storage and distribution. Directs GAS DISPATCHER (pipe lines; utilities) to release stored gas into distribution system according to supply and demand. Requisitions supplies and materials. Trains new personnel. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.06.04 STRENGTH: L GED: R4 M3 L4 SVP: 8 DLU: 77

953.137-010 GAS-PUMPING-STATION SUPERVISOR (utilities)

Supervises and coordinates activities of workers engaged in providing adequate pressure on gas dispensed from gasholders. Performs duties as described under SUPERVISOR (any industry) Master Title.

GOE: 05.06.03 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

953.137-014 PRESSURE SUPERVISOR (utilities) alternate titles: pressure-control supervisor; regulation supervisor

Supervises and coordinates activities of workers engaged in controlling gas pressure and moisture condensate in mains of city gas-distribution system to meet consumer demands and state regulations: Analyzes hourly estimates of pressure required to meet consumer demands for gas, based on weather conditions, time of day, and customer contracts. Compares estimates with pressure chart readings and teletype reports of actual amount of gas consumed to determine pressure adjustments required. Notifies PRESSURE CONTROLLER (utilities) by telephone or teletype to adjust gas regulators at city gate and customer stations to control pressure. Directs DRIP PUMPER (pipe lines; utilities) in keeping mains free from condensate and in thawing frozen condensate from pipes and meters. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.06.03 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

953.137-018 SERVICE SUPERVISOR I (utilities) alternate titles: complaint supervisor; superintendent, service

Supervises and coordinates activities of workers engaged in installing, adjusting, testing, and removing gas meters, regulators, and appliances on customers' premises, and in resolving customers' complaints. Performs duties as described under SUPERVISOR (any industry) Master Title. May be designated according to type of installation or service as Industrial-Gas-Servicer Supervisor (utilities).
GOE: 05.10.02 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

953.167-010 GAS DISPATCHER (pipe lines; utilities)

Coordinates flow of natural gas throughout distribution system of public utility or pipeline to ensure volume and pressure of gas required for consumers demands: Monitors telemetering panelboard to determine gas pressure and volume, and records instrument readings in log. Reviews correlating data, such as gas quality, pressure and temperature with variables affecting consumer demand, such as weather conditions and time of day to forecast load adjustments. Adjusts controls to regulate gas flow and pressure through system or telephones GAS-COMPRESSOR OPERATOR (any industry) to increase or decrease pressure in pipelines according to forecast. Directs GAS-PUMPING-STATION OPERATOR (utilities) to pump gas from holding station into distribution system and return according to supply and demand. Informs station personnel to regulate flow of gas from wells into system to maintain specified pressure and volume in pipelines. Records data, such as gas pressure and volume from outlying stations. Observes colorimeter to detect deviations in mixture of natural gas with manufactured gas according to specified Btu rating. Notifies mixing station personnel when deviations occur. May discontinue gas service to specified areas when emergencies or gas shortages exist.
GOE: 05.06.13 STRENGTH: S GED: R4 M3 L3 SVP: 8 DLU: 77

953.281-010 FIELD-MECHANICAL-METER TESTER (petrol. refin.; pipe lines; utilities) alternate titles: mechanical-meter tester; meter inspector

Installs, tests, and maintains mechanical metering, regulating, indicating, and testing instruments and equipment used in *production and distribution of gas: Tests, installs, and maintains gas, steam, and water instruments and apparatus, such as meters, governors, calorimeters, flowmeters, and pyrometers used in gas generating plants, holders, and distribution lines [GAS-REGULATOR REPAIRER (petrol. refin.; pipe lines; utilities); INSTRUMENT MECHANIC (any industry)]. Installs, tests, and maintains mechanical testing equipment, such as gas *provers*. Conducts physical tests on gas, steam, and water. Correlates test data, performs technical calculations, and writes reports.
GOE: 05.05.09 STRENGTH: M GED: R4 M4 L4 SVP: 8 DLU: 77

953.362-010 FUEL ATTENDANT (any industry)

Controls equipment to regulate flow and pressure of gas from mains to fuel feedlines of gas-fired boilers, furnaces, kilns, soaking pits, smelters, and related steam-generating or heating equipment in such establishments as power plants, steel mills, pottery works, chemical plants, and petroleum refining facilities: Opens valve on feedlines to supply adequate gas for fuel when boilers are to be put in operation and to maintain standard pressure on gaslines. Closes valve to reduce gas pressure when increase in gas consumption by boilers causes pressure to rise. Observes, records, and reports flow and pressure gauge readings on gas mains and fuel feedlines.
GOE: 05.06.02 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

953.362-014 LIQUEFACTION-AND-REGASIFICATION-PLANT OPERATOR (utilities)

Controls operation of compressors, scrubbers, evaporators, and refrigeration equipment to liquefy and regasify natural gas: Turns valves to admit flow of natural gas through scrubbers that remove harmful gases and water and starts compressors and refrigeration units that liquefy and transfer gas to storage tanks. Starts pumps and adjusts controls of auxiliary equipment to transfer liquid gas from storage tanks and to regulate temperature and pressure of units that regasify liquid gas into distribution lines. Signals workers engaged in tending auxiliary equipment, such as pumps and cooling towers. Repairs equipment, using handtools. May post meter and gauge readings in logbook.
GOE: 05.06.04 STRENGTH: M GED: R4 M3 L3 SVP: 7 DLU: 77

953.362-018 PRESSURE CONTROLLER (utilities)

Controls volume of gas in city distribution mains to ensure adequate gas supply according to consumer demand: Determines required governor adjustments to maintain specified gas pressure and volume according to consumer-demand estimates, based on weather conditions and time of day or night, or receives governor adjustment instructions from PRESSURE SUPERVISOR (utilities). Changes position or number of weights on balance lever or turns valves to adjust governors located at various regulating stations within city. Operates switchboard to adjust governors which are remotely controlled by electric telemetering equipment. May overhaul gas governors [GAS-REGULATOR REPAIRER (petrol. refin.; pipe lines; utilities)]. May change charts in recording meters [CHART CHANGER (clerical)]. May clean pits housing governors, using suction pump and shovel. May determine causes of abnormal pressure variances and make corrective recommendations, such as installation of pipe to relieve overloading.
GOE: 05.06.03 STRENGTH: M GED: R3 M3 L3 SVP: 7 DLU: 77

953.364-010 GAS-METER INSTALLER (utilities) alternate titles: gas fitter; meter installer

Installs residential-type gas meters and regulators in buildings, using handtools: Turns valve to adjust gas burners on appliances, using screwdriver. Inspects appliances to detect gas leaks, using portable testing device, and notifies customer of needed repair. Shuts off gas supply to installed meters, following instructions [CUSTOMER-SERVICE REPRESENTATIVE (tel. & tel.; utilities; waterworks)]. Removes meters from vacated or abandoned buildings. Prepares work orders indicating data, such as meter number, date, and location of installation.
GOE: 05.10.02 STRENGTH: M GED: R3 M2 L3 SVP: 6 DLU: 77

953.367-010 GAS-LEAK INSPECTOR (pipe lines; utilities) alternate titles: leak locator; maintenance inspector

Inspects underground and exposed gas pipelines and enclosed areas to detect and locate leaks, using testing instruments. Walks or rides along pipelines and observes terrain for evidence of leaks, such as decayed vegetation, gas odor, and water bubbles. Drives bar into ground at intervals near pipe, using sledgehammer, preparatory to testing subsurface for traces of gas. Inserts combustible-gas indicator-probe into hole and reads indicator to determine location of leak. Inspects exposed pipes in buildings, manholes, vaults, and valve boxes for leaks, using combustible indicator. Notifies maintenance department of location and condition of facilities inspected and tested. May make temporary repairs, using repair dope or gastight clamps. May drive vehicle equipped with detection devices to aid in locating leaks.
GOE: 05.07.01 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

953.367-014 GAS-METER CHECKER (utilities) alternate titles: meter-and-service-line inspector

Inspects gas service lines and meters on customers' premises to detect tampering or improper use of gas: Examines meter case and meter connections for signs of tampering or improper use. Pulls meter with both hands to determine if meter can be tilted, causing it to register slowly. Examines visible gas lines and pipe joints for irregular connections. Submits inspection reports to supervisory personnel.
GOE: 05.07.01 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

953.367-018 HOUSE-PIPING INSPECTOR (utilities)

Inspects and tests new gas-pipe installations in buildings to determine conformance to company and city requirements: Screws coupling into gasline to facilitate attachment of hand-pump testing set. Pumps air and reads gauge to determine specified amount of air pumped into gasline. Patches gauge to detect fall in pressure indicating leaks in gasline. Observes pressure gauge while joints are being tightened by coworkers to determine when leak has been detected and repaired. Tests joints with soap and water and observes bubble formation to detect leaks. Examines flue openings of gas-heating appliances to determine conformance to specifications. Notifies customer of needed repairs. Prepares inspection report. May inspect installations, such as gas mains, services (pipes from mains to residences), meters, and regulators and be designated Utility Inspector (utilities). May test for presence of subsurface gas to detect leaks in underground gaspipes [GAS-LEAK INSPECTOR (pipe lines; utilities)].
GOE: 05.07.01 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

953.382-010 GAS-PUMPING-STATION OPERATOR (utilities) alternate titles: compressor-house operator; engineer, booster and exhauster; engineer, gas-pumping station; gas-substation operator

Controls operation of steam, gas, or electric-motor-driven compressor to maintain specified pressures on high and low pressure mains dispensing gas from gasholders: Observes pressure gauges to determine consumption rate variations and turns knobs or switches to regulate pressures. Opens valves to allow gas to flow into and out of compressors. Reads gas meters and records amount of gas received and dispensed from holders. May clean, lubricate, and adjust compressors, using handtools. May regulate gas governors to maintain specified pressure [PRESSURE CONTROLLER (utilities)].
GOE: 05.06.03 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

953.387-010 CYLINDER INSPECTOR-AND-TESTER (chemical) alternate titles: cylinder tester; gas-cylinder inspector; hydrostatic tester

Inspects gas cylinders to detect surface defects and tests elasticity of cylinder walls: Removes valve from cylinder, using wrench or valve-removal machine. Inspects exterior and interior of cylinder to detect dirt, rust scale, dents, and arc burns. Fills cylinder with water, seals cylinder and immerses cylinder in

water-filled jacket, using chain hoist. Screws fittings and turns valve or starts pump to create pressure that expands cylinder wall. Compares pressure gauge or burette reading with specifications and segregates cylinders that exceed prescribed expansion limits. Stamps test data and company symbol on cylinder. Records test results, cylinder serial number, and test date. May weigh cylinder. May be designated according to size of cylinder inspected as Ton-Cylinder Inspector (chemical).
GOE: 06.03.01 STRENGTH: M GED: R3 M3 L3 SVP: 4 DLU: 77

953.583-010 DRIP PUMPER (pipe lines; utilities)
Drives tank truck equipped with suction pump to drain condensate from gas pipeline drips: Drives truck to drip location and connects hose from truck tank to drip valve. Measures condensate in tank with calibrated pole or reads tank meter. Opens pressure valve to force condensate into truck tank, or starts suction pump to draw out condensate when gas pressure is low. Records amount of condensate drawn at each drip location. May use hand-operated suction pump to drain condensate when truck is not equipped with automatic pump.
GOE: 05.11.03 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

953.584-010 HELPER, LIQUEFACTION-AND-REGASIFICATION (utilities)
Assists LIQUEFACTION-AND-REGASIFICATION-PLANT OPERATOR (utilities) in maintenance of equipment in natural gas plant: Observes operation of equipment to detect malfunctions and reports findings to maintenance personnel. Performs minor repairs, using handtools. Records instrument readings at specified intervals. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.10.02 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

953.667-010 GAS-LEAK INSPECTOR HELPER (pipe lines; utilities)
Assists GAS-LEAK INSPECTOR (pipe lines; utilities) in locating and detecting leaks in underground and exposed pipelines: Carries testing equipment and handtools to and from vehicle to test site. Places barricades and safety signs at test area and directs traffic to protect workers and public. Measures distances of leak from reference point, using rule or tape, and records data, such as instrument readings in survey report. Assists in performing temporary repairs, using handtools. May drive vehicle equipped with detection devices along inspection route. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.07.01 STRENGTH: M GED: R3 M3 L3 SVP: 4 DLU: 77

953.684-010 GAS-PUMPING-STATION HELPER (utilities)
Assists GAS-PUMPING-STATION OPERATOR (utilities) in maintenance of equipment in gasholder station: Carries handtools to and from work area. Inspects equipment to detect malfunctions, such as overheating and noisy compressor. Assists in repairing equipment, using handtools. May paint equipment to prevent corrosion. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.06 STRENGTH: M GED: R2 M1 L2 SVP: 4 DLU: 77

953.687-010 GAS-METER-INSTALLER HELPER (utilities)
Assists GAS-METER INSTALLER (utilities) to install residential-type gas meters and regulators in buildings: Carries handtools and meters to and from vehicle and work site. Disconnects meters or regulators, using handtools. Ignites gas appliances after meter installation. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.15 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 77

954 OCCUPATIONS IN FILTRATION, PURIFICATION, AND DISTRIBUTION OF WATER

This group includes occupations concerned with controlling treatment plant equipment to purify and clarify water, and to transfer, distribute, and regulate pressure and flow of water; controlling equipment to convey water in irrigation systems; and controlling gates and valves in aqueducts and dams to supply waterpower.

954.130-010 SUPERVISOR, PUMPING STATION (waterworks) alternate titles: water-plant-pump-operator supervisor
Supervises and coordinates activities of workers engaged in operating equipment, such as pumps, valves, turbines, and electric motors to transfer, distribute, and regulate pressure and flow of raw and processed water: Trains workers in operation and maintenance of equipment. Records data, such as reservoir water elevation, power consumption, and equipment and human resource utilization. Inspects equipment and requisitions supplies. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.06.03 STRENGTH: L GED: R4 M4 L3 SVP: 7 DLU: 77

954.132-010 SUPERVISOR, WATER TREATMENT PLANT (waterworks)
Supervises and coordinates activities of workers engaged in operating and maintaining equipment in water treatment plant: Directs activities of workers engaged in filtering, chemically treating, pumping, and testing fresh and processed water in preparation for human or industrial use. Plans daily work schedule and assigns tasks to workers based upon priority of work and expertise of individual workers. Inspects equipment, such as filters, chlorine indicators, basins, filtered water basins, and pumps, to detect malfunctions. Directs workers in repair of equipment or reports need for repairs to designated authority. Maintains records on chemical usage and storage, equipment operation, and personnel attendance. Performs other duties as described under SUPERVISOR (any industry) Master Title. May be required to meet licensing or certification standards established by regulatory agency concerned.
GOE: 05.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 86

954.362-010 DITCH RIDER (waterworks) alternate titles: canal tender; ditch tender; water tender; zanjero
Controls irrigation system to convey water to farms in assigned area, according to rights, or as instructed by WATER CONTROL SUPERVISOR (waterworks) or other officials, for irrigating fields and crops: Contacts water users to determine quantity of water needed, and time and duration of delivery. Computes and requisitions quantity of water required. Operates gates, checks, turnouts, and wasteway: to regulate waterflow into canals and laterals (individual supply ditches). Measures or estimates diversions of water from canals and to water users, and calculates and records quantities delivered for use in computing charges to farmers. Patrols assigned area by foot, horseback, or motor vehicle to detect leaks, breaks, weak areas, or obstructions and damage to irrigation system. Removes debris and makes emergency repairs to banks, structures, gates, and canal roads. Fills holes and exterminates rodents. Writes reports and records daily deliveries, number of users, amount of water used, and other data required by law or company. May prepare reports on condition of system and equipment, and replacements or repairs needed. May supervise crew workers cleaning ditches, raising ditch banks, repairing concrete and wooden structures, erecting fences and gates, and other maintenance work after irrigating season has passed. May take annual crop census and make weed and other surveys. May patrol canal at night to determine that water is flowing in prescribed volume into users' ditches.
GOE: 05.06.03 STRENGTH: M GED: R4 M3 L3 SVP: 4 DLU: 77

954.367-010 WATER-SERVICE DISPATCHER (waterworks)
Dispatches service crews to repair water mains. Receives calls from consumers regarding pressure complaints, service requests, and leaks in mains. Dispatches service crew, using telephone or radio. Increases pumpage rate, conduit flow, and reservoir elevation. May keep log on dispatching activities.
GOE: 07.04.05 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 77

954.382-010 PUMP-STATION OPERATOR, WATERWORKS (waterworks) alternate titles: pumping-plant operator; water-plant-pump operator
Operates pumping equipment to transfer raw water to treatment plant, or distribute processed water to residential, commercial, and industrial establishments: Turns valves, pulls levers, and flips switches to operate and control turbine- or motor-driven pumps that transfer water from reservoir to treatment plant, or to transfer processed water to consumer establishments. Reads flowmeters and gauges to regulate equipment according to water consumption and demand. Inspects equipment to detect malfunctions, such as pump leaks or worn bearings. Repairs and lubricates equipment, using handtools. Records data, such as utilization of equipment, power consumption, and water output in log. May operate equipment to treat and process raw water [WATER-TREATMENT-PLANT OPERATOR (waterworks)]. May test water for chlorine content, alkalinity, acidity, or turbidity to determine potability of water, following color analysis standards. May operate hydroelectric equipment to generate power.
GOE: 05.06.03 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

954.382-014 WATER-TREATMENT-PLANT OPERATOR (waterworks) alternate titles: filter operator; purifying-plant operator; water-control-station engineer; water filterer; water purifier
Controls treatment plant machines and equipment to purify and clarify water for human consumption and for industrial use: Operates and controls electric motors, pumps, and valves to regulate flow of raw water into treating plant. Dumps specified amounts of chemicals, such as chlorine, ammonia, and lime into water or adjusts automatic devices that admit specified amounts of chemicals into tanks to disinfect, deodorize, and clarify water. Starts agitators to mix chemicals and allows impurities to settle to bottom of tank. Turns valves to regulate water through filter beds to remove impurities. Pumps purified water into water mains. Monitors panelboard and adjusts controls to regulate flow rates, loss of head pressure and water elevation, and distribution of water. Cleans tanks and filter beds, using backwashing (reverse flow of water). Repairs and lubricates machines and equipment, using handtools and power tools. Tests water samples to determine acidity, color, and impurities, using colorimeter, turbidimeter, and conductivity meter. Adds chemicals such, as alum into tanks to coagulate impurities and to reduce acidity. Records data, such as residual content of chemicals, water turbidity, and water pressure. May operate portable water-purification plant to supply drinking water.
GOE: 05.06.04 STRENGTH: M GED: R3 M3 L3 SVP: 5 DLU: 88

954.382-018 WATERSHED TENDER (waterworks) alternate titles: aqueduct-and-reservoir keeper; dam tender; needle-valve operator; reservoir caretaker
Controls equipment to regulate waterflow and water level in reservoirs: Turns valves and pulls levers to regulate waterflow through aqueduct and floodgates. Reads gauges and meters to control specified waterflow, water levels, and water pressure in reservoir. Records data, such as water level, turbidity, temperature, and flow rate. Lubricates and performs minor repairs to equipment, using

handtools. Patrols area to detect property damage and to prevent trespassing. May tend heating apparatus to prevent freezing of valves and gates. May add chemicals to water to retard organic growth such as algae.
GOE: 05.06.03 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

954.385-010 BASIN OPERATOR (waterworks)
Tends and maintains desilting basin that removes silt from river water entering irrigation system: Reads dials and gauges to determine if equipment is operating according to specifications. Inspects sluice hoppers of clarifiers to detect clogged valves. Flushes valves to clear them. Inspects and repairs ventilating blowers, pumps, and corrosion protection system. Removes trash from slots of influent channels, using steel rake. Sluices sand and silt from ends of channels, using high-pressure hose. Lubricates machinery and gear boxes or clarifiers. Records equipment malfunctions and corrective actions taken. Cleans basin area, pilot houses, and equipment. Patrols dam area and compound to guard against fire, trespassing, or property damage.
GOE: 05.12.07 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

954.564-010 WATER-METER INSTALLER (waterworks)
Installs watermeters in consumer establishments, using handtools: Turns mainline valve to close waterflow through line. Disconnects water pipe and connects watermeter to outlet and inlet pipe unions, using wrench. Examines pipes to detect leaks and informs consumer to close faucets. Opens mainline valve to admit waterflow into building. Records meter readings [METER READER (utilities; waterworks)]. May install and repair water system pipes and accessories, using equipment such as pneumatic jackhammer and plumber's handtools.
GOE: 05.10.01 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

954.587-010 WATER-FILTER CLEANER (waterworks) alternate titles: laborer, filter plant; sand-cleaning-machine operator; water-filterer helper
Cleans water filter beds: Holds suction pipe to transfer sand and gravel from filter bed onto regrading screens. Washes and simultaneously screens sand and gravel to remove foreign particles and grade material according to size, using water hose. Turns handle to backwash (reverse waterflow) filter to remove chemical precipitates and impurities. Scrapes and removes dirt from side of filter bed, using metal scraper. Reverses action of suction pipe to return gravel and sand to filter bed. Records daily production. May clean and redistribute sand in filter bed, using sand cleaning machine. May lubricate and repair defective filtering equipment.
GOE: 05.12.18 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

955 OCCUPATIONS IN DISPOSAL OF REFUSE AND SEWAGE

This group includes occupations concerned with equipment to regulate flow of radioactive or sewage waste and sludge through pumps, conveyors, blowers, chlorinators, vacuum filters, and other decontaminating equipment; controlling equipment to burn garbage, refuse, and sludge cake; collecting garbage and refuse from homes and business establishments; and related activities such as street cleaning and snow removal. Includes occupations concerned with landfill operations. Occupations concerned with the transportation of garbage and trash to disposaal areas are found in Group 909.

955.130-010 SUPERVISORY WASTEWATER-TREATMENT-PLANT OPERATOR (sanitary ser.) alternate titles: sewage plant supervisor; solid waste facility supervisor
Supervises and coordinates activities of workers engaged in operating and maintaining equipment in wastewater (sewage) treatment and disposal facility: Directs activities of workers in power generating, grit removal, pump and blower, and sludge filtration departments. Tests sewage and water supply to prevent contamination, using chemicals and testing equipment. Inspects equipment, such as pumps, sediment tanks, filters, and chlorinators to detect malfunctions. Confers with engineering personnel and directs workers in repair and maintenance of machinery and equipment. May direct workers in maintenance of buildings and grounds. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.02.01 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 77

955.131-010 SUPERVISOR, INCINERATOR PLANT (sanitary ser.)
Supervises and coordinates activities of incinerator plant workers engaged in operation, maintenance, and repair of incinerator furnaces and auxiliary equipment, such as grates, fans, compressors, temperature controls, overhead electric cranes, and ventilating and hydraulic equipment: Directs activities of workers engaged in tasks such as weighing and unloading refuse trucks, moving rubbish to furnace hoppers, operating incinerator furnaces, repairing furnace refractory linings, and removing ashes. Assists workers in repairing facilities and equipment, applying knowledge of principles of combustion and safety procedures, and using handtools. Maintains personnel records. Trains workers in performance of duties and safety procedures. Inspects incinerator furnace and other equipment to detect need for maintenance and repair. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.06.04 STRENGTH: L GED: R4 M2 L2 SVP: 5 DLU: 86

955.133-010 SANITARY-LANDFILL SUPERVISOR (sanitary ser.)
Supervises and coordinates activities of workers engaged in landfill operations, utilizing knowledge of local, state, and federal laws regulating waste disposal: Directs operations, such as spreading and compacting solid waste and spraying insecticides to control insects and pests. May assist in selecting new sites according to community population. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.11.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

955.137-010 SNOW-REMOVING SUPERVISOR (government ser.)
Supervises removal of snow from thoroughfares and public places, such as airports, government buildings, and streets. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.11.01 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

955.167-010 DISPATCHER, RADIOACTIVE-WASTE-DISPOSAL (chemical)
Coordinates activities of workers engaged in mixing and controlling flow of chemicals and radioactive waste through pipelines, storage tanks, and sampling areas: Reviews processing schedule to determine receiving and transferring priorities, and notifies workers of type and quantities for processing, destinations, pumping schedule, and operating procedures. Monitors panelboard to ensure temperatures, pressures, pH readings, and contamination content of waste chemicals conform with schedule and processing specifications. Recommends change of pumping rates and pressures that will ensure rate of flow of chemicals or radioactive waste follows specifications. Reviews reports to verify accuracy of amounts received, processed, transferred, or stored.
GOE: 06.01.01 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 77

955.222-010 INSTRUCTOR, WASTEWATER-TREATMENT PLANT (sanitary ser.)
Instructs wastewater treatment plant personnel in operation and maintenance of treatment plant facilities to improve efficiency and meet regulatory certification requirements: Trains personnel in operation and maintenance of treatment plant machines and equipment and demonstrates operation of machines and equipment. Instructs personnel in other procedures, such as selection of sampling sites, laboratory techniques, record keeping, safety measures, and care of lift stations. Administers tests and maintains records of students' progress. Assembles materials, schedules courses, and designs contents of courses to meet specific needs of plant personnel. Provides technical assistance to plant staff and serves as troubleshooter in solving problems in operations. Maintains examination records and coordinates training program with state certification program.
GOE: 05.06.04 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 86

955.362-010 WASTEWATER-TREATMENT-PLANT OPERATOR (sanitary ser.) alternate titles: disposal-plant operator; sewage-plant operator; utilities operator
Operates sewage treatment, sludge processing, and disposal equipment in wastewater (sewage) treatment plant to control flow and processing of sewage: Monitors control panels and adjusts valves and gates manually or by remote control to regulate flow of sewage. Observes variations in operating conditions and interprets meter and gauge readings and tests results to determine load requirements. Starts and stops pumps, engines, and generators to control flow of raw sewage through filtering, settling, aeration, and sludge digestion processes. Maintains log of operations and records meter and gauge readings. Gives directions to WASTEWATER-TREATMENT-PLANT ATTENDANTS (sanitary ser.) and SEWAGE-DISPOSAL WORKERS (sanitary ser.) in performing routine operations and maintenance. May collect sewage sample, using dipper or bottle and conduct laboratory tests, using testing equipment, such as colorimeter. May operate and maintain power generating equipment to provide steam and electricity for plant. May be designated according to specialized activity or stage in processing as Activated-Sludge Operator (sanitary ser.); Grit-Removal Operator (sanitary ser.); Pump-And-Blower Operator (sanitary ser.); Sludge-Control Operator (sanitary ser.); Sludge-Filtration Operator (sanitary ser.).
GOE: 05.06.04 STRENGTH: L GED: R4 M4 L3 SVP: 6 DLU: 77

955.362-014 INCINERATOR OPERATOR II (sanitary ser.)
Controls operation of multiple-hearth incinerator furnaces and related equipment to burn sludge in wastewater treatment plant: Pushes buttons and turns valves to ignite burners, release combustion air, add fuel, control hearth dampers, set hearth temperatures, and set length of burning cycles. Observes meters and gauges on central control room panel to verify that flows, pressures, and temperatures are within specifications. Turns controls to make routine adjustments, following standard procedures. Notifies worker controlling sludge filter press to adjust feed rate of waste material into incinerator hopper to maintain incinerator efficiency. Opens hearth doors and observes operation of waste raking mechanism to verify that burned residue is swept to succeeding hearth. Periodically records specified meter and gauge readings on incinerator log. Calculates and records values for number of tons of waste material fed per hour and quantity of auxiliary fuel burned per ton of waste material, to document efficiency of incinerator operation. Monitors and adjusts controls of auxiliary equipment, such as exhaust emissions, scrubbers, and incinerator heat recovery unit, following prescribed procedures. Removes and cleans equipment parts, such as valves, burners, and oxygen analyzers, following manuals and using handtools.
GOE: 05.06.04 STRENGTH: M GED: R3 M2 L3 SVP: 4 DLU: 86

955.382-010 CLARIFYING-PLANT OPERATOR (textile)
Controls equipment to clean and neutralize waste bleach water preparatory to discharge into natural waterways: Starts pumps or opens valves to transfer

waste bleach water from bleaching tanks to settling and mixing tanks. Tests water to determine acidity, using titration equipment, and calculates quantity of chemicals required to neutralize water. Opens valves to admit specified amount of chemicals into mixing tank and starts motor to mix chemicals with water. Starts pumps or opens valves to discharge water and accumulated sludge into waterway.
GOE: 06.02.16 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

955.382-014 WASTE-TREATMENT OPERATOR (chemical)
Controls heat exchange unit, pumps, compressors, and related equipment to decontaminate, neutralize, and dispose of radioactive waste liquids collected from chemical processing operations. Removes sample of liquid from collection tank, using pipette. Pours sample into dish and bakes dish under heat lamp to evaporate water, leaving radioactive residue. Tests residue with Geiger counter and compares reading with chart to determine whether radioactivity level is within prescribed safety limits. Determines degree of acidity or alkalinity in liquid, using pH meter, and adds acid or alkali to neutralize liquid. Starts pump and admits waste liquid into sewer for disposal or into storage tanks for evaporation, according to degree of radioactivity. Transfers radioactive waste liquid from storage tanks to heat exchange unit. Operates heat evaporation system to reduce volume of liquid, and observes gauges and adjusts controls during process to maintain steam pressure, temperature, and liquid at specified levels. Starts compressed-air pump to blow slurry on bottom of evaporator into lead container for permanent storage. Records data, such as number of gallons of waste pumped into sewer system or storage tanks, or reduced by heat exchange unit, and radioactivity levels. May monitor panelboard to control operation of recovery systems that store or dispose of radioactive waste and be designated Nuclear-Waste-Process Operator (any industry).
GOE: 06.02.11 STRENGTH: L GED: R4 M4 L4 SVP: 6 DLU: 77

955.383-010 WASTE-DISPOSAL ATTENDANT (any industry)
Disposes of radioactive equipment and wastes, performing any combination of following duties: Loads contaminated equipment and lead pigs of waste material onto truck, using forklift. Drives truck to storage area and removes load. Shovels specified quantities of ingredients into and tends concrete mixer. Pours or shovels concrete into forms to make disposal coffins (containers). Lifts contaminated equipment or wastes from lead pigs and places them in coffin, using stainless steel rods. Pours concrete into coffin to encase waste. Loads coffins onto truck, using forklift, and transports them to burial ground or arranges for burial at sea. Records amount and type of equipment and waste disposed. May accompany coffins for burial at sea. May clean contaminated equipment for reuse by operating sand blasters, filtering pumps, and steam cleaners or by scrubbing with detergents or solvents. Workers must follow prescribed safety procedures and federal laws regulating waste disposal.
GOE: 05.12.03 STRENGTH: H GED: R3 M2 L2 SVP: 5 DLU: 77

955.463-010 SANITARY LANDFILL OPERATOR (sanitary ser.) alternate titles: solid waste facility operator
Performs any combination of following duties to dispose of solid waste materials at landfill site: Operates heavy equipment, such as bulldozer, front-end loader, and compactor, to excavate landfill site, transport solid waste materials, and to spread and compact layers of waste and earth cover. Directs incoming vehicles to dumping area. Examines cargo to prohibit disposal of caustic waste, according to government regulations. Sprays poisons and other specified chemicals over waste material to control disease carrying pests. Drives truck to distribute oil or water over landfill to control dust. Weighs vehicles entering and leaving site and collects dumping fees.
GOE: 05.11.01 STRENGTH: M GED: R2 M1 L1 SVP: 5 DLU: 86

955.585-010 WASTEWATER-TREATMENT-PLANT ATTENDANT (sanitary ser.) alternate titles: sewage-plant attendant
Tends pumps, conveyors, blowers, chlorinators, vacuum filters, and other equipment used to decontaminate wastewater (sewage) by settling, aeration, and sludge digestion: Removes obstructions, such as coarse materials from bar-screens, to accelerate influent through initial screening process. Adjusts pipe valves to regulate flow velocity through settling tanks to separate sludge by sedimentation. Turns air and steam valves to aerate effluent, and to control temperature in sludge digestion tanks. Observes temperature gauges to determine lubrication of equipment. Reads charts, flow meters, and gauges to detect equipment malfunctions. Collects samples, makes process reports, and performs minor repairs on equipment as directed by WASTEWATER-TREATMENT-PLANT OPERATOR (sanitary ser.). May be designated according to station assignments as Activated-Sludge Attendant (sanitary ser.); Grit Station Attendant (sanitary ser.); Pump-And-Blower Attendant (sanitary ser.); Sludge-Control Attendant (sanitary ser.); Sludge-Filtration Attendant (sanitary ser.).
GOE: 05.12.07 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

955.667-010 INCINERATOR PLANT LABORER (sanitary ser.)
Signals GARBAGE COLLECTOR DRIVER (motor trans.) 905.663-010 to dump refuse in specific area of collection pit to maintain even distribution of refuse, using hand. Cleans spills from floor of receiving area, using rake, broom, and hose. Loads noncombustible material into containers and carries containers to pickup area for removal.
GOE: 05.12.20 STRENGTH: M GED: R2 M1 L1 SVP: 1 DLU: 86

955.685-010 INCINERATOR OPERATOR I (sanitary ser.)
Tends one or more incinerator furnaces that burn refuse, such as sludge, trash, and garbage: Pulls mechanism to release refuse from hopper into incinerator. Moves levers to ignite burners, to adjust blowers and dampers that regulate airflow and temperature, and to control charging, discharging, and quenching mechanisms of furnace. Opens furnace door and agitates burning refuse to facilitate combustion, using stoking hoe. Moves levers to open grate and drop ashes and noncombustible material from furnace at end of burning cycle. Replaces refractory linings of furnace, using firebrick and mortar. Cleans debris from furnace room floor, using rake and broom. May assist SUPERVISOR, INCINERATOR PLANT (sanitary ser.) 955.131-010 in maintenance and repair of cranes, conveyor equipment, and exhaust system, using handtools.
GOE: 05.06.02 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 86

955.687-010 SEWAGE-DISPOSAL WORKER (sanitary ser.)
Cleans and maintains equipment in sewage disposal plant to facilitate flow and treatment of sewage: Cleans filter screens, processing tanks, and walkways, using hose, brushes, and chemical solutions. Cleans precipitates, such as grit, sludge, trash, and muck from sump, catch basin and grit chamber, using shovel, rake, and hand pump. Lubricates equipment, such as pumps and valves. Opens and closes gates and valves according to gauge readings or warning lights on equipment. Collects samples of decontaminated refuse for testing. May conduct test on sewage sample, using colorimeter. May maintain grounds and outbuildings [GROUNDSKEEPER, INDUSTRIAL-COMMERCIAL (any industry)]. May be designated according to equipment cleaned as Catch-Basin Cleaner (sanitary ser.).
GOE: 05.12.18 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

955.687-014 SNOW SHOVELER (government ser.) alternate titles: snow remover
Shovels snow into truck or open sewer from streets and other public thoroughfares. Chops ice and packed snow, using pick or ice-chopper, to clear area around catch basins, fire hydrants, and street corners. May spread salt or thawing chemicals onto roadway from rear of moving truck, using shovel.
GOE: 05.12.18 STRENGTH: H GED: R1 M1 L1 SVP: 1 DLU: 77

955.687-018 STREET CLEANER (government ser.) alternate titles: street sweeper
Sweeps refuse from municipal streets, gutters, and sidewalks into pile and shovels refuse into movable container that is pushed from place to place. May pick up paper and similar rubbish from lawns, flower beds, or highway median strips, using spike-tipped stick.
GOE: 05.12.18 STRENGTH: L GED: R1 M1 L1 SVP: 1 DLU: 77

955.687-022 GARBAGE COLLECTOR (motor trans.)
Collects refuse on designated route within municipality and dumps refuse from containers onto truck. May be designated according to refuse collected as Trash Collector (motor trans.). May drive truck [GARBAGE COLLECTOR DRIVER (motor trans.)]. May start hoisting device that raises refuse bin attached to rear of truck and dumps contents into opening in enclosed truck body.
GOE: 05.12.03 STRENGTH: V GED: R1 M1 L1 SVP: 1 DLU: 77

956 OCCUPATIONS IN DISTRIBUTION OF STEAM

This group includes occupations concerned with maintenance and servicing of steam distribution systems.

956.267-010 INSPECTOR, CHIEF (utilities)
Inspects steam-heat systems in buildings served by steam utility company to determine effect of system modifications reported by BUILDING-EQUIPMENT INSPECTOR (utilities) on steam-metering equipment and billing rates and to determine cause of abnormal steam consumption or other evidence of system malfunction. Investigates changes made in equipment layout by customers and determines if changes affect metering equipment and rates. Determines causes for abnormal meter readings by inspecting customers' steam-utilization equipment and steam lines to detect malfunctioning, and makes minor repairs and adjustments or recommends major overhaul by other workers. Submits reports on special investigations.
GOE: 05.07.01 STRENGTH: M GED: R4 M4 L3 SVP: 7 DLU: 77

956.387-010 BUILDING-EQUIPMENT INSPECTOR (utilities)
Examines steam-heat systems and records steam-meter readings at regular intervals to verify accuracy of meter registration and to ensure economical service to customers of steam utility company. Examines steam-distribution equipment, such as meters, steam traps, safety valves, and pipes, for loose connections or other defects and makes minor repairs and adjustments. Notifies INSPECTOR, CHIEF (utilities) of necessary major repairs and of changes, such as installation of additional steam-utilization equipment or repositioning of pipes which might affect metering equipment or steam rates. Reads meters and compares readings with previous recordings to detect fluctuations indicative of meter or equipment defects. Submits meter readings for billing purposes and reports equipment status. May notify customer of equipment requiring repair.
GOE: 05.07.01 STRENGTH: L GED: R3 M3 L2 SVP: 6 DLU: 77

959 OCCUPATIONS IN PRODUCTION AND DISTRIBUTION OF UTILITIES, N.E.C.

This group includes occupations, not elsewhere classified, concerned with power generation, utilities, and sanitation.

959.131-010 HEATING-PLANT SUPERINTENDENT (any industry) alternate titles: chief engineer

Supervises and coordinates activities of workers engaged in producing and distributing steam heat and hot water in commercial or industrial establishments, and in maintaining mechanical equipment, such as boilers, pipe systems, pump, hot water generators, hot air furnaces, and air-cooling units. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.06.02 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

959.137-010 DISPATCHER, CHIEF, SERVICE OR WORK (utilities)

Supervises and coordinates activities of DISPATCHERS, SERVICE OR WORK (utilities) and power line workers to increase efficiency of work crews and equipment in routine maintenance and emergencies, such as floods or fire: Assigns duties to workers according to priority of trouble calls received. Relays information and technical instructions between linecrews and appropriate department heads concerning power line troubles requiring action not covered by standard operating procedures. Verifies that all switching operations are accurately recorded and reported to ensure safety of linecrews. May supervise DISPATCHERS, SERVICE (utilities).
GOE: 07.04.05 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

959.137-014 DISPATCHER, SERVICE, CHIEF (utilities) alternate titles: service-order dispatcher, chief

Supervises and coordinates activities of DISPATCHERS, SERVICE (utilities) engaged in receiving and reviewing service calls, performing duties as described under SUPERVISOR (clerical) Master Title. May make investigations and tabulations concerning trends, causes, and effects of factors necessitating service calls.
GOE: 07.04.05 STRENGTH: S GED: R4 M3 L3 SVP: 7 DLU: 77

959.137-018 ORDER DISPATCHER, CHIEF (utilities)

Coordinates and supervises activities of WORK-ORDER-SORTING CLERKS (utilities) engaged in routing and scheduling orders for installation and removal of gas meters and installation of main extensions and service connections. May direct service connection construction crews to areas or zones to equalize work loads. May assign trucks to transport crews to job sites. May order materials from storeroom. May maintain records and assist in preparation of reports.
GOE: 07.05.01 STRENGTH: S GED: R4 M2 L3 SVP: 6 DLU: 77

959.137-022 SUPERVISOR, HOME-ENERGY CONSULTANT (utilities) alternate titles: supervisor, energy conservation representative

Supervises and coordinates activities of workers engaged in performing domestic-energy-consumption audits for customers of public utilities: Confers with customers and utility representatives to determine customer needs, appointment times, availability of representatives, and scheduling conflicts. Reschedules energy audits accordingly. Reads federal program guidelines, journals, and related reports to ascertain federal program requirements and recent developments concerning energy conservation techniques. Attends energy seminars, staff meetings, and training sessions to assess effectiveness of energy audit program. Suggests to management changes in brochures, community workshops, or audit procedures to improve community acceptance. Prepares written reports that reflect assessment of program and submits them to management and department officials. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.02.01 STRENGTH: S GED: R4 M3 L4 SVP: 6 DLU: 86

959.167-010 DISPATCHER, SERVICE (utilities) alternate titles: schedule clerk; trouble dispatcher

Dispatches customer service workers to install, service, and repair electric, gas, or steam powered systems or appliances, or cable television systems: Reviews work orders from departments or complaints from customers and records type and scope of service to be performed. Determines and schedules orders according to urgency. Contacts supply storekeeper to verify availability of parts and equipment to ensure scheduled work performance. Receives check in calls from service workers by radio, telephone, or in person. Informs workers of type and location of work to be performed and dispatches workers to job. Keeps records of repairs, installation, removal of equipment or appliances, and hours required on each job. May maintain records, using computer terminal. May be designated according to utility as Telegraphic-Service Dispatcher (tel. & tel.).
GOE: 07.04.05 STRENGTH: S GED: R4 M3 L3 SVP: 4 DLU: 88

959.361-010 CUSTOMER SERVICE REPRESENTATIVE (utilities) alternate titles: field inspector; special-gas-and-electric service investigator

Investigates customer complaints concerning gas leakage or low pressure, and abnormal consumption of gas or electricity by gas and electric appliances: Ascertains number and type of appliances used on premises to determine rate of utility consumption. Turns off appliances and observes gas or electric meter to detect power leakage. Examines meter and appliance connections for defects, such as shorts, grounds, and loose pipe joints to determine power loss or gas leakage. Covers gas pipe joints with soapsuds and watches for bubble formation to determine position of leak. Performs repairs and adjustments, such as cleaning and regulating gas burner jets, and replacing defective meters and gas regulators, using handtools. Shuts off service and notifies repair crew of major repairs required, such as replacement of underground pipes or electric wiring. May perform emergency repairs to gas service pipes between gas main and building. May collect delinquent accounts. May recommend and write specifications for distribution changes, such as house wiring, and relocation of poles or service lines, utilizing necessary right-of-way grants. May investigate illegal use of gas or electricity [GAS-METER CHECKER (utilities); UTILITIES SERVICE INVESTIGATOR (utilities)].
GOE: 05.10.04 STRENGTH: L GED: R3 M2 L3 SVP: 6 DLU: 77

959.367-010 ELECTRIC POWER LINE EXAMINER (utilities)

Patrols overhead electric power lines and reports damaged or defective power line equipment and facilities: Patrols on foot, by automobile, boat, or other means of transportation to detect unsafe or defective power lines. Taps poles with hammer to detect rot or splits caused by weather conditions. Pulls guy wires and anchors to detect slack or looseness. Observes crossarms, insulators, transformers, switches, pole hardware, and overhead conductors, using binoculars, to detect evidence of deterioration, storm damage, and vandalism. Writes periodic report of observations. Climbs poles to examine equipment not observable from ground and makes minor repairs, such as tightening loose guy wires. Notifies trouble dispatching personnel by telephone or radio of necessary major repairs. May open and close switches as directed by supervisory personnel.
GOE: 05.07.01 STRENGTH: L GED: R3 M2 L3 SVP: 6 DLU: 77

959.367-014 FACILITY EXAMINER (tel. & tel.)

Examines telephone transmission facilities to determine equipment requirements for providing subscribers with new or additional telephone services: Climbs telephone poles or stands on truck-mounted boom to examine terminal boxes for available connections. Designates cables available for use. Visits subscribers' premises to arrange for new installations, such as telephone booths and telephone poles.
GOE: 05.05.05 STRENGTH: L GED: R3 M2 L3 SVP: 6 DLU: 77

959.367-018 ENERGY-CONSERVATION REPRESENTATIVE (utilities)

Inspects homes of utility company customers to identify conditions that cause energy waste and suggests actions to reduce waste: Interviews customer to obtain data relating to household energy use, such as type of heating system, number of persons home during day, furnace temperature setting, and prior heating costs. Draws sketch of house, measures house perimeter, windows, and doors, using tape measure, and records dimensions on sketch for use in heat-loss calculations. Inspects areas of house, such as attics, crawl spaces, and basements, and notes conditions that contribute to energy waste, such as loose-fitting windows, uninsulated pipes, and deficient insulation. Reads hot water tank label to ascertain tank heat-loss rating and determine need for tank insulation blanket. Examines furnace air filters and heat exchanger to detect dirt in filters and soot buildup in exchanger that retard efficient furnace operation. Confers with customer and recommends action to be taken to reduce energy waste, such as weatherstripping, reducing hot water temperature setting, and adding insulation. Informs customer of types and prices of energy efficiency items sold by utility. Gives customer pamphlets describing energy conservation improvements and sources of loans. Occasionally wraps insulating blanket around hot water tank, using adhesive strips. Calculates area of windows and house volume, using calculator, and records results on computer input form to provide data for computer calculation of heat-loss estimates that are mailed to customer.
GOE: 05.07.01 STRENGTH: M GED: R3 M3 L3 SVP: 3 DLU: 86

959.574-010 SERVICE REPRESENTATIVE (utilities; waterworks)

Discontinues or connects service to consumer's establishment, following written or oral instructions: Locates curb cock (valve) at customer's establishment and turns valve to shut off or to permit flow of gas or water, using handtools. Records meter readings [METER READER (utilities; waterworks)]. Investigates consumer complaints of high service cost. Inspects meters, valves, and pipes to detect defects, such as leaks or malfunctioning meters, using testing equipment. Tightens pipe connections to prevent leaks, using wrench. Recommends necessary repairs to consumer. May collect delinquent accounts. May install meters [WATER-METER INSTALLER (waterworks); GAS-METER INSTALLER (utilities)].
GOE: 05.10.01 STRENGTH: M GED: R3 M2 L2 SVP: 3 DLU: 77

959.684-010 POLE FRAMER (utilities; wood prod., nec) alternate titles: line-and-frame poler

Cuts notches for crossarms and installs step sockets in telephone, telegraph, and electric-power transmission poles: Sights down pole to determine straightest side so that poles will line up evenly when erected. Saws tip of pole to point with chain saw. Saws two parallel cuts at specified place on pole and cuts out wood between cuts with adz to make crossarm notch. Drills bolthole through pole at center of crossarm notch, using electric drill. Measures intervals for step sockets on opposite sides of pole. Drills holes and drives step sockets in place with small ax. Loads and unloads poles from railroad cars or truck, using rope, skids, and cant hook.
GOE: 05.12.12 STRENGTH: M GED: R2 M1 L2 SVP: 3 DLU: 77

96 AMUSEMENT, RECREATION, MOTION PICTURE, RADIO AND TELEVISION OCCUPATIONS, N.E.C.

This division includes occupations, not elsewhere classified, concerned with projecting images on screens; posing for painters and photographers, and stand-

ing-in for actors and actresses; erecting, raising, and lowering scenery and positioning microphones and other equipment on sets and stages; creating and editing sound effects; monitoring and controlling equipment in radio and television broadcasting studios to regulate sound and picture quality; adjusting lights; supplying properties; and preparing ice for skating rinks.

960 MOTION PICTURE PROJECTIONISTS

This group includes occupations concerned with operating motion-picture projectors and related equipment to provide motion-picture entertainment or for other viewing purposes.

960.132-010 CHIEF PROJECTIONIST (motion picture)

Supervises and coordinates activities of workers engaged in projecting motion picture film in motion picture studio: Trains workers in methods and techniques of operating projectors. Observes workers and projection operations to verify conformance with established operating procedures. Requisitions supplies and materials. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.05 STRENGTH: S GED: R4 M2 L3 SVP: 8 DLU: 77

960.362-010 MOTION-PICTURE PROJECTIONIST (amuse. & rec.; motion picture) alternate titles: audiovisual equipment operator; process projectionist; projectionist; theater projectionist

Sets up and operates motion picture projection and sound-reproducing equipment to produce coordinated effects on screen: Inserts film into top magazine reel of projector. Threads film through picture aperture of projector, around pressure rollers, sprocket wheels, and sound drum or magnetic sound pickup on film, and onto spool that automatically takes up film slack. Regulates projection light and adjusts sound-reproducing equipment. Monitors operation of machines and transfers operation from one machine to another without interrupting flow of action on screen. Rewinds broken end of film onto reels by hand to minimize loss of time. Inspects and rewinds projected films for another showing. Repairs faulty sections of film. Operates stereopticon (magic lantern) or other special-effects equipment to project picture slides on screen. Cleans lenses, oils equipment, and makes minor repairs and adjustments.
GOE: 05.10.05 STRENGTH: L GED: R4 M2 L2 SVP: 6 DLU: 80

960.382-010 AUDIOVISUAL TECHNICIAN (any industry) alternate titles: audiovisual-equipment operator; projectionist

Operates audiovisual or sound-reproducing equipment to provide or complement educational or public service programs offered by institutions, such as museums, zoos, or libraries: Operates motion picture projecting equipment to show films in auditorium or lecture hall for entertainment or enlightenment of visitors to institution. Operates film, slide, video, audio tape, or turntable equipment to project or produce still or moving pictures, background music, oral commentary, or sound effects to illustrate, clarify, or enhance impact of presentation by TEACHER (museums) 099.227-038. Coordinates equipment operation with material presented, according to notations in script or instructions of speaker. Maintains equipment in working condition. Makes minor adjustments and repairs to equipment, and notifies maintenance personnel when correction of major malfunction is required. Positions, installs, and connects equipment, such as microphones, amplifiers, and lights.
GOE: 05.10.05 STRENGTH: M GED: R4 M3 L3 SVP: 3 DLU: 86

961 MODELS, STAND-INS, AND EXTRAS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with posing for painters and photographers; and standing-in for actors and actresses and appearing as extras in motion picture and television productions. Fashion models in garment industry, and in retail and wholesale trade are included in Group 297.

961.364-010 DOUBLE (motion picture; radio-tv broad.)

Portrays image of star performer, facing away from camera or at long range, for motion-picture or television films: Imitates gestures and mannerisms of star performer, such as in standing, walking, climbing stairs, and mounting or riding horse. Dresses in same costume as person portrayed. May be designated according to type of work performed as Photographic Double (amuse. & rec.); Riding Double (amuse. & rec.).
GOE: 01.08.01 STRENGTH: L GED: R3 M1 L2 SVP: 3 DLU: 77

961.367-010 MODEL, PHOTOGRAPHERS' (any industry)

Poses for pictures taken by PHOTOGRAPHER, STILL (profess. & kin.) to be used for advertising purposes: Applies special makeup to face and styles hair to enhance appearance, considering factors, such as color, camera techniques, and facial features. Poses as directed or strikes suitable interpretive poses for promoting and selling merchandise or fashions. May specialize in one category of modeling, such as high fashion, illustration, or art. May specialize in modeling one part of body, such as hands, legs, or face.
GOE: 01.08.01 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

961.667-010 MODEL, ARTISTS' (any industry)

Poses as subject for paintings, sculptures, and other types of art for translation into plastic or pictorial values by PAINTER (profess. & kin.) or SCULPTOR (profess. & kin.).
GOE: 01.08.01 STRENGTH: L GED: R3 M1 L1 SVP: 3 DLU: 77

961.667-014 STAND-IN (motion picture; radio-tv broad.)

Substitutes for star performer to achieve desired angle, lighting effects, and background for motion picture or television scene preliminary to taking picture. Must have same general proportions, complexion, and other physical characteristics as person for whom worker is stand-in.
GOE: 01.08.01 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

962 OCCUPATIONS IN MOTION PICTURE, TELEVISION, AND THEATRICAL PRODUCTIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with erecting, raising, and lowering scenery, and positioning microphones and other equipment on sets, television studios, and outdoor locations; adjusting and controlling lighting to achieve desired camera effects; creating and editing sound and visual effects; installing rigging for acrobats and related entertainers; supplying properties, such as costumes and props; and controlling equipment to regulate sound and picture quality in motion pictures, radio, television, theatrical, and related productions. Occupations concerned with cutting and splicing of film and videotape are included in Group 976.

962.132-010 SUPERVISING FILM-OR-VIDEOTAPE EDITOR (motion picture; radio-tv broad.)

Supervises and coordinates activities of workers engaged in editing and assembling filmed scenes photographed by others: Reviews edited and assembled film on screen or edited videotape on monitor, to detect errors. Studies script and confers with producers and directors concerning layout or editing techniques to increase dramatic or entertainment value of production. Trims film segments to specified lengths and assembles segments in sequence that presents story with maximum effect, or edits videotape to correct errors, using editing equipment. Performs other duties as described under SUPERVISOR (any industry) Master Title. May operate studio or portable, shoulder-mounted camera [CAMERA OPERATOR (motion picture; radio-tv broad.) 143.062-022]. May be designated according to specialty as Supervising Editor, Feature (motion picture; radio-tv broad.); Supervising Editor, News Reel (radio-tv broad.); Supervising Editor, Trailer (motion picture; radio-tv broad.).
GOE: 01.01.01 STRENGTH: M GED: R5 M3 L5 SVP: 8 DLU: 89

962.134-010 RECORDIST, CHIEF (motion picture) alternate titles: operative supervisor

Supervises and coordinates activities of workers engaged in servicing and operating recording machines, power supply units, and allied equipment: Assigns workers to test and repair defective equipment. Reads production schedule to ascertain recording machines to be used and informs workers. Places sound film sections under microscope of densitometer and records densitometer readings on test forms to determine density of film. Examines film under microscope to determine width of noise reduction line on film, and records readings. Reads instructions to determine amount of current to be used on exposure lamp of each film recording machine, and what adjustments are necessary. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.05 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

962.137-010 GRIP BOSS (motion picture) alternate titles: supervisor, grips

Supervises and coordinates activities of workers engaged in rigging and dismantling equipment, maintaining buildings and grounds, sewing material to make tents, backing, and scrim, and operating cranes, booms, or dollies to move cameras in motion picture studio or on location: Reads script and confers with DIRECTOR, MOTION PICTURE (motion picture) and DIRECTOR OF PHOTOGRAPHY (motion picture; radio-tv broad.) to determine type equipment needed. Requisitions supplies and equipment. Plans schedule to coordinate activities of construction, sewing room, and production workers. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: L GED: R4 M3 L4 SVP: 8 DLU: 77

962.137-018 SUPERVISOR, COSTUMING (motion picture; radio-tv broad.)

Supervises and coordinates activities of workers engaged in storing, altering, making, renting, and buying costumes and other wardrobe accessories for cast: Confers with DIRECTOR, MOTION PICTURE (motion picture) or PRODUCER (radio-tv broad.), and studies script and research material to determine style of dress according to period and characters to be represented. May sketch and design costumes. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 01.02.03 STRENGTH: S GED: R4 M3 L4 SVP: 7 DLU: 77

962.137-022 SUPERVISOR, PROP-MAKING (motion picture)

Supervises and coordinates activities of workers engaged in fabricating, installing, and operating props and special effects equipment in studio or on location, according to script specifications or oral instructions. May be designated according to workers supervised as Supervisor, Drapery Hanging (motion picture); Supervisor, Special Effects (motion picture); Supervisor, Stage Carpentry (motion picture); Supervisor, Upholstering (motion picture). Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 01.06.02 STRENGTH: L GED: R4 M4 L3 SVP: 8 DLU: 77

962.137-026 SUPERVISOR, PROPERTIES (motion picture)

Supervises and coordinates activities of personnel engaged in obtaining, moving, and fabricating props used in motion pictures: Reads script and confers

with DIRECTOR, MOTION PICTURE (motion picture) to determine prop requirements for designated scenes. Assigns personnel to fabricate props, to obtain prefabricated props from inventory, or to buy or rent props from outside sources. Assumes responsibility for safekeeping and placement of props on sets during shooting of scenes. Instructs GRIP (motion picture; radio-tv broad.) to remove and store props at completion of shooting. May decorate sets.
GOE: 05.12.01 STRENGTH: L GED: R4 M3 L4 SVP: 8 DLU: 77

962.162-010 DIRECTOR, TECHNICAL (radio-tv broad.) alternate titles: switching operator

Coordinates activities of radio or television studio and control-room personnel to ensure technical quality of picture and sound for programs originating in studio or from remote pickup points: Plans and arranges for special effects requested by supervisory personnel. Assigns work to technical personnel engaged in controlling and maintaining lights, audio and video control equipment, microphones, and cameras. Observes picture through monitor and gives instruction to VIDEO OPERATOR (radio-tv broad.) 194.282-010 concerning shading or CAMERA OPERATOR, TELEVISION (radio-tv broad.) 143.062-022 concerning composition desired. Controls switcher-mixer unit to switch cameras, fade from one picture to another, or superimpose one image upon another as indicated by script or as cued by DIRECTOR, PROGRAM (radio-tv broad.) 184.167-030.
GOE: 05.02.04 STRENGTH: L GED: R5 M2 L4 SVP: 8 DLU: 88

962.167-010 MANAGER, SOUND EFFECTS (radio-tv broad.) alternate titles: sound-effects supervisor

Coordinates activities of workers engaged in preparing and producing sound effects for radio, film, and video tape productions: Assigns duties to SOUND-EFFECTS TECHNICIAN (radio-tv broad.) and other studio personnel engaged in producing sound effects for various productions. Consults with production management personnel, DIRECTOR, RADIO (radio-tv broad.) or SOUND CUTTER (motion picture), and SCREEN WRITERS (motion picture; radio-tv broad.), to determine special sound effects required for production presentation.
GOE: 01.06.02 STRENGTH: S GED: R5 M4 L5 SVP: 7 DLU: 77

962.167-014 PROGRAM ASSISTANT (radio-tv broad.) alternate titles: associate director; production assistant; production coordinator; stage manager

Performs any combination of following or similar duties as directed by DIRECTOR, PROGRAM (radio-tv broad.) 184.167-030 or PRODUCER (radio-tv broad.) 159.117-010 in rehearsal and broadcast of television programs: Distributes copies of script and arranges for rehearsal quarters. Prepares and distributes rehearsal call sheets. Lays out acting areas on stage floor, using tape and following floor plan. Times scenes during rehearsal and calculates overall program timing. Contacts guest and members of cast to verify that makeup has been applied. Verifies that specified films, slides, titles cards, and similar items are ready for broadcast. Directs personnel in rehearsal and broadcast of sign-ons and sign-offs, station breaks, film feature programs, and other programs composed of non-live video elements. Notifies various departments of changes in daily operation schedules. Oversees distribution of studio equipment, such as scenery, cameras, and microphones. Transmits instructions received over telephone headset to performers and others on set orally, or using body gestures. Prepares report of daily on-air activities. May direct production of sound effects. May prepare rehearsal call sheets, reports, daily on-air activity report, memos, or scripts, using computer.
GOE: 01.03.01 STRENGTH: L GED: R4 M2 L3 SVP: 5 DLU: 89

962.167-018 PROPERTY COORDINATOR (amuse. & rec.; radio-tv broad.)

Provides stage properties for theatrical production: Purchases or rents properties from merchants and museums or obtains properties from theater or warehouse. Arranges with PROP MAKER (amuse. & rec.; motion picture) for construction of period furniture and properties. Arranges properties on stage for each scene. Clears or directs clearing of properties from stage at conclusion of each scene. Performs minor repairs on props, using handtools. Cleans props or sends to property shop for maintenance. Keeps record of purchases and submits bill and purchase order to designated authority. When accompanying show on tour, packs and unpacks properties. May arrange for transportation of properties.
GOE: 05.02.06 STRENGTH: V GED: R4 M1 L3 SVP: 7 DLU: 77

962.261-010 PLANETARIUM TECHNICIAN (museums) alternate titles: astro-technician; technical specialist

Installs, modifies, operates, and maintains sound and projection equipment used in presentation of planetarium classes and shows: Consults with personnel who plan classes and shows to determine feasibility of achieving specified effects, modifications in equipment necessary to create desired effects, and additional equipment or properties to be incorporated into technical equipment layout. Modifies projectors, electro-optic equipment, console controls, and auxiliary instruments, following script or lecture outline, to adjust equipment for producing desired visual effects, basing modifications on knowledge of equipment capabilities, and using handtools, precision instruments, and circuitry diagrams. Selects tapes of musical compositions from planetarium files and records portions of each, as designated in script, to produce tape recording with musical background. Modifies sound system to permit synchronization of recorded commentary and background music with visual presentation. Installs special effect properties, such as models of space ships or slides of ancient interpretations of constellations, in designated positions in dome of theater, and secures properties to control wires or machinery to facilitate manipulation of properties according to script or lecture outline, using handtools. Operates electro-optic, audio, and auxiliary equipment to present show or to complement presentation of class lectures. Repairs and maintains equipment, using handtools and precision calibrating and testing instruments, applying knowledge of electronic circuitry and electro-optics, and following manufacturer's maintenance instructions and diagrams. Constructs and installs permanent or temporary displays, incorporating electromechanical or electronic components, in planetarium's exhibit area.
GOE: 05.10.05 STRENGTH: M GED: R4 M4 L4 SVP: 7 DLU: 86

962.261-014 STAGE TECHNICIAN (amuse. & rec.)

Installs rigging, lighting, sound equipment, and scenery, and erects stages for theatrical, musical, and other entertainment events in arenas, stadiums, theaters, studios, and other amusement places: Reads stage layout specifications and blueprints and confers with MANAGER, STAGE (amuse. & rec.) 159.167-018 to determine type and location of sets, props, scenery, lighting, and sound equipment required for specific event. Assembles props provided by production company, constructs additional props, scenery, or stages, and attaches braces that support scenery frames in upright position, using carpenter's handtools and power tools. Climbs ladder or scaffolding to ceiling grid, crawls and balances on beams, inserts ends of cables or ropes through ceiling grid, and attaches cables to scenery, curtains, equipment, support pipes, and counterbalance weights [GRIP (amuse. & rec.; radio-tv broad.) 962.684-014]. Positions lighting fixtures on and around stage area, clamps light fixtures to supports, connects electrical wiring from fixtures to power source and control panel [LIGHTING-EQUIPMENT OPERATOR (amuse. & rec.) 962.381-014], positions sound equipment, such as microphones, speakers, and amplifiers, on and around stage area, and connects electrical lines to power source and mixing console [PUBLIC-ADDRESS SERVICER (any industry) 823.261-010], utilizing knowledge of electrical codes and use of electrician's handtools and power tools. Pulls cables that raise and lower scenery, curtains, and equipment [FLYER (amuse. & rec.; radio-tv broad.) 962.687-018] and operates lighting and sound equipment during rehearsals and performances, following audio or visual cues.
GOE: 05.10.04 STRENGTH: H GED: R4 M3 L4 SVP: 7 DLU: 86

962.262-010 FILM OR VIDEOTAPE EDITOR (motion picture; radio-tv broad.) alternate titles: cutter

Edits motion picture film, television or cable television video tape, and sound tracks: Evaluates and selects scenes in terms of dramatic and entertainment value and story continuity. Trims film segments to specified lengths and reassembles segments in sequence that presents story with maximum effect, or edits video tape, using editing equipment. Reviews assembled film or edited video tape on screen or monitor and makes corrections. Confers with supervisory personnel and others concerning filming of scenes. May specialize in particular field of film or video editing, such as feature, news, sound, sound effects, or music.
GOE: 01.01.01 STRENGTH: L GED: R5 M2 L4 SVP: 8 DLU: 88

962.267-010 SIGHT-EFFECTS SPECIALIST (amuse. & rec.) alternate titles: electrician, master

Provides special stage lighting and sight effects for theatrical performances and directs electrical crew engaged in installing and arranging lighting and wiring equipment: Studies work drawings of stage sets showing light details. Confers with producing personnel and studies continuity script to determine lighting of sets and special sight effects desired. Suggests changes and orders special mechanical stage contrivances to obtain mobile or stationary sight effects, such as forests burning, oceans rolling, or other scenic effects. Attaches stereopticon lens on lamp and operates lamp from rear of stage to project picture of desired effects on scrim (transparent curtain), following cue sheet. Directs crew in setting up and arranging electrical equipment and lights for use on stage and in theater. May originate designs for artistic lighting of sets.
GOE: 05.10.03 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

962.281-010 PROP MAKER (amuse. & rec.; motion picture)

Fabricates and assembles props, miniatures, and sets for motion pictures and theatrical productions from a variety of materials, using handtools and woodworking and metalworking machines and equipment: Analyzes sketches, blueprints, and verbal instructions to determine type props and other materials needed and equipment required. Measures and marks cutting lines on material, using work aids, such as jigs and fixtures, micrometers, calipers, and templates. Fabricates parts, using machinery, such as drill press, metal and wood lathes, power saws, router, and milling machine. Assembles parts into props, miniatures, and sets, using handtools and equipment, such as screwdrivers, wrenches, hammers, and welding apparatus. Rigs and controls moving or functioning elements of sets that depict action.
GOE: 01.06.02 STRENGTH: M GED: R4 M4 L4 SVP: 7 DLU: 77

962.281-014 SOUND-EFFECTS TECHNICIAN (radio-tv broad.)

Produces artificial sounds that are transmitted and synchronized with production being presented to simulate aural impression of action being broadcasted to listener or viewer. Reproduces recorded sounds from previously prepared phonograph records or tape.
GOE: 01.06.02 STRENGTH: L GED: R4 M3 L4 SVP: 6 DLU: 77

962.281-018 SPECIAL EFFECTS SPECIALIST (amuse. & rec.; motion picture; radio-tv broad.)

Fabricates, installs, and activates equipment to produce special effects, such as rain, snow, explosions, and other mechanical and electrical effects as re-

quired by script for television, motion picture, and theatrical productions: Reads script to determine type of special effects required. Mixes chemicals to produce special effects, following standard formulas. Constructs towers and similar objects used in making effects, using handtools and machine tools. Fabricates parts for special effects from materials, such as wood, metal, plaster, and clay, using handtools and power tools. Installs special effects, using handtools.
GOE: 01.06.02 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

962.361-010 OPTICAL-EFFECTS LAYOUT PERSON (motion picture) alternate titles: assistant camera operator; optical-effects-line-up person; plotter

Locates and marks frames of motion picture film to identify film segments for optical effects processing: Reads work order or optical effects specifications sheets to ascertain optical effects specifications and location of subject material on original photography film. Mounts single or multiple rolls of film on spindles of winding device, locates marked start frame of film, and aligns start frame in start position of synchronizer-counter device to locate and identify film frames specified for optical effects. Turns crank on winding device to advance film and observes film passing over viewing light box to detect damage or unclean condition. Cleans film using cleaning solutions and velvet cloth. Repairs minor damage, such as torn sprocket holes, using tape. Periodically stops film when viewing more than one roll simultaneously and compares numbers printed on film edges to ensure synchronization of films. Stops film when counter reading matches number indicated on work order for start of first optical effect. Reviews subject matter within film frame and compares to description on work order to ensure match when work order does not include reference numbers. Marks reference frame of film, using film notcher, tape, or other marking device to indicate optical effect starting point. Marks symbols and numbers on film edge or leader to indicate type of effect and length. Advances film to additional reference frames indicated, and marks designated frames to show reference points within individual optical effects. Prepares count sheet indicating position, length, and type of optical effects required for films which do not have prepared specification sheets. Splices strips of leader material to film, and assembles designated segments of film in specified relationship, using splicing device. May confer with clients regarding optical effects requirements and production problems. May determine artwork requirements and requisition artwork. May review and approve finished optical effects. May load and unload film from camera magazine, and mount and remove magazines from camera. May change subtitle cards when filming subtitles.
GOE: 01.06.02 STRENGTH: L GED: R3 M3 L3 SVP: 6 DLU: 86

962.362-010 COMMUNICATIONS TECHNICIAN (education)

Performs a variety of duties involved in producing motion picture film in audio-visual department of educational institution: Selects areas and locations for filming motion pictures according to specifications. Sets up lighting equipment. Selects picture and sound takes to conform film to script. Assists in designing and building sets for film production. Requisitions props. Edits and splices motion picture film. Operates projectors, video tape recorders, and sound recording equipment to inspect and preview film for clients. Packages and ships film.
GOE: 01.03.01 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 77

962.362-014 LIGHT TECHNICIAN (motion picture; radio-tv broad.) alternate titles: operator, lights; set electrician, assistant chief

Sets up and controls lighting equipment for television broadcast or motion picture production: Confers with directors and studies script to determine lighting effects required. Sets up spot, flood, incandescent, and mercury vapor lights, reflectors, and other equipment. Switches lights on during broadcast, following script or instructions from directors. Makes minor repairs, such as replacing broken cables on equipment. May lead and give directions to workers while performing same duties.
GOE: 05.10.03 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 87

962.381-010 DRAPER (motion picture; radio-tv broad.)

Lays out patterns and cuts fabrics to make drapes, curtains, and items, such as banners, flags, bunting, pennants, and tapestries, for motion-picture or television sets, and hangs items on set: Measures windows or wall areas to be covered and lays out dimensions on fabrics, following specifications. Cuts fabrics and routes cut articles to sewing shop to be sewn. Installs brackets, rods, and similar mountings on sets, using screws, handtools, and power drills, and hangs draperies or other items on mountings.
GOE: 05.05.15 STRENGTH: M GED: R3 M2 L2 SVP: 7 DLU: 77

962.381-014 LIGHTING-EQUIPMENT OPERATOR (amuse. & rec.) alternate titles: electrician, front

Controls lighting equipment, such as floodlamps, strip lights, and spotlights from projection room and front or backstage areas of theater to cast spotlight on stage performers: Places spotlights in specified locations in theater and connects wiring for lighting. Moves spotlight to follow movements of performers with beam of light, according to instructions on prepared cue sheet. Turns color wheel, causing light to be diffused through varicolored gelatin disks to change color of light. Cleans and adjusts light, replacing carbons or bulbs as needed. May insert varicolored gelatin sheets in frame to assemble color wheel.
GOE: 05.12.16 STRENGTH: L GED: R4 M2 L3 SVP: 6 DLU: 77

962.381-018 MINIATURE-SET CONSTRUCTOR (motion picture) alternate titles: miniature-set builder; model-set artist; set-model builder

Constructs miniature models of motion picture sets used in filming backgrounds, titles, and special effects according to scale. Cuts materials, such as wood, cardboard, or plastic to specified dimensions, using handtools. Fits and glues or tacks cutouts to form three-dimensional set pieces. Builds landscapes, using plaster of paris or modeling clay to represent trees and bushes. Trims and paints completed miniature set.
GOE: 01.06.02 STRENGTH: L GED: R4 M4 L3 SVP: 7 DLU: 77

962.382-010 RECORDIST (motion picture)

Controls equipment to record sound originating on motion-picture set, using magnetic film, optical film, and acetate disk recording equipment: Tests and sets up recording mechanism according to specifications. Starts recorder and synchronizes sound with film. Observes operation to ensure that sound is properly recorded. May be designated according to equipment used as Disk Recordist (motion picture); Film Recordist (motion picture).
GOE: 05.10.05 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

962.382-014 SOUND CUTTER (motion picture) alternate titles: editing-machine operator; editor, sound

Edits and synchronizes music, dialogue, and sound effects of motion picture film and video tape into single sound-print for film or video-tape production: Loads combination sound-and-picture reproducing machine with picture and sound-track films and video tape. Starts machine, views action through aperture, and listens to sound being reproduced, using earphones. Notes dupe sheet for sound effects to accompany or punctuate action. Determines that sound matches picture or dupe sheet indicates sound-effect insertion. Stops machine at such points and marks symbol on film with grease pencil or notches symbol on video tape, using electronic device. Rewinds prints onto reels by reversing action of machine. Sets reels on rewinder, turns handle until both sound and picture are unwound to points marked by symbol, and splices sound effect into sound print.
GOE: 01.06.02 STRENGTH: S GED: R4 M3 L4 SVP: 6 DLU: 77

962.384-010 MICROPHONE-BOOM OPERATOR (motion picture; radio-tv broad.) alternate titles: boom operator

Moves levers on adjustable boom to position microphone in proximity of performers during filming of motion picture or television broadcasts: Attaches microphone to rubber supports at end of boom and places preamplifier in container attached to boom as directed by SOUND MIXER (motion picture; recording; radio-tv broad.) 194.262-018. Connects microphone wires to preamplifier and preamplifier wires to sound mixing apparatus. Positions microphone so as not to cast shadows or come in view of camera. Moves boom according to script and position of performers.
GOE: 05.10.05 STRENGTH: L GED: R3 M1 L2 SVP: 5 DLU: 87

962.664-010 HIGH RIGGER (amuse. & rec.; radio-tv broad.)

Installs rigging to raise, lower, or support equipment, such as scenery, lighting equipment, ladders, and nets for theatrical performances on stage or television studio: Climbs ladders, poles, or scaffolding to determine position for rigging and connects, hangs, or attaches cables, ropes, and blocks (pulley) across loft area of stage. Tests rigging to ensure that it is workable. Erects high ladders for acrobatic performances by connecting successive short lengths of ladder to top of erected portion, using clamps, wrenches, and hammers. Installs motors used to move curtains and track on which scenery and curtains move, using handtools and power tools.
GOE: 05.10.01 STRENGTH: V GED: R3 M2 L2 SVP: 6 DLU: 77

962.664-014 RECORDING STUDIO SET-UP WORKER (recording)

Arranges sound recording equipment in studio preparatory to recording session following work order specifications: Reads work order to determine position of equipment and arranges equipment, such as consoles, isolation booths, microphones, tape machines, amplifiers, music stands, and musical instruments, by hand or using handtrucks and dollies. Connects equipment electrical lines to outlets according to oral or written instructions. Dismantles equipment subsequent to recording session and returns items to storage. Maintains storage area and assists in maintaining tape library.
GOE: 05.12.03 STRENGTH: M GED: R3 M1 L1 SVP: 4 DLU: 77

962.665-010 DUBBING-MACHINE OPERATOR (motion picture; radio-tv broad.)

Tends film or magnetic tape dubbing machines that play back recordings of music, dialogue, or sound effects to facilitate synchronization of sound motion-picture film action by RERECORDING MIXER (motion picture; radio-tv broad.): Loads reels of film or tape onto machine and passes lead-end over and around sprockets, wheels, tension rollers, and magnetic tape head or over photo-electric cell apertures. Starts machines, unwinds film or tape, and stops machine when mark on tape or film indicates beginning of sound. Switches machine to automatic for control by RERECORDING MIXER (motion picture; radio-tv broad.). Informs RERECORDING MIXER (motion picture; radio-tv broad.) that machines are loaded and ready for playback. Removes reels when recordings are finished and rewinds tape or film onto original reel.
GOE: 05.10.05 STRENGTH: M GED: R3 M1 L1 SVP: 3 DLU: 77

962.684-010 ACROBATIC RIGGER (amuse. & rec.) alternate titles: rigger

Erects equipment for aerial and acrobatic acts in shows, such as circus, variety show, and carnivals, working as member of crew: Drills holes in floor of stage or platform, using electric drill, and fastens metal floor plates to hold vertical steel rods. Screws steel rods to holding plates and stretches wire or rope between rods, using handtools. Climbs ladder to attach ropes, swinging trapeze,

and other rigging to ceiling area. Fastens rigging and pulleys to hooks or poles in ceiling. Erects net under aerial and highwire acts for safety of performers. Lowers and raises trapezes and nets during performance.
GOE: 05.10.01 STRENGTH: H GED: R3 M1 L1 SVP: 6 DLU: 77

962.684-014 GRIP (amuse. & rec.; radio-tv broad.)
Erects sets and moves scenery on stage for theatrical productions on stage and television studio, using handtools and power tools and equipment: Ties sets upright with lash lines. Hooks stage brace onto set and adjusts brace to straighten and support set. Connects lines to overhead steel work to support hanging units, using handtools and power tools. Fits and hangs painted backdrops and curtains. Inserts weights as specified to counter balance hanging units. Changes scenery between acts or scenes according to script.
GOE: 05.10.01 STRENGTH: V GED: R3 M2 L2 SVP: 5 DLU: 87

962.684-018 MOTOR-POWER CONNECTOR (motion picture)
Connects sound, camera, and lighting motors of motion-picture apparatus to common power source by means of portable junction box and cables: Selects types and lengths of cable according to type equipment to be connected and accessibility to power source. Maintains connections while camera and sound equipment are in use. May manipulate microphone boom [MICROPHONE-BOOM OPERATOR (motion picture; radio-tv broad.)].
GOE: 05.10.03 STRENGTH: L GED: R3 M1 L1 SVP: 5 DLU: 77

962.684-022 PROP ATTENDANT (amuse. & rec.)
Readies stage, equipment, and seating area of theater prior to performances, and produces special lighting and sound effects during performances, using various equipment and devices: Lifts, places, and repositions special effect props, such as breakaway walls, dry ice in smoke/fog generator, and stage elevators, for use by performers during show. Starts, connects, and tests light and sound equipment, such as microphones, magnetic tape players, amplifiers, and stage lighting system, prior to show. Cleans and prepares stage, seating, and dressing areas prior to show [CLEANER, COMMERCIAL OR INSTITUTIONAL (any industry) 381.687-014]. Pushes buttons, presses and flips switches, and turns valves to achieve special sound and lighting effects and to raise and lower scenery and stage curtain during performance, following sight or sound cues. Hands props to performers and assists performers with costume changes during show. May order makeup supplies and props to replace those used or damaged during shows. Prior to show may test equipment and during show may tend equipment that activates and controls animated characters.
GOE: 05.12.16 STRENGTH: M GED: R3 M2 L3 SVP: 2 DLU: 86

962.687-010 DOLLY PUSHER (radio-tv broad.) alternate titles: assistant camera operator
Pushes television camera dolly around studio, as directed by CAMERA OPERATOR, TELEVISION (radio-tv broad.), to follow action of scene being broadcast.
GOE: 05.12.03 STRENGTH: V GED: R2 M1 L1 SVP: 2 DLU: 77

962.687-014 FILM LOADER (motion picture)
Loads and unloads film magazines, as directed, prior to and following photographing of motion-picture scenes. May perform other duties on set location, such as marking stage floor with chalk to designate actors' and actresses' positions, clapping hinged boards together to designate start of scene, and recording scene number and related information on slate to identify scene.
GOE: 05.12.03 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

962.687-018 FLYER (amuse. & rec.; radio-tv broad.)
Lowers or raises scenery and curtains by pulling ropes from position above or to one side of stage. Follows prepared cue sheet, bell, or light signals to make required changes during performance.
GOE: 05.12.04 STRENGTH: V GED: R2 M1 L1 SVP: 3 DLU: 77

962.687-022 GRIP (motion picture; radio-tv broad.) alternate titles: property handler
Performs any combination of following tasks in motion picture or television studio or set location: Moves control levers and wheels to guide cranes, booms, and dollies that move cameras and other equipment. Sews canvas and other materials to make and repair tents, tarps, scrims, and backings, using sewing machine. Erects canvas covers to protect camera from rain on location. Cuts gelatin and fiberglass light diffusers to fit metal frame of camera and inserts diffusers into frame. Rigs and dismantles frames, scaffolding, backdrops, prefabricated dressing rooms, camera platforms, and tents for set in studio or on location, using carpenter's handtools. May be designated according to department assigned as Construction Grip (motion picture); Production Grip (motion picture); Sewing Room Grip (motion picture).
GOE: 05.12.04 STRENGTH: H GED: R2 M1 L2 SVP: 5 DLU: 77

969 MISCELLANEOUS AMUSEMENT AND RECREATION OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with miscellaneous amusement and recreation occupations.

969.137-010 SUPERVISOR, CIRCUS (amuse. & rec.)
Supervises and coordinates activities of workers engaged in cleaning various areas, moving equipment, and erecting tents and rigging in circus, carnival, or other exhibition, performing duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: L GED: R4 M2 L2 SVP: 6 DLU: 77

969.137-014 SUPERVISOR, SHOW OPERATIONS (amuse. & rec.)
Supervises and coordinates activities of performers and technicians in amusement or theme park: Reviews and adjusts performance schedule to ensure number of performances meets anticipated attendance. Arranges shift assignments of performers and technicians. Talks to guests in person or by telephone to answer questions and resolve complaints. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 01.03.01 STRENGTH: L GED: R4 M4 L4 SVP: 6 DLU: 86

969.367-010 CUSTODIAN, ATHLETIC EQUIPMENT (amuse. & rec.) alternate titles: manager, equipment
Keeps stock of new and used athletic supplies, such as balls, gloves, bats, shoes, and uniforms, and issues supplies to players: Keeps record of supplies in stock and supplies issued to players. Informs officials when additional supplies are needed. Inspects supplies in stock to detect those requiring repair or cleaning. Repairs torn or damaged supplies or sends supplies out for repair. Issues new or clean supplies to players in exchange for supplies that are worn or dirty. Packs and unpacks supplies for road trips and ensures that arrangements are made for transportation. Accompanies players on trips. Modifies protective supplies, such as adding additional arch supports to shoes, padding uniforms and helmets, or preparing slings for injured players, under specific directions from INSTRUCTOR, SPORTS (amuse. & rec.; education) or ATHLETIC TRAINER (amuse. & rec.; education). May prepare budget estimate for supplies. May purchase supplies. May wash soiled uniforms and other supplies in automatic washing machine or may arrange to have supplies laundered.
GOE: 05.09.01 STRENGTH: M GED: R3 M2 L2 SVP: 5 DLU: 77

969.381-010 WARDROBE-SPECIALTY WORKER (motion picture; radio-tv broad.)
Makes, repairs, alters, and revamps special wardrobe items and accessories, such as military hats and caps, badges, shoes, belts, and leather pouches, or other leather, suede, and canvas items, working from patterns and diagrams, and using handtools and power sewing machines.
GOE: 05.05.15 STRENGTH: L GED: R3 M3 L2 SVP: 7 DLU: 77

969.664-010 FIREWORKS DISPLAY SPECIALIST (chemical) alternate titles: setter-off; setter-up
Assembles and sets off fireworks displays at fairs, expositions, or celebrations, according to picture programs or diagrams: Advises committee as to distance audience should be from setoff site of display, according to wind direction and velocity, considering fallout of sparks and acid, and types of fireworks used. Lays out setoff arrangement. Directs workers to set mortars (pipes used to fire aerial shells) apart from ground display, and places barrier of sandbags, railroad ties, or boxes of gravel between mortars to avoid detonating shells from sparks. Assembles framework and affixes display to framework, using hammer, saw, nails, scissors, and twine. Ties fuses of components to lead fuse to create simultaneous fireworks display. Determines appropriate time for setting off of display, according to environmental conditions.
GOE: 05.10.06 STRENGTH: M GED: R4 M2 L2 SVP: 5 DLU: 77

969.685-010 SNOWMAKER (amuse. & rec.)
Tends artificial snow making equipment of ski resort to produce artificial snow along ski trails: Rides chair lift or drives snow-terrain vehicle along ski trails to reach snow equipment. Attaches hoses from snow equipment to nozzles of above-ground outlets for underground compressed air and water pipelines, using wrenches. Turns outlet valves to adjust compressed air and water mixture to obtain desired snow spray. Returns defective or frozen snow equipment to ski lodge for repair, using snow vehicle. Repositions equipment periodically to direct snowfall to other sections of trail, or closes valves to shut off equipment when snow coverage is completed. Cleans dirt and frozen snow from equipment, using handtools.
GOE: 05.12.18 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 86

969.687-010 CIRCUS LABORER (amuse. & rec.)
Performs variety of tasks in cleaning floors and moving equipment for amusement show, such as fair, circus, or carnival, as directed: Cleans and sweeps show area after each performance. Cleans floor after elephants and horses perform. Moves wild animal cages, acrobatic equipment, and carries other properties to show area. Leads horses, elephants, and other animals into show area. Loads and unloads animals and equipment on and off train. May work as member of team to erect and dismantle canvas tents and place seats.
GOE: 05.12.18 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

969.687-014 ICE MAKER, SKATING RINK (amuse. & rec.)
Prepares floor for use as ice-skating rink and removes ice after use: Sprays floor of rink (which has been chilled by ammonia pipes), using water hose, to obtain ice layer of specified thickness. Skates behind tractor to guide scraper blades that smooth surface of rink. Turns valves to force steam through piping in floor to melt ice. Breaks ice, using chisel, and shovels ice into drain or sump. Mops water. May maintain order among patrons and protect property during skating sessions.
GOE: 05.12.18 STRENGTH: M GED: R2 M1 L2 SVP: 2 DLU: 77

97 OCCUPATIONS IN GRAPHIC ART WORK

This division includes occupations concerned with handsetting text or display type; making and mounting plates of line or continuous tone illustrations; as-

sembling hand- or machine-set type, plates, and spacing material to make up pages and forms; reproducing type, illustrations, pages, and forms by photoengraving, lithographic process, electrotyping, or stereotyping to make plates for printing presses; copying lettering, lines, or designs, and retouching artwork; etching or engraving printing rollers; developing and printing film and prints; bookbinding; and related graphic arts activities. Occupations concerned with cold type typesetting and word processing are found in Division 20.

970 ART WORK OCCUPATIONS, BRUSH, SPRAY, OR PEN

This group includes occupations concerned with copying or altering designs or lettering following layout or other directions; retouching original artwork, including photographic negatives or positives, using brush, spray, airbrush, or pen; drawing lines, such as column rules, on page layouts; and related artwork. Creating layouts and producing original art are included in Division 14.

970.131-014 SUPERVISOR, ARTIST, SUSPECT (government ser.)
Supervises and coordinates activities of workers engaged in forming composite images of persons suspected of criminal activities: Assigns duties to and trains new workers. Participates in activities of ARTIST, SUSPECT (government ser.) 970.361-018 to arrange and enhance set of facial features to form composite images of persons suspected of criminal activities. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 01.06.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 86

970.137-010 SUPERVISOR, SIGN SHOP (fabrication, nec)
Supervises and coordinates activities of workers engaged in constructing and painting signs: Reviews work orders and visits future site of sign to determine size of sign, materials needed to construct sign, and media needed to convey requested message. Orders material not already on inventory. Assigns work to PAINTER, SIGN (any industry) 970.381-026; SIGN ERECTOR (fabrication, nec) I 869.381-026; SIGN WRITER, HAND (any industry) 970.281-022; or other workers based upon current work load, priority of work to be completed, and expertise of available workers. Performs other duties as described under SUPERVISOR (any industry) Master Title. May prepare periodic department budget based upon knowledge of historic and projected costs of personnel, materials, and replacements and additions to tool and equipment inventory.
GOE: 05.10.04 STRENGTH: L GED: R4 M3 L4 SVP: 8 DLU: 86

970.281-010 AIRBRUSH ARTIST (profess. & kin.) alternate titles: photograph restorer
Restores damaged and faded photographs or colors and shades drawings to simulate photographs, using airbrush: Examines drawing or photographic print to determine coloring, shading, and changes required. Cuts out masking template, using shears, and positions templates on control areas to be sprayed. Mixes ink or paint solutions according to color specifications and spraying consistency desired. Sprays solution over control area to fill in and blend missing parts of photograph or to give depth, perspective, and tone to drawing, using airbrush. Builds up or changes photograph backgrounds to block out undesirable or distracting details, using airbrush. Inks borders and lettering on illustrations and paints in detail missing from photographs, using pen, brush, and drafting instruments. Rubs eraser over specified areas and applies white ink to highlight illustrations, using brush or pen. May specialize in mechanical and industrial designs and be designated Airbrush Artist, Technical (profess. & kin.); or in photograph restoring and be designated Airbrush Artist, Photography (profess. & kin.).
GOE: 01.06.03 STRENGTH: S GED: R4 M2 L3 SVP: 7 DLU: 77

970.281-014 DELINEATOR (profess. & kin.) alternate titles: renderer
Renders perspective drawings of buildings and manufactured products for display or advertising purposes working from sketches and blueprints and using pencil, pen, charcoal, watercolors, or airbrush. May be designated according to specialization as Architectural Renderer (profess. & kin.); Industrial Renderer (profess. & kin.).
GOE: 01.02.03 STRENGTH: S GED: R4 M3 L3 SVP: 7 DLU: 77

970.281-018 PHOTOGRAPH RETOUCHER (photofinishing) alternate titles: retoucher
Retouches photographic negatives and prints to accentuate desirable features of subject, using pencils or watercolors and brushes: Examines negative to determine which features should be accented or minimized. Paints negative with retouching medium so that retouching pencil will mark surface of negative. Shades negative with pencil to smooth facial contours, conceal stray hairs, wrinkles, or blemishes, and soften harsh highlights. Brushes watercolors on print to accentuate lights and shadows and produce clear and attractive features.
GOE: 01.06.03 STRENGTH: S GED: R4 M2 L3 SVP: 6 DLU: 77

970.281-022 SIGN WRITER, HAND (any industry) alternate titles: card writer, hand; show-card writer
Writes, paints, or prints signs or showcards used for display or other purposes, using brushes. May cut out letters and signs for display purposes from wallboard or cardboard, by hand or machines, such as electrically powered jigsaw or bandsaw.
GOE: 01.06.03 STRENGTH: S GED: R4 M3 L3 SVP: 5 DLU: 77

970.281-026 SKETCH MAKER, PHOTOENGRAVING (print. & pub.) alternate titles: artist, color separation
Sketches cloth designs onto transparent paper for subsequent transfer to printing rollers by photographic process, using drafting tools and artists' work aids: Studies customer's design to locate one complete repeat of pattern. Lays out reference points on design according to location of pattern repeat and motifs within repeat, using ruler, dividers, and pencil. Places design on lighted drafting table, covers design with sheet of transparent paper, and transfers reference points from design to paper. Holds paper against design with styles and sketches each color (segments of design) in pattern repeat on separate sheet of paper, using pen, brush, sponge, opaque, india ink, and watercolors. Varies intensity of sketch according to design so that printing rollers will be etched in manner that will produce shades and tones of color. Corrects flaws left in design by artist or designer and alters design to make it practical for printing, employing knowledge of fabrics, colors, and etching and printing techniques. Assembles sketches into composite sketch and compares composite with design to determine if parts of design join together to reproduce complete design. Routes sketches to PHOTOGRAPHER, PHOTOENGRAVING (electron. comp.; print. & pub.) for transfer to film.
GOE: 01.02.03 STRENGTH: S GED: R4 M3 L3 SVP: 7 DLU: 77

970.361-010 FORM DESIGNER (print. & pub.) alternate titles: form drafter
Develops office forms, such as invoices and production sheets, according to clients' specifications, using drafting instruments. Draws and submits initial draft to client. Makes changes according to client's specifications. Prepares final form of approved design for printing.
GOE: 01.06.01 STRENGTH: L GED: R3 M3 L3 SVP: 6 DLU: 77

970.361-014 REPEAT CHIEF (print. & pub.) alternate titles: inspector
Examines and corrects defects in films used to transfer designs onto printing rollers: Examines films to detect pinholes, defective screens, loss of contour, and exposure errors. Paints out pinholes, fills in defective screens, and alters contour of images on film, using brushes and opaque. Returns overexposed or underexposed films to PHOTOGRAPHER, PHOTOENGRAVING (electron. comp.; print. & pub.) for correction. Measures image on film to verify conformance to specifications, using steel tape. Routes acceptable prints to REPEAT-PHOTOCOMPOSING-MACHINE OPERATOR (print. & pub.) for use in composing master film for transferring image to sensitized copper printing rollers. Compares master film with original design and examines repeat joinings (lines along which repeats of design are joined) through magnifying lens to detect repeats that are out of register. Returns unsatisfactory films to REPEAT-PHOTOCOMPOSING MACHINE OPERATOR (print. & pub.) for correction of defects.
GOE: 05.10.05 STRENGTH: S GED: R4 M3 L3 SVP: 7 DLU: 77

970.361-018 ARTIST, SUSPECT (government ser.)
Selects set of facial features from inventory, and arranges features to form composite image of persons suspected of criminal activities based on descriptions obtained from victims and witnesses to crimes: Assembles and arranges outlines of features, such as head contours, noses, eyes, lips, chins, and hair lines and styles, to form composite image, according to information provided by witness or victim. Operates photocopy or similar machine to reproduce composite image. Draws moles, scars, and other identifying marks, using pens, pencils, and other artist's work aids, to retouch copy. Alters copy of composite image until witness or victim is satisfied that composite is best possible representation of suspect. Classifies and codes components of image, using established system, to help identify suspect. Searches, or helps witness or victim to search, police photograph records, using classification and coding system, to determine if existing photograph of suspect is available.
GOE: 01.06.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 86

970.381-010 COLORIST, PHOTOGRAPHY (photofinishing) alternate titles: tinter, photograph
Applies oil colors to portrait photographs to produce natural, lifelike appearance, according to specifications, using cotton swabs and brushes: Dips cotton swab in photographic colors, and applies color onto face of portrait freehand. Wipes excess color from portrait to produce specified shade, using cotton swab. Applies color to shaded spots of face, cheeks, and lips, using cotton-tipped wooden stick, and rubs color to blend with color previously applied. Applies color to eyes, using camel's hair spotting brush. May color scenic or other photographs.
GOE: 01.06.03 STRENGTH: S GED: R3 M1 L2 SVP: 6 DLU: 77

970.381-014 DECORATOR, MANNEQUIN (fabrication, nec)
Paints facial expressions on mannequins according to established standards, using artists' brushes and airbrush: Inspects mannequin heads to detect imperfections, such as scratches, chips, and cracks and discards defective heads. Mixes paint for eyes, brows, lips, and cheeks according to established formulas. Brushes paint on specified areas of mannequin to create lifelike appearance, using sample mannequin as guide. Applies paint to cheeks of mannequin, using airbrush. Measures and cuts eyelash strips, using rule and scissors. Attaches eyelash to mannequin, using pins. Sprays preservative coating on mannequin, using airbrush.
GOE: 01.06.03 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 77

970.381-018 LAY-OUT FORMER (business ser.)
Prepares advertising layout for reproduction according to customer specifications, utilizing knowledge of display techniques: Cuts out and trims photograph, drawing, or color sketch in order to create balanced layout and focus consumer attention on advertisement, using cutting tools and stencils. Mounts layout units on backing material and draws lines to indicate position of units, using pen,

Draws functional and decorative borders around layout, using marking and measuring instruments. Positions hand-lettered copy on layout. Writes reproduction instructions outside layout border.
GOE: 01.06.03 STRENGTH: S GED: R4 M2 L3 SVP: 7 DLU: 77

970.381-022 PAINTER, HAND (any industry) alternate titles: artist; decorator; filler-in tinter

Paints decorative freehand designs on objects, such as pottery, cigarette cases, and lampshades, using handbrushes: Sketches design, using pencil or permanent ink. Grinds colors on pottery tile, using palette knife, to mix colors and oils to desired consistency. Paints freehand or within sketched design, using mixed colors, or applies pure colors, one over another, to produce desired shade, allowing time for drying between applications. May stipple (create designs by dabbing dots on ware). May trace design prior to painting or sketch guidelines for decals and be designated Sketch Liner (pottery & porc.).
GOE: 01.06.03 STRENGTH: S GED: R4 M2 L3 SVP: 7 DLU: 77

970.381-026 PAINTER, SIGN (any industry) alternate titles: letterer

Designs, lays out, and paints letters and designs to create signs, using measuring and drawing instruments, brushes, and handtools: Reads work orders to determine type of sign specified, work procedures, and materials required. Sketches design on paper, using drawing instruments, such as angles, rulers, and shading pencils. Lays out design on plastic, silk, or tin to prepare stencil, or on paper to draw pounce pattern, using measuring and drawing instruments. Sketches or follows pattern to draw design or lettering onto objects, such as billboards and trucks, using stencils and measuring and drawing instruments. Brushes paint, lacquer, enamel, or japan over stencil, or paints details, background, and shading to fill in outline or sketch of sign, using paintbrush or airbrush. When painting window signs, draws outline of sign on outside window, using chalk, or dusts pounce pattern to mark outline and paints inside of window following drawing or outline, using brush. When making gold or silver leaf signs, forms sign by either of following methods: (1) Paints sign, positions leaf over fresh paint, and removes excess leaf after sign has dried, using cotton swab and knife blade. (2) Paints inside of window with watersize (glue), applies leaf, and paints sign in reverse on back of leaf, using paintbrush or airbrush. May cut out letters and apply background coating to construct and prepare signs, using tinning shears. May project layout image on paper and trace outline of design, using projector and electric needle. May specialize in maintenance of signs along railroad right-of-way and be designated Painter, Sign, Maintenance (r.r. trans.).
GOE: 01.06.03 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

970.381-030 RETOUCHER, PHOTOENGRAVING (print. & pub.)

Touches up photoengraving film reproductions of sketches or photographs to eliminate processing defects and distortions in design, or to create special effects on reproductions, utilizing knowledge of lithographic techniques: Compares film negatives or positives with original to locate portions of image, such as dots and lines that were lost during processing, spots on negatives or positives, and excessively dark or light tone values on film. Paints in lines and dots that were lost during processing, using brush, pen, or sponge and opaque. Scratches out spots and undesirable portions of image, using knife and pin. Paints in additional lines or dots to increase intensity of image on film or scratches out lines or dots to reduce intensity, following colors on original to restore specified tone values. May sketch designs on transparent paper preparatory to transferring to film. May retouch, correct, and create special effects on reproductions of photoengraved materials, using computer graphics system, and be designated Computer-Assisted Retoucher, Photoengraving (print. & pub.).
GOE: 01.06.01 STRENGTH: S GED: R3 M3 L3 SVP: 7 DLU: 86

970.381-034 SPOTTER, PHOTOGRAPHIC (photofinishing)

Covers or spots out imperfections on photographic prints, using gloved finger, brush, or pencil: Positions print under viewing light or on illuminated table and examines print to detect defects, such as surface blemishes, dust spots, and uneven margins. Selects premixed paint or mixes paint, using color charts, when repairing color prints. Applies paint to defective area of color print, using gloved finger or artists' brush. Shades light areas on black-and-white prints, using pencil. Rubs surface of photograph with cloth to remove debris and reduce gloss. Trims edges of print to enhance appearance, using scissors or paper cutter. Places prints in customer bag and records number per bag or mounts print in specified frame. May retouch film negatives and be designated Negative Spotter (photofinishing).
GOE: 01.06.03 STRENGTH: S GED: R3 M2 L1 SVP: 5 DLU: 77

970.381-038 STENCIL CUTTER (railroad equip.)

Designs, lays out, and cuts letters for stenciling railroad cars, according to specifications, using precision measuring and drawing instruments and handtools: Draws letter designs on stencil paper, using rule, triangle, T-square and pen or pencil. Brushes shellac and linseed oil on both sides of stencil paper to stiffen and preserve stencil. Cuts out letters, using knife or stencil-cutting machine. Constructs wood stencil frame, using miter box, saw, and hammer. Tacks stencil onto frame, using hammer or staple gun. May apply protective coating to exterior surfaces of locomotives, fixtures, and buildings, using brush, spray gun, or paint rollers. May stencil letters on cars, using brush or spray gun and be designated Car Letterer (railroad equip.).
GOE: 01.06.03 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

970.381-042 TYPE COPYIST (machinery mfg.)

Draws and cuts out type characters of plastic, such as letters, numbers, and logos for use in manufacturing phototypesetting type disks, using drawing and cutting instruments: Searches reference sources to determine availability of characters in type style specified on orders. Reproduces reference copies of new characters required to obtain working copies, using automatic film developer. Places tracing paper over working copies, and traces and draws new characters, using pencil and triangle. Measures width, thickness, and spacing of characters, using optical and other measuring instruments, and pencils in or erases markings of characters as necessary to arrive at specified size and spacing requirements. Places tracing paper with finalized characters in light box, positions plastic sheets over light box, and cuts plastic following character outlines on tracing paper to obtain plastic characters, using cutting tools and metal guides. Records identity of characters on card for filing with reference source and routes characters for further processing.
GOE: 01.06.03 STRENGTH: S GED: R4 M3 L3 SVP: 7 DLU: 86

970.581-010 MUSIC GRAPHER (print. & pub.) alternate titles: music autographer

Transcribes music symbols and lyrics from manuscript to sheet music master copy, using pen and ink, ink pad, rules, dies, and straightedge: Draws evenly spaced horizontal lines (staff lines) on master copy, using rule, straightedge, and pen. Reads manuscript to determine word and symbol dies needed. Presses dies in ink pad and transcribes words and symbols to master copy to prepare copy for reproduction.
GOE: 01.06.03 STRENGTH: S GED: R3 M2 L3 SVP: 6 DLU: 77

970.661-010 ENGROSSER (profess. & kin.) alternate titles: calligrapher; script artist

Letters formal documents, such as diplomas, testimonials, charters, citations, and appointments, using pen and ink. May design and cut script and display type faces for reproduction purposes. When designing and rendering borders, scrollwork, and initial letters for book or page, may be designated Illuminator (profess. & kin.).
GOE: 01.06.03 STRENGTH: S GED: R3 M2 L2 SVP: 8 DLU: 77

970.661-014 LETTERER (profess. & kin.) alternate titles: commercial artist, lettering

Paints or draws precise lettering to be reproduced in advertisements, books, and other printed materials, using lettering pen or brush and determining lettering design from layout sketches and instructions. May design lettering when style of letters is not specified.
GOE: 01.06.03 STRENGTH: S GED: R3 M2 L2 SVP: 6 DLU: 77

970.664-010 PAINTER HELPER, SIGN (any industry)

Assists PAINTER, SIGN (any industry) to lay out and paint letters and designs to make signs, using handtools: Cleans display boards or other display surfaces to remove foreign matter and rough places, using scraper or scouring brush. Beats dust bag against stencil on display area to create pounce pattern. Traces over pounce pattern to prepare outline for PAINTER, SIGN (any industry) to follow, using pencil. Applies coat of base paint to display surface and paints background of display, using brushes and hand rollers. May mix paint according to established formulas. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 01.06.03 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 77

970.681-010 BEN-DAY ARTIST (print. & pub.) alternate titles: tint layer

Applies benday tints (shadings in form of dots of different intensities) to drawings or to zinc or aluminum plates with inked screen or pattern: Positions mask (protective covering) over parts of drawing or plate not to be shaded, or brushes protective coating over those parts as determined by inspection of copy. Applies ink to screen or pattern, places screen or pattern over drawing or plate, and applies pressure to transfer ink from screen, using roller or burnisher. Washes ink and protective coating from parts of drawing not to be shaded.
GOE: 01.06.03 STRENGTH: L GED: R3 M1 L2 SVP: 6 DLU: 77

970.681-014 COLORER (print. & pub.)

Colors by hand or sprays designs on cards, calendars, maps, and related articles, using colored inks and pens or airbrush, following instructions or working drawings: Applies color to article by stencil or freehand method, depending on article to be colored. May mix and blend paints. May paint monograms on stationery and sprinkle metallic powder over paint and be designated Bronzer (print. & pub.). May be designated according to article colored as Map Colorer (print. & pub.).
GOE: 01.06.03 STRENGTH: S GED: R3 M1 L2 SVP: 4 DLU: 77

970.681-018 INKER AND OPAQUER (motion picture)

Traces drawings prepared by CARTOONIST, MOTION PICTURES (motion picture; radio-tv broad.) and paints tracing to render drawing opaque, using tracing pen and brush: Positions celluloid sheet over original drawing. Traces original in ink on celluloid. Reverses celluloid and brushes thin coat of opaquing paint on reverse side to render drawing opaque.
GOE: 01.06.03 STRENGTH: S GED: R3 M1 L1 SVP: 7 DLU: 77

970.681-022 MANUGRAPHER (fabrication, nec)

Traces and paints advertising material on poster paper, using projector, brushes, and drawing instruments: Projects outline of advertisement on paper, using opaque projector, and traces magnified drawing of advertisement, using pencil. Applies paint to drawing according to color chart, using artists' brushes. Prints lettering on advertisement, using T-square, straightedge, and artists' brushes.
GOE: 01.06.03 STRENGTH: S GED: R3 M2 L2 SVP: 4 DLU: 77

970.681-026 PAINTER, ANIMATED CARTOONS (motion picture; radio-tv broad.)

Applies premixed color paints on back of inked celluloids to depict animated cartoon characters, using brush: Scans celluloid on which characters have been drawn to determine number codes of paints required. Brushes paint within outline of character, according to number code specified.
GOE: 01.06.03 STRENGTH: S GED: R3 M1 L1 SVP: 4 DLU: 77

970.681-030 PAINTER, PLATE (print. & pub.) alternate titles: plate colorer

Paints colors on zinc plates, using brushes and watercolors, following colors in original design, to guide PANTOGRAPHER (print. & pub.) in transferring design to cloth-printing rollers.
GOE: 01.06.03 STRENGTH: S GED: R3 M1 L2 SVP: 6 DLU: 77

971 PHOTOENGRAVING OCCUPATIONS

This group includes occupations concerned with reproducing line or continuous tone copy on metallic printing plates for use in letterpress printing, using photoetching process; mounting and photographing copy; developing latent images on plates; and etching plates to leave raised printing surface. Group also includes occupations concerned with the fabrication and assembly of silk screen stencils, using photoetching process.

971.131-010 SUPERVISOR, PHOTOENGRAVING (print. & pub.)

Supervises and coordinates activities of workers engaged in production of photoengraved printing plates by processes, such as photographing, developing, printing, and etching: Trains workers in techniques of photoengraving processes. Examines finished printing plates to ensure conformance with company standards or customer specifications, using magnifying glass. Requisitions parts, supplies, and materials and submits cost data to management for budget planning. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 01.06.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

971.131-014 SUPERVISOR, SCREEN MAKING (textile)

Supervises and coordinates activities of workers engaged in preparing (by photographic process) and repairing screens used in printing textile materials: Confers with other supervisors to coordinate interdepartmental work flow, to determine type new screens to be produced, and estimate costs for repairing used screens. Trains new employees in techniques of photographic screen reproduction and repair or assigns employee to experienced worker for training. Interviews and hires personnel for department. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.05 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

971.261-010 ETCHER, HAND (print. & pub.)

Etches images (designs) on surface of printing rollers coated with photo or acid resist on which images have been transferred photographically or engraved pantographically, utilizing knowledge of colors, fabrics, and etching and printing techniques: Studies design sheet to determine etching requirements based on colors in design, type and weight of fabric, and printing sequence. Lifts roller onto brackets of rinsing vat with aid of ETCHER HELPER, HAND (print. & pub.). Tapes ends of roller with masking tape to limit etching to specified width. Cleans rollers preparatory to etching, using sponge, cleaning chemicals, and water. Transfers roller from rinsing vat to acid vat with aid of ETCHER HELPER, HAND (print. & pub.), using electric hoist. Turns valve to agitate acid solution with compressed air and starts machine to rotate roller in solution. Periodically removes roller from acid bath, measures etch with depth gauge, and moves fingers over surface of roller and scans etching through magnifying lens to detect processing defects, such as pinholes and collapsing ground lines. Processes roller through series of acid baths to increase depth of etch and broaden ground lines without collapsing top (unengraved portion) of design. Verifies depth of etch, using depth gauge. Scratches charcoal into etched cavities to make ground lines stand out and examines engraving to determine whether roller will print with desired effect. Transfers etched roller to cleaning vats, starts machine to spin roller in cleaning solution, and lowers brush to surface of spinning roller to remove acid-resistant coating. Dilutes acid with water to obtain etching chemicals of specified concentration.
GOE: 01.06.01 STRENGTH: M GED: R4 M2 L3 SVP: 6 DLU: 77

971.381-010 ETCHER APPRENTICE, PHOTOENGRAVING (print. & pub.) alternate titles: etcher apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 01.06.01 STRENGTH: L GED: R4 M2 L4 SVP: 8 DLU: 77

971.381-014 ETCHER, PHOTOENGRAVING (print. & pub.)

Etches metal photographic plates to produce photoengraved printing plates, using etching machines, handtools, and chemicals: Mixes caustic or acid solutions according to type metal plate being etched. Brushes protective (resist) solution on back and edges of metal plate to protect plate during etching process. Brushes protective (resist) powder over photographic emulsion on plate to protect printing design. Bakes plate to adhere powder to design, using gas heating plate. Mounts plate in etching machine and starts machine that sprays acid or caustic solution against plate to etch (eat away) areas not protected by resist solution or powder. Removes and measures plate to determine depth of etching, using depth gauge, and remounts plate in machine when etching has not attained specified depth. Washes and scrubs etched plates to remove resist solutions and photographic emulsion, using brush and caustic solution. Dries plates, using chamois cloth. Matches colors with original artwork of multicolor photographic plates to produce balanced color valves, applying knowledge of photographic printing process. May weigh plates before and after etching to determine amounts of etching solutions to be added to machine, using scales. May be designated according to type of plate etched as Copper Etcher (print. & pub.); Zinc Etcher (print. & pub.).
GOE: 01.06.01 STRENGTH: L GED: R4 M2 L4 SVP: 8 DLU: 77

971.381-022 PHOTOENGRAVER (print. & pub.) alternate titles: engraving operator; photolith operator

Photographs copy, develops negatives, and prepares photosensitized metal plates, such as copper, zinc, aluminum, and magnesium for use in printing, using photography and developing equipment and engravers' handtools: Positions copy on copy board of darkroom camera and exposes film to copy. Fastens scoured metal plate to *whirling machine* table or suspension hooks, pours photosensitizing solution on plate, and starts machine which rotates plate to distribute and dry solution evenly over plate surface. Exposes negative and plate to bright light in vacuum type printing frame to transfer image onto plate. Rolls ink onto exposed plate and washes unexposed and unfixed emulsion from plate, using running water and cotton pad to expose bare metal. Places developed plate in acid bath or etching machine to erode unprotected metal to specified depth. Mounts etched plates on wood blocks, using hammer and nails or on metal base, using thermosetting adhesive to raise printing surface type to specified height. Removes excess metal from nonprinting areas of cut, using routing machine [ROUTER (print. & pub.)]. Cuts mortises in mounted plates, using power drill and jigsaw, for insertion of type or other cuts. Modifies and repairs finished plates, using engravers' handtools, etching brush, and acid. May be designated according to type of plate made as Plate Maker, Zinc (print. & pub.).
GOE: 01.06.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

971.381-026 PHOTOENGRAVER APPRENTICE (print. & pub.)

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 01.06.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

971.381-030 PHOTOENGRAVING FINISHER (print. & pub.) alternate titles: plate finisher, photoengraving

Blocks out, re-etches, or intensifies designs to refine or repair copper, zinc, aluminum, and magnesium photoengraved printing plates according to copy and specifications, using artist's brushes and hand engraving and burnishing tools: Applies chalk to engraved surface and examines cut under magnifying glass to detect damaged halftone dots and evaluate quality of etching against copy. Outlines images, cuts border, blocks out backgrounds, and raises halftone dots, using engraving tools. Burnishes high halftone dots to correct defects in printing quality and contrast of cut, using burnishing tools. Repairs breaks in type, using handtools. May reetch or reengrave photographic plates to correct color tone valves or to intensify designs, using etching machine or engraver's handtools. May make proofs of completed monochrome and multicolor plates [PROOF-PRESS OPERATOR (print. & pub.)].
GOE: 01.06.01 STRENGTH: L GED: R4 M2 L2 SVP: 8 DLU: 77

971.381-034 PHOTOENGRAVING PRINTER (print. & pub.) alternate titles: proof-plate maker; stripper and printer

Exposes film or glass negatives or positives to artificial light to transfer image onto photosensitive metal plates used for printing, applying knowledge of photographic and layout techniques, using photographic equipment, handtools, and cutting machines: Washes plate to remove foreign matter, using brush, abrasive, and running water. Pours photosensitive solution onto face of plate and distributes solution evenly, using *whirling machine*. Positions sensitized plate in contact with photographic negative under vacuum frame and directs lights through negative for specified time to print image on sensitized coating of plate. Rolls ink onto face of plate or immerses plate in developing solution and washes with water to remove coating which has not been affected by light. Dusts ink-developed plates with protective powder and heats plates over gas flame to produce surface resistant to etching acid. Surprints line negatives over halftone print to introduce type or other solid matter and combines several subjects stripped to separate flats by successive printing onto plate in register. Cuts metal plates to size, using squaring shear, circle saw, or bandsaw. May mix chemicals. May strip negatives [STRIPPER (print. & pub.)].
GOE: 01.06.01 STRENGTH: L GED: R4 M2 L2 SVP: 8 DLU: 77

971.381-038 PHOTOENGRAVING PROOFER (print. & pub.) alternate titles: prover

Proves printing quality and register of photoengraved printing plates, using hand or power driven flatbed or cylinder press, and prepares data sheet on color matching or ink modification to improve printing quality and register according to copy or customer specifications: Clamps plates to press, applies ink to rollers, and positions guides, grippers, and fingers to guide paper through press. Wraps packing sheets and tympan around cylinder to form cushion. Cuts and pastes overlays under tympan sheet to increase impression of low areas. Depresses pedal to open grippers, inserts blank sheet, and turns crank or starts motor to print set of proofs for progressive proof book for both black and white and color plates. Prepares data on color matching and ink modification to guide

pressman. Examines proofs to determine printing quality of dots and lines, using magnifier, and marks corrections, such as reetching and additional finishing. May be designated according to work proofed as Proofer, Black And White (print. & pub.); Proofer, Color (print. & pub.).
GOE: 05.05.13 STRENGTH: L GED: R4 M2 L2 SVP: 8 DLU: 77

971.381-040 PHOTOENGRAVING-PROOFER APPRENTICE (print. & pub.) alternate titles: proofer apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.13 STRENGTH: L GED: R4 M2 L2 SVP: 8 DLU: 77

971.381-046 SCREEN MAKER, TEXTILE (textile)

Prepares stencils used in screen printing of textile materials: Assembles prefabricated parts to construct silk screen frame, using handtools and wing nuts. Clamps frame and silk screen material in stretching machine and activates machine that stretches screen material over frame. Glues screen to frame and cuts excess material from around frame, using glue applicator and scissors. Coats screen with photosensitive emulsion, using brush. Positions negative on glass bed of photoprint machine and centers screen over negative. Activates photoprint machine that exposes screen and negative to high intensity light to develop pattern on screen. Washes unexposed emulsion from screen, using water and hose. Applies resist coating to screen to protect pattern, using brush, and removes resist coating from open areas of pattern, using suction machine.
GOE: 05.10.05 STRENGTH: M GED: R4 M2 L2 SVP: 7 DLU: 77

971.381-050 STRIPPER (print. & pub.) alternate titles: negative assembler; negative turner

Strips photographic negative from film base and mounts negative on glass plate or platemaking *flat* to be used in preparing photoengraving plates, using art layout, blueprint, and handtools: Examines negative to detect defective areas, using lighted viewing table. Spots or blocks out defective areas, using opaque and brush. Pours rubber solution and collodion over film base to toughen negative. Dries base, using blotter, and cuts negative to size, using knife and straightedge. Immerses glass or film base in acid bath to loosen negative. Strips negative from base. Mounts and aligns negative on glass plate or platemaking flat, according to art layout, blueprint, and color register. Rubs negative to remove excess water and to ensure adhesion to plate, using blotter. May control equipment to produce photographic negatives preparatory to stripping. May be designated according to type of negative stripped as Stripper, Black And White (print. & pub.); Stripper, Color (print. & pub.).
GOE: 01.06.01 STRENGTH: S GED: R4 M2 L3 SVP: 8 DLU: 77

971.381-054 STRIPPER APPRENTICE (print. & pub.) alternate titles: negative-turner apprentice; stripper-and-opaquer apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 01.06.01 STRENGTH: S GED: R4 M2 L3 SVP: 8 DLU: 77

971.382-014 PHOTOGRAPHER, PHOTOENGRAVING (electron. comp.; print. & pub.) alternate titles: contact-frame operator; engraving photographer

Sets up and operates camera to photograph drawings, sketches, or other material to produce negatives for transfer to printing plates, rollers, or printed circuit boards: Mounts copy on holder, aligning centerline on copy with centerline on holder. Studies copy and order sheet to determine photographic techniques required to transfer desired effect onto film, according to plate or roller dimensions, type of design, colors in design, and engraving requirements. Computes camera settings required to reproduce sketch to specified scale according to dimensions of printing plates or rollers. Focuses camera, compensating for difference in size and distortions in copy. Measures opening in back of camera to verify settings, using steel tape. Positions film on vacuum board, closes board against back of camera, and locks board in position. Arranges arc lamps for even distribution of light and exposes film for specified length of time. Removes exposed film from camera and develops film in series of developing, rinsing, and fixing baths, or using automatic film processing equipment. Compares developed film with design to determine whether desired effect has been reproduced. Hangs film on line to dry. When producing negatives for halftone printing, inserts screen in front of film to reduce copy to dots for reproduction. When producing multicolor prints, fits color filters over lens. May process sensitized metal plates for subsequent etching [PHOTOENGRAVING PRINTER (print. & pub.)].
GOE: 01.06.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

971.382-018 REPEAT-PHOTOCOMPOSING-MACHINE OPERATOR (print. & pub.) alternate titles: composer

Operates photocomposing machine to repeat designs on film for transfer to sensitized copper rollers used in printing such products as wallpaper and oilcloth: Sketches design layout on worksheet according to sequence in which design is to be repeated around roller. Computes machine setting required to repeat design on film as laid out on worksheet, using standard formulas and tables. Mounts positive print on negative frame, aligning centerline on print with centerline on frame, and tapes print in position. Masks area around print with black paper. Centers film on backboard of machine and tapes film in position. Lifts backboard against negative frame and locks in position. Moves negative frame in position for exposing film to first repeat of design, following computations on worksheet. Starts compressor that creates vacuum between negative frame and backboard, drawing backboard against negative frame. Exposes film to light through positive print for specified time, transferring image from print to film. Repeats process until design has been repeated along vertical and horizontal plane of film a specified number of times. Removes exposed film from machine and processes film through series of chemical baths to develop, fix, and rinse film. Examines developed film for exposure errors and misalignment of repeated designs. Agitates film in chemical solution to etch out overexposed film. Discards unusable film. Hangs developed film on line to dry.
GOE: 01.06.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

971.684-010 BLOCKER II (print. & pub.) alternate titles: film, masker; film painter; negative checker

Examines photographic negatives for defects and paints over defects preparatory to transferring images to sensitized zinc plates or copper rollers, using measuring instruments, brushes, and handtools. Spreads negatives over illuminated table and marks register points on negatives, using straightedge, triangle, and scriber. Examines negatives to detect pinholes and to locate line along which design will be fitted around sensitized rollers or mounted on zinc plates. Masks (blocks out) pinholes and extra images on film, using brushes and opaque. Scratches out undesirable spots and lines, using knife or pin. Compares masked films with original design to verify conformance to specifications. May lay out and print customer's legend on films. May correct spelling, punctuation, and grammatical errors on negative proofs, using standard proofreading symbols.
GOE: 06.03.02 STRENGTH: S GED: R3 M2 L2 SVP: 4 DLU: 77

971.684-014 STAGER (print. & pub.) alternate titles: roller painter

Paints out specified portions of etched design on printing rollers to prevent further etching or paints around images on printing rollers to cover pinholes and scratches, using brushes and acid-resistant paint.
GOE: 05.12.14 STRENGTH: S GED: R3 M2 L1 SVP: 4 DLU: 77

971.685-010 ROLLER-PRINT TENDER (print. & pub.) alternate titles: roller printer

Tends equipment to transfer design images from master film to copper printing rollers: Marks register points on ends of rollers, using straightedge and scriber. Inserts mandrel through roller and lifts roller onto brackets of sensitizing machine, using hoist. Starts machine that rotates roller. Turns valve to spray roller with water and cleans coated roller, using cloth, cleaning solution, and pumice. Dries rollers, using paper towel. Fills spray gun with sensitizing solution and turns valve to spray solution onto rotating roller. Transfers sensitized roller to copy machine, using electric hoist. Positions master film over roller and aligns register points on film with register points on roller. Covers master film with sheet of transparent film and engages ends of transparent film in machine drive. Tapes master film to transparent film, using masking tape. Lifts ultraviolet light frame into position over roller and starts machine that rotates sensitized roller and film, exposing sensitized roller to images on film. Transfers exposed roller to developing bath, using electric hoist. Turns roller in developing solution for specified time to dissolve sensitized coating from areas of roller that were exposed to light through film. Transfers developed roller to dye bath and turns roller in bath to dye unexposed area of roller. Transfers dyed roller to wash vat and rinses excess dye from roller. Dries roller, using cloth.
GOE: 05.10.05 STRENGTH: V GED: R3 M2 L1 SVP: 3 DLU: 77

971.687-010 ETCHER HELPER, HAND (print. & pub.)

Assists ETCHER, HAND (print. & pub.) in etching designs on copper printing rollers: Trucks rollers from storage area to etching room. Inserts mandrel through roller and screws collar onto mandrel to hold roller in position. Assists ETCHER, HAND (print. & pub.) in lifting rollers onto machine brackets and in transferring rollers from one vat to another. Turns crank on mandrel to rotate rollers in rinsing and etching vats. Cleans solvent and acid-resistant coating from etched rollers by rubbing with sawdust or using absorbent cloth. Removes mandrel from etched rollers and trucks rollers to mending bench. Drains vats of spent etching solutions and performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.03 STRENGTH: H GED: R2 M1 L1 SVP: 2 DLU: 77

972 LITHOGRAPHERS AND RELATED OCCUPATIONS

This group includes occupations concerned with reproducing line or continuous tone copy on metallic printing plates for use in lithographic printing using lithographic process; photographing, scanning and assembling copy to produce film; and exposing and developing latent images on plate.

972.137-010 SUPERVISOR, PREPRESS (print. & pub.) alternate titles: supervisor, prep

Supervises and coordinates activities of workers engaged in photography, image assembly, platemaking, and other prepress activities in preparation for offset lithographic printing: Examines work to ensure conformity to job specifications and company standards. Maintains inventory of supplies and materials, such as film, layout sheets, and plates. Oversees maintenance and repair of machines and equipment. Performs other duties as described under SUPERVISOR (any industry) Master Title. May perform minor maintenance and repair of machines and equipment. May be designated according to department supervised as Camera Supervisor (print. & pub.); Scanner Supervisor (print. & pub.); Supervisor, Offset-Plate Preparation (print. & pub.); Supervisor, Stripping (print. & pub.); Systems Manager (print. & pub.).

GOE: 01.06.01 STRENGTH: L GED: R4 M4 L4 SVP: 8 DLU: 89

972.281-010 DOT ETCHER (print. & pub.) alternate titles: color corrector; lithographer retoucher; process artist; tone artist

Increases or reduces size of photographic dots by chemical or photomechanical methods to make color corrections on halftone negatives or positives to be used in preparation of lithographic printing plates: Examines film on light table to determine specified color and color balance, using magnifying glass or densitometer. Compares proof print of color separation negative or positive with customer's original sample or copy and standard color chart to determine accuracy of reproduction. Identifies and marks color discrepancies on print and film. Prepares dyes or other chemical solutions according to standard formulas and applies solution to inaccurately colored areas of film to correct color by chemical method. Blocks out or modifies color shades of film, using template, brushes, and opaque. Prepares photographic masks to protect areas of film not needing correction, using contact frame and automatic film processor or by manually cutting masking material, to correct color by photomechanical method. Determines extent of correction and exposure length needed based on experience or predetermined exposure and color charts. Places masks over separation negatives or positives and exposes film for specified time, using contact frame and automatic film processor to reduce size of photographic dots to increase or reduce color. Applies opaque to defective areas of film to block out blemishes and pinholes.

GOE: 01.06.01 STRENGTH: L GED: R4 M3 L2 SVP: 8 DLU: 89

972.281-018 DOT ETCHER APPRENTICE (print. & pub.) alternate titles: lithographic retoucher apprentice; tone-artist apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.

GOE: 01.06.01 STRENGTH: L GED: R4 M3 L2 SVP: 8 DLU: 77

972.281-022 STRIPPER, LITHOGRAPHIC I (print. & pub.) alternate titles: color stripper; commercial stripper; image assembler; process stripper

Plans composition of *film flat* according to customer's requirements, applying knowledge of film assembly, pieces together and positions negative or positive film on layout sheets; and makes composite film, using precision measuring instruments, artist's work aids and photographic equipment, to assemble multi- or single-color film flat used in production of lithographic printing plates: Examines materials received with order, such as pasteup, artwork, film, prints, or customer's instructions, to determine size and dimensions, number of colors on job, and camera work needed, such as number of base negatives, halftones, color separations (film for each primary color), and *screen tints*. Determines proportions needed to reduce or enlarge photographs and graphics to fit in designated areas of film flat and prevent color overlap, using calculator or proportion scale. Receives base negatives, halftones, and color separations from PHOTOGRAPHER, LITHOGRAPHIC (print. & pub.) 972.382-014 and SCANNER OPERATOR (print. & pub.) 972.282-010 to be used in composition of film flat. Touches up negatives to conceal pinholes and other imperfections, using artist's brush and opaque material, or examines positive film, using magnifier, and repairs broken lines and incomplete and missing half-tone dots, using needle and crayon pencil. Tapes layout sheet or grid to illuminated table and positions masking sheet and transparent plastic sheet over layout grid to prepare for positioning of film. Positions film negatives or positives on masking sheet or transparent plastic sheet according to predetermined reference marks on layout sheet and inserts illustrations, halftones, or four-color process negatives in windows of base negatives or complementary flats (flats that will be exposed onto same plate), using tape, triangles, straightedges, dividers, and magnifiers. Selects and inserts screen tints in film flat, using knowledge of dot percentages required to obtain specific colors. Cuts out masks, using razor blade, artist's knife, or mask cutting tool, and arranges negatives in order, to prepare for contact printing, plate exposure, or proof making. Aligns multiple negatives and masks over unexposed film in vacuum frame and activates light source to make negatives or positives for final film of each color. Determines or approves plans and page sequences to lay out job for specific printing press. Pieces together and aligns negatives or positives on masking sheet or transparent plastic sheet, applying knowledge acquired from experience in film assembly to assure register and fit with all units of color, to assemble film flat. Inverts assembled film flat on table and cuts windows behind image areas of negatives or positives, using razor blade or artist's knife, to allow exposure to plate or film. Routes completed negative or positive flat to proofing area for preparation of positive or negative proof. Examines proof returned by customer and makes corrections or remakes film to meet customer's specifications. Routes completed negative or positive flat to LITHOGRAPHIC PLATEMAKER (print. & pub.) 972.381-010 for preparation of positive or negative lithographic printing plate. May draw ruled lines and borders around negatives or positives, using scribing tools. May make proof from film flat to determine accuracy of flat.

GOE: 01.06.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 89

972.282-010 SCANNER OPERATOR (print. & pub.) alternate titles: electronic scanner operator; laser-beam-color-scanner operator

Analyzes original copy (material to be reproduced) and operates electronic scanner to produce color-separated positive or negative films for use in production of lithographic printing plates: Analyzes original copy to evaluate color density, gradation highlights, middle tones, and shadows, using densitometer and knowledge of light and color. Types on scanner keyboard or touches mouse to symbols on scanner video display unit to input software, or turns knobs or punches buttons to set scanner to specific color density, size, screen ruling, and exposure adjustments. Loads film into film holder, places holder in exposing chamber and starts automatic vacuum system mechanism that loads and secures film on scanner drum. Activates scanner to produce positive or negative films for each primary color and black in original copy. Unloads exposed film from scanner and places film in automatic processor to develop image on film. Inspects developed film for specified results and quality, using magnifying glass and scope, and forwards acceptable negatives or positives to STRIPPER, LITHOGRAPHIC (print. & pub.) I 972.281-022, PROOFER, PREPRESS (print. & pub.) 972.381-034, or customer. Performs tests to determine exposure adjustments on scanner and adjusts scanner controls until specified results are obtained. May position color transparency, negative, or reflection copy on scanning drum and mount drum and head on scanner.

GOE: 05.10.05 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 89

972.282-018 ELECTRONIC MASKING SYSTEM OPERATOR (print. & pub.) alternate titles: electronic plotting system operator

Operates computerized masking system to produce stripping masks used in production of offset lithographic printing plates: Positions artist's layout (comprehensive) on digitizing table of electronic masking system to prepare for data entry in system memory. Studies layout sheet to determine shapes of windows drawn on layout sheet. Selects options on menu of electronic masking system, such as shape, dimensions of designs to be drawn, register marks, and retrieval of stored designs. Touches symbol of option selected on menu with mouse (hand held input device) and presses button on mouse to activate option. Touches reference points of designs on layout sheet, using mouse, and presses button of mouse to enter coordinates of design in system memory. Views monitors for feedback and error prompts, for visual representations of work in progress, and for numerical information such as width of line and last point plotted. Presses button to transfer data from system memory to disk. Loads drafting unit with masking material to prepare for plotting and scoring of programmed figures or loads film into plotting drum to prepare for photographic mask exposure. Presses button to activate vacuum to hold masking material in place and to activate drafting unit that scores masking material with programmed figures or activates plotting drum to make photographic mask exposure. Removes scored masking material from drafting table, places material on light table and peels scored figures from masking material, using needle and tape, or removes film from plotting drum and puts film in automatic film processor, to create masks to be used by STRIPPER, LITHOGRAPHIC (print. & pub.) I 972.281-022. May operate electronic plotting system to draw artwork positions on pasteup.

GOE: 01.06.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 89

972.284-010 FILM FLAT INSPECTOR (print. & pub.)

Inspects *film flats* for quality, content, and positioning of elements at printing establishment: Places film flats and companion materials, such as artwork, pasteups, layouts, film, and corrected proofs, on light table and examines materials, using magnifying glass to view details in materials. Examines film flat label for identifying information, such as date and job number. Compares film flat to companion materials, using knowledge of film assembly, and measures film flat with ruler to verify conformance to specifications, such as positioning of pages in rotation for folding, trim marks, colors on pages, window sizes, and size, colors, and positioning of elements, such as halftones, screen tints, and type. Examines film flats for defects, such as holes or scratches on film, overlapping or unaligned elements, and incorrect dot percentages in halftones. Returns film flat to STRIPPER, LITHOGRAPHIC (print. & pub.) I 972.281-022 for corrections, or repairs defects, such as pinholes or incomplete and missing halftone dots, with opaque material or needle and crayon pencil.

GOE: 06.03.02 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 89

972.381-010 LITHOGRAPHIC PLATEMAKER (print. & pub.) alternate titles: platemaker

Exposes sensitized metal plate to positive or negative film, using vacuum frame, to produce offset lithographic printing plates: Punches holes in light-sensitive plate with register punch and inserts register pins in holes to prepare plate for contact with positive or negative film. Places plate on bed of vacuum frame and inserts positives or negatives on register pins to align positives or negatives with each other and with plate. Places masking paper on areas of plate not covered by positives or negatives to prevent exposure of those areas. Lowers top of vacuum frame onto plate and film assembly and activates vacuum to maintain contact between negative or positive film and plate. Sets timer to activate ultraviolet light that exposes plate to positives or negatives. Removes plate and film assembly from vacuum frame and places exposed plate in automatic processor to develop image and dry plate. Performs tests to determine time required for exposure by exposing plates and comparing exposure to gray scale (scale used to measure tone ranges). May replenish chemical solutions in automatic plate processor to maintain processor in working order. May expose plates, using step-and-repeat machines. May make proofs.

GOE: 01.06.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 89

972.381-014 LITHOGRAPHIC-PLATE-MAKER APPRENTICE (print. & pub.) alternate titles: lithographic-press-plate-maker apprentice, photomechanical

Performs duties as described under APPRENTICE (any industry) Master Title.

GOE: 01.06.01 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

972.381-018 SKETCH MAKER II (print. & pub.)

Sketches, photographs, and etches cloth designs on zinc plates in form that can be transferred to printing rollers by mechanical pantograph process, using precision measuring and drawing instruments, camera, and etching chemicals: Studies design and production sheet to determine number of times design will be repeated around roller, size of sketch, and number of plates required to complete sketch. Lays out reference lines on design according to location of one complete repeat of pattern and number of plates required to sketch pattern, using straightedge and pencil. Draws reference lines on zinc plates, using dividers, straightedge, and pencil. Places design under weighted door of camera and moves camera up graduated scale to enlarge pattern to specifications. Positions zinc plate on table beneath camera and aligns reference lines on plate with reference lines of reflected design. Traces around reflected outline of design, using diamond stylus, leaving specified spacing between colors to compensate for color, type of cloth, and etching process. Corrects flaws left in design by designer or artist, and reproduces design so that it will be practical for printing. Immerses sketched plate in acid solution to etch (deepen) lines of design. Washes etched plates, using water and brush. Records number of times design will be repeated around roller, number and size of plates in design, and spacings left between colors on production sheet.
GOE: 01.06.01 STRENGTH: S GED: R4 M2 L2 SVP: 7 DLU: 77

972.381-022 STRIPPER, LITHOGRAPHIC II (print. & pub.) alternate titles: book stripper; stripper, black and white; stripper-opaquer

Positions negative or positive film on layout sheets to assemble single or multiple color *film flats* used in production of lithographic printing plates, according to customer specifications, using precision measuring instruments and artist's work aids: Touches up negatives to conceal pinholes and other imperfections, using artist's brush and opaque material or examines positive film, using magnifier, and repairs broken lines and incomplete and missing halftone dots, using needle and crayon pencil. Tapes layout sheet or grid to illuminated table and positions masking sheet and transparent plastic sheet over layout sheet to prepare for positioning of film. Positions film negatives or positives on masking sheet or transparent plastic sheet according to predetermined reference marks on layout sheet and inserts halftones, *screen tints* or four-color process negatives in windows of base negatives or complementary flats (flats to be exposed onto same plate), using tape, triangles, straightedges, dividers, and magnifiers. Inverts assembled film flat on table and cuts windows behind image areas of negatives or positives, using razor blade or artist's knife to allow exposure to plate or film. Routes completed negative or positive flat to platemaking department for preparation of positive or negative lithographic printing plate or proof. May select screen tints to be inserted in film flat, using knowledge of dot percentages required to obtain specific colors. May draw ruled lines and borders around negatives or positives, using scribing tools.
GOE: 01.06.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 89

972.381-026 TRANSFERRER (print. & pub.) alternate titles: press-plate maker

Transfers images, by hand, from photographic negatives to zinc plates for printing by lithographic process: Covers surface of grained plates with coating of photosensitive chemicals, using brush, and allows plate to dry. Mounts negative and plate in camera and activates camera that exposes sensitized plate to strong artificial light through photographic negative for specified period of time, thus reproducing (transferring) image from negative to plate.
GOE: 01.06.01 STRENGTH: L GED: R3 M1 L1 SVP: 6 DLU: 77

972.381-030 PASTE-UP ARTIST (print. & pub.) alternate titles: keyliner; mechanical artist

Assembles typeset copy and artwork into pasteup for printing reproduction: Measures and marks board according to GRAPHIC DESIGNER (profess. & kin.) 141.061-018 or artist's layout to indicate position of artwork, typeset copy, page edges, folds, and colors, using ruler and drafting instruments. Measures artwork and layout space of artwork on pasteup and compares measurements, using ruler and proportion wheel to determine proportions needed to make reduced or enlarged photographic prints for pasteup. Cuts and trims typeset copy and artwork to specified size, applies adhesive, and aligns artwork and typeset copy on board, following position marks, and removes excess adhesive from board, using scissors, artist's knife, and drafting instruments. Tapes transparent plastic overlay to board, positions and applies copy to plastic, and applies masking film to artwork layout space on overlay to create clear space on negative where artwork can be added later by STRIPPER, LITHOGRAPHIC (print. & pub.) I 972.281-022. Indicates crop marks and enlargement or reduction measurements on photographs with grease pencil to prepare photographs for STRIPPER, LITHOGRAPHIC (print. & pub.) I and covers photographs with tissue paper to protect photographs. Tapes tracing paper to board to protect artwork and copy and writes specifications on tracing paper to provide information to PHOTOGRAPHER, LITHOGRAPHIC (print. & pub.) 972.382-014; STRIPPER, LITHOGRAPHIC (print. & pub.) I; and OFFSET-PRESS OPERATOR (print. & pub.) I 651.382-042. May make negatives or prints of artwork, using photographic equipment, to prepare artwork for pasteup. May operate phototypesetter to prepare typeset copy for pasteup. May operate electronic plotter to draw artwork positions on pasteup.
GOE: 01.06.01 STRENGTH: L GED: R4 M4 L3 SVP: 7 DLU: 89

972.381-034 PROOFER, PREPRESS (print. & pub.)

Makes single or multicolored prepress proofs of text and graphics, performing any combination of following duties: Places base material and color coated sheet or light sensitive film into laminating machine that transfers pigment from sheet or laminates light sensitive film to base. Exposes base to corresponding color-separated negative or positive film, using vacuum frame, and places color coated base in automatic processor that develops and reveals color image on base, or places light sensitive base into corresponding color bin of automatic toner machine that deposits powdered ink pigment onto image. Registers succeeding color negatives or positives over base, using magnifier or register device system, and repeats process to produce multicolor proof. Exposes film to proofing paper to make single-color proof. Exposes film to colored base material to produce overlay of each color, and assembles and aligns individual overlays on top of one another to form multicolor overlay proof. Compares test exposures to quality control color guides to determine data for exposure settings. Measures density levels of colors or color guides on proofs, using densitometer, and compares readings to set standards. Mixes powdered ink pigments, using ink matching book and measuring and mixing tools, to create nonstandard colors, and applies ink pigments to base by hand. Immerses exposed materials in chemical baths to hand-develop proofing materials. Method used to make proof is determined by brand of equipment and quality of proof required.
GOE: 05.10.05 STRENGTH: L GED: R3 M2 L3 SVP: 5 DLU: 89

972.381-038 PASTE-UP ARTIST APPRENTICE (print. & pub.)

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 01.06.01 STRENGTH: L GED: R4 M4 L3 SVP: 7 DLU: 77

972.382-010 PHOTOGRAPHER APPRENTICE, LITHOGRAPHIC (print. & pub.) alternate titles: copy-camera-operator apprentice; lithographer apprentice; photolithographer apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 01.06.01 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 77

972.382-014 PHOTOGRAPHER, LITHOGRAPHIC (print. & pub.) alternate titles: lithographic-camera operator; photolithographer; photolithographic process worker; process-camera operator

Sets up and operates horizontal or vertical process camera to photograph illustrations and printed material and produce film used in preparation of lithographic printing plates: Mounts material to be photographed on copyboard of camera and adjusts camera settings to enlarge or reduce size of copy to be reproduced. Selects and places screen over high contrast film in camera to reproduce image with dot pattern for halftone printing. Places color filters between lens and film to produce four-color separations. Performs exposure tests to determine line, halftone and color reproduction exposure lengths for various photographic factors, such as type of camera, screens, films, and light intensity. Measures degrees of darkness (density) of continuous tone images to be photographed, using densitometer, and enters readings into exposure control system of process camera to set exposure time for halftone images. Adjusts lens and copyboard for reduction or enlargement of copy and focus, adjusts lights, and exposes high contrast film for predetermined period of time. Places film in automatic film processor that develops, fixes, washes, and dries film. May immerse film in series of chemical baths to develop image on film and hang film on rack to dry for manual method of processing film. May measure original layouts and determine proportions needed to make reduced or enlarged photographic prints for pasteup.
GOE: 01.06.01 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 89

972.382-018 PHOTO MASK MAKER, ELECTRON-BEAM (electron. comp.) alternate titles: electron-beam operator

Operates computer-controlled electron-beam exposure equipment to transfer circuit pattern onto photoresist-coated photo mask plates for subsequent use in fabrication of semiconductor devices: Loads disk or tape of pattern information into equipment, and positions unexposed photo mask plate in vacuum chamber of equipment. Types commands to enter exposure specifications and production instructions and activate equipment that directs electron beam at specified locations on coated photo mask plate to expose photoresist. Develops and etches exposed photo mask plate, using automatic developing and etching equipment. Inspects pattern on photo mask plate for conformance to specifications, using microscope and specialized inspection devices.
GOE: 05.10.05 STRENGTH: L GED: R3 M2 L3 SVP: 6 DLU: 86

972.382-022 PHOTO MASK TECHNICIAN, ELECTRON-BEAM (electron. comp.)

Generates computer tape or disk of processing instructions for use in electron-beam fabrication of photo masks used in integrated circuit (IC) manufacture, using computer graphics system and software and applying knowledge of photo mask layout: Reviews work order and specification manuals to determine data required to lay out array (arrangement of integrated circuit layer patterns) for reproduction onto photo mask. Enters commands into computer, using keyboard, to retrieve from data file and display on display screen existing array format information. Calculates additional array information required, such as array center and coordinates, number of rows and columns in array, and location of test patterns in array, following specification manual and work order instructions. Locates file (computer tape) relating to specified IC layer and loads tape into computer tape drive. Enters specified commands into computer, using keyboard to retrieve IC layer pattern from file and display pattern on array format on computer display screen. Positions IC layer patterns and test

patterns within array format on display screen, using knowledge of photo mask layout and computer graphics. Enters electron-beam exposure instructions into computer and keys in commands to transfer array data and exposure instructions onto computer disk or tape for use by PHOTO MASK MAKER, ELECTRON BEAM (electron. comp.) 972.382-018. May enter commands into computer, using keyboard, to transfer IC layer patterns onto hard copy (plots), using plotter peripheral equipment. May inspect plots of IC layer patterns for layout errors.
GOE: 05.10.05 STRENGTH: L GED: R3 M3 L3 SVP: 6 DLU: 86

972.384-014 PLATEMAKER, SEMICONDUCTOR PACKAGES (electron. comp.)

Prints and develops printing plates used in printing symbols and numbers on semiconductor packages: Types identifying symbols and numbers on paper or rubs transfer sheet to transfer symbols and numbers onto paper. Places paper containing identification information on camera grid. Places specified lens on camera holder and presses buttons and turns handles to adjust camera focus. Mounts film in guide slot of camera and pushes button to expose film to identify information. Removes exposed film from camera and places film in developer that automatically develops and dries negative. Inserts negative (containing image of identification information) and sheet of polymer into exposure machine. Activates machine to expose negative polymer sheet to print negative image on polymer and form printing plate. Removes polymer plate and places plate in envelope. Maintains production records and machines. May place semiconductor packages in oven to set or dry printing. May immerse printed packages in chemical solution to test durability of printing.
GOE: 05.10.05 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 86

972.681-010 MUSIC ENGRAVER (print. & pub.)

Engraves words and music on zinc plates used to print sheet music, following original manuscripts: Rules staff lines on plate, allowing for even margins. Stamps letters, words, and musical symbols in specified position on plate, using metal dies and hammer. Taps and scrapes engraved plates to smooth surface and prepare plates for use in printing presses, using ball peen hammers and hand scrapers.
GOE: 01.06.01 STRENGTH: S GED: R3 M1 L1 SVP: 6 DLU: 77

972.682-010 PLATE GRAINER (print. & pub.) alternate titles: plate preparer; zinc-plate grainer

Operates plate graining machine to roughen (grain) faces of flexible sheets of zinc or aluminum metal for use in offset photolithographic printing: Operates power shear to cut sheets of aluminum and zinc to size, and clamps them to bed of graining machine tub (tray). Operates hydraulic lifting and tilting mechanism attached to machine to load and unload machine with specified amount of steel or wooden balls, water, and abrasive. Washes sediment from plates with water hose at end of graining cycle and places on conveyor for further washing under water jets and drying under heating unit. Examines each plate with magnifier at inspection table for uniformity, size, and structure of grain. Stacks plates in shipping crate. Rolls out and hammers used plates to remove gripper marks, dents, and bent corners. Lubricates machine and replaces worn bearings. May grain plates by wet or dry sandblasting. May feed plates through graining machine having reel-type nylon brush which roughens surface with abrasive and water. May grain plates with glass marbles.
GOE: 06.02.02 STRENGTH: L GED: R3 M2 L3 SVP: 7 DLU: 77

972.682-014 PLATE-GRAINER APPRENTICE (print. & pub.) alternate titles: stone-and-plate-preparer apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 06.02.02 STRENGTH: L GED: R3 M2 L3 SVP: 7 DLU: 77

972.687-010 PLATE INSPECTOR (print. & pub.)

Inspects offset lithographic printing plates for quality and content at printing establishment: Visually examines plates for defects, such as spaces, spots, broken type, and crooked or overlapping halftones, and views film and *film flat* used to produce plates to determine cause of defect. Compares halftones and *screen tints* on plates to film flat, using magnifier, to detect overdevelopment or underdevelopment of plates. Measures plates with ruler and compares measurements and appearance of plates to prepress proofs to verify accuracy of positioning and presence of artwork and type for each color. Applies correcting solutions to plates or notifies supervisor of defects and suspected causes. Delivers plates meeting establishment criteria and companion materials, such as artwork, proofs, pasteups, film, and film flats, to press for printing.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 89

973 HAND COMPOSITORS, TYPESETTERS, AND RELATED OCCUPATIONS

This group includes occupations concerned with setting and distributing type by hand; making up and tearing down forms, including handset and machine-set type, mounted plates, and spacing material; locking forms; and pulling proofs. Occupations concerned with typesetting by word processing methods are found in Group 203.

973.137-010 SUPERVISOR, COMPOSING-ROOM (print. & pub.)

Supervises and coordinates activities of workers engaged in setting type by hand and machine for printing books, magazines, newspapers, catalogs, and pamphlets. Inspects typesetting operations to verify conformance with work order specifications. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.13 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 77

973.381-010 COMPOSITOR (print. & pub.) alternate titles: typesetter; typographer

Sets type by hand and machine, and assembles type and cuts in galley, for printing articles, headings, and other printed matter, determining type size, style, and compositional pattern from work order: Measures copy with line gauge to determine length of line. Sets composing stick to line length indicated on line gauge. Selects type from type case and sets it in compositional sequence, reading from copy. Inserts spacers between words or units to balance and justify lines. Transfers type from stick to galley when setup is complete. Inserts leads, slugs, or lines of quads between lines to adjust length of setup. Prepares proof copy of setup, using proof press. Examines proof for errors, corrects setup, and forwards it to imposing stone or bank. Cleans type after use and distributes it to specified boxes in type case. May set type to print copy that is unaccompanied by specifications, using knowledge of composition and printing processes. May be designated Job Compositor (print. & pub.) when setting type in commercial printing establishments or Ad Compositor (print. & pub.) when assembling type and cuts for display advertisements.
GOE: 05.05.13 STRENGTH: L GED: R4 M2 L3 SVP: 8 DLU: 77

973.381-014 COMPOSITOR APPRENTICE (print. & pub.) alternate titles: typesetter apprentice

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.13 STRENGTH: L GED: R4 M2 L3 SVP: 8 DLU: 77

973.381-018 JOB PRINTER (print. & pub.) alternate titles: country printer; printer

Sets type according to copy and operates cylinder or automatic platen press to print complete job order: Selects type from type case and inserts type in printer's stick to reproduce material in copy. Inserts spacers between words and leads between lines. Slides type from stick into galley. Removes assembled type from galley and places type on composing stone. Places chase over type, inserts quoins, and locks chase to hold type. Lays form (type in locked chase) on bed of proof press, inks type, fastens sheet of paper to press roller, and pulls roller over form to make proof copy. Reads proof for errors and clarity of impression. Corrects errors by resetting type and improves impression by tapping face of type with hammer. Positions form (type in locked chase) on bed of press and tightens clamps, using wrench. Fills ink fountain and moves lever to adjust flow of ink. Sets feed guides according to size and thickness of paper. Runs proofsheet through press and examines sheet for clarity of impression. Pushes button to start press, examines printed sheets, and adjusts press when printing is defective. Cleans ink rollers at end of run.
GOE: 05.05.13 STRENGTH: M GED: R4 M2 L3 SVP: 8 DLU: 77

973.381-022 JOB-PRINTER APPRENTICE (print. & pub.) alternate titles: country-printer apprentice; printer's devil

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.13 STRENGTH: M GED: R4 M2 L3 SVP: 8 DLU: 77

973.381-026 MAKE-UP ARRANGER (print. & pub.) alternate titles: stone hand

Arranges, groups, and locks galley setups of type, cuts, and headings in chases, according to dummy makeup sheet, for direct printing, reproduction proofs, or fabrication of stereotype and electrotype plates: Positions chase on imposing stone and transfers type and cuts from galley to chase, arranging type forms and units as specified on makeup sheet. Inserts lead or wooden strips between forms and units to maintain spacing during printing. Places quoins between type matter and chase frame and turns quoin key or setscrews in chase frame to lock type in place. May refile type in storage cabinets or dump type in remelt box subsequent to printing. May cut wood or lead strips to size to fabricate spacing inserts, using power saw.
GOE: 05.10.05 STRENGTH: L GED: R4 M2 L3 SVP: 8 DLU: 77

973.381-030 PROOFSHEET CORRECTOR (print. & pub.)

Replaces slugs in set type to correct errors indicated on proofsheet preparatory to printing of final copy: Arranges galleys of linotype slugs (takes) in sequence on correction table. Compares corrected type slugs against proof to detect errors. Compares guide symbols on proof with galley symbol, and reads portion of proof and galley text to locate positions for insertion of corrected slugs. Removes incorrect portion and manually inserts corrections. Cuts slugs to size to achieve specified fit, using electric saw. Keeps tabular material in specified sequence when correcting type line errors or adding new lines. Stores proofs in designated drawers and in sequence for specified period and disposes of obsolete proofs. Removes unwanted portions of lines from previously published editions, inserts new or corrected lines, and rearranges balance of slugs for next edition.
GOE: 05.05.13 STRENGTH: L GED: R4 M2 L3 SVP: 8 DLU: 77

973.681-010 GALLEY STRIPPER (print. & pub.)

Prepares page layouts, arranges, and mounts galleys of type, illustrations, sketches, and folios to be used in preparing printed material, using drafting and cutting instruments: Measures and marks paper according to artist's layout, cus-

tomer specifications, and instructions of supervisor to determine position of type and other material, using rules and drafting instruments. Cuts out and removes errors in galley, using cutting instruments, and strips in corrections or alterations, using tape. Cuts out illustrations, type matter, and other material, using scissors or knife, and arranges and fits material or positions material for emphasis on paper according to layout marks.
GOE: 05.10.05 STRENGTH: S GED: R3 M2 L2 SVP: 5 DLU: 77

974 ELECTROTYPERS, STEREOTYPERS, AND RELATED OCCUPATIONS

This group includes occupations concerned with reproducing printing surface of units of type, line or halftone plates, or full pages, using an electrochemical process that plates a mold of type surface with copper, chrome, or other metal to form a shell, backed with type metal; or by making a matrix of type and casting a curved or flat plate in stereotype metal; routing or planing cast plate to specified thickness; and mounting plates for printing.

974.131-010 SUPERVISOR, ELECTROTYPING AND STEREOTYPING (print. & pub.)

Supervises and coordinates activities of workers engaged in preparation of duplicate electrotype and stereotype printing plates: Examines items, such as plastic molds, proof prints, stereotype casting molds, and finished printing plates to ensure conformance to company standards or customer specifications. Requisitions parts, supplies, and materials. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.13 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

974.381-010 ELECTROTYPER (print. & pub.)

Fabricates and finishes duplicate electrotype printing plates, according to specifications, using handtools, electroplating equipment, and metal casting, trimming, and forming machines: Forms plastic mold of composed type and cuts, using sheet-molding fiber and hydraulic press. Sprays mold with silver solution and immerses mold in plating tank. Separates mold from plated shell and fills back of shell with molten lead to form plate, using pouring ladle or casting machine. Removes excess metal from edges and back of plate, using power shear and milling machines. Examines plate to detect imperfect formation of halftone dots, lines, and type, using magnifier, and corrects defects, using engraver's handtools, punches, and hammer. Mounts finished plates on wood or metal blocks for flatbed presses or curves plate for cylinder presses, using hammer, nails, bonding press, or plate-curving machine. Removes excess metal from nonprinting areas of plate surface, using radial or cylindrical routing machine. May operate proof press to obtain proof of plate reproduction and registration. May revise plates to customer's specifications. May be known according to task performed as Electrotype Caster (print. & pub.); Electrotype Molder (print. & pub.).
GOE: 05.05.13 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

974.381-014 ELECTROTYPER APPRENTICE (print. & pub.)

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.13 STRENGTH: M GED: R4 M3 L3 SVP: 8 DLU: 77

974.382-010 STEREOTYPER APPRENTICE (print. & pub.)

Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.13 STRENGTH: M GED: R4 M2 L2 SVP: 8 DLU: 77

974.382-014 STEREOTYPER (print. & pub.)

Operates machines to press face of composed type and plates into wood-fiber mat to form stereotype casting mold, pour molten metal into mold, and finish castings by cutting, shaving, and trimming to form plates for printing: Drills matching holes in series of mounted color plates to be duplicated and inserts pilot pins in base to register all plates to key plate for mat molding. Lays sheet of mat paper on form or plates, covers assembly with molding blanket and protective sheet, and pushes assembly to self-feeding rollers of mat-rolling machine or into cavity of hydraulic press. Adjusts time, temperature, and pressure controls to form and dry mold. Cuts and pastes pieces of paper felt or cardboard in large nonprinting areas of mat to prevent collapse during casting of plate. Aligns and notches mats of series with key color mat (mold), using matching machine with monocolor magnifier attachment. Aligns notches with pins of trimming machine and pushes lever to trim three edges of mat simultaneously. Lays mat on casting box platen and arranges steel bars on three sides of mat to confine molten type metal. Pours metal into casting box by hand or by operating automatic stereotype plate-casting machine. Trims plates to specified size [PLATE FINISHER (print. & pub.)]. Coats curved plates with nickel [PLATER (electroplating)]. May register series of color plates and mats by transparent acetate overlay process. May be designated according to task performed as Stereotype Caster (print. & pub.); Stereotype Molder (print. & pub.).
GOE: 05.05.13 STRENGTH: M GED: R4 M2 L2 SVP: 8 DLU: 77

974.682-010 BLOCKER, METAL BASE (print. & pub.)

Operates machines to cast blocks of type metal, mill blocks to specified size, and bond blocks to printing plates: Fills melting pot of stereotype casting machine with bars of metal alloy and sets thermostatic control. Tightens clamps on casting box cover and raises casting box to vertical position. Depresses lever on melting pot to open pouring gate or ladles molten metal into honeycomb mold in casting box. Removes cast metal block from casting box after it has cooled and cuts to size on trim saw. Operates block leveling machine to mill block surface to specified height. Cuts sheet of thermoplastic bond film to size. Inserts film between plate back and block top and places on sliding table of heat press. Makes proof of cut on transparent plastic sheet to verify color register, using proof press. Marks plates for filing.
GOE: 05.10.05 STRENGTH: L GED: R4 M2 L2 SVP: 7 DLU: 77

976 DARKROOM OCCUPATIONS, N.E.C.

This group includes occupations, not elsewhere classified, concerned with photographing flat copy; enlarging or reducing copy by projection printing; contact printing; developing and fixing negatives, positives, and prints; developing and printing still or motion-picture black-and-white or color film; toning, dodging, or otherwise controlling resulting prints; and mixing photographic chemicals.

976.131-010 LABORATORY CHIEF (photofinishing) alternate titles: laboratory manager; photographic-laboratory supervisor

Supervises and coordinates activities of workers engaged in developing photographic prints from negatives, copying and enlarging prints, and in production of lantern slides, and airbrushing and retouching prints: Inspects finished film and prints for sharpness, color balance, and brilliance. Directs workers in care and setting up of field laboratory equipment. Requisitions and distributes materials and supplies. Assists workers in performance of tasks, such as airbrushing and retouching photographic prints. May set up and adjust laboratory equipment. May assist in classification of pictures as confidential or restricted before their release from laboratory. Performs other duties as described under SUPERVISOR (any industry) Master Title. May supervise and coordinate crew engaged in developing, printing, enlarging, and finishing prints in portable truck-drawn photographic laboratory and be designated Trailer Chief (photofinishing).
GOE: 05.10.05 STRENGTH: L GED: R4 M2 L3 SVP: 8 DLU: 77

976.131-014 SUPERVISOR, FILM PROCESSING (motion picture; photofinishing; radio-tv broad.) alternate titles: film technician; laboratory contact supervisor

Supervises and coordinates activities of workers engaged in developing exposed black-and-white and color motion picture film. Examines samples of developed film for defects, such as scratches, cracks, and contours. Directs workers to make machine adjustments to correct defects. Monitors gauges of developing solution tanks to ensure adherence to specifications. Sets up or corrects set-up of photographic processing machines. Collects and submits film strips and processing solutions to quality control department for analysis. Mends film breaks, replaces film reels, and performs minor repair work on machines, using handtools. Notifies maintenance supervisor when major repair is required. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

976.131-018 SUPERVISOR, MICROFILM DUPLICATING UNIT (business ser.)

Supervises and coordinates activities of workers engaged in microfilm reproduction activities, including laboratory processing, computer output microfilming, optical character recognition and microfiche duplicating. Advises customer agencies of services available, equipment needs, and microfilming costs. Operates and repairs microfilming equipment as required to provide continuing service. Provides advice and counsel to units of local government and private agencies with respect to technical and procedural aspects of microfilming. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.05 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 77

976.131-022 SUPERVISOR, QUALITY CONTROL (photofinishing)

Supervises and coordinates activities of workers engaged in inspecting, testing, and processing photographic materials and conducts tests to establish and maintain quality standards: Instructs workers in use of equipment and procedures and tours department to evaluate quality of work. Performs tests on film strips to determine photographic density, using densitometer, and records readings on chart to plot changes from established norms. Computes setup time factors for printing equipment to determine optional settings for color and density, using mathematical formulas, and sets up or notifies other workers to set up equipment accordingly. Authorizes adjustments when workers report significant change in temperature readings of equipment. Inspects equipment to detect mechanical malfunctioning and confers with maintenance personnel to authorize and schedule repairs. Advises management on adaptability of new processes or purchase of new equipment. Studies production records, company operational reports, customer comments, and manufacturers' recommendations for use and operation of photographic equipment to establish quality control standards. Prepares reports, such as budget of operational expenses, stock inventories, and personnel evaluation and submits reports to management. Confers with administrative and technical personnel to coordinate interdepartmental workflow. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.05 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

976.131-026 SUPERVISOR, TYPE PHOTOGRAPHY (machinery mfg.)

Supervises and coordinates activities of workers engaged in photographing, developing, printing, examining, measuring, and sorting type characters used in

production of phototypesetting type disks. Schedules daily production activities, utilizing computerized production control system, and assigns work to staff based on priorities, knowledge of worker capability, and capacity of machines and equipment. Observes workflow to ensure schedules are maintained. Examines production operations at each station to ensure adherence to specifications and quality standards, using comparator-profile projector and rules. Confers with staff to resolve production problems and provide technical assistance. Interviews job applicants and trains new staff. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.05 STRENGTH: L GED: R4 M3 L4 SVP: 8 DLU: 86

976.132-010 SUPERVISOR, FILM PROCESSING (photofinishing)

Supervises and coordinates activities of workers engaged in photofinishing operations, such as preparing photographic negatives and paper, and developing, sorting, and checking prints. Trains new workers and demonstrates new techniques to improve skills of experienced workers. Flips switches and turns controls on master panelboard to start photographic processing equipment, admit solutions to processing tanks, and to adjust solution temperature and flow rate. Monitors operation of machinery and equipment to detect defective parts. Repairs defects, such as loose nuts and bolts, and notifies maintenance department when major repairs are required. May perform duties of subordinates to maintain production or to replace absent worker. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.05 STRENGTH: L GED: R4 M3 L3 SVP: 6 DLU: 77

976.134-010 SUPERVISOR, CUTTING AND SPLICING (motion picture; photofinishing)

Supervises and coordinates activities of workers engaged in numbering, cutting, assembling, splicing, and inspecting negative slide or motion picture film. Trains new workers in techniques, such as cutting out censored or defective scenes from film strip, assembling and splicing film strips together, and printing footage numbers on film rolls. Inserts film strip in splicing machine to test sealing unit and adjusts temperature controls of machine to obtain permanent seal without burning film. Inserts film strips in stapling machine to ascertain that film is secured in prescribed manner. Examines assembled film over bench lamp to detect cutting and splicing errors and to verify edited arrangement of picture sequence according to work order and editorial instructions. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.12.01 STRENGTH: L GED: R4 M2 L3 SVP: 6 DLU: 77

976.137-014 SUPERVISOR, FINISHING DEPARTMENT (photofinishing) alternate titles: checking department supervisor; finishing department supervisor

Supervises and coordinates activities of workers engaged in cutting, checking, spotting, mounting, pricing, and packaging film negatives and prints to prepare orders for shipment. Plans and conducts training programs for new workers and to improve skills of experienced workers. Inspects work in progress to verify consistency of workers' decisions with company standards. Inspects equipment, makes minor adjustments, and confers with maintenance personnel to schedule major repairs. Reviews price listings of merchandise and indicates price changes on listings according to instructions from management. Requisitions supplies according to worker requirements and records of supplies on hand. Performs other duties as described under SUPERVISOR (any industry) Master Title. May perform duties of subordinates to prevent production lag.
GOE: 05.09.01 STRENGTH: L GED: R4 M2 L3 SVP: 6 DLU: 77

976.267-010 QUALITY-CONTROL TECHNICIAN (photofinishing)

Examines photographic prints, processed film, cameras and other photographic equipment for defects or faulty operation to determine course of action required to satisfy customer complaints. Reviews unresolved requests for adjustment of complaints and reads customer comments to determine basis of complaint and plan of action needed to resolve complaint. Spreads negatives and prints on illuminated worktable and uses magnifying glass to detect defects, such as incorrect coloring, shading, or cutting. Determines cause of defect and type correction required based on knowledge of photo processing and finishing techniques. Prepares memorandum to processing department and confers with SUPERVISOR, QUALITY CONTROL (photofinishing) to suggest remedies to prevent subsequent errors in processing. Contacts customer to explain causes for defects and confers with sales-service personnel to resolve technical questions and to demonstrate correct usage of photographic equipment. Prepares reports indicating complaints handled and dispositions made.
GOE: 05.10.05 STRENGTH: L GED: R4 M2 L3 SVP: 6 DLU: 77

976.360-010 PRINT CONTROLLER (photofinishing)

Sets up and adjusts photographic print developing equipment according to density, color, and size of prints. Positions film in densitometer, reads dials, and records findings on plot sheet to locate defects in density and color balance. Confers with SUPERVISOR, QUALITY CONTROL (photofinishing) to determine adjustments required to bring print machine into balance. Runs test film strip through print machine to evaluate machine exposure. Removes cover from control panel of print machine to gain access to control shafts and adjustment knobs, using wrench. Plugs electric timer into printer to determine time elapsed during printing operation. Starts equipment, observes timer, and adjusts shafts and knobs to attain specified process settings, using handtools. Locks control shafts of printer into position subsequent to final adjustment to prevent shifting in color or density balance during printing. Keeps record of adjustments made for departmental use.
GOE: 06.01.02 STRENGTH: L GED: R4 M3 L2 SVP: 6 DLU: 77

976.361-010 REPRODUCTION TECHNICIAN (any industry) alternate titles: copy-camera operator; photolith operator; vacuum-frame operator

Duplicates printed material on sensitized paper, cloth, or film according to customer specifications, using photographic equipment and handtools. Reads work order and confers with supervisor to determine processes, techniques, equipment, and materials required. Places original on sensitized material in vacuum frame. Mounts camera on tripod or stand and loads prescribed type and size film in camera. Sets camera controls to regulate exposure time according to line density of original and type of sensitized material. Activates camera to expose sensitized material, imprinting original on material. Develops exposed material [DEVELOPER (photofinishing) 976.681-010]. Examines developed reprint for defects, such as broken lines, spots, and blurs, and touches up defects, using chemicals, inks, brushes, and pens. May enlarge reprints [PROJECTION PRINTER (photofinishing) 976.381-018]. May reprint original in sections and piece sections together.
GOE: 05.10.05 STRENGTH: L GED: R4 M2 L2 SVP: 6 DLU: 77

976.362-010 FILM INSPECTOR (photofinishing) alternate titles: quality-control projectionist; reel-film inspector

Operates motion picture projector to inspect home movie film and visually examines slides for defects to determine need for reprocessing and repair. Randomly selects specified number of home movie reels and inserts reels in magazine of projector. Threads film through projector onto take-up reel. Starts projector and adjusts lens to focus image on screen. Examines projected image to detect defective exposure or color density and presence of scratches or foreign matter. Records findings on quality control sheet and notifies processing department personnel regarding need for machine adjustments or customer regarding defective camera lens. Measures width of film to determine accuracy of slitting, using precision measuring instrument, and notifies slitting department personnel when width is not within specified tolerances. Examines specified number of randomly selected photographic slides to detect scratches or defects in color density, accuracy, and exposure. Records type defect and reprocessing required on quality control form and routes form and defective slides to processing department. Conveys acceptable reels and slides to packaging department. Collects daily reports from production personnel, totals production figures, and calculates production averages to determine whether quotas have been met.
GOE: 05.10.05 STRENGTH: L GED: R4 M2 L2 SVP: 5 DLU: 77

976.380-010 COMPUTER-CONTROLLED-COLOR-PHOTOGRAPH-PRINTER OPERATOR (photofinishing)

Sets up and operates computerized photofinishing equipment to produce color photographic prints from negatives. Develops test film strip and prints test photographic prints from negative at specified intervals, using film processing and printing equipment, to ensure photofinishing equipment functions according to processing standards. Tests film strip and prints for conformance to color density values, using densitometer. Plots and records reading on charts and compares results with standards to ascertain color balance deviation and need for program changes, following processing control manual. Keys program changes into computer and posts changes in processing log to maintain record of changes. Measures and mixes specified chemicals and transfers solutions to reservoirs of photofinishing equipment. Reads customer photofinishing order to ascertain film type, number of prints desired, and delivery date and to determine machine settings and lens requirement for printing photos. Replaces lens and negative carrier in printer according to film type to be processed. Adjusts controls to regulate frame and paper size. Scans computer display unit to ensure specified program mode is operational and inputs code changes. Keys in billing information according to film type and number of exposures to be printed. Positions negatives in frame of carrier and depresses pedal to actuate printing action. Examines prints for variations from standards and keys in computer changes to maintain computer programming of color values in printing operation. Removes customer sales slip from billing unit and attaches slip to envelope containing customer film and prints.
GOE: 05.10.05 STRENGTH: S GED: R3 M3 L3 SVP: 3 DLU: 86

976.381-010 FILM LABORATORY TECHNICIAN I (motion picture)

Evaluates motion picture film to determine characteristics, such as sensitivity to light, density, and exposure time required for printing, using sensitometer, densitometer, and timer lights. Threads film strip through sensitometer, exposes film to light, and reads gauges to determine film's sensitivity to light. Threads film strip through densitometer and exposes film to light to determine density of film. Computes amount of light intensity needed to compensate for density of film, using standardized formulas. Exposes film strip to progressively timed lights to compare effects of various exposure times. Examines developed film strip to determine optimal exposure time and light intensity required for printing. Records test data and routes to FILM DEVELOPER (motion picture; photofinishing) and FILM PRINTER (motion picture). May be designated according to specialty as Densitometrist (motion picture); Sensitometrist (motion picture); Timer (motion picture).
GOE: 02.04.01 STRENGTH: L GED: R4 M4 L4 SVP: 7 DLU: 77

976.381-014 MICROFICHE DUPLICATOR (business ser.)

Prepares microfiche duplicates of microfilm, using contact printer and developing machine. Cuts roll of exposed microfilm to specified lengths, using paper cutter. Aligns film strips in lighted vacuum box and tapes strips together to as-

semble master print. Inserts master print and sensitized paper into vacuum frame of printer, sets timer, and activates printer to transfer image from master print to paper, producing microfiche print. Feeds print into machine that develops and fixes image by heat-ammonia process [BLUEPRINTING-MACHINE OPERATOR (any industry) 979.682-014]. Positions print on lighted table and examines print to detect imperfections, using magnifier. Affixes identification label to microfiche print.
GOE: 05.10.05 STRENGTH: L GED: R4 M2 L2 SVP: 6 DLU: 77

976.381-018 PROJECTION PRINTER (photofinishing) alternate titles: photograph enlarger; projection-camera operator

Produces enlarged or reduced photographic prints from original negative or positive, using projection printer. Sorts orders according to type, size, and processing requirements. Examines negative for contrast to determine grade of sensitized paper required for print. Places sensitized paper on easel and adjusts sliding arms of easel to outline specified area on paper, or threads paper through guides onto takeup spool and secures with tape. Places negative in holder and slides holder beneath light. Raises or lowers carriage of printer to focus image within outlined area on paper. Selects lens assembly according to size and type of negative to be printed and positions lens in holder. Adjusts lens opening, sets exposure timer, and starts machine. Varies contrast by shading darker image areas with hand or sheet of paper (dodging). Develops exposed paper [DEVELOPER (photofinishing)]. Examines developed prints to detect color deficiencies, scratches, and dust specks, and retouches print to remove defects, using paints, pencils, brush, and cloth. Computes customer charges and maintains production record.
GOE: 05.10.05 STRENGTH: L GED: R3 M2 L2 SVP: 7 DLU: 77

976.381-022 TEMPLATE REPRODUCTION TECHNICIAN (aircraft mfg.) alternate titles: tooling reproduction technician

Reproduces images of engineering drawings, tracings, stencils, layouts, templates, and other work aids onto base materials to produce working patterns used in manufacturing aircraft parts, using photographic and x-ray reproduction cameras, contact printers, and related equipment. Reads work order to determine nature of material to be copied, enlargement or reduction required, and equipment to be used. Sets up, operates, and adjusts photographic and reduction equipment to produce pattern negatives and to reproduce image from negative onto emulsion-treated or sensitized base material. Mixes developing and processing solutions, and immerses exposed materials in developing, processing, and rinsing solutions to produce image, manually or using material handling devices. Visually inspects image for quality. Cuts base material to specified dimensions, using power shear. May operate equipment to wash and dry processed materials. May operate photographic equipment to reproduce pattern on transparent plastic film. May laminate sensitized material onto base material.
GOE: 05.10.05 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 88

976.382-010 CAMERA OPERATOR, TITLE (motion picture)

Photographs title cards bearing foreign-language titles and dialogue on standard motion picture film for use with films for export. Sets title card on photographing rack. Switches on mercury light. Mounts rolls of film in camera and adjusts and focuses lens. Photographs title cards, removes film from camera, and forwards it for developing.
GOE: 05.10.05 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

976.382-014 COLOR-PRINTER OPERATOR (photofinishing)

Controls equipment to produce color prints from negatives. Reads customer instructions to determine processing requirement. Loads roll or magazine of printing paper into color printing equipment. Examines color negative to determine equipment control settings for production of prints meeting acceptable color-fidelity standards. Sets controls in accordance with examination, loads negative into machine, and starts machine to produce specified number of prints. Removes printed photographic paper from machine and places paper in film bag for further processing or in developing machine. Inspects finished prints for defects, such as dust and smudges, and removes defects, using brush, cloth, and cleaning fluid. Inserts processed negatives and prints into envelope for return to customer.
GOE: 05.10.05 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 87

976.382-018 FILM DEVELOPER (motion picture; photofinishing) alternate titles: developer operator

Operates machine to develop still or motion-picture film. Pulls reel of motion-picture film or rack of film strips through trapdoor into darkroom. Examines film to determine type processing required, utilizing knowledge of film developing techniques. Feels edges of film to detect tears and repairs film, using hand stapler. Mounts film in guide slot of developing machine according to length of time required for processing and pulls lever to lower film into processing position. Flips switch to start machine that transports film through series of solutions and into drying cabinet to develop and dry film. Observes film passing through machine to determine density of image and adjusts machine controls to shorten or lengthen path of film through solutions according to observation. May be designated according to type film developed as Negative Developer (motion picture; photofinishing); Positive Developer (motion picture; photofinishing).
GOE: 05.10.05 STRENGTH: L GED: R3 M1 L1 SVP: 6 DLU: 77

976.382-022 PHOTOSTAT OPERATOR (any industry) alternate titles: photocopy operator

Sets up and operates photostat machine to duplicate printed material, such as manuscripts. Places roll of sensitized paper in machine. Measures length and width of material to be copied, using rule. Computes percentage of enlargement or reproduction necessary, using chart or percentage scale. Mounts material on easel beneath lens, turns on light, and moves controls to focus lens on material. Estimates exposure time, according to size of lens aperture, grade of sensitized paper, and intensity of light. Places filter over lens to make color separation when copying color work. Sets automatic timer and starts exposure. Rolls exposed section of sensitized paper into developer tank inside machine and presses lever to cut section from roll. Turns crank to transfer print to pan of hypo (fixing fluid) attached to machine. Examines print for sharpness of line. Rinses developed print in water and places print in heated drying cabinet, between blotters, or on heated cylinders of roll-dryer. Trims excess margin from dried print, using cutting blade.
GOE: 05.10.05 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

976.382-030 PHOTOGRAPHIC ALIGNER, SEMICONDUCTOR WAFERS (electron. comp.) alternate titles: aligner

Operates photographic equipment to align and expose mask circuit pattern with photoresist-coated semiconductor wafer to produce image of circuit pattern on wafer surface. Inserts mask into aligning equipment. Places wafer in wafer holders, such as chuck or conveyor, using tweezers or vacuum wand, to load aligning equipment. Presses buttons to position wafers underneath microscope and aligning head. Observes wafer through microscope and turns knobs to align mask with index points on wafer. Presses button to activate wafer exposing cycle. Maintains production records.
GOE: 06.02.18 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 86

976.382-034 STEP-AND-REPEAT REDUCTION CAMERA OPERATOR (electron. comp.)

Operates step-and-repeat camera and film developer to reduce electronic drawings to specified size and to repeat pattern on photographic (photo mask) plates used in fabrication of semiconductor devices. Positions and aligns electronic drawing and photographic plates in holding fixtures of camera. Turns adjustment knobs to attain specified focus. Sets control panel dials according to specifications, or loads preprogrammed tape into computerized control panel, and activates camera. Feeds film into automatic machine that develops, fixes, washes, and dries film, or moves film from tank to tank in developing unit, using tongs or tweezers and utilizing knowledge of film development techniques to develop film. Records process information in production log. May inspect electronic drawing or exposed plate.
GOE: 05.10.05 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 86

976.382-038 PHOTO MASK PATTERN GENERATOR (electron. comp.) alternate titles: pattern generator operator

Operates pattern-generating machine to transfer integrated circuit pattern onto surface of *reticle* for use by PHOTO MASK PROCESSOR (electron. comp.) 976.384-014 in production of photo mask plates used in fabrication of semiconductor devices. Reads specifications to determine production data and enters data into pattern-generating machine, using keyboard. Loads digitizer tape into machine reader to control exposure process. Positions unexposed photoresist coated reticle on projection stage of machine and adjusts focus. Types commands to activate machine that exposes photoresist on reticle to circuit pattern. Tends developing and etching equipment to develop and etch pattern on reticle. Inspects reticle for defects, using microscope.
GOE: 05.10.05 STRENGTH: L GED: R3 M3 L3 SVP: 5 DLU: 86

976.384-010 PHOTO TECHNICIAN (electron. comp.)

Prints and develops film of circuit designs for use in fabricating printed circuit boards (PCB's), using photographic equipment and knowledge of photographic processing. Reads work order to determine photographic techniques required. Aligns artwork developed from circuitry blueprint and other specifications with duplicating film on darkroom light table, following prescribed procedures. Tapes materials to table or closes table lid and depresses control to activate vacuum device that holds work in alignment during processing. Adjusts camera settings for reduction or enlargement of image, according to work order specifications, and sets or activates timer that controls exposure time of film. Feeds exposed film into machine that develops, fixes, washes, and dries film [PRINT DEVELOPER, AUTOMATIC (photofinishing) 976.685-026]. Examines film to verify that reproduced image meets quality standards. May touch up artwork or developed film, using tape, knife, brush, or pen. May submerse exposed film in series of baths to develop and fix image, and dry film, using squeegee and electric dryer. May print and develop circuit image on diazo film, using automatic equipment, and be designated Diazo Technician (electron. comp.).
GOE: 05.10.05 STRENGTH: L GED: R3 M2 L3 SVP: 4 DLU: 86

976.384-014 PHOTO MASK PROCESSOR (electron. comp.)

Prints and develops working photo mask plates from master plate for subsequent use in fabrication of semiconductor devices. Reads work order to determine process specifications. Loads unexposed plates and master plate in holding fixture of printing machine. Adjusts controls and activates machine that exposes blank plates to image on master plate. Develops exposed plates, using developing equipment, chemicals, and dryer. Cleans developing equipment periodically and refills chemicals in developing sinks. Cleans master plate at specified intervals, using cleaning and rinsing solutions and ultrasonic equipment.
GOE: 05.10.05 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 88

976.385-010 MICROFILM PROCESSOR (business ser.)

Tends machine that automatically processes microfilm and examines processed film to ensure that quality of microfiche meets established standards.

Loads film into magazine of camera under darkroom conditions, attaches magazine to camera, and splices end of film to leader in machine to facilitate threading film, using splicing tape. Flips switches and turns valves to activate machine components and functions, such as blower, squeegee, water flow into processor, and rate of processing chemical replenishment. Monitors machine warning lights to detect processing malfunctions, such as break in film or leader, and takes action to correct malfunction, using knowledge of machine operation. Records film processing information, such as film type, developing speed, and rate of chemical replenishment to maintain film log. Examines processed film to ensure numerical order and clarity of microfiche, using film winder, light table, and magnifier. Marks defective microfiche section of film and lists identifying number of sections on identification sheet to indicate refilming required. Measures optical density of random film section to ensure standard processing, using densitometer. Places film on cutter, aligns markings on cutter and film, and moves cutting instrument across film to separate individual microfiche sections of film. Discards defective microfiche and places acceptable microfiche in envelope for further processing. Mixes processing chemicals to maintain supply, following specified formula, using mixing machine. Processes sample film and measures density of film to enable MICROFILM-CAMERA OPERATOR (business ser.) 976.682-022 to determine exposure settings for new batches of film.
GOE: 05.10.05 STRENGTH: L GED: R3 M2 L2 SVP: 2 DLU: 86

976.487-010 PHOTOGRAPH FINISHER (photofinishing) alternate titles: print finisher

Performs any combination of following tasks to dry, trim, and mount photographic prints. Places washed print on conveyor leading to heated rotating cylinder that dries and flattens print. Trims print edges, using paper cutter or scissors. Inserts print in specified frame or mounts print on material, such as paper, cardboard, or fabric, using cement or hand-operated press. Inserts print and corresponding negative in customer envelope. Computes price of order, according to size and number of prints, and marks price on customer envelope. May cut film lengthwise to separate individual print rolls, using slitting machine.
GOE: 05.10.05 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

976.564-010 DETAILER, SCHOOL PHOTOGRAPHS (photofinishing)

Performs variety of tasks to prepare and disseminate school photographs. Reads photographers' work orders and records information, such as number of prints and type finish specified as guide for processing film. Assigns control number to each order. Records customer charges on worksheet and submits to accounting department for billing. Sorts and bags film according to processing required. Cuts prints to prepare composite for group photographs, using chopping block, die, and mallet. Assembles composite and mails to picture service for processing of negative. Routes composite negative to printing section and records cost of composite service. Feeds specified photographs in gluing machine that automatically applies adhesive backing to photographs. Confers with photographers to discuss school program: available, costs, and shipping dates. Confers with customers to resolve complaints regarding missing or defective photographs. Cuts out, arranges, and pastes letters, numbers, and pictures to design advertising circulars. Maintains records indicating orders received, unit prices charged, and department earnings.
GOE: 07.05.03 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

976.567-010 FILM-REPLACEMENT ORDERER (motion picture)

Orders replacement footage for defective motion-picture negative film. Ascertains reel number of film, footage of film to be replaced, and intensity of light required for printing replacement. Transcribes this information on replacement ticket and delivers ticket to FILM PRINTER (motion picture).
GOE: 07.07.03 STRENGTH: L GED: R3 M2 L3 SVP: 3 DLU: 77

976.665-010 TAKE-DOWN SORTER (photofinishing)

Sorts and examines processed photographic film, repairs defective film, and tends drying cabinet that dries film: Flips switch to activate exhaust fan of drier, reads temperature gauge, and adjusts heat controls to maintain specified temperature in drier. Notifies supervisor or darkroom personnel concerning need for machine adjustments or solution changes if excessive amounts of film damage occurs. Monitors drying operation to detect dirty, twisted, or torn film in drier and removes defective film from drier. Washes film in negative cleaner to clean, soften, and straighten film and mends torn film, using tape, sealing solution, and scissors. Feels surface of film in drier to determine dryness and removes film from drier when completely dry. Examines film for clearness of image to determine printability and matches numbered label attached to film with number on customer envelope to avoid missorts. Sorts film into bins or attaches film to hooks according to size and type processing required. May compute customer charges, using pricelist.
GOE: 05.10.05 STRENGTH: L GED: R3 M1 L1 SVP: 3 DLU: 77

976.667-010 PHOTOGRAPHER HELPER (any industry)

Assists PHOTOGRAPHER, STILL (profess. & kin.) in taking and developing photographs: Arranges lights and screens, sets up camera at proper angle, and moves objects to secure desired background for photographs as directed. Assists in darkroom duties, such as mixing chemical solutions and developing films. May label photographs. Performs other duties as described under HELPER (any industry) Master Title.
GOE: 01.02.03 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 77

976.681-010 DEVELOPER (photofinishing) alternate titles: darkroom worker; doper; hand developer

Develops exposed photographic film or sensitized paper in series of chemical and water baths to produce negative or positive prints: Mixes developing and fixing solutions, following formula. Immerses exposed film or photographic paper in developer solution to bring out latent image. Immerses negative or paper in stop-bath to arrest developer action, in hyposolution to fix image, and in water to remove chemicals. Dries prints or negatives, using sponge or squeegee, or places them in mechanical air drier. May produce color photographs, negatives, and slides, using color reproduction processes, and be designated Color-Laboratory Technician (photofinishing). May perform duties as described under GROUP LEADER (any industry).
GOE: 05.10.05 STRENGTH: L GED: R3 M2 L2 SVP: 4 DLU: 77

976.682-010 FILM PRINTER (motion picture) alternate titles: daily release and dupe printer; positive printer operator

Sets up and operates motion picture film printing machine to produce positive images and soundtrack from negative film. Reads work orders to determine type film to be printed and type printing aperture required. Installs specified printing aperture in machine. Mounts rolls of positive and negative film on machine spindles and threads film through guide rollers, tension bars, picture and sound apertures and onto winding reel to synchronize negative and positive films for printing. Starts machine to pass films through printing apertures and produce positive images and soundtrack. Examines film passing through machine and turns lever of rheostat to adjust intensity of printing light according to control card specifications, or installs punched tape in machine that controls light and color densities during printing operation. Packages films in labled containers subsequent to printing. May operate printer equipped with negative viewer and evaluate scene frames to select frames with specified photographic characteristics preparatory to printing.
GOE: 05.10.05 STRENGTH: L GED: R3 M1 L1 SVP: 5 DLU: 77

976.682-014 PRINTER OPERATOR, BLACK-AND-WHITE (photofinishing) alternate titles: photograph printer

Operates printer to produce black-and-white photographic prints from negatives: Mounts roll of sensitized paper on spindle of printer and threads paper through guides, rollers, and onto take-up spindle. Prepares batch identification sheet, positions sheet in printer, and activates printer to transfer information from sheet to sensitized paper. Prints identification number on customer envelope, using stamping machine. Removes negative strip or single negative from envelope and cleans negatives to remove dust particles, using air blower or gloved finger. Inserts negative in printer and examines image to determine whether picture setting is in or out-of-doors. Activates printer and adjusts control knobs to produce photographic prints of required shading and density. Places printed roll in envelope and seals envelope to prevent exposure to light.
GOE: 05.10.05 STRENGTH: S GED: R3 M1 L1 SVP: 5 DLU: 77

976.682-018 RECTIFICATION PRINTER (any industry)

Operates rectification printer to remove aerial photograph distortions caused by variations in axis and tilt of airplane in relation to earth's surface: Positions roll of negative film in holder so that first negative is over lens in printer. Places print paper on easel of printer. Turns screws to regulate vertical and horizontal axis of printer and distance of printer from easel, following chart of axis, tilt, and scale settings received with film. Adjusts shutter speed and lens opening, according to kind of negative film and print paper used. Exposes negative and paper to light to print photograph.
GOE: 05.10.05 STRENGTH: L GED: R3 M2 L1 SVP: 4 DLU: 77

976.682-022 MICROFILM-CAMERA OPERATOR (business ser.)

Operates microfilm unit camera to film documents: Selects and inserts format disk, turns knobs and flips switches to set controls of unit operation, such as exposure time, margin space, and camera action, according to format instructions. Selects specified camera lens according to document reduction ratios desired on film and slides lens into position on unit. Loads film into camera and splices film to device that facilitates movement of film through unit, using splicing tape. Positions documents on unit feed belt, depresses pedal to activate camera, and observes control panel to monitor unit operation. Replaces film or realigns documents according to signal lights on control panel. Observes colors on printed documents to determine exposure settings based on predetermined standards, and adjusts unit controls to obtain desired effects. Removes film from unit and wraps film in light-resistant bag for further processing. Completes film identification sheet that indicates indexing numbers of microfilm and attaches sheet to bag for reference by MICROFILM PROCESSOR (business ser.) 976.385-010. May work in darkroom and develop exposed film through chemical processing.
GOE: 05.10.05 STRENGTH: L GED: R3 M1 L2 SVP: 3 DLU: 86

976.684-010 DENSITY CONTROL PUNCHER (motion picture)

Punches symbols in perforated tape or notches in negative film which control color and light density changes during printing of motion picture film, using electric tape puncher, film footage counter, and hand notcher: Punches density control symbols in tape according to timing specifications, using tape puncher. Feeds tape through viewing machine and observes light, color, and film footage recordings to verify accuracy of punched symbols. Mounts roll of filter tape or reel of negative film on bench spindle and threads material through footage counter onto takeup spindle. Turns crank to wind material through footage counter and observes footage recording or negative image to determine where density changes are required. Stops counter at point where density change is indicated and cuts filter tape, using cutting machine or notches film, using hand notcher. Routes tape and film to printing department. Maintains production records. May be designated according to method used as Matte Cutter (motion picture); Negative Notcher (motion picture).

GOE: 05.10.05 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

976.684-014 FILM LABORATORY TECHNICIAN (motion picture; photofinishing)

Performs any combination of following tasks to process motion picture film: Mixes specified chemicals according to formula to prepare solutions for use in processing film. Cuts and arranges film and splices film together according to written instructions or edited test print, using splicer. Compares film with edited print to detect irregularities in detail and color. Projects film on screen to detect defects in printing and developing, such as blurs, scratches, and perforations, using motion picture projector. Approves film for release, rejects defective film, or routes film to specified department for further processing. May be designated according to specialty as Film Inspector (motion picture); Film Splicer (motion picture).
GOE: 05.10.05 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

976.684-018 MOUNTER, HAND (photofinishing)

Cuts and mounts photographic film transparencies, using film cutter and heat-sealing press: Positions film roll on spindle of cutting machine and threads end of film into rack or along track in front of lighted screen, and under cutter knives. Inspects film for defects, such as blank or black film and double exposures. Aligns exposure separation line with cutter knives and depresses pedal to cut film along line. Positions cut film in center of mount and folds edges of mount over film. Inserts mount in heating press that automatically numbers, seals, and ejects mount into tray. Packs mounts in boxes for shipment.
GOE: 06.04.34 STRENGTH: S GED: R2 M1 L1 SVP: 2 DLU: 77

976.684-022 PRINT WASHER (photofinishing)

Washes and dries photographic prints, using print-washing pan, blotter, and wringer: Places developed prints in print-washing pan and activates mechanism that rotates pan to wash prints. Immerses prints in chemical solution subsequent to washing cycle to increase flexibility of prints. Dries prints, using blotter, or positions prints on metal plates, and dries prints, using wringer. Inserts prints in rack on open-faced frames to complete drying process. May examine prints for stains and other defects and return defective prints to developing room. May remove excess water from washed prints to prevent watermarks, using sponge or squeegee.
GOE: 05.10.05 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

976.684-026 SPLICER (photofinishing)

Joins strips of undeveloped film and winds film onto reels for subsequent processing, using splicing device and bench winder: Places one roll of film on spindle and another at end of splicer. Positions ends of each roll in splicing device. Depresses pedal to trim ends and form joint, or perforates film, using hand punch. Depresses pedal to drive staples into ends of film, pushes switch to lower heat-sealing head over film ends, or applies adhesive tape over joint to splice film ends. Removes film from splicing device and winds film on reel, using bench winder. Places film in container. May cut 16 mm. film into 8 mm. strips before splicing and be designated Slitter, Processed Film (photofinishing). May perform duties as described under GROUP LEADER (any industry) Master Title.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

976.684-030 CONTACT PRINTER, PRINTED CIRCUIT BOARDS (electron. comp.) alternate titles: exposure machine operator; imager; photo printer; photoresist printer

Prints circuit image on photoresist film-laminated panels for use in fabricating printed circuit boards (PCB's), using contact printer: Aligns (registers) one or more circuit negative films with film-laminated circuit board panel in drawer of contact printer vacuum frame. Activates printer controls to create vacuum and secure negative film against circuit board panel. Activates printer to expose negative and panel film to ultraviolet light and transfer circuit image onto panel film. Lifts drawer cover and removes PCB panel and negative. May measure light intensity of contact printer, using exposure meter, tapes, or radiometer, and adjust exposure time according to specifications. May secure negative and panel in vacuum frame, using jig or tape. May examine printed panels for defects in printed circuit. May feed circuit board panels into machine that develops exposed circuit pattern on panels. May tend equipment that laminates photoresist film to circuit board panels. May print circuit pattern on dry photoresist film for use in manufacturing double-sided and flexible PCB's and be designated Contact Printer, Dry Film (electron. comp.)
GOE: 05.10.05 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 86

976.684-034 CONTACT PRINTER, PHOTORESIST (inst. & app.; optical goods) alternate titles: reticle printer

Prints reticles or patterns on optical lenses, metal films, and other materials used in optical instruments, using printing equipment. Cleans material surfaces to facilitate adherence of photoresist solution, using solvents and pumice. Pours, brushes, or sprays photoresist solution onto material or dips material into photoresist tank to apply coating. Places material into drier to set photoresist. Positions material in vacuum printer, using handtools, such as tweezers and vacuum probe. Positions and aligns reticle pattern or mask over top of material, using binocular microscope, and activates vacuum to hold assembly in alignment. Sets printer time controls for specified exposure period and activates printer that exposes photoresist to light to print pattern onto material. Develops photoresist image on material, using developing solution, and places printed material into drier. May etch printed material, using etching equipment, or fill surfaces to specified thickness, using vacuum deposition equipment, to create reticle or pattern on material. May prepare photo masks for reticle-making process, using photographic equipment. May strip photoresist from material after etching or filling.
GOE: 05.05.11 STRENGTH: L GED: R3 M3 L3 SVP: 6 DLU: 86

976.684-038 CONTACT WORKER, LITHOGRAPHY (print. & pub.)

Combines multiple photographic film images onto single film to assist in film assembly (stripping) process for lithographic printing: Aligns negative or positive film image over unexposed film (duplicating or contact) and places film assembly into or on top of vacuum frame. Lowers top of frame or places vinyl sheeting over film and activates vacuum to maintain contact between original and unexposed film. Sets time controls and activates high intensity light source that exposes film to specified amount of time and light. Removes negative or positive and places exposed film in automatic processor that develops image on film.
GOE: 05.10.05 STRENGTH: L GED: R3 M2 L2 SVP: 6 DLU: 89

976.685-010 CUTTER (photofinishing) alternate titles: film cutter; print cutter

Tends automatic or semiautomatic machines that cut processed film or prints into single or multiple units: Examines film or print roll to determine size, number of cuts required, and type machine to use. Turns setscrews to adjust machine guides to roll width and sets density meter on automatic machine to coincide with sensitized marks on roll that control release of cutting blade. Threads roll through machine guides and starts machine that automatically cuts roll into individual or multiple units or depresses pedal of semiautomatic machine to cut roll. Cuts rolls of nonstandard width, using scissors or hand operated paper cutter. Inserts units in customer envelope. Keeps production records.
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

976.685-014 DEVELOPER, AUTOMATIC (photofinishing) alternate titles: continuous process machine operator; film machine operator

Tends machine that develops sheets, strips, or continuous roll of film preparatory to printing: Pulls film through trapdoor into darkroom. Strips paper backing from film and attaches identifying label. Feels edges of film to detect tears and repairs film, using stapler. Reads work order or feels film for size or notches to determine type of process and developing time required. Positions racks of film on machine chain links according to developing time required or threads leader of continuous roll through machine preparatory to processing. Activates machine that automatically transports film through series of chemical baths to develop, fix, harden, bleach, and wash film. Listens for sounds that indicate machine malfunctioning and notifies supervisor or maintenance personnel when repairs are needed. May run test strip through machine for inspection by supervisor and add chemicals to or adjust machine as directed. May tend equipment that develops, fixes image, and dries x-ray plates and be designated X-Ray-Developing-Machine Operator (medical ser.).
GOE: 06.04.19 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 89

976.685-018 FILM LABORATORY TECHNICIAN II (motion picture)

Performs one or combination of following tasks to process motion picture film: Tends machine that automatically develops exposed film. Tends machine that dries film. Rewinds film by hand or tends machine that automatically inspects, cleans, counts footage, and rewinds reels of film. Numbers film by hand or tends machine that numbers film for identification purposes. Tends machine that brushes wax on splices to strengthen film at junctures and applies wax to sproket holes of film to facilitate passage through projector. Removes damaged film sections or repairs defective sections, using handtools. May be designated according to specialty as Developing-Machine Tender (motion picture); Drying-Machine Tender (motion picture); Film Numberer (motion picture); Rewinder (motion picture); Waxer Tender (motion picture).
GOE: 05.12.14 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

976.685-022 MOUNTER, AUTOMATIC (photofinishing)

Tends automatic-mounting press that cuts film into individual transparencies, and inserts and seals transparencies in mounting frames: Loads mounting frames into machine and depresses lever to lock frames into feed position. Compares identifying labels to ensure numbers on film reel and customer envelope match. Records customer charges on envelope according to standard price listing. Mounts film reel on machine spindle and trims rough edges of film, using scissors. Threads film through machine guides and activates machine that automatically cuts film and mounts transparencies. Observes movement of film through machine to detect jamming and adjusts machine guides, using screwdriver. Notifies supervisor of major machine malfunction.
GOE: 06.04.20 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

976.685-026 PRINT DEVELOPER, AUTOMATIC (photofinishing)

Tends one or more machines that automatically develop, fix, wash, and dry photographic prints: Threads leaders (paper strips) around rollers, through processing tanks and dryer, around polished drum, and onto takeup reel. Turns valves to fill tanks with premixed solutions, such as developer, dyes, stop-baths, fixers, bleaches, and washes. Moves thermostatic control to keep steam-heated drum at specified temperature. Splices sensitized paper to leaders, using tape. Starts machine and throws switches to synchronize drive speeds of processing and drying units. Compares processed prints with color standard and reports variations to control department. Adds specified amounts of chemicals to renew solutions. Maintains production records.
GOE: 06.04.19 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

976.685-030 UTILITY WORKER, FILM PROCESSING (photofinishing)
Performs variety of tasks to assist or substitute for other workers in photofinishing laboratory: Sorts prints according to size and order number to facilitate handling. Tends automatic cutting machine that cuts roll into individual prints [CUTTER (photofinishing)]. Tends automatic film developing machine that develops and fixes image on film [DEVELOPER, AUTOMATIC (photofinishing)]. Removes prints from print developer rinse tray and tends drum-type drier that dries prints. Prepares daily production sheet, noting quantity and kind of work performed.
GOE: 06.04.19 STRENGTH: L GED: R3 M1 L2 SVP: 3 DLU: 77

976.685-034 DEVELOPER, PRINTED CIRCUIT BOARD PANELS (electron. comp.)
Tends equipment that develops photoresist image on panels of printed circuit boards (PCB's): Mixes specified amount of chemical solution and pours chemicals into equipment developing tank. Turns valves to admit specified amount of water into equipment reservoirs. Starts equipment and monitors conveyor systems, temperature gauges, and pumps. Adjusts controls to maintain specified temperature levels and speed of conveyor. Removes plastic protective film from upper and lower surfaces of photoresist laminated PCB panels. Places panels on conveyor that feeds panels into equipment that automatically develops photoresist circuit image on exposed photoresist film, dissolves unexposed photoresist film, and rinses and dries panels. Removes panels from conveyor and visually examines panels to detect development processing defects. Notifies supervisor of defective panels and equipment malfunctions.
GOE: 06.04.19 STRENGTH: M GED: R2 M2 L2 SVP: 2 DLU: 89

976.685-038 PHOTOGRAPHIC PROCESSOR, SEMICONDUCTOR WAFERS (electron. comp.) alternate titles: resist coater-developer
Tends photographic processing machines that coat semiconductor wafers with solutions, such as photoresist and developing chemicals: Places wafers in containers, such as boats, magazines, cassettes or chuck, using vacuum wand or tweezers. Loads wafer containers in photographic processing machine, such as photoresist coater or developer. Pushes buttons and turns knobs to start automatic coating cycle. Removes container of coated wafers from machine. Cleans and maintains machines. Maintains production records. May immerse wafers in baths of developing chemicals. May place coated wafers in oven to set and dry wafers. May enter production information into computer, using computer terminal keyboard. May immerse wafers in chemical baths to etch excess photoresist or to clean wafers. May visually inspect wafers to identify defects, such as misalignment, excess photoresist, and scratches.
GOE: 06.04.19 STRENGTH: L GED: R2 M1 L2 SVP: 2 DLU: 86

976.687-010 EDITOR, SCHOOL PHOTOGRAPH (photofinishing)
Compares negatives of several poses of an individual and selects best copy to be used in printing group or individual school photographs: Mounts reel of negative film in holding device or positions negatives on illuminated worktable to examine film images and determine degree of printability. Selects best copy of negatives viewed, considering factors, such as lighting, density, pose, and whether subjects eyes are open. Cuts out selected negative, using scissors and inserts negative into transparent holder to prevent damage. Attaches approved negative to card indicating work order number and processing instructions and routes negative to printing department. Discards unselected negatives.
GOE: 01.06.01 STRENGTH: L GED: R3 M1 L2 SVP: 5 DLU: 77

976.687-014 PHOTO CHECKER AND ASSEMBLER (photofinishing) alternate titles: checker; inspector
Inspects, assembles, and packs mounted or unmounted negatives, color film transparencies, and photographic prints: Examines items for natural color shading, density, sharpness of image, or identifying numbers, using lighted viewing screen. Marks defective prints, using grease pencil and standardized symbols to indicate nature of defect and corrective action required in reprinting. Removes defects, such as dust and smudges from prints, using brush, cloth, and cleaning fluid. Packages and labels satisfactory prints and negatives. Maintains daily production records. May cut negatives and prints from roll, using cutting machine. May be designated according to type of print inspected as Color-Print Inspector (photofinishing); Full-Roll Inspector (photofinishing); Mounting Inspector (photofinishing); Reversal-Print Inspector (photofinishing); May inspect prints for tears, dirt, scum, or other surface defects preparatory to mounting and be designated Take-Down Inspector (photofinishing).
GOE: 06.03.02 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

976.687-018 PHOTOFINISHING LABORATORY WORKER (photofinishing) alternate titles: film numberer; film sorter; pricer-bagger; proof sorter; racker; reprint sorter; sorter-packer
Performs any combination of following tasks to prepare and disseminate negatives, positives, and prints in photofinishing laboratory: Reads instructions written on orders, and examines contents of orders to ascertain size, type, and number of pieces. Sorts orders according to size and type processing required. Pastes identifying label on customer order envelopes and transfer bags to ensure matching of orders subsequent to processing. Removes finished work from transfer bags subsequent to processing and computes customer charges according to pricelist. Inserts order in bag or envelope, and staples bag together or seals envelope. Pastes address label on bag or envelope. Conveys orders between departments. Distributes supplies to other photofinishing workers. Maintains records of orders sorted and packaged.
GOE: 06.03.02 STRENGTH: L GED: R2 M2 L2 SVP: 3 DLU: 87

976.687-022 PRINT INSPECTOR (photofinishing)
Inspects photographic prints for defects, using film winder. Mounts roll of prints on spindle of film winder and tapes free end of film to crankshaft. Turns crank and inspects prints for defects as film winds onto crankshaft. Compares colors with standard image to ensure that prints meet specifications. Marks defective prints with code number, using chemical pencil, to indicate nature and degree of correction required.
GOE: 06.03.02 STRENGTH: L GED: R3 M1 L2 SVP: 5 DLU: 87

977 BOOKBINDERS AND RELATED OCCUPATIONS

This group includes occupations concerned with gathering pages, forms, folios, and tip-ins, and assembling them into pamphlets or books; trimming, gluing, and affixing endsheets, coverboards, or cover material; and applying decorations and lettering to fabricate books by hand, using handtools, presses, and other bench equipment. Occupations concerned with bookbinding machines are found in Group 653.

977.381-010 BOOKBINDER (print. & pub.) alternate titles: bookmaker
Cuts, assembles, glues, and sews components to bind books, according to specification, using automatic and manually operated machines, handtools, and equipment: Folds printed sheets to form signatures (pages) and assembles signatures in numerical order to form book body. Attaches endpapers to top and bottom of book body. Sews signatures and endpapers together along spine of book body, using sewing machine, or glues endpapers and signatures together along spine, using brush or glue machine. Compresses sewed or glued signatures to reduce book to required thickness, using handpress or smashing machine. Trims edges of book to size, using cutting or book trimming machine or hand cutter. Inserts book body in device that forms back edge of book into convex shape and produces grooves to facilitate attachment of cover. Applies glue to back of book, using brush or glue machine, and attaches cloth backing and headband. Applies color to edges of signatures, using brush, pad, or atomizer. Cuts binder board to specified dimension, using board shears, hand cutter, or cutting machine. Cuts cover material, such as leather or cloth, to specified dimensions and fits and glues material to binder board manually or by machine. Glues outside endpapers to cover. Places bound book in press that exerts pressure on cover until glue dries. May imprint and emboss lettering, designs, or numbers on cover, using gold, silver, or colored foil and stamping machine. May pack, weigh, and stack books on pallet for shipment. May specialize in repairing and rebinding damaged or worn books for resale or reuse.
GOE: 05.05.15 STRENGTH: M GED: R3 M2 L2 SVP: 7 DLU: 89

977.381-014 BOOKBINDER APPRENTICE (print. & pub.)
Performs duties as described under APPRENTICE (any industry) Master Title.
GOE: 05.05.15 STRENGTH: M GED: R3 M2 L2 SVP: 7 DLU: 77

977.684-010 BOOK REPAIRER (any industry) alternate titles: book mender
Repairs damaged or worn books for resale or reuse, using handtools: Erases disfigurations from pages. Cuts damaged pages, linings, or covers from book body, using knife. Trims pages, using knife or paper cutter. Positions and pastes repaired or new pages, linings, or covers to book body. Clamps book in press for specified time to bond edges. May operate sewing machine to sew pages into book body. May imprint or emboss lettering on cover, using stamping machine.
GOE: 05.12.19 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

977.684-014 INLAYER (print. & pub.)
Inserts or inlays pieces of leather, cloth, or paper in artistic formal patterns in surfaces of covered bookcases to form inlaid (mosaic) bindings: Cuts out out sections in bookcase cover, using pattern and knife or scissors. Positions and glues mosaic pieces in cut-out sections. Usually works from patterns.
GOE: 01.06.03 STRENGTH: S GED: R3 M1 L1 SVP: 4 DLU: 77

977.684-018 PRESSER (print. & pub.) alternate titles: caser-in; joint creaser; book paster
Folds prefabricated bookcases (separately made bindings) over book bodies and compresses assembled book in press to secure cases to bodies: Folds upper half of case over top sheet of book body, stretches case tight over back of book and holds book in place on lower half of case. Presses case down on book body; centers book in case with fingers. Stacks enfolded books in press and places pressboards at intervals in stack. Turns handwheel or depresses pedal to lower press head and clamp stack. Retains books in press until glue or paste has dried. Reverses handwheel or pushes lever to raise press head, removes books, and stacks books for finishing. May coat book bodies with paste, using brush, or position books over blade of machine and press button to lower book body between saturated rollers to coat body with paste prior to positioning case over book body and be designated Caser (print. & pub.) 977.684-018. May position enfolded books singly on press and press button to lower heated ram to crease and recrease joints on backbone of book. May wipe glue from endpapers, using cloth.
GOE: 06.02.26 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 89

977.684-022 STITCHER, HAND (print. & pub.)
Sews gathered and collated signatures by hand to form book preparatory to binding: Stretches holding cords over workbench frame. Positions signatures in

frame according to numbered sequence and attaches signatures to holding cords, using needle and thread. Wraps cloth tape around frame to compress signatures and sews signatures together to form book. Routes book to binding department.
GOE: 06.04.26 STRENGTH: L GED: R2 M1 L1 SVP: 4 DLU: 77

977.684-026 BENCH WORKER, BINDING (print. & pub.)
Examines, marks, measures, and prepares damaged, worn, and softbound publications for rebinding, following specifications: Reads job order for special instructions. Stacks publications on table and counts books or journals to ensure order is complete as listed on shipping or job slip. Removes cover and endpapers from book body or journal, using hands or scissors. Fans pages of publication and inspects publication for duplicate pages, incorrect numbering, and incorrect placement of pages. Removes advertisements, address cards, or coupons from publication as specified. Cuts and removes thread from spine of books, using scissors. Pulls staples, sensors, or spiral bindings from journals or other publications, using handtool. Measures and records book or journal dimensions on bindery slip. Locates, folds, and trims excess border from maps or other foldouts, using scissors. Inserts specified colored paper markers between pages to identify book body with foldouts or narrow edges for BOOK TRIMMER (print. & pub.) 640.685-010. May pull endpapers and reinforcing spine strip for attachment to book body. May remove dirt from cover, using cloth and cleaning solvent. May prepare and route slip and book case to printing or laminating area. May repair cover, using tape or glue. May operate machine to emboss name and address on nonmetallic plates (EMBOSSING-MACHINE OPERATOR (clerical) I 208.582-014).
GOE: 06.04.37 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 89

977.687-010 COLLATOR, HAND (print. & pub.)
Arranges and stacks printed or unprinted sheets on worktable according to size, weight, color or number sequence: Picks up one sheet at time from each stack to assemble complete set. Taps batch of sets on worktable or feeds sets into jogging machine to straighten and align sheets. Applies glue to top edges of sets, using brush or roller. Separates individual sets from glued stacks, using knife.
GOE: 06.04.26 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 77

979 OCCUPATIONS IN GRAPHIC ART WORK, N.E.C.

This group includes occupations, not elsewhere classified, concerned with graphic arts, such as engraving, roller making, silk screen printing, and other graphic arts and related activities.

979.130-010 SUPERVISOR, BLUEPRINTING-AND-PHOTOCOPY (any industry)
Supervises and coordinates activities of BLUEPRINTING-MACHINE OPERATOR (any industry), PHOTOSTAT OPERATOR (any industry), FILE CLERK (clerical) I and other workers engaged in producing and filing blueprints, vandyke and ozalid prints, and photostats in an industrial plant or commercial photocopy laboratory: Sets up blueprint and photostat machines. Trains workers in operation of machines. Inspects finished prints for sharpness, density of line, and size. Consults with customers concerning work details, such as sizes of prints and prices. Performs other duties as described under SUPERVISOR (any industry) Master Title. May supervise workers engaged in making photostats only and be designated Supervisor, Photostat (any industry).
GOE: 05.10.05 STRENGTH: L GED: R4 M2 L2 SVP: 8 DLU: 77

979.130-014 SUPERVISOR, PRINTING-SHOP (print. & pub.) alternate titles: lead printer
Supervises and coordinates activities of workers engaged in photographing and assembling images, making plates, setting type, operating printing presses and related machines and equipment, and assembling and stitching pamphlets, leaflets, and books: Inspects film assembly, platemaking, printing, and binding operations to verify conformance to job order specifications. May repair printing presses, type-setting machines, and assembling and stitching equipment. May supervise workers in printing department of establishment and be designated Supervisor, Printing Department (print. & pub.). Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.05.13 STRENGTH: L GED: R4 M3 L4 SVP: 8 DLU: 89

979.131-010 SUPERVISOR, PUBLICATIONS PRODUCTION (print. & pub.) alternate titles: supervisor, layout
Supervises and coordinates activities of workers engaged in preparation and layout of printed material: Studies editorial matter to determine most effective form of presentation and number and type of illustrations required, in accordance with specifications of customer or editorial personnel and accepted standards of composition, limitations of equipment, and available funds. Prepares mockup of pages for use by other workers in setting type and making up pages. Marks copy to incorporate printing instructions and editorial changes, utilizing standard printing symbols. Routes artwork to reproduction department or outside contractor for retouching, photographing, and platemaking. Routes editorial material to composing room for typesetting. Reviews finished material for format, accuracy, and general appearance. Submits proofs for final review and routes corrected copy to pressroom for printing. Performs other duties as described under SUPERVISOR (any industry) Master Title. May plan technical drawings to supplement copy.
GOE: 01.02.03 STRENGTH: L GED: R4 M2 L4 SVP: 8 DLU: 77

979.131-014 SUPERVISOR, ROLLER SHOP (textile)
Supervises and coordinates activities of workers engaged in inspecting and repairing cloth printing rollers: Confers with technical and supervisory personnel in print department and analyzes customer orders and pattern sketches to determine specifications for printing rollers to be ordered and to plan department work schedule. Orders new and replacement printing rollers. Inspects new printing rollers for defects and rejects damaged rollers. Issues repair list and instructions for storing and transporting rollers to ROLLER INSPECTOR (textile). Confers with and assists ROLLER REPAIRER (textile) to repair defective rollers. Confers with engravers to resolve engraving problems. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: H GED: R4 M3 L3 SVP: 7 DLU: 77

979.131-018 SUPERVISOR, SILK-SCREEN CUTTING AND PRINTING (any industry)
Supervises and coordinates activities of workers engaged in fabricating and assembling silk screens and in handprinting, utilizing silk-screen method: Trains workers in performance of tasks, such as screen cutting by hand, photographic screen making, and screen printing. Examines screens for imperfections and compares screens with customer artwork to verify conformance to specifications. Compares paint colors with artwork, color swatches, or samples to verify correct color choice and to ascertain paint compatibility with stock to be printed. Examines sample print to verify specified register of colors and shifts register marks on silk-screen frame or brushes block-out lacquer on defective areas of screen to correct color register. Requisitions materials and supplies. Confers with other unit supervisors to coordinate interdepartmental workflow. May fabricate and assemble silk screens and sandblast stencils. May supervise workers engaged in sandblasting decorative designs on material. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

979.132-010 SHIFT SUPERVISOR, FILM PROCESSING (print. & pub.)
Supervises and coordinates activities of workers engaged in production of computer tapes containing pattern design data or film positives or negatives of pattern designs for use in photoengraving processes: Analyzes work order and confers with supervisory personnel to determine most feasible method required to produce negative or positive film or computer tape of customer pattern design. Develops work procedures for producing customer design in accordance with computer limitations and customer specifications. Computes *mathematical model* for pattern designs adaptable to mathematical solution. Inspects film positives and negatives to verify conformance to specifications. May operate scanner, computer, display console, and color design console. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 05.10.05 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 86

979.137-010 SUPERVISOR, FINISHING ROOM (print. & pub.)
Supervises and coordinates activities of workers engaged in finishing and assembling maps, charts, and globes. Performs duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M2 L2 SVP: 7 DLU: 77

979.137-014 SUPERVISOR, INSPECTING (paper goods)
Supervises and coordinates activities of workers engaged in inspecting and packaging screen-printed wallpaper: Examines substandard wallpaper to determine repair procedures and corrective action required to prevent recurrence of defect. Rejects unsalvageable wallpaper. Compiles record of rejected wallpaper and reports probable causes to management for remedial action. Trains workers in inspecting and packaging procedures. Requisitions supplies and materials. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M2 L2 SVP: 7 DLU: 77

979.137-018 SUPERVISOR, PRODUCTION (paper goods)
Supervises and coordinates activities of workers engaged in handprinting and flocking wallcovering, utilizing silk-screen method: Monitors production activities and discusses methods and techniques with workers to improve performance. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M2 L2 SVP: 6 DLU: 77

979.137-022 SUPERVISOR, SAMPLE PREPARATION (textile)
Develops dye formulas according to customer specifications and supervises and coordinates activities of workers engaged in screen printing cloth samples by hand: Analyzes customer artwork and color card to determine number and type colors specified. Compares specified colors with standard color swatches to match colors and records mixing formulas from selected swatches. Monitors color weighing and mixing activities to ensure adherance with formula specifications. Observes cloth printing activities to ensure product conformance with standards. Examines printed samples for color penetration, off-center print, and to verify customer color specifications. Revises dye formulas to match shades desired by customer. Records data, such as customer name, pattern number, colors, and quantity desired and forwards data to production department. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.02.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

979.137-026 SUPERVISOR, TYPE-DISK QUALITY CONTROL (machinery mfg.)
Supervises and coordinates activities of workers engaged in printing, developing, and examining type character proofsheets used to verify accuracy of

phototypesetting type disks: Schedules production activities, such as printing, developing, and proofing of copy used to verify accuracy of type characters on disks, applying knowledge of processing techniques and production requirements. Periodically examines proofs or type characters on disks, using magnifier, to ensure conformity to product specifications and quality standards. Interviews and hires job applicants, initiates training, and assigns new workers to work with experienced workers to continue on-the-job training. Performs other duties as described under SUPERVISOR (any industry) Master Title.
GOE: 06.01.01 STRENGTH: L GED: R4 M3 L4 SVP: 7 DLU: 86

979.281-010 DIE MAKER (print. & pub.) alternate titles: die cutter; die engraver

Engraves designs onto steel dies used to produce textile printing rollers, using engravers' handtools and machines: Measures dimensions of pattern to be engraved in die, using ruler. Operates engine lathe to turn steel roller down to size according to dimensions of pattern and copper printing roller. Sketches design on steel roller (die) utilizing one of following alternate methods: (1) Lays out reference points on design according to location of one complete pattern repeat, using ruler, dividers, and pencil. Covers design with transparent film and transfers reference points to film, using scriber and magnifying lens. Sketches design colors onto separate sheets of film, using brushes and ink. Examines design to detect errors in scribing and color quality and corrects or alters design, employing knowledge of colors, fabrics to be printed, and engraving and printing techniques. Immerses steel roller in electroplating solution to coat roller with copper. Wraps film around roller, allowing ink in design to react with copper coating to transfer design from film to roller. (2) Computes machine settings required to reproduce straight-line designs on roller, using mathematical tables and formulas. Plots machine settings on graph paper. Mounts steel roller in index-dividing machine and adjusts tracing carriage of machine according to computations on graph paper. Lowers tracing-carriage scriber to surface of roller and moves levers of machine to sketch vertical and horizontal lines on roller. Mounts sketched rollers in fixture on worktable and engraves outline of design following sketch lines, using gravers' tools. Cuts or stipples in ground lines as specified, using gravers' and stippling tools. Prints proof print of engraved design on wax paper to verify accuracy of etchings on roller. Removes scratches from and polishes roller die, using polishing lathe. Punches indentations into edges of die to facilitate transfer of design from die to *mill*, using hammer and punch. Controls furnace to harden and temper dies.
GOE: 01.06.01 STRENGTH: L GED: R4 M3 L3 SVP: 7 DLU: 77

979.281-014 ENGRAVER, BLOCK (print. & pub.) alternate titles: artist, woodblock; block cutter; engraver, wood; wood-cut engraver; wood-type finisher

Carves designs and lettering in wooden blocks or rollers used to print articles, such as cloth, greeting cards, and posters following sketch or photograph, using gravers handtools and machines: Traces or draws design on wooden block or roller, using pencil, ruler, dividers, or pantograph. Cuts design in block or roller, using wood-carving and engraving tools and power router. Rounds and bevels top edges, smooths sides and base, and cuts sharp angles, ridges, and joints to produce detail in printing and to finish type, using file and knife. Carves separate block for each color of multicolor pattern. May design pattern for use in cloth printing. May carve lettering and designs freehand. May cut and bend metal strips to conform to contours of design, using files, pliers, and pincers, and force strips into grooves of block to produce raised printing surface. May operate copy camera to produce negative from photograph or drawing of design [REPRODUCTION TECHNICIAN (any industry) 976.361-010].
GOE: 01.06.01 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 77

979.281-018 ENGRAVER, PICTURE (print. & pub.)

Engraves metal dies to represent portraits, landscapes, figures, and ornamental engravings used to make plates to print bonds, stamps, currency, diplomas, and other paper documents, following models and oral instructions: Traces model of drawing on gelatin sheet, using magnifying glasses and graver. Makes wax impression of tracing, transfers tracing to polished metal die, and stains design with weak acid solution. Engraves or etches lines, dots, and dashes in specified depths, widths, spacings, and directions to portray features, such as drapery, foliage, or flesh by either one or combination of following methods: (1) Draws design through transparent, acid-resistant background on metal plate, using tempered steel point, and washes design with acid that etches lines and other markings in metal surface to produce representations of images, such as wood, stone, foliage, and sky. (2) Cuts or carves lines of design in surface of metal die, using graver. Repeats cuts to obtain required depth for portrayal of images, such as flesh, hair, drapery, and clothing. Makes proof of engraved design, examines proof print, and reworks engraving as required. May engrave lettering on plates and be designated Engraver, Letter (print. & pub.).
GOE: 01.06.01 STRENGTH: L GED: R4 M3 L3 SVP: 8 DLU: 77

979.282-010 ELECTRONIC PREPRESS SYSTEM OPERATOR (print. & pub.) alternate titles: console operator; electronic imaging system operator; system operator

Operates prepress system to electronically assemble images into pages and to retouch and make color corrections to page elements to be used in production of lithographic printing plates or gravure cylinders: Enters digitized data, such as artist's layout, color separations, text, page dimensions, and layout instructions, into electronic prepress system computer memory, using components of system such as scanner, camera, keyboard, or mouse, or loads floppy disks or tapes containing information into system. Studies layout or other instructions to determine work to be done and sequence of operations. Views monitors for visual representation of work in progress and for instructions and feedback throughout process. Activates options, such as masking or text processing; enters data, such as background color, shapes, and coordinates of images; and retrieves data from system memory to assemble elements on pages. Retrieves images from system memory; activates options, such as masking, pixel (picture element) editing, airbrushing, or image retouching; and enters data, such as coordinates of images and color specifications, into system to retouch and make color corrections. Saves completed work on floppy disks or magnetic tape. May create special effects, such as vignettes, mosaics, and image combining. May be designated according to area of specialization and be known as Electronic Color Correction Operator (print. & pub.); Electronic Page Makeup System Operator (print. & pub.); Pagination System Operator (print. & pub.).
GOE: 01.06.01 STRENGTH: S GED: R4 M3 L3 SVP: 7 DLU: 89

979.360-010 SCREEN-PRINTING-EQUIPMENT SETTER (paper goods)

Sets up and adjusts silk-screen printing equipment used to hand print multicolored designs on wallpaper: Adjusts feed rollers and spindle reel to specified tension, using wrench. Compares ink prepared for printing run with master color swatch to confirm accuracy of match. Examines printing screen for sharpness of stencil design and feels screen to verify specified tension on frame. Measures distance between printing guide marker on table and center of screen and adjusts distance as required to ensure specified color print registration. Starts drying oven and sets thermostat to temperature specified for printing run. Observes test run or manipulates equipment to produce test print. Examines print for defects and adjusts equipment to correct defective printing as required. Monitors production activities to ensure standard quality of printing. Trains workers in use of printing equipment.
GOE: 06.01.02 STRENGTH: L GED: R4 M2 L3 SVP: 7 DLU: 77

979.361-010 DOCUMENT RESTORER (profess. & kin.)

Restores and preserves documents for libraries, archives, and private and public historical societies: Cleans document, using cleaning compounds to remove dirt and stains, and removes foreign matter, such as rusted clips, pins, rotted bands, and adhesives. Tests document to determine if ink is fast, and to what extent map colors will fade. Immerses document in deacidification baths to remove acidity from paper and ink. Places document on rack to dry. Reinspects document for presence of foreign matter. Dampens document, places it between absorbent boards, and places boards in screw press to evenly distribute moisture content in document, and flatten all wrinkles and creases. Seals document in cellulose acetate film and places document in laminating machine to be laminated. Removes document and bones, presses, and trims it to specified size. Places document in cover, folder, or binder.
GOE: 05.05.13 STRENGTH: M GED: R4 M3 L3 SVP: 6 DLU: 77

979.362-010 INSTANT PRINT OPERATOR (print. & pub.) alternate titles: offset-duplicating machine operator, instant print; press operator, instant print shop; quick print operator

Operates offset-duplicating machine, photocopier, and related machines and equipment to produce copies of original materials for customers in instant print shop: Accepts printing orders from customers and computes and quotes prices to customers. Reads job orders to determine quantity of materials to be printed, and stock and ink specifications. Adjusts settings and operates camera plate maker to produce plastic or paper plates for use in offset duplicating. Operates offset duplicating machine to reproduce single or multicolor copies of text, drawings, graphs, or similar materials [OFFSET-DUPLICATING-MACHINE OPERATOR (print. & pub.) 651.682-014]. Operates copier to produce photocopies of single color or small run jobs [PHOTOCOPYING-MACHINE OPERATOR (clerical) 207.685-014]. Examines proof copy to assure accurate reproduction of color, centering of print, and conformance of copy to layout specifications. Operates auxiliary machines such as collator, pad and tablet making machine, stapler, and paper punching, folding, cutting, and perforating machines to assemble materials. May operate computerized typesetting machine to set type for printing. May assemble typeset copy and artwork into pasteup for printing reproduction. May receive payment from customers and box or wrap printed materials.
GOE: 05.10.05 STRENGTH: M GED: R3 M2 L3 SVP: 6 DLU: 88

979.380-010 PANTOGRAPH SETTER (print. & pub.)

Sets up pantograph machines to transfer designs in reduced form from zinc plates to varnished cloth-printing rollers: Inserts mandrel through roller and lifts roller onto headstocks on machine carriage, using electric hoist. Aligns centerline on zinc plate with centerline on machine table and tacks plate to table. Moves pantograph tracing arm through series of reference points on zinc plate and moves dimension levers backward or forward to adjust pantograph for specified reduction in scale of design. Tightens levers in position, using handtools. Positions diamond point on machine crossbar, moves tracing arm through reference points on zinc plate, and depresses pedal to mark corresponding marks on varnished roller. Aligns succeeding diamond point with marks on roller. Repeats procedure until diamond point has been spaced on crossbar for each side-repeat of pattern. Tightens diamond points in position, using pliers. Turns thumbscrew on diamond frame (holder) to raise diamond points equal distance from varnished roller. Weighs diamond points on miniature scales and adds or removes washers to compensate for differences in weight. Moves tracing arm through series of reference points on zinc plate, depresses pedal to mark corresponding crosses on roller, and examines marks on roller to verify alignment of diamond points. Determines ground setting accord-

best copy available

ing to weight of fabric, type of design, and colors in design. Records ground setting, length of roller, width of engraving, and circumference of roller on production sheet.
GOE: 05.05.13 STRENGTH: M GED: R4 M2 L2 SVP: 6 DLU: 77

979.381-010 ENGRAVER I (print. & pub.) alternate titles: pantograph operator

Engraves lettering or designs in copper or steel printing plates, using pantograph engraving machine: Rubs blank plate with emery or charcoal and oil to polish surface. Clamps blank plate in position under diamond cutting point and master plate under tracing point of pantograph. Starts electric motor that revolves cutting point and lowers engraving control bar, simultaneously moving bar sideways until tracing point enters desired figure on master plate. Moves bar so that tracing point follows figure on master plate, reproducing figure on blank plate. Loosens thumbscrews and changes position of pantograph bar to reproduce figures larger or smaller than those on master plate. May be designated according to type of plate used as Engraver, Copperplate (print. & pub.); Engraver, Steel Plate (print. & pub.).
GOE: 05.10.05 STRENGTH: L GED: R3 M1 L2 SVP: 5 DLU: 77

979.381-014 LINE-UP EXAMINER (print. & pub.)

Examines proof sheets to detect errors in position and alignment of type, page elements, margins, trim, and fold areas: Positions proof sheet on glass top of lighted, line-up table. Moves geared straightedges into position over proof copy to verify alignment of printed material, page, position, and folio continuity. Compares colors on proof sheet with standard color key to verify specified color register. Records degree and direction plates or type must be shifted to correct alignment, or marks corrective information on proof sheet. Draws trim, stitch, and fold lines for bindery processes and plate trim lines for stereotype and electrotype plate fabrication, using straightedge and printer's line gauge.
GOE: 05.10.05 STRENGTH: L GED: R3 M2 L2 SVP: 8 DLU: 77

979.381-026 ROLLER REPAIRER (textile) alternate titles: engraved-roller inspector; roller inspector and mender

Examines engraved cloth-printing rollers for processing defects and repairs defects, using handtools: Lifts roller into brackets on table or turning device with aid of another worker and portable hoist. Examines rollers for defects, such as pinholes and scratches. Compares customer's design and printed proof to detect missed engravings, extra engravings, and uneven joining of design on circumference of roller, and examines roller to verify defects. Dusts engraved design with chalk and examines roller to determine whether engraving is too full or too dense to print desired effects on cloth. Plugs pinholes, extra engravings, and over-engraved areas with copper wire plugs, and forces plugs in place, using ball peen hammer and punch. Smooths rough spots, using file and removes scratches from roller surface, using burnishing tool. Traces outline of missed engraving on wax paper and transfers outline to roller, using scriber. Engraves additional lines or designs on roller surface freehand or following outline to fill in gaps in design or missing engravings, using gravers and magnifying lens. Rejects unrepairable rollers. Cleans and polishes rollers, using water, polishing paste, and cloth. May inspect rollers only and be designated Roller Inspector (textile).
GOE: 01.06.01 STRENGTH: H GED: R4 M2 L2 SVP: 7 DLU: 77

979.381-030 SIDEROGRAPHER (print. & pub.)

Reproduces original engravings on metal plates used to print banknotes, bonds, and other securities, using gravers' handtools and machines: Cuts around designs on roller die to remove undesirable parts of assembled die, using graver, and assembles die from several rollers on which parts of design have been engraved. Lays out construction lines on steel plate, using trammel point, dividers, steel scribers, and gauge, to align subjects to be transferred. Scrapes and burnishes plate surface to remove imperfections, aligns plate on transfer press bed, and positions engraved steel roll on plate, using magnifying glass to verify accuracy. Depresses lever that embeds engraved design on roll into steel plate. Examines transferred design and repeats process until exact reproduction is made. May reproduce design in soft steel rolls.
GOE: 01.06.01 STRENGTH: M GED: R4 M3 L2 SVP: 6 DLU: 77

979.381-034 SKETCH MAKER I (print. & pub.)

Traces designs on wood-printing blocks or rollers preparatory to engraving by ENGRAVER, BLOCK (print. & pub.), using stylus, ink, and burnishing tool: Places drawing of design over wax paper and traces design, using stylus. Pours ink over wax paper to fill depressions made by stylus and wipes away excess ink. Wraps inked paper around wood-printing roller or positions paper on printing block. Rubs back of paper, using burnishing tool (spoonlike instrument) to transfer inked design to roller or block. May print proof impression of design from etched printing rollers onto wax paper to verify accuracy of etchings and be designated Impression Printer (print. & pub.).
GOE: 01.06.01 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

979.381-038 STENCIL MAKER (carpet & rug)

Lays out and cuts stencils used to print multicolor designs on rugs, using opaque projector, knife, pencil, and brushes: Draws pencil copy of symmetrical design on tracing paper according to specified dimensions. Projects and enlarges scale drawing of nonsymmetrical design on tracing paper, using opaque projector, and reproduces enlargement, using pencil. Lays out shape of each stencil on drawing and traces shape onto stencil paper. Cuts stencil from paper, using knife. Brushes shellac onto stencils and attaches stencils to frames, using handtools. May attach wires to brace frames. Prepares proof copy and inspects for accuracy of design reproduction. May mix paints to obtain specified colors for printing.
GOE: 01.06.02 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

979.382-010 CLAMPER (print. & pub.)

Operates clamp (rotary press) to transfer designs from engraved dies to *mills* used in transferring designs to copper printing rollers: Positions die in fixtures on bed of clamp. Mounts mill over die and turns handwheel to lower head of clamp against journals of mill, forcing mill against die. Rotates die specified number of times equal to number of times design is to repeat around circumference of mill. Examines impression of design on mill and determines from gap left between ends of impression amount reduction required in circumference of mill. Starts machine that turns die against mill to produce indentations on mill. Spreads acid-resistant wax over surface of mill and gradually increases pressure on head of clamp as die turns against mill, working wax away from area of mill corresponding to unengraved area of die. Removes mill from clamp and spins mill in acid bath to etch waxfree area of mill, leaving waxed area of mill in relief. Offsets head of clamp and works die against mill to round off end of design and make surface of mill oval to facilitate transfer of design from mill to surface of copper printing roller. Examines raised design on mill through magnifying lens to verify sharpness of lines. Inserts mill in heat-treating pot, fills pot with carbon-activated bonemeal, and places pot in electric furnace. Turns thermostat to set temperature of furnace according to type of steel. Removes mill from furnace at end of heating cycle, using tongs, and dips mill into brine solution to harden and temper steel. Cleans mill with wire brush. May operate engine lathe to reduce diameter of mill or to turn raised indentations off ends of mill [ENGINE-LATHE SET-UP OPERATOR (machine shop)].
GOE: 05.05.13 STRENGTH: M GED: R3 M2 L2 SVP: 6 DLU: 77

979.382-014 ENGRAVER, MACHINE (print. & pub.)

Sets up and operates engraving machine to transfer designs from *mills* to copper printing rollers used in color-printing cloth: Lifts printing roller into position on machine with aid of another worker. Places *truing I* roller in fixture on head of machine and lowers machine head until truing roller rests on surface of printing roller. Starts machine to rotate truing roller against printing roller and turns setscrews until truing roller rotates without horizontal motion to align head of machine with printing roller. Divides *register wheel* on machine into divisions, according to number of times design is to be repeated around printing roller, and marks divisions on wheel, using chalk. Inserts stud in specified slot on register wheel, replaces truing roller with mill, and moves *pitch finger* against stop on head of machine to set mill in register for engraving. Lowers mill to surface of printing roller, releases catch on weight lever to apply pressure on mill, and rotates mill one revolution to transfer one repeat of pattern to roller. Repeats procedure until design has been repeated around circumference of printing roller. Examines impression of design on roller to detect repeats of pattern that are out of register. Replaces mill with burnishing roller and works burnishing roller against printing roller to erase defective impressions. Increases pressure on mill if design is in register and starts machine that works mill against printing roller to increase depth of impression. Measures depth of engraving, using depth gauge. Measures width of embossed design on mill, using divider, and converts measurement into number of teeth on side-shift gear, using conversion tables. Releases pressure on mill and turns gear specified number of teeth to move mill into position for engraving design adjacent to first impression and repeats procedure as above until design has been engraved across length of roller. Engages dog in teeth of gear and pitches design in register. Repeats procedure until design has been engraved across length of roller. Mounts engraved roller on mandrel of polishing lathe and operates lathe to remove burrs and smooth roller [PRINTING-ROLLER POLISHER (machine shop)].
GOE: 05.10.05 STRENGTH: V GED: R4 M2 L2 SVP: 8 DLU: 77

979.382-018 PRINTER (print. & pub.) alternate titles: graphic arts technician; printer, small print shop

Reproduces and assembles graphic arts materials, performing any combination of following duties in small printing shop or printing department of establishment: Sets up and operates various types of cameras to produce plastic or paper plates, or negatives for later use in preparation of aluminum plates for reproduction in offset lithographic process. Touches up negatives, using opaque material, positions negatives on masking sheet, and cuts exposure windows in masking sheet to assemble *film flats* for reproduction. Places masked negative on aluminum plate, and exposes plate to negative under high intensity (ultraviolet) lamp to transfer image to plate, using vacuum frame. Places exposed plate in automatic processor or immerses plate in chemical solutions to develop image on plate. Operates offset-duplicating machine or small printing press to reproduce single or multicolor copies of line, drawings, graphs, or similar materials. Inspects printed material to verify specified color and clarity of print. Sets up and operates bindery equipment to cut, assemble, staple, or bind materials. Maintains machinery and equipment in operating condition.
GOE: 01.06.01 STRENGTH: M GED: R4 M2 L3 SVP: 5 DLU: 88

979.382-022 PANTOGRAPHER (print. & pub.)

Operates pantograph machine to transfer design in reduced form from zinc plate to varnished printing rollers: Moves stylus on tracing carriage through series of reference points on zinc plate, depresses pedal to lower diamond points to surface of roller, and observes alignment of diamond points with marks on

roller to verify machine setup. Sets ground point into slot on ground wheel according to instructions on design sheet. Moves lever to lock tracing carriage in position for inscribing ground lines on surface of varnished roller. Rotates ground wheel to advance tracing carriage specified distance, depresses pedal to lower diamond points to roller surface, and moves stylus back and forth within outline on zinc plate to inscribe oblique ground lines on roller. Releases tracing carriage and guides stylus around outline on zinc plate to transfer outline to roller. Engages register point in appropriate slot on *register wheel* and adjusts dimension levers, using handtools to set up machine for inscribing subsequent repeats of pattern around circumference of roller. Transfers portions of design represented by different colors onto separate rollers. Paints over pinholes, scratches, and reference points left on roller by PANTOGRAPH SETTER (print. & pub.), using brush and acid resistant paint. Marks register point on end of roller, using hammer and punch.
GOE: 05.10.05 STRENGTH: L GED: R3 M1 L1 SVP: 4 DLU: 77

979.382-026 COMPUTER TYPESETTER-KEYLINER (print. & pub.) alternate titles: desktop publisher

Lays out pages, selects size and style of type, and enters text and graphics into computer to produce printed materials, such as advertisements, brochures, newsletters, and forms, applying knowledge of graphic arts techniques and typesetting, and using computer: Reviews layout and customer order. Enters text into computer, using input device, such as mouse, keyboard, scanner, or modem. Scans artwork, using optical scanner which changes image into computer-readable form. Enters commands to position text and illustrations on page grid of computer monitor. Creates spaces between letters, columns, and lines, applying knowledge of typesetting, and enters commands, using input device. Arranges page according to aesthetic standards, layout specifications of GRAPHIC DESIGNER (profess. & kin.) 141.061-018, and applying knowledge of layout (keylining) and computer software. Prints paper or film copies of completed material. May alter illustration to enlarge, reduce, or clarify image. May operate stat camera to produce photostat. May operate automatic film developer to process photographs. May assemble art work into pasteup and perform keylining manually [PASTE-UP ARTIST (print. & pub.) 972.381-030].
GOE: 01.06.01 STRENGTH: S GED: R4 M3 L4 SVP: 6 DLU: 90

979.384-010 SCREEN MAKER, PHOTOGRAPHIC PROCESS (any industry)

Fabricates stencils for screen printing, applying knowledge of photochemical processing, using photographic equipment: Coats screen with photosensitive emulsion, using brush. Places and secures artwork and screen in frame of vacuum printer. Adjusts printer controls and activates printer to transfer image onto screen and form stencil. Washes unexposed emulsion from screen, using water and hose. Hangs screen in rack or places screen in oven to dry. May fabricate stencil by adhering film with specified image to screen, using vacuum frame. May insert screen in frame, using handtools and tension meters [PRINTING SCREEN ASSEMBLER (electron. comp.) 979.684-042]. May measure and mix ingredients used in photochemical process, according to standard formulas. May scrub screen for reuse, using solvents, brush, and hose. May pour ink or other printing material onto screen and move squeegee across screen to test screen or to screen print objects [SCREEN PRINTER (any industry) 979.684-034].
GOE: 05.10.05 STRENGTH: M GED: R3 M2 L2 SVP: 4 DLU: 88

979.581-010 ENGRAVER, RUBBER (print. & pub.)

Engraves rubber plates used in printing designs and lettering on fabric or other materials, using knife, mechanical drawing tools and handtools: Cuts strip of engraving gum (two- or three-ply rubber, cemented to cloth backing) from roll, using knife. Positions design over strip and traces outline or draws letters, using pencil and mechanical drawing tools, leaving impression in surface of strip. Cuts around impression with knife to one-ply depth and pulls cut rubber from strip, leaving raised design or lettering. Prepares additional rubber plates for jobs requiring colors by omitting different portions of design or lettering from each plate. Punches hole on either side of plate and inserts and clinches grommet around hole, using setting tool and hammer, for use in fastening plate to press.
GOE: 01.06.01 STRENGTH: S GED: R3 M1 L1 SVP: 6 DLU: 77

979.667-010 INSPECTOR, SCREEN PRINTING (print. & pub.)

Inspects stencils, silk screens, materials, and printed products at various stages of production to ensure conformance to specifications, applying knowledge of screen printing techniques: Reviews job order and examines customer artwork and material to be printed, such as vinyl, wood, glass, or paper products, to evaluate suitability of material for silk-screen printing. Inspects stencils for conformance to customers specifications and company standards and returns unsatisfactory stencils to cutter for modifications. Examines sample of screen printing prepared from stencil to verify print is complete and color is applied in conformity with customer's requirements. Feels surface of screen print for smoothness. Discusses corrections to silk-screen process with screen printer. Inspects final product to verify quality. Records inspection results on job order or quality control form.
GOE: 06.03.02 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 86

979.681-010 LETTERER (machinery mfg.) alternate titles: raiser; sketcher

Copies outline of type from lead type proof to furnish pattern for processing steel type: Places lead type under projectoscope that magnifies it. Traces outline of letter. Draws letter in detail, using drawing board, pencil, and paper.
GOE: 01.06.03 STRENGTH: S GED: R3 M1 L1 SVP: 6 DLU: 77

979.681-014 PRINTER (glass products)

Prints specified design on paper for use in etching glassware, using printing plate and artist's handtools: Warms printing plate and ink on electric heater preparatory to printing. Spreads ink on plate, using spatula and positions plate on paper. Rubs paper against plate to transfer design from plate to paper. Examines print for clarity and lays prints on worktable to dry. Cuts plate to produce new designs following outline on plate, using scriber. Applies acid to etch design into plate.
GOE: 01.06.01 STRENGTH: L GED: R3 M1 L2 SVP: 5 DLU: 77

979.681-018 ROLLER ENGRAVER, HAND (print. & pub.)

Engraves designs into copper textile printing rollers, using graver, punches, hammer, and sketches. Presses sketch on roller to produce impression of design. Cuts grooves of specified depth and uniformity into roller following lines of design impression. Refers to sketch to ensure that lines of only one printing color are engraved into each roller. May inspect design for defective engraving and reengrave roller to meet specifications. May engrave designs, using engraving machine [ENGRAVER, MACHINE (print. & pub.)].
GOE: 01.06.01 STRENGTH: S GED: R3 M2 L2 SVP: 7 DLU: 77

979.681-022 SILK-SCREEN CUTTER (any industry) alternate titles: film cutter; silk-screen maker; stencil cutter

Cuts stencils by hand for use in silk-screen printing: Superimposes transparent gelatinous film or shellacked onionskin paper on design or lettering to be reproduced, and cuts outline of design, using knife. Irons stencil on silk or fine copper mesh screen to transfer film or shellac onto screen. Cuts additional stencils for each color to be printed in design. May draw design directly on screen and fill in surfaces around design with glue, lacquer, or paper. May print designs [SCREEN PRINTER (any industry)]. May cut stencils for use in making computer circuit plug boards and be designated Silk-Screen-Layout Drafter (any industry).
GOE: 01.06.01 STRENGTH: L GED: R3 M1 L2 SVP: 5 DLU: 77

979.682-010 BLOCKER I (print. & pub.) alternate titles: mounter

Operates machines to mount finished stereotype and eletrotype printing plates on wood, synthetic, or metal blocks, and to trim, square, and smooth edges of mounted plates: Places plates face up on flat metal surface and taps plates with hammer and wooden block to straighten irregularities due to warping or bending. Cuts blocks to size on power saw. Lays plates on adhesive-coated block or inserts sheet of thermosetting bonding film between plate and block and places assembly on sliding table of heat press. Places bearers (steel bars) around assembled cut and covers assembly with heat resistant blanket to prevent mechanical damage to plate. Adjusts controls to regulate pressure and temperature of press. Pushes sliding table with plate into press cavity (oven) and depresses lever to apply pressure for specified time. Nails plate to block, using hammer or nailing machine. Operates machines, such as trim saw, rotary trimming machine, block planer, and block leveling machine to trim, square, and smooth edges of mounted plates and reduce blocks and mounted plates to type-high thickness. Adjusts microgauges, guides, and cutting blades of machines to produce specified cuts and verifies dimensions of blocks and mounted plates, using try square, snap gauge, and dial indicator type gauge. Patches plates with solder and sweats electrotypes to metal base, using electric soldering equipment. Cuts notches and mortises in mounted plates, using drill press and jig saw, to make openings for inserting type on other plates. May mount plates with double-coated pressure-sensitive tape and tap with woodblock and hammer to form bond. May operate routing machine to cut excess metal from nonprinting areas of electrotype, stereotype, and photoengraved printing plates [ROUTER (print. & pub.)].
GOE: 06.02.09 STRENGTH: L GED: R3 M2 L2 SVP: 7 DLU: 77

979.682-014 BLUEPRINTING-MACHINE OPERATOR (any industry) alternate titles: ammonia-print operator; blue-line operator; blueprint maker; diazo machine operator; whiteprinting-machine operator

Operates machine to make copies (blueprints) of printed material, such as documents or drawings: Examines negative of original for translucency. Selects sensitized paper according to color of line specified, and positions original over paper. Moves controls to regulate light intensity and exposure time, according to translucency of original and type of sensitized paper. Slides original and sensitized paper into printer to expose and develop print. Examines finished print for specified color, intensity, and sharpness of line. Pushes button to supply machine with ammonia, or manually pours ammonia into printer. May cover original negative with translucent sensitized paper and color filter to prepare autopositive (negative) of original. May be known according to trade name of printer operated.
GOE: 05.10.05 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 81

979.682-022 ROLLER VARNISHER (print. & pub.)

Operates machine to coat unengraved copper rollers or to top engraved copper rollers with acid-resistant varnish preparatory to inscribing design: Mounts roller on mandrel of machine, using electric hoist, and starts machine to rotate roller. Cleans roller, using rag or brush, detergents, and water. Dries roller, using paper towel or leather squeegee. Varnishes roller, using either of following methods: (1) Holds rubber varnishing roller against rotating copper roller and pours varnish between rollers. Guides varnishing roller back and forth over length of copper roller to distribute varnish evenly over surface of roller.

Inserts steam pipe through varnished roller and circulates steam through roller to smooth out pinholes and harden varnish. (2) Holds rubber topping roller against rotating steel (dummy) roller and pours varnish between rollers. Moves topping roller back and forth over dummy roller to work varnish into topping roller. Transfers topping roller to engraved roller as varnish becomes tacky and guides topping roller back and forth over engraved roller to top roller with varnish, leaving engravings exposed. Tops varnish coating with acid-resistant ink. Examines engravings on topped roller to detect ink smears or cavities filled with ink. Cleans and retops defective roller. Trucks varnished or topped rollers to storage area.
GOE: 06.02.21 STRENGTH: M GED: R3 M1 L1 SVP: 6 DLU: 77

979.682-026 ROUTER (print. & pub.) alternate titles: printing-plate router

Operates routing machine with free moving head to cut excess metal from nonprinting areas of electrotype, stereotype, and photoengraved printing plates: Clamps plate face onto routing machine table. Selects cutter bit and installs bit in chuck of routing spindle. Depresses pedal to start machine and moves hand guides to control direction of rotating cutter bit along outlines of design or letters set off by chemically darkened etching. Depresses pedal to raise cutter bit to avoid cutting printing areas of plate. Bevels edges of plates to form nailing surface for mounting plates to wood or synthetic blocks, using router or beveling machine. Mounts curved plates on saddle device in order to cut metal from nonprinting areas. May mount finished printing plates on wood, synthetic, or metal blocks to raise them to printing height, by hand or using automatic plate-mounting equipment [BLOCKER (print. & pub.) II].
GOE: 06.02.02 STRENGTH: L GED: R3 M1 L1 SVP: 5 DLU: 77

979.684-010 CARBON PRINTER (print. & pub.)

Transfers image onto polished surface of copper cylinder to be used in rotogravure process, using photographic equipment: Places sensitized carbon tissue in frame over setup form of matter to be reproduced, and exposes assembly to arc light. Removes tissue after exposure, trims to size, and affixes it to surface of cylinder. May mix chemicals to prepare sensitizing solution and immerse tissue in solution to produce sensitized coating on tissue.
GOE: 05.10.05 STRENGTH: L GED: R3 M1 L1 SVP: 5 DLU: 77

979.684-014 ENGRAVER II (print. & pub.)

Cuts letters and designs in linoleum and mounts cut articles on blocks for use in printing posters, using drawing and cutting instruments: Traces pattern of design and letters in reverse on linoleum, using ruler, pencil, and drawing instruments. Cuts around drawn pattern leaving raised design or letters, using cutting tools. Glues pattern to wooden block.
GOE: 01.06.01 STRENGTH: S GED: R3 M1 L1 SVP: 6 DLU: 77

979.684-018 LEGEND MAKER (fabrication, nec)

Arranges and mounts precut letters, numbers, symbols, and logos on paper backing to produce word groupings for signs and displays: Reads work order to determine wording of sign or display. Cuts transparent backing paper to specified size and positions and secures paper to graph grid on drafting table. Removes precut letters, numbers, symbols, or logos from strips or sheets, using knife, and positions them on pressure sensitive paper according to copy, following graph grid. Tapes letters to paper, using transparent tape. Removes completed graphic from table and cuts graphic to size according to customer specifications, using knife.
GOE: 06.04.26 STRENGTH: S GED: R2 M1 L2 SVP: 3 DLU: 77

979.684-022 MAP-AND-CHART MOUNTER (print. & pub.) alternate titles: bookmaker, map; finisher, map and chart

Performs any combination of following tasks to mount maps and charts according to oral or written specifications: Glues muslin or board backing to paper maps and charts, by hand or using mounting machine. Tends machine that automatically applies reinforcing tape to edges of unmounted charts and maps. Attaches spring roller and draw rod to roll-type maps and charts. Cuts maps into sections of specified size, using knife or razor. Spaces sections on muslin according to specifications and glues sections to muslin to assemble fold-mounted maps. Attaches brackets to corners of wooden strips to assemble map-mounting frame. Secures map or chart to frame, using glazier's points, screws, or tape. Inserts fold-mounted maps into binders, punches eyelet holes in binder, using hand press, and inserts and crimps eyelets to secure maps in binder, using hammer.
GOE: 06.02.26 STRENGTH: L GED: R3 M2 L2 SVP: 5 DLU: 77

979.684-026 PRINT-SHOP HELPER (print. & pub.)

Assists workers engaged in setting type, operating printing presses, and making plates, performing any combination of following duties: Moves material and supplies to and from various work areas. Assists in making ready and adjusting presses for production runs. Keeps presses supplied with paper stock. Cleans presses, printing plates, and type setups after use. Covers dampening rolls with wool or felt. Counts, stacks, and wraps finished printed material. Cleans electrotype shells prior to casting, and removes excess metal from edges or backs of cast printing plates, using metal trimming and shaving machines. Trims stereotype matrices to size and dries them between steam or flame-heated plates. Immerses cast plates in copper and chrome plating solutions. Nails wooden blocks to backs of prepared plates to bring plates to printing level. May set type by hand following copy. May be designated according to work involved as Electrotyper Helper (print. & pub.); Photoengraving Helper (print. & pub.); Stereotyper Helper (print. & pub.). Performs other duties as described under HELPER (any industry) Master Title.
GOE: 05.12.18 STRENGTH: M GED: R2 M1 L1 SVP: 3 DLU: 77

979.684-030 SCREEN PRINTER (textile) alternate titles: silk-screen printer

Prints designs on textiles, such as cloth, towels, bath cloths, sheets, and pillowcases, using screen and squeegee: Sets register guides along edge of printing table at intervals specified for pattern repeat. Pours color paste onto screen and positions screen against guides over cloth. Draws squeegee across screen to press color paste through open portion of screen and print design. Repeats process with different screen for each color in design. Washes screens with water or solvent to remove color paste.
GOE: 06.02.27 STRENGTH: L GED: R3 M2 L2 SVP: 3 DLU: 77

979.684-034 SCREEN PRINTER (any industry) alternate titles: decorator; letterer; screener; silk-screen operator; silk-screen painter

Prints lettering and designs on objects, such as posters, targets, instrument dials, furniture, glass, and toys, using screen printing device: Positions object against guides on setup board or holding fixture of screening device and lowers screen. Pours paint into screen frame or dips squeegee in paint and draws squeegee across screen to transfer design to object. Cleans screen with solvent at end of run and when using different colors. May mix paints according to standard formulas. May affix decals to parts and assemblies, using roller. May examine printed object for defects. May fabricate silk-screen stencil, using photographic equipment. May be designated according to object printed as Target-Face Maker (toy-sport equip.). May tend semiautomatic machine that advances wallpaper under printing screen and be designated Wallpaper Printer (paper goods) II. May screen print electrode material onto substrate used in electronic components, such as ceramic capacitors and film resistors, and be known as Silk-Screen Printer (electron. comp.). May screen print solder mask or nomenclature on printed circuit boards and be designated Screen Printer, Printed Circuit Boards (electron. comp.).
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 3 DLU: 86

979.684-038 SILK-SCREEN REPAIRER (any industry)

Repairs silk screens used in printing articles, such as glass, textile products, furniture, and toys, using handtools: Examines screens over lighted inspection table to detect holes in gelatin emulsion. Brushes blocking solution over holes. Measures alignment of design on article printed, using calipers, and adjusts registration guides and tightens screen in frame to correct misalignment.
GOE: 05.10.05 STRENGTH: L GED: R3 M2 L1 SVP: 3 DLU: 77

979.684-042 PRINTING SCREEN ASSEMBLER (electron. comp.) alternate titles: screen stretcher

Stretches and fastens screening material to metal frames to make printing screens, using either of following methods: (1) Positions frame in holding fixture of stretcher. Places specified length of screening material, such as silk, polyester, or metal mesh, over frame and secures edges of material in clamps of stretcher. Turns ratchet wheels on stretcher to stretch and straighten screening material. Examines and feels screening material to determine tension. Places tension measuring instrument on screening material to measure tension according to specifications. Glues screening material to frame and removes frame from stretcher. Trims excess material from frame, using knife. (2) Clamps specified length of screening material to screen frame. Tightens screws of frame to stretch and straighten screening material according to sequence diagram, using handtool. Examines screen for defects, such as runs or torn areas.
GOE: 06.04.34 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 86

979.685-010 SILK-SCREEN PRINTER, MACHINE (any industry) alternate titles: screen printer

Tends silk screen machine that prints designs, patterns, lettering, or other images on assorted materials and products, such as glassware, ceramics, metal, plastic, or electronic components: Bolts framed silk screen onto machine, and installs and adjusts workpiece holding fixture, stops, and guides, using handtools, ruler, and workpiece pattern. Attaches squeegee to pneumatic drive mechanism, using wrench, and connects air line to mechanism. Regulates air pressure and manipulates squeegee to adjust pressure and angle of sweep. Applies printing compound to screen, using spatula or brush. Places workpiece in or on holding fixture, presses button to lower screen, and depresses pedal or pushes button to activate squeegee. Observes silk screen and workpiece to detect printing defects caused by ripped screen and applies glue to rip to repair screen. Cleans silk screen, using brush and solvent. May thin printing compound, using specified thinner. May tend firing oven to dry printed workpiece. May sharpen squeegee on sanding machine. May transfer image of original artwork to screen, using vacuum printer. May be designated according to type of machine tended as Decorating-Machine Tender (glass mfg.); Squeegee-Machine Tender (glass mfg.); or Stenciling-Machine Tender (glass mfg.: glass products). May tend machine that screen-prints circuit pattern and nomenclature on printed circuit board (PCB) panels used in fabricating PCB's and be designated Screen-Printing-Machine Tender, Printed Circuit Boards (electron. comp.).
GOE: 06.04.09 STRENGTH: L GED: R2 M1 L2 SVP: 3 DLU: 89

979.687-010 EXAMINER (print. & pub.)

Inspects engraved letterheads, envelopes, cards, and stationery to detect defects in engraving and flaws in paper. Informs supervisor of defective engraving rollers and paper.
GOE: 06.03.02 STRENGTH: S GED: R2 M1 L2 SVP: 4 DLU: 77

979.687-014 PHOTOSTAT-OPERATOR HELPER (any industry)

Performs any combination of following tasks to assist PHOTOSTAT OPERATOR (any industry): Pegs or clamps material to be duplicated on copy-board of photostat machine and removes material subsequent to duplication. Pours developing and fixing solutions into machine tanks. Washes prints subsequent to duplication and places prints in drying cabinet. Trims edges of prints, using paper cutter or scissors. Records type, size, and number of prints duplicated. Performs other duties as described under HELPER (any industry) Master Title.

GOE: 05.12.19 STRENGTH: L GED: R2 M1 L1 SVP: 2 DLU: 77

979.687-018 PLATE GAUGER (print. & pub.)

Examines and repairs engraved printing plates, using plate gauge, cement, and tissue paper: Visually examines plates for defects, such as scratches, broken corners, or broken type. Measures plates to verify specified printing height of type-face, line-engraving, half-tone, and color printing areas. Builds up low spots on plate, using tissue paper and cement. Records type of defect on back of plate and routes plate to repair room.

GOE: 06.03.02 STRENGTH: S GED: R2 M1 L2 SVP: 3 DLU: 77

979.687-022 SCREEN PRINTER HELPER (any industry)

Assists SCREEN PRINTER (any industry) in printing lettering and designs on articles, performing duties as described under HELPER (any industry) Master Title.

GOE: 06.04.34 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 77

979.687-026 TYPE-COPY EXAMINER (machinery mfg.)

Examines proofsheets for irregularities in type characters indicative of defects in phototypesetting type disks: Examines each character on proofsheet for breaks, irregular spacing, improper alignment, and eccentricity, using magnifying glass. Circles characters that do not conform to standards, using red pencil. Files approved proofsheets and forwards proofsheets failing to meet standards to SUPERVISOR, TYPE-DISK QUALITY CONTROL (machinery mfg.) 979.137-026. May attach identification labels or adhesive-backed paper to phototypesetting type disk components.

GOE: 06.03.02 STRENGTH: S GED: R2 M1 L2 SVP: 2 DLU: 86

979.687-030 INSPECTOR, FURNITURE DECALS (furniture)

Inspects silk-screened decals used in furniture decoration for defects: Inspects sheets of decals for defects, such as smears, misalignments, uneven color, or torn paper. Counts acceptable decals and records totals on production records. Arranges stacks of decal sheets in order and cuts stacks, using power shear. Positions rubberbands around stacks of decals and places stacks in storage bins.

GOE: 06.03.02 STRENGTH: M GED: R2 M1 L1 SVP: 2 DLU: 86

979.687-034 GENERAL WORKER, LITHOGRAPHIC (print. & pub.)

Assists apprentices and journey workers, as assigned by supervisors, in prepress, press, and bindery departments within offset lithographic printing establishment, performing duties as described under HELPER (any industry) Master Title.

GOE: 05.12.19 STRENGTH: M GED: R2 M2 L2 SVP: 1 DLU: 89

GLOSSARY

The Glossary contains technical or special uses of words, which are not ordinarily found in a standard desk dictionary. These words are *italicized* when they appear in an occupational definition.

ABSORPTION TOWER

Tank used to form acidic bisulfate-active agent in digesting wood, from ingredients such as sulfur dioxide, lime, manganese, and ammonia.

AGATE BEARING

A bearing made of agate used in small scales or precision balances where resistance to corrosion is essential.

AIRGAP

The gap between the rotor and stator of an electric machine.

AIR LANCE

A long metal rod that carries compressed air to its tip. It is used for cleaning purposes.

ALODIZE

A process for bathing metal in hot alodine solution to give it protective coating and surface for painting.

BACK-ROLL LATHE

A veneer lathe equipped with knives mounted on impression roller that rotates counter to rotation of log. The knives score log lengthwise causing veneer to be peeled from log in narrow stave and hoop widths.

BACK SHEET

A veneer sheet, usually of slightly inferior quality than FACE SHEET, used for the bottom surface sheet of plywood panels.

BALANCE

To adjust pressure, velocity, or volume control settings in a heating, cooling, or ventilating system to attain performance indicated in system design specifications.

BALL WARP

An untwisted rope of yarn wound on core, usually for dyeing or mercerizing.

BAND

Two plies of rubberized fabric pressed together with ends joined to form endless strip used in building pneumatic tires.

BAT

A fluffy layer which is composed of interlaced and matted strands of fibrous material used for filling or insulating articles such as mattresses or comforters.

BEAT

See IN-BEAT.

BEATING MACHINE

A machine equipped with leather strips which, when revolving, beat loose hair, dust, and foreign matter from fur pelts.

BELL REAMER

An expanding bit used to enlarge bottom of holes drilled to accommodate concrete pier footings. The conical shape of resulting hole anchors footing and serves as base for pier construction.

BENCH GRINDER

A small grinding machine for shaping and sharpening cutting edges of tools. It consists of a motor, mounted on bench or floor stand, with grinding wheel at one or both ends of shaft.

BILGE OF STAVE

The difference in width between ends and middle of a barrel stave.

BLADDER

Heavy-walled rubber cylinder used in a curing press to expand uncured tires into the recesses of the tire mold.

BLINDSTITCH SEWING MACHINE

A machine equipped with a curved needle to sew stitches that do not penetrate the outer surface of fabric. Used for operations, such as hemming, lapel padding, and lining felling.

BLOCKER

One of a number of leather strips joined together for use as trimming for shoes.

BLOCKING MACHINE

An electric stove equipped with a grill on which blocks, pitch, and lenses are heated. On depressing a lever, hot pitch is forced onto block surface.

BOARD

A sheet of varnished canvas, or a lightweight wooden board, upon which rubber slabs or parts are placed for transportation or storage.

BOARDING I

The process of softening leather and developing the grain by rubbing the surfaces together.

BOARDING II

The operation of shaping and drying hosiery on heated, metal, leg-shaped forms known as hosiery boarding forms or boards.

BOAT

A supporting structure used to hold semiconductor wafers during and between processing.

BOOK

Pieces of uncured gum rubber or rubber-coated fabric placed between cloth pages or canvas sheets to prevent cohesion.

BOX BLANK

The sides, ends, and bottom of a wire-bound box in process of manufacture.

BULKING CELL

A rectangular enclosure with an open top and hinged door used to compress tobacco into a bulk.

BURLING IRON

A handtool similar to an ice pick with a slit in the pick end used to push yarn through fabric.

BURN PATTERN

The path that a fire takes from point of origin to the outermost limit of the fire.

BUS BAR

Metal conductor forming a common junction between two or more electrical circuits.

BUSHING

Heat resistant metal device with 200-400 holes through which molten glass is extruded to manufacture fiberglass sliver.

BUTTON

A steel cylinder used on knitting machine to keep links of pattern chain from engaging and turning gears that activate shafts of machine.

CAKE

Synthetic thread piled into ring shape.

CALIPER CHISEL

A chisel attached to one leg of caliper used to turn wood to specified diameter on wood lathe.

CAPTIONS

On-screen text of a television show's or a movie's dialogue shown simultaneously with the sound of the dialogue. This is usually done to provide information for the hearing-impaired, or to provide a translation from a foreign language. Captions are sometimes called subtitles, especially when providing a translation from a foreign language.

CARD CLOTHING FILLET

A long, narrow strip of foundation material studded with many fine, closely spaced, wire teeth.

CARROTING

The brushing of furs with solution of hydrogen peroxide and nitric acid. This treatment opens sheaths surrounding each fur fiber and permits matting (felting) of fibers in subsequent operations.

CASING FLUID

A flavoring solution applied to tobacco to give it distinctive taste. Usually made according to carefully guarded plant formulas from ingredients, such as tonka beans, rum, licorice, and sugar.

CAUSTICIZER

Tanks used to convert spent liquor and lime hydrate into hydroxide.

CHARGER

A cylinder, open at both ends, which is inserted in top of hogshead container to extend height of hogshead container for packing purposes.

CHARGING MANIFOLD

A hollow pipe fixture containing holes which receive and hold capillary tubes of thermostat bellows while they are being filled with gas.

CHILL-PROOF

To stabilize or eliminate protein compounds in beer to prolong shelf life.

CHOKER

A noose of wire rope hitched about a log by means of which logs are skidded overground.

CLAMP MACHINE

A stationary hand-powered or air-driven vise used to force together and hold joints of wooden assemblies in position while being reinforced by nails, screws, staples, and glue. Also known as case clamp, chair clamp, or bed clamp, depending on design or purpose.

CLARIFIERS

A machine having submerged, rotating arms with plow blades which scrape settled silt from bottom of settling basin spirally toward center of machine where silt is collected in trough and sluiced through pipes back to river. The clarifier does not clarify in the usual sense; silt is settled by gravity.

CLEARER ROLLER

A small cloth- or felt-covered roller driven by frictional contact with rollers to keep rollers clean and collect roving waste when end breaks.

CLINCHING TOOL

A device used to secure upholstery padding material to furniture frames. Wire staples held in tension in shaft of tool are released when trigger is pressed and secure padding material to frames.

COILER HEAD

An attachment on textile machines that coils sliver after it has been processed.

COIL FORM

Paper or plastic tube onto which wire coils are wound. Forms vary in length according to number of coils wound on each form. Multiple wound coil forms are cut on bandsaw into individual coils for assembly into electronic equipment.

COLOR BOX

Metal trough under each PRINTING ROLLER that contains a reservoir of printing paste. A rubber or nylon bristle-covered roller dips color paste from the COLOR BOX and forces the paste into the engravings of the PRINTING ROLLER.

COMB

Precut undipped pasteboard resembling a hair comb, used for book matches.

CONES

A set of small triangular pyramids of clay mixtures and fluxes so graded that they represent series of fusion points. The degree of heat is measured in kiln by observing which of various cones have bent over.

CONTACT PROCESS

Catalytic method of producing sulfuric acid by treatment of sulfur dioxide with catalytic agents and reaction of resulting product with water in absorbing towers.

CORE CUTTER

A modified pneumatic pavement breaker (jack-hammer) adapted to break into wall of cement building.

CORE STOCK

Cheap veneer sheets placed between glued CROSSBANDS to form the interior of plywood panel between the FACE SHEETS and BACK SHEETS.

COUNTERBORING

A machining process in which an enlarged, flat-bottomed cylindrical hole is made at opening of existing hole usually so that bolt head or nut can be seated flush with or below surface.

COVERSTITCH SEWING MACHINE

A machine that sews parallel rows of stitches with a covering thread spread between the rows on one or both surfaces. Used for coverstitching on knit fabrics.

CRACKS

The outer grooves cut in buhr stones.

CRIMPING ATTACHMENT

Two feed rolls and a stuffer box into which yarn is overfed, then folded or bent at a sharp angle and then heat-set during compression by attached heating element.

CROSSBANDS

Cheap veneer sheets glued between CORE STOCK and surface veneer to form plywood, with the grain of the CROSSBANDS running across the grain of the CORE STOCK and surface veneer to bind and hold the veneer sheets from expansion and warping.

CRYSTAL ORIENTATION

The structural arrangement of atoms or molecules inside a semiconductor crystal or wafer.

CUP

Similar to SPREADER PAN in which it sets. Spreads molten lead around spreader pan through holes in side. Receives lead as it comes from spout.

CURING OVEN

A loop or roller-type drier through which resin treated fabrics are run in open width at high temperature to convert soluble resin into insoluble compound.

CUTLINES

Outlines of shapes of glass to be followed for cutting and leading stained-glass windows.

DEBEAKING

Removing the tip on a bird's upper beak to prevent infliction of injuries to other birds.

DECANTER

A rectangular, steel tank in which tar and ammonia are separated by settling according to their differences in specific gravity.

DEVULCANIZER

A machine used in treating ground scrap rubber with chemicals and steam to restore it as nearly possible to its original physical and chemical state for use as RECLAIM rubber.

DIAL

A flat circular plate that rotates and presents parts to machine at prescribed intervals. The worker places parts on designated spots on dial.

DIE

An individual integrated circuit also known as a chip. The term is usually used after the wafer has been scribed and sorted, although it is not limited to that use.

DOBBER

A device with serrated edge which separates strands of yarn and keeps them parallel.

DOBBY LOOM

A loom usually used for weaving goods of a nonfloral pattern in which the interlacings are complicated.

DRAWING-IN DRAFT

In weaving, a plan prepared on design paper showing how warp threads are to be drawn through the heddle to produce desired pattern. A DRAWING-IN DRAFT is prepared for all fancy patterns.

DRAWING-IN FRAME

A rack on which harnesses are hung while warp ends are being drawn through heddle eyes.

DRIFT PIN

A tapered steel pin for aligning rivet holes before inserting the rivet.

DRIP

A tank located below level of gas mains, and connected to main by pipes, for the purpose of collecting condensed water, gas, and tars which must be drained from the main continually to prevent congestion and eventual rupture of the pipe. Capacities of the tanks vary from a few gallons to as much as 500 gallons.

DROP WIRE

In textile machines, thin metal strip with an eye through which single strands of yarn are passed. If the yarn breaks, the wire drops to cut the electric circuit, thus stopping the machine.

DRYING CANS

A machine used in textile mills to dry fabric. Several large heated drums, wide enough to accommodate one or two widths of cloth, are arranged in tiers. Cloth threaded through drums contact a large area of each and are rapidly dried.

DUMPING PIVOT

A simple steel basket open at top and one side to accommodate ice freezing containers. The lower corner opposite open side is hinged to facilitate tipping and removal of ice block.

DWELL METER

An electrical meter used to measure dwell or time interval between closing cycle of distributor points of automobile ignition system. Incorrect spacing of points results in improper dwell.

EDGE ROLL

Rope-like roll of jute core covered with burlap used to build up edges of upholstered furniture before adding padding.

ELECTRICAL-DISCHARGE MACHINING

Removal of metal through action of high-energy electric sparks on surface of workpiece.

END EFFECTOR

Device attached to wrist of industrial robot arm that enables robot to perform tasks.

ESCAPE WHEEL

Wheel of escapement in clock or watch that supplies power from mainspring. It is allowed to 'escape' from pallet at rate governed by balance wheel and thereby controls motion of train.

FACE SHEET

A veneer sheet, of high quality and free from imperfections, used for the top surface sheet of plywood panels.

FACING

A machining operation that is a form of turning in which the tool is fed at right angles to axis of workpiece rotation to produce flat surface.

FAILURE MODE AND EFFECT ANALYSIS

Detailed listing of potential failures of critical parts and effects on total system operation.

FALLER

A narrow metal bar set with one or more rows of sharp, pointed pins that comb through silver to blend and align fibers.

FALLER WIRE

A device on a mule-spinning frame to keep yarn under tension during winding and to guide it onto bobbins.

FALSE SELVAGE

An extra layer of selvage woven on each edge of some looped pile fabrics. This selvage is formed by floats inserted to hold loop pile during weaving. Both FALSE SELVAGE and floats are removed after cloth is doffed from loom.

FALSE-TWIST SPINDLE

A hollow spindle with small wheel mounted in its aperture used in manufacture of stretch yarn. Yarn processed through this spindle is commonly referred to as false-twisted yarn.

FEED CUPS

A feeding mechanism on a sewing machine on which the needle operates horizontally. Two wheels or discs rotate in a horizontal plane to pull the material between them.

FEEDER TUBE

A clay tube clamped in orifice of forehearth to capture and hold gob of molten glass for delivery to bottlemaking machines.

FELLED SEAM

A stress-resistant seam formed by joining overlapped, interfolded garment-part edges with two or three parallel rows of stitching.

FELLING STITCH

A sewing stitch that does not completely penetrate the material in which it is made. Such stitching is used to fasten lining into garments so that the stitches do not show on the outside.

FESTOONS

Two banks of evenly spaced rollers in FOUR-ROLL CALENDER used for accumulating fabric to maintain continuous operations while making roll changes and for taking up slack in fabric prior to calendering.

FILLING PILE FABRIC

Fabric in which an extra set of filling yarns forms pile. Examples are corduroy and velveteen.

FILM FLAT

Group of film negatives or positives mounted on transparent plastic film, colored paper or vinyl which comprise page elements (text and illustrations) of magazine, book, or other printed material, used in preparation of lithographic printing plates.

FILTRACELL

A siliceous material that absorbs impurities and clarifies oil pressed from corn germs.

FINGER BUFF

Strips of buffing cloth used in manufacture of buffing wheels. These strips are attached to core of buffing wheel with LACING and form fingerlike projections.

FIRST-ARTICLE-CONFIGURATION INSPECTION

Detailed physical inspection by customer and company of first part or assembly of given series for conformance with authorization change and engineering drawing.

FLAGGING

Dried strips of a marsh weed, such as cattail.

FLASH

The ridge or line of excess material left on metal or plastic objects along the parting or closing line of mold. Also known as fin.

FLAT

A flat edge ground along a semiconductor crystal to denote crystal orientation and resistivity and which serves as a reference line during processing.

FLATLOCK SEWING MACHINE

A feed-off-the-arm coverstitch machine that sews a flat, nonraveling seam by joining abutted edges with a top-and-bottom covering stitch.

FLOWER NAIL

A long nail with large head that is used as base to create intricate designs with icings.

FOLDING BONE

A thin strip of fish bone used to fold and press leather edges under.

FOLLOW BOARD

See MOLDING BOARD.

FORM BOARD

A specified number of form strips fastened together side by side with long bolts.

FORMING CHUCK

A metal block shaped to contour and attached to machine spindle which serves dual purpose of holding and rotating cylindrical workpieces and as forming die to shape workpiece to contour.

FORM TOOL

A cutting tool ground to specific contour in order to machine the inverse contour in workpiece.

FOTO MAT

Linotype metal matrices with small film of letter in center.

FOUR-ROLL CALENDER

A machine which coats both sides of fabric stock with rubber simultaneously and rolls sheets to specifications. Also known as Z-calender.

FRAZING MACHINE

A machine which guides briar block against cutters to duplicate preselected pipe shape. A clamp-fitted shaft and a cam follows a master model to shape shank and lower half of bowl.

FREENESS

The quality of pulp stock that determines rate at which it parts with water when being formed into sheet on wire screen or perforated plate. The same quality is known as freeness, slowness, or wetness according to type of instrument used to estimate it.

FRENCH BINDING

A narrow strip of fabric that is stitched to edge of shoe uppers and folded over to form smooth finished edge.

FROTHING MACHINE

A mixing machine with electrically operated agitating paddles used for mixing air with latex to obtain desired density.

FULLING MILL

A machine that shrinks and felts fibers of woolen cloth through application of moisture, heat, friction, and pressure. May be used to crush and dust carbonized vegetable matter from dry woolen cloth.

FUNNEL APPROACH

A counseling technique, using open-ended questions in the early stages of counseling, to collect information, orient the individual, married couple, or

family, and to establish communication. As problems become identified, questions are less open-ended and more specific to address or clarify aspects of one or more problems.

FUR MACHINE

A disk-feed sewing machine used for seaming heavy materials to make items, such as fur and fake fur garments, plush toys, and leather slippers. Layers of material are guided vertically between the two disks (cups or wheels) and sewn with a horizontal needle.

GAMB STICK

A metal or wooden rod with pointed or hooked ends which are inserted through the tendons on the hind legs of animal carcass to hold the legs apart while animal is dressed. The stick has a rind in the center for attaching to a trolley or an overhead rail.

GANG KNIFE

A set of knives, arranged to be raised and lowered by hand, used to slice fish into several pieces of predetermined length.

GARNETT MACHINE

A machine similar to a carding machine, used to open hard-twisted yarn wastes, rags, and clippings. Cylinders are covered with coarse wire teeth.

GAS CHECK

A metal cup, coated with oil or wax, that expands to form a gastight, moving seal under piston of device used to measure pressure produced within gun barrel by exploding cartridge.

GEAR CAGES

A cluster of gears, bearings, and locking devices usually attached to a shaft.

GEAR GENERATING

A gear-machining operation in which the cutter teeth have (or simulate) the shape of mating gear teeth rather than of the space between the teeth, and the cutting is done as the cutter and gear blank rotate together.

GEL-COAT

Pigmented, high purity polyester coating, catalyzed with liquid oxidizers used to form layer on boat mold prior to application of fiberglass resin layers.

GIRDLING STICK

A tool with one end threaded to hold drop, wooden middle section for handhold, and metal rod on the other end which is held between body and arm to support and control diamond during girdling.

GORE

An elastic insert in side, front, or panels of a shoe used to decorate or reinforce, or to allow stretching that will provide additional comfort and freedom of movement to wearer.

GROUND RACKING BOARD

Wooden boards of various lengths and widths that are placed flat on an oil well floor to form a base for tubing and pipe sections to stand on when sections are standing up-right in the derrick. Boards are used for the base to prevent sections from sinking into the ground and getting plugged with soil or mud or to prevent damage to the threaded ends of pipe and casing.

HANGER

Part of bicycle frame that holds fork assembly.

HARNESS FRAME

Two wooden laths upon which are suspended series of cords or wires called heddles.

HEAD

Part of bicycle frame that holds crank and sprocket assembly.

HEADER

A fabricated chamber to which series of tubes are joined to permit free circulation of fluid within water tube boiler.

HELICAL SPRINGS

Spiral springs used to hold rows of coil springs together in bedsprings.

HIGH LEAD

A cable-log yarding system consisting of a steel or wooden spar near the yarding machine and a circuit of cable running from the top of the spar to a block at the rear of the cutting area, which enables logs to be lifted over obstructions in rough, mountainous terrain where logging tractors cannot be used efficiently.

HOBBING

A gear-machining operation in which teeth are generated by rotating HOB and gear blank against each other with action similar to that of worm gear. See GEAR GENERATING.

HOG MILL

A power-driven machine for cutting scrap wood into fine particles suitable for blowing as fuel into fireboxes or boilers with compressed-air jet.

HOMOGENIZED LEAF

A tobacco wrapper material made from powdered tobacco and other substances that cause ingredients to stick together.

HOOKER MACHINE

A machine that folds cloth by means of blade that guides fabric back and forth across surface of table.

HORN

A device mounted on a unit similar to a sewing machine called an ULTRASONIC SEAMING MACHINE. HORN emits high-frequency sound waves that fuse thermoplastic materials.

HYDRO-SPRAYER

A tank with horizontal-in-tank agitator, motor, pumps, and piping system, mounted on truck bed, used to cover areas, such as highway median strips, hillsides, and fields with a mixture of grass seed, fertilizer, and mulch.

IMPULSE PIN

The pin mounted on the balance wheel of a clock or watch that receives impulse from pallet fork.

IN-BEAT

Characteristic of timepiece movement resulting from jewel pin being in line of center on ESCAPE WHEEL, pallet, and balance wheel when hairspring is unstressed. In this condition the strokes of the escape wheel teeth against pallet stones will occur at equal intervals. A timepiece is out of beat when strokes or ticks occur at unequal intervals.

INDEXING

Moving workpiece or toolholding device, such as a turret, to a series of regularly spaced positions to repeat an operation or to perform a series of operations at predetermined intervals.

INPOINT

The point at which editing/copying of a portion of audio, music, video, or graphics onto a videotape begins.

INVOLUTE CHECKER

A device for inspecting involute curves on teeth of gears, splines, etc.

JACQUARD LOOM

Loom equipped with device for weaving figured fabrics. The Jacquard attachment consists of mechanism controlled by perforated cards which cause warp threads to be lifted in proper succession for producing figure.

JIGGER

Small pointed metal instrument, resembling sharpened pencil, used in assembling ribs of expansion metal watch bands.

JUMPBASTING SEWING MACHINE

A basting machine that allows free movement of fabric over the work bed to produce a stitch of variable length and direction. There is no feed mechanism or presser foot. A plunger-like device (needle stripper) encloses the needle and holds the fabric down only long enough for the needle to penetrate and withdraw. Used for basting with a long, loose stitch over large areas to hold plies of fabric together, as in preliminary positioning of coat layers.

JUMP IRON

A heavy iron, supported by movable arm, designed to eject steam through holes in bottom. A pedal is depressed to lower iron and to apply pressure to article being pressed. The iron is pushed back and forth manually.

KAPLAN

A control for water turbines which varies pitch of blades in accordance with load, resulting in high efficiency over large-load range.

LACING

A circular metal strip with serrated edges used in manufacture of buffing wheels to secure buffing material to center of wheel. The serrated edges are bent outward to form groove in which material is inserted.

LAP I

A tool, usually of softer material than workpiece and of complementary shape, which is charged with LAPPING COMPOUND. See LAPPING.

LAP II

A roll of loosely matted cotton fiber.

LAP III

A horizontal wheel or disk made of cast iron, used to fine-grind flat surfaces on diamonds or other stones.

LAPPING

Smoothing, finishing, or achieving an extremely close tolerance (e.g., 0.000002 inch in gauge block manufacture) on metal surface by means of a LAP I that is charged with LAPPING COMPOUND and rubbed against workpiece in rotary and/or reciprocating motion, either by hand or machine.

Matching workpieces may be lapped against each other to assure a close fit. Sometimes used loosely to denote fine grinding or honing.

LAPPING COMPOUND

A fine abrasive material, usually mixed with oil, water, or some other vehicle in the form of paste, which becomes imbedded or "charged" in the LAP. See LAPPING.

LAP-UPS

A term used in textile industry denoting material (lap, thread, fibers, etc.) which becomes entangled in or wound about machinery.

LASTING

The operation of tacking a shoe upper and insole to a last or of turning down and sticking together the upper and sole of rubber footwear by hand or machine.

LASTING TOOL

A combination handtool usually composed of hammerhead, pincers, and tack puller used in construction of shoes. Also known as lasting pincers or shoemaker's pliers.

LAYBOY

An automatic mechanism that receives, stacks, and jogs sheets of paper into piles. It may be attached to machines, such as cutters, printing presses, or ruling machines. Generally equipped with counting and tabbing devices.

LAYOUT MACHINE

Modified vernier height gauge, having a scriber on the end of an extending arm, which when positioned next to workpiece, scribes exact locations of reference points and lines.

LEACH TANK

A tank containing hot water into which uncured balloons are dipped to remove bitter taste of coagulant.

LEAD WIRES

Soft metal wires used to take impressions between two adjoining parts to determine clearances measured by micrometers.

LEASE STRING

Strings inserted between the threads of a warp to hold the threads in the same relative position for drawing-in or tying to old warp.

LETOFF RACK

A rack that operates with braking action permitting machine to pull material from a roll.

LIGHT TABLE

A table or bench having translucent top over a light source. It is used in examining objects where it is desired that no shadow will be cast.

LITE

Flat glass cut to specified size from continuous sheet of glass.

LOADING BOX

A receptacle, usually part of, or rigidly attached to, a lever into which molten metal or equivalent may be poured to aid in balancing scale under a zero load.

LOOM BEAM

A large wood or metal cylinder on which are wound the warp threads for a loom.

LOOPING LINE

A line of stitches knitted into both sides of the open toe of seamless hose as a guide along which the looper must set the stitches to produce a straight looped toe.

LOOPING MACHINE

A machine that knits two parts of knitted garment or stocking together.

LUMBER SCALE

A ruler equipped with a calibrated scale used to measure the width of rough-sawed lumber of known thickness and length and to convert the measurement into board feet.

LUMITE

A liquid which hardens when dry to give rigidity to back of shoe.

LUMPIA

A bakery product wrapped around a filling to form lumpias (ethnic dish from the Philippines).

MASK MIRROR

A glass plate, with silvered images of facial features imprinted, used to block out portions of a photograph in preparing a montage.

MASTER STRAIGHTEDGE

A straight slender bar made of rigid material, which is placed across wide points of contact to hold the level on a structure to be leveled.

MATHEMATICAL MODEL

The general characterization of a process, object, or concept, in terms of mathematics, which enables the relatively simple manipulation of variables to be accomplished in order to determine how the process, object, or concept would behave in different situations.

MEASURING WIRES

Accurately made short wires of standard diameters, for use in precision measuring of gear or thread dimensions.

MECHANICAL PRINT

An engineering drawing that is the actual pictorial presentation of a product, part, or machine, showing dimensions, type of material, wiring, and other details.

MEGGER

An instrument used to measure insulation resistance or electrical resistance of electrical equipment, such as powerline poles.

MILL

A small, soft-steel cylinder upon surface of which a design in relief is made by rolling in contact with die.

MINERAL WOOL BLANKET

A continuous ribbon of mineral wool fibers, 2 to 4 inches thick and up to 10 feet wide, that is cut into insulation batts and felts.

MOLDING BOARD

A board on which the patterns and drag are placed when making the drag part of a mold. Also known as FOLLOW BOARD.

MOLD-PRINTING BOARD

The board on which molds are fixed in rows and which, when placed upside down over a tray of leveled starch leaves indentations into which fluid candy is introduced.

MONOTUBE

A hollow stainless-steel tube, into which enriched uranium fuel elements are loaded.

MORTAR GUIDE

A metal band that fits the edge of a stone and has a projecting side the thickness of a joint.

MOSS

A form cadmium metal takes when the molten metal drops into cold water. This bubblelike form of solidified metal enhances dissolution.

MOTHER

Nickel positive electroplate made by electrodeposition on master electroplate. Required in making stamper, which presses positive of recording into phonograph records.

MULLING

The process of heating tobacco to ferment and sweat out bitter gums, ammonia compounds, and impurities which impair flavor and color of tobacco leaves.

NARROWING

The process of contracting size of knit articles, especially a stocking, by taking two stitches in one.

NECK RING

A cast iron ring which is used in conjunction with mold to form neck of bottle.

NECKTIE-CENTRALIZING SEWING MACHINE

A machine that sews the lengthwise seam on a necktie. Two types of machines are in use: One is equipped with a hook in front of the needle and another under the bed of the machine to assist in forming an unusually stretchable single-thread stitch. The other is equipped with a feed track resembling a tractor tread in appearance, that pulls fabric edges up and down over a stationary, 55-inch, horizontal needle to simulate handstitching.

NEEDLE JACKS

Small metal pieces, fitted into grooves in needlebed of knitting machine, that transmit reciprocating motion to needles.

OPTICAL SCANNER

A device that automatically samples or verifies a number of measuring points and indicates those that have drifted from their desired values.

ORDERING MACHINE

A machine in which tobacco is brought to desired moisture content by application of water or steam spray in cylindrical device or compartment through which conveyor belt passes.

OUTFLOW QUENCH STICK

A device on spinning machine that quenches (cools) formed synthetic filaments upon ejection from spinnerette.

OUTPOINT

The point at which editing/copying of a portion of audio, music, video, or graphics onto a videotape stops.

OVERCOIL HAIRSPRING; OVERCOILING

Hairspring of a watch with its outer coil raised above plane of spring and then bent so as to terminate in a curve that is concentric with remaining coils. Purpose is to provide for concentric winding and unwinding of spring thereby eliminating side thrust against bearings. Overcoiling is the act of bending outer coil.

OVERLOCK SEWING MACHINE

A machine that sews an overedge stitch, looping over fabric edges to prevent edge fraying or to seam two or more plies.

PACK

An assembly containing a spinnerette, filter screen, gaskets, and sand through which polymer is passed to filter out impurities and form filaments by forcing polymer through spinnerette.

PACKAGE DYEING MACHINE

A dyeing machine resembling large pressure cooker. The yarn to be dyed is wound on perforated beams or tubes so that dye solution can be circulated through package.

PANTOGRAPH MECHANISM

An attachment used with conventional metal cutting machines, which allows for two (or three) dimensional duplication of a template. The exact or scalar movements of the tracer spindle over the template is transmitted to the cutter spindle which cuts the template pattern from a blank.

PAPER TAPE

A strip of paper capable of storing or recording information. Storage may be in the form of punched holes, partially punched holes, carbonization or chemical change of impregnated material, or by imprinting. Some PAPER TAPES, such as punched PAPER TAPES, are capable of being read by the input device of a computer or a transmitting device by sensing the pattern of holes which represent coded information.

PENCIL EDGE

The round or convex surface edge of glass or mirror after edges have been ground. To apply such edge by grinding.

PICAROON

A short-handled device with a pointed metal end used to move and align logs and lumber inside a sawmill or in confined areas.

PICK

One thread of filling either before weaving or in cloth. Number of picks per inch of warp is measure of fineness of fabric.

PICOT BAR

A bar on knitting machine that holds slender metal rods (picot points) used to knit a row of large, wide stitches (picot stripe) after welt is knitted.

PIECE UP

The joining or union of two or more ends of sliver, slubbing, roving, or yarn by twisting or intermingling fiber ends with fingers.

PILE WIRES

Strips of metal that are inserted into shed of looms to form pile fabrics, such as carpeting.

PILLAR PLATE

Base plate which determines size and shape of clock or watch movement. It is recessed and drilled to form foundation for assembly of various parts and pivots which comprise movement.

PINCH CLEAT

A metal cleat that fits around ends of steel bailing straps. When pinched by strapping tool cleat secures ends and keeps strap taut on bale.

PIN JACK

A cast iron pedestal, usually fastened to shoemaker's bench, on which shoe last is placed during processing operations.

PITCHED WORT

Wort (unfermented beer) with added yeast to promote fermentation.

PITCH FINGER

A metal rod mounted over journal of mill that is used to pitch design on mill in register with other portions of design during engraving process.

PIVOT

That element of conventional scale lever designed to transmit external forces through its knife edge.

PLANER GAUGE

A work aid consisting of two right-triangle ground metal blocks fastened together to enable user to adjust their outer parallel surfaces to any dimension within a given range by sliding one block on the other.

PLANETARY ACTION

A double mechanical motion in which a tool is rotated on a center, while that center is revolved in another circle at the same time.

PLATE PRESS

A filter press that removes water from gluten.

PLUG

Rubber block marked to indicate hat size.

POACHING

Process of removing acid and impurities from nitrocotton prior to processing into explosives.

POISE; POISING

Equal distribution of mass of timepiece balance wheel around axis of rotation that neutralizes effect of gravity. POISING is accomplished by removing or adding weight to balance wheel to create equal distribution of mass around axis.

POLYSOMNOGRAPH

Equipment that measures and records physiologic patterns of sleep.

POWER PRESS

A machine, used in conjunction with dies, for forming, molding, cutting, and shaping of materials under great pressure.

PREFORM RUBBER

Uncured rubber that is precut to provide specific amount of rubber necessary to fill each mold cavity.

PREROLL

The time (usually in seconds) it takes a videotape to get up to speed, i.e., the lapse time between pressing the play button and when the picture appears on the monitor for the viewing audience to see.

PRIMACORD

A flexible woven cord with an explosive core which detonates at an extremely fast velocity of over 20,000 feet per second.

PRINTING ROLLER

See PRINTING SHELL.

PRINTING SHELL

A large, engraved copper roller used to print designs in color on cloth when mounted in printing machine.

PROGRAMMABLE CONTROLLER

A device which, after being programmed by means of its keyboard and display screen, starts, stops, and coordinates one or more pieces of automated machinery.

PROGRESSIVE DIE

An integrated stamping die made up of several die units or stations through which workpiece is indexed one station at a time for a series of operations. Usually, a continuous strip of sheet metal is fed into press and completely formed workpiece is ejected from other end with each action of press.

PROJECTION (SHADOW) COMPARATOR MACHINE

Floor-mounted machine that employs intense light to project shadow of machined workpiece onto master drawing which is laid on a lighted table screen. The shadow is aligned with the master drawing to determine conformance of workpiece to specifications.

PRONGS

Scissors-like tool with three tines, one on one handle and two on other, used for gripping and twisting.

PROVER

A device for passing measured amount of gas or compressed air under constant pressure through gas meters to test accuracy of meters.

PULL-TEST MACHINE

A testing device in which pounds of pull, necessary to pull bullet out of cartridge case, are measured.

PULSATION RECORDER

An instrument equipped with a revolving drum and a pressure-sensitive pen which marks the duration and intensity of vacuum-cycle wave forms when its probe is inserted into a vacuum line. It is used to test the operation of automatic milking systems.

PUTTING-IN-BEAT

See IN-BEAT.

RACK

The standard unit of measure for lace. It is the amount of lace woven by 1,920 single motions of loom.

RADIAL DRILL PRESS

A machine tool used primarily for metal drilling, which consists of central column and horizontal radial arm to which a vertical drilling spindle is attached.

RANGE

An arrangement of machines used to perform a number of yarn- or cloth-processing operations continuously by feeding material to each unit in succession automatically and without interruption.

RAPPING

The process of removing ore dust that has accumulated on wires in the stack treater to recover the ore.

RECLAIM

Rubber material recovered from scrap rubber goods by chemical treatment.

REED HOOK

A flat metal tool, similar to crochet hook, used for drawing individual strands of yarn through reed of loom.

REEDING

Nylon monofilament or copper wire used to reinforce and shape sweatbands and brims on hats and caps.

REEF NET

A bag-like net anchored to boats or the shore to simulate a V-shaped reef in a channel.

REFLECTANCE METER

A small, bench-mounted device used to compare the whiteness of bleached paper pulp to a standard white color.

REGAUGING

Process of verifying alcoholic content of recently distilled liquor to determine quantity of diluent necessary to be added to liquor to obtain specified alcoholic content.

REGISTER WHEEL

A large indexed wheel on pantograph or engraving machine. A gross setting on larger register wheel results in precise placement of design on smaller printing roller.

RELIEVING

A machining process in which a FORM TOOL is used to cut teeth for cutting tools to specified contour.

REMELT

Pieces of crystal ingot not meeting specifications used as material to grow new ingot.

RETICLE

A photo plate on which an enlarged copy of a semiconductor circuit layer pattern is reproduced and used in the production of photomasks.

ROBOT CONTROLLER

A computerized device that provides the signals that direct the motions of the robot, so that it is both positioned and oriented correctly in space over time.

ROD TRANSFER DEVICE

A metal box-shaped device approximately eight inches tall, three inches wide, and three inches deep that is open on one side with a rectangular slot on the end. There is a swivel eye on the other end of the device where a rod hoist cable is attached. The rectangular opening at the lower end of the device is fitted on the square neck of rod to support rod sections as they are being transferred to and from holding slots and lifting clamp.

ROLLING TABLE

A heated press, the upper platen of which lowers and pivots on a shaft, to compress and roll resin impregnated fabrics onto mandrel.

ROLL PICKER

A pneumatic tool which removes lint and trash from spinning and roving frames by winding it on rapidly rotating spindle.

ROPE FORM

The form in which cloth is gathered or bunched into longitudinal folds by being drawn through a ring or series of rings. Some processing is more easily accomplished with cloth in this form.

ROTARY LATHE

A machine for cutting thin sheets of veneer from logs. The log is supported and rotated on horizontal axis as heavy steel knife is fed against its surface to slice thin sheet of wood from circumference.

ROUNDING JACK

A handtool for trimming hat brims. One end of tool is fitted with sharp blade and the other end is shaped to rest on crown of hat. The tool is drawn around hat brim, using crown as guide, to cut off excess material.

SCRATCHING TOOL

A four-pronged, long-handled tool similar to a pitch fork and used to pull up loops and uncut ends of rug pile.

SCREEN TINTS

Film used to produce shade of color or black.

SEAM

A finished edge on flat glass or mirrors on which the sharp corners are removed by an abrasive belt to form a semi-rounded edge.

SEARCHER

A notched metal strip, tooled to 0.0005 inch thickness, used to remove small particles of threads from brass bobbins.

SET POINT

A point in space, expressed in three dimensional coordinates, at which tip of cutting tool of automatic machine is set before the start of machining operations.

SHADOW LINES

Lines on power ripsaw machine table cast by wire hung between light source and table. Used as guides by saw operators in aligning boards before sawing.

SHERIFF'S SALE

A public sale of properties lawfully seized by the county as directed by a civil court order; money received reverts to county treasury.

SHOOT WIRE

Wires running short way of cloth or screen as woven.

SHORT-CYCLE SEWING MACHINE

A semi-automatic machine that sews a limited number of stitches to tack layers of fabric, attach buttons, or make buttonholes.

SHOT PAN

A pan, resembling frying pan, with equidistantly spaced holes in bottom through which molten lead is dropped to form shot pellets. Pans are numbered according to size of holes.

SHUTTLE BINDER

A wood or iron lever located at front or back of, and projecting slightly into, the shuttle box. Its purpose is to check force of shuttle as it enters the box.

SIEVE CLOTH

The fabric belts on printing machine which absorb color solutions from color trays and convey it to rollers that print designs on wallpaper.

SIGHTING RIB

Raised metal rib along entire outside length of shotgun barrel which is matted (knurled) to provide a glare-proof sighting surface.

SINKER

An elevator platform that submerges felt hat cones in tub of hot water to strengthen cohesion of fur fibers.

SKIRTLIKE UPPER

The sewn-together vamp, quarters, and counter of nonrubber upper of an article of footwear before rubber, composition, or cork sole is put on. The bottom edges of upper are cemented all around, like the hem of a skirt, for bonding with sole.

SLUBBER

The first fly frame for drawing and twisting slivers to form roving.

SPACE GAUGE

A rectangular metal piece with parallel rows of fine grooves extending across its face, used as a guide for spacing needles in the needle bar of a knitting machine.

SPINNING BOX

A device used in rayon manufacturing for piling thread into ring-shaped CAKES. The thread is drawn into spinning box through glass funnel and wound by centrifugal force.

SPOIL PILES

Earth and rock removed from coal, ore, or rock deposit in strip mine, open pit, or quarry.

SPONGE

A powder form of cadmium with a high zinc content.

SPOT-FACING

A machining process in which the area around a hole is milled to smooth, flat surface by application of a rotating tool with cutting edges on its end or face.

SPREADER PAN

A pan, resembling a frying pan, with holes around the side which sets on legs in the SHOT PAN and spreads lead evenly around shot pan.

SPRUNG OIL

Oil that has been allowed to separate from water and rise to the surface by means of gravity.

SPUR CHUCK

A stubby, pronged fork attached to driving spindle of lathe to assist in mounting and centering workpieces.

SPUTTERING

Bombarding metal surface with positive ions to form fine-grained coating on surface.

SQUEEGEE

A strip of uncured rubber, approximately tread-width, which is applied to BAND stock to reduce friction and promote adhesion between plies of completed tire.

STABILITY GAUGE

An instrument equipped with needle gauge used to indicate variation in or inadequacy of vacuum in automatic milking systems.

STANDARD SIZE SYSTEM

A system decreed by Edward II in 1324 that established a variation of one-sixth of an inch in length between half sizes and one-third of an inch in length between whole sizes of shoes.

STEAM LANCE

A long pipe attached to a steam source, through which steam under pressure is blown into boiler tubes to remove soot and sludge.

STENO-MASK

An enclosed microphone, used to record speech on tape, which renders the spoken word inaudible to other persons in the room.

STIPPLING TOOL

A small block of metal, the under surface of which is covered with small projections. It is used to make multiple indentations in wood by striking top of tool with hammer or mallet.

STIRRUP

A shackle which transmits to a connection load from only one lever.

STITCH-BONDING

A process whereby barbed needles are used to bond or entangle web fibers to produce a nonwoven fabric.

STITCHING WHEEL

A wheel mounted in the bed of an ULTRASONIC SEAMING MACHINE. STITCHING WHEEL has raised pattern that simulates sewing machine stitches. Wheels are changed to produce various decorative effects.

STRAPPING TOOL

A hand-operated device that pulls taut strip-steel straps wrapped around a bale and secures ends by pinching a cleat placed around overlapping ends of strap.

SURVEYOR

A precision instrument used to make a pencil mark around a tooth indicating its greatest circumference in any one position relative to the vertical.

SWING-FOLDING ATTACHMENT

A device, usually attached to the rear of a processing machine, to fold cloth coming from the machine. It consists of a pair of thin parallel rollers mounted between two arms that swing like a pendulum, laying cloth in loose folds.

SWING WEIGHT

The swing weight of a golf club is a measure of the leverage of the club, from beyond a fixed point, applied against the end of the handle. It is the weight felt by the golfer when he swings the club.

TAKEUP ROLL

A roller, operating continuously or intermittently, that winds long lengths of material after it has passed through a machine.

TARGET BLOCK

A tungsten block, having the same thickness as a workpiece to be welded by electron-beam system, used to substitute for workpiece during system setup.

TEACH PENDANT

A hand-held control box connected to the robot by an electrical cable used to actuate, for programming and re-programming purposes, the motions of the robot performing its prescribed task.

TELESCOPING GAUGE

A precision measuring instrument the end of which can be positioned inside hole or opening and expanded to touch walls; interior dimension can then either be read on calibrations of gauge or measured with micrometer.

TELETICKETER

An electrical device that transmits and prints transportation-routing information on passenger tickets.

TEMPERATURE POTENTIOMETER

A device to take temperature readings at any given point via transmission through thermocouples to reading device. It is equipped with a dial to select the thermocouple (point) from which to take a reading.

TENSION GUIDE

A device used as a guide to provide specified tension during winding, coning, sizing, and warping. This device contains fingers, disks, or washers that apply tension.

TENTER FRAME

A machine that dries and stretches cloth to its original width and straightens its weave after a finishing process.

THATCHER

A machine (similar to a rotary-type lawn mower with wire claws, rather than blades, on the rotating bar) used to claw and lift thatch from lawn.

THRUST END ASSEMBLY

The forward end of a turbine at which steam enters.

TIDAL PEN

Large rectangular ponds constructed on an island located in a natural shrimp growing area with screened gates at the ends to allow pens to be flushed by tidal flow. Gates can be raised for impoundment of shrimp larvae and shrimp spawners.

TIMER DRUM

A metal drum containing a series of paralleled slots extending around its circumference to hold timing buttons that trip solenoid switches, as drum revolves, to control operation of bottlemaking machine.

TOE BOARD

The portion of a board on which toe of stocking is shaped.

TRACER POINT

A metal rod placed in the chuck of the master spindle of a wood-carving machine, used to follow around the contour of a carving pattern.

TRANSFER BAR

A rectangular metal bar used to transfer knitted garment parts from one full-fashioned knitting machine onto the needle bar of another.

TRANSFER POINT

The needlelike projections on a TRANSFER BAR or transfer ring over which stitches of knitted material are hung when the material is transferred from one machine to another.

TRIBOX

Glass enclosed container housing a thermometer and a hydrometer through which distilled liquor flows, allowing the temperature and specific gravity proof of liquor to be measured.

TRIP BUTTONS

Small bolts locked in slots on TIMER DRUMS to trip solenoid switches that start and stop functions of bottlemaking machines.

TRUING I

The shaping of grinding wheel for purpose of producing consistent flatness or contour on the ground workpiece. Usually accomplished by application of diamond, abrasive, or hard-metal tool.

TRUING II

Technique used for correcting errors in timepiece balance wheels and hairsprings. Balance wheel truing is accomplished by bending the wheel rim until it lies in a single plane and is concentric with and perpendicular to the staff axis. Hairspring errors are either in the round (coils are not perfectly concentric with collet) or in the flat (coils are not in same plane as collet). Hairsprings are trued by bending coil to correct faulty colleting.

TUBE

The portion of a paper bag without a bottom.

TUNNEL HEADING

That part of a tunnel where digging operations are performed.

TURNER TUBES

A device used in turning gloves, with corresponding rods that push the finger tips of the glove into the tube, partially turning it. Turning is completed manually by worker or automatically on machine.

TYPING ELEMENT

Ball-shaped component of electric typewriters that contains raised characters, such as alpha and numeric characters, and special symbols.

ULTRASONIC HORN

A resonant bar or metal section which transfers energy from converter to workpiece.

ULTRASONIC SEAMING MACHINE

A machine that uses high-frequency sound waves to fuse layers of thermoplastic material simulating a stitchline. The machine resembles a sewing machine in appearance and operation but uses no thread and has a HORN and STITCHING WHEEL for impressing a stitch pattern. The stitching wheel can be changed to produce various decorative effects.

VENEER BLOCK

A log cut to length for peeling or slicing into veneer.

VIBRATING

Process of determining that length of timepiece hairspring will cause balance wheel to vibrate a fixed number of times per hour. Factors considered are length, width, thickness, and strength of hairspring.

WARP WIRE

Wires running the long way of the cloth or screen as woven.

WEBBING STRETCHER

A handtool used to stretch webbing across furniture seat frames.

WELD CONTROLLER

A programmable device which controls the amperage, pressure, and dwell (time) of welding guns attached to automatic machinery.

WELT BAR

A bar of a knitting machine containing a row of small steel hooks (welt points) that hold the first loops or stitch of fabric until the welt is knitted.

WELT ROD

A small metal rod used to facilitate turning of welt on full-fashioned stockings and to wind hose on takeup roller.

WHIRLING MACHINE

Machine that distributes photosensitive solution over surface of photographic printing plates by means of a rotating or whirling action.

WHITING COMPOUND

A mixture of powdered chalk and liquid glue used to form wood sealer or priming base for further application of paint.

WICK

Strands of asbestos twisted together and used for making asbestos rope, packing for steam valves, and as a seal for oven or furnace doors.

WINDUP RACK

A rack that has a continuous drive action which winds long lengths of material into a roll after material has passed through a machine.

YARN CARRIER

In flat knitting, the sliding frame above the needlebeds that hold the cams and yarn guides and carries them to and fro.

ZIGZAG SEWING MACHINE

A machine that sews with an oscillating needle. The pattern of the stitches can be varied by changing cams. Used where a decorative, stretchable stitch is needed.

APPENDIX A

REVISIONS FROM THE 4TH EDITION DOT

In this revised edition of the *Dictionary of Occupational Titles* (DOT), several format and content changes were made in an effort to make this DOT easier to use.

The most noticeable change in this revised DOT is that a profile has been appended to each definition. This profile contains the following selected occupational analysis characteristics: GOE Code; Strength rating; R, M, and L of GED; and SVP. (A detailed explanation of these characteristics can be found in Appendix C.) The last item in the trailer, the Date of Last Update (DLU), is the date of the most recent material gathered in support of that occupation. The date "1977" indicates that the occupation has not been studied since the publication of the fourth edition DOT in 1977. This entry allows the reader to identify the currency of each definition. It also identifies "new" definitions in the DOT or alerts the reader to previously published and recently updated definitions.

A new division has been added to the DOT classification structure, Division 03 COMPUTER-RELATED OCCUPATIONS, and under it there have been added five new Occupational Groups to reflect a reorganization of the DOT taxonomy to bring all of the computer-related occupations together. The five Occupational Groups are as follows:

030 OCCUPATIONS IN SYSTEMS ANALYSIS AND PROGRAMMING
031 OCCUPATIONS IN DATA COMMUNICATIONS AND NETWORKS
032 OCCUPATIONS IN COMPUTER SYSTEMS USER SUPPORT
033 OCCUPATIONS IN COMPUTER SYSTEMS TECHNICAL SUPPORT
039 COMPUTER-RELATED OCCUPATIONS, N.E.C.

Additionally, when an updated occupational definition in this DOT contains a reference to the title of another occupation, the DOT code of the referenced occupation is listed, following the referenced DOT title. Within the definitions and the indexes, Undefined Related (UR) titles will now be shown in initial capital letters instead of all captial letters to avoid confusion between Base and UR Titles.

Also, additional appendices have been added to the revised DOT. In this revised DOT, Appendix A is new. Appendix B was the Appendix in the 1977 DOT. Appendix C, mentioned above, explains the components of the definition trailer. Appendix D explains how to use the DOT for job placement, and Appendix E explains how to submit information concerning occupations not found in the DOT. (Appendix D and Appendix E were sections in the front of the 1977 DOT).

The fourth edition DOT Industry Designations have been revised and reduced from 220 to 140 Industry Designations to more closely reflect the Standard Industrial Classification system. And finally, to facilitate its use, the Alphabetical Index of Occupational Titles appears as the last section in the DOT.

APPENDIX B

EXPLANATION OF DATA, PEOPLE, AND THINGS

Much of the information in this publication is based on the premise that every job requires a worker to function, to some degree, in relation to Data, People, and Things. These relationships are identified and explained below. They appear in the form of three listings arranged in each instance from the relatively simple to the complex in such a manner that each successive relationship includes those that are simpler and excludes the more complex. (As each of the relationships to People represents a wide range of complexity, resulting in considerable overlap among occupations, their arrangement is somewhat arbitrary and can be considered a hierarchy only in the most general sense.) The identifications attached to these relationships are referred to as Worker Functions, and provide standard terminology for use in summarizing how a worker functions on the job.

The fourth, fifth, and sixth digits of the occupational code reflect relationships to Data, People, and Things, respectively. These digits express a job's relationship to Data, People, and Things by identifying the highest appropriate function in each listing shown in the following table:

DATA (4th Digit)	PEOPLE (5th Digit)	THINGS (6th Digit)
0 Synthesizing	0 Mentoring	0 Setting Up
1 Coordinating	1 Negotiating	1 Precision Working
2 Analyzing	2 Instructing	2 Operating-Controlling
3 Compiling	3 Supervising	3 Driving-Operating
4 Computing	4 Diverting	4 Manipulating
5 Copying	5 Persuading	5 Tending
6 Comparing	6 Speaking-Signalling	6 Feeding-Offbearing
	7 Serving	7 Handling
	8 Taking Instructions-Helping	

Definitions of Worker Functions

DATA: Information, knowledge, and conceptions, related to data, people, or things, obtained by observation, investigation, interpretation, visualization, and mental creation. Data are intangible and include numbers, words, symbols, ideas, concepts, and oral verbalization.

0 Synthesizing: Integrating analyses of data to discover facts and/or develop knowledge concepts or interpretations.

1 Coordinating: Determining time, place, and sequence of operations or action to be taken on the basis of analysis of data; executing determinations and/or reporting on events.

2 Analyzing: Examining and evaluating data. Presenting alternative actions in relation to the evaluation is frequently involved.

3 Compiling: Gathering, collating, or classifying information about data, people, or things. Reporting and/or carrying out a prescribed action in relation to the information is frequently involved.

4 Computing: Performing arithmetic operations and reporting on and/or carrying out a prescribed action in relation to them. Does not include counting.

5 Copying: Transcribing, entering, or posting data.

6 Comparing: Judging the readily observable functional, structural, or compositional characteristics (whether similar to or divergent from obvious standards) of data, people, or things.

PEOPLE: Human beings; also animals dealt with on an individual basis as if they were human.

0 Mentoring: Dealing with individuals in terms of their total personality in order to advise, counsel, and/or guide them with regard to problems that may be resolved by legal, scientific, clinical, spiritual, and/or other professional principles.

1 Negotiating: Exchanging ideas, information, and opinions with others to formulate policies and programs and/or arrive jointly at decisions, conclusions, or solutions.

2 Instructing: Teaching subject matter to others, or training others (including animals) through explanation, demonstration, and supervised practice; or making recommendations on the basis of technical disciplines.

3 Supervising: Determining or interpreting work procedures for a group of workers, assigning specific duties to them, maintaining harmonious relations among them, and promoting efficiency. A variety of responsibilities is involved in this function.

4 Diverting: Amusing others, usually through the medium of stage, screen, television, or radio.

5 Persuading: Influencing others in favor of a product, service, or point of view.

6 Speaking-Signaling: Talking with and/or signaling people to convey or exchange information. Includes giving assignments and/or directions to helpers or assistants.

7 Serving: Attending to the needs or requests of people or animals or the expressed or implicit wishes of people. Immediate response is involved.

8 Taking Instructions-Helping: Attending to the work assignment instructions or orders of supervisor. (No immediate response required unless clarification of instructions or orders is needed.) Helping applies to "non-learning" helpers.

THINGS: Inanimate objects as distinguished from human beings, substances or materials; and machines, tools, equipment, work aids, and products. A thing is tangible and has shape, form, and other physical characteristics.

0 Setting Up: Preparing machines (or equipment) for operation by planning order of successive machine operations, installing and adjusting tools and other machine components, adjusting the position of workpiece or material, setting controls, and verifying accuracy of machine capabilities, properties of materials, and shop practices. Uses tools, equipment, and work aids, such as precision gauges and measuring instruments. Workers who set up one or a number of machines for other workers or who set up and personally operate a variety of machines are included here.

1 Precision Working: Using body members and/or tools or work aids to work, move, guide, or place objects or materials in situations where ultimate responsibility for the attainment of standards occurs and selection of appropriate tools, objects, or materials, and the adjustment of the tool to the task require exercise of considerable judgment.

2 Operating-Controlling: Starting, stopping, controlling, and adjusting the progress of machines or equipment. Operating machines involves setting up and adjusting the machine or material(s) as the work progresses. Controlling involves observing gauges, dials, etc., and turning valves and other devices to regulate factors such as temperature, pressure, flow of liquids, speed of pumps, and reactions of materials.

3 Driving-Operating: Starting, stopping, and controlling the actions of machines or equipment for which a course must be steered or which must be guided to control the movement of things or people for a variety of purposes. Involves such activities as observing gauges and dials, estimating distances and determining speed and direction of other objects, turning cranks and wheels, and pushing or pulling gear lifts or levers. Includes such machines as cranes, conveyor systems, tractors, furnace-charging machines, paving machines, and hoisting machines. Excludes manually powered machines, such as handtrucks and dollies, and power-assisted machines, such as electric wheelbarrows and handtrucks.

4 Manipulating: Using body members, tools, or special devices to work, move, guide, or place objects or materials. Involves some latitude for judgment with regard to precision attained and selecting appropriate tool, object, or material, although this is readily manifest.

5 Tending: Starting, stopping, and observing the functioning of machines and equipment. Involves adjusting materials or controls of the machine, such as changing guides, adjusting timers and temperature gauges, turning valves to allow flow of materials, and flipping switches in response to lights. Little judgment is involved in making these adjustments.

6 Feeding-Offbearing: Inserting, throwing, dumping, or placing materials in or removing them from machines or equipment which are automatic or tended or operated by other workers.

7 Handling: Using body members, handtools, and/or special devices to work, move, or carry objects or materials. Involves little or no latitude for judgment with regard to attainment of standards or in selecting appropriate tool, object, or materials.

APPENDIX C

COMPONENTS OF THE DEFINITION TRAILER

The following descriptions of the components of the Definition Trailer are in inverse order to their placement in the trailer.

I. DATE OF LAST UPDATE (DLU)

Listed as the final element in the trailer following the definition, the Date of Last Update indicates the last year in which material was gathered for that occupation. A DLU of "77" would indicate that the occupation has not been studied by an analyst since publication of the fourth edition DOT in 1977.

II. SPECIFIC VOCATIONAL PREPARATION (SVP)

Specific Vocational Preparation is defined as the amount of lapsed time required by a typical worker to learn the techniques, acquire the information, and develop the facility needed for average performance in a specific job-worker situation.

This training may be acquired in a school, work, military, institutional, or vocational environment. It does not include the orientation time required of a fully qualified worker to become accustomed to the special conditions of any new job. Specific vocational training includes: vocational education, apprenticeship training, in-plant training, on-the-job training, and essential experience in other jobs.

Specific vocational training includes training given in any of the following circumstances:

a. Vocational education (high school; commercial or shop training; technical school; art school; and that part of college training which is organized around a specific vocational objective);

b. Apprenticeship training (for apprenticeable jobs only);

c. In-plant training (organized classroom study provided by an employer);

d. On-the-job training (serving as learner or trainee on the job under the instruction of a qualified worker);

e. Essential experience in other jobs (serving in less responsible jobs which lead to the higher grade job or serving in other jobs which qualify).

The following is an explanation of the various levels of specific vocational preparation:

Level	Time
1	Short demonstration only
2	Anything beyond short demonstration up to and including 1 month
3	Over 1 month up to and including 3 months
4	Over 3 months up to and including 6 months
5	Over 6 months up to and including 1 year
6	Over 1 year up to and including 2 years
7	Over 2 years up to and including 4 years
8	Over 4 years up to and including 10 years
9	Over 10 years

Note: The levels of this scale are mutually exclusive and do not overlap.

III. GENERAL EDUCATIONAL DEVELOPMENT (GED)

General Educational Development embraces those aspects of education (formal and informal) which are required of the worker for satisfactory job performance. This is edu-

Scale of General Education Development (GED)

LEVEL	REASONING DEVELOPMENT	MATHEMATICAL DEVELOPMENT	LANGUAGE DEVELOPMENT
6	Apply principles of logical or scientific thinking to a wide range of intellectual and practical problems. Deal with nonverbal symbolism (formulas, scientific equations, graphs, musical notes, etc.) in its most difficult phases. Deal with a variety of abstract and concrete variables. Apprehend the most abstruse classes of concepts.	Advanced calculus: Work with limits, continuity, real number systems, mean value theorems, and implicit functions theorems. Modern Algebra: Apply fundamental concepts of theories of groups, rings, and fields. Work with differential equations, linear algebra, infinite series, advanced operations methods, and functions of real and complex variables. Statistics: Work with mathematical statistics, mathematical probability and applications, experimental design, statistical inference, and econometrics.	Reading: Read literature, book and play reviews, scientific and technical journals, abstracts, financial reports, and legal documents. Writing: Write novels, plays, editorials, journals, speeches, manuals, critiques, poetry, and songs. Speaking: Coversant in the theory, principles, and methods of effective and persuasive speaking, voice and diction, phonetics, and discussion and debate.
5	Apply principles of logical or scientific thinking to define problems, collect data, establish facts, and draw valid conclusions. Interpret an extensive variety of technical instructions in mathematical or diagrammatic form. Deal with several abstract and concrete variables.	Algebra: Work with exponents and logarithms, linear equations, quadratic equations, mathematical induction and binomial theorem, and permutations. Calculus: Apply concepts of analytic geometry, differentiations and integration of algebraic functions with applications. Statistics: Apply mathematical operations to frequency distributions, reliability and validity of tests, normal curve, analysis of variance, correlation techniques, chi-square application and sampling theory, and factor analysis.	Same as Level 6.
4	Apply principles of rational systems to solve practical problems and deal with a variety of concrete variables in situations where only limited standardization exists. Interpret a variety of instructions furnished in written, oral diagrammatic, or schedule form.	Algebra: Deal with system of real numbers; linear, quadratic, rational, exponential, logarithmic, angle and circular functions, and inverse functions; related algebraic solution of equations and inequalities; limits and continuity, and probability and statistical inference. Geometry: Deductive axiomatic geometry, plane and solid; and rectangular coordinates. Shop Math: Practical application of fractions, percentages, ratio and proportion, mensuration, logarithms, slide rule, practical algebra, geometric construction, and essentials of trigonometry.	Reading: Read novels, poems, newspapers, periodicals, journals, manuals, dictionaries, thesauruses, and encyclopedias. Writing: Prepare business letters, expositions, summaries, and reports, using prescribed format and conforming to all rules of punctuation, grammar, diction, and style. Speaking: Participate in panel discussions, dramatizations, and debates. Speak extemporaneously on a variety of subjects.

LEVEL	REASONING DEVELOPMENT	MATHEMATICAL DEVELOPMENT	LANGUAGE DEVELOPMENT
3	Apply commonsense understanding to carry out instructions furnished in written, oral, or diagrammatic form. Deal with problems involving several concrete variables in or from standardized situations.	Compute discount, interest, profit and loss; commission, markup, and selling price; ratio and proportion, and percentage. Calculate surfaces, volumes, weights, and measures. Algebra: Calculate variables and formulas; monomials and polynomials; ratio and proportion variables; and square roots and radicals. Geometry: Calculate plane and solid figures; circumference, area, and volume. Understand kinds of angles, and properties of pairs of angles.	Reading: Read a variety of novels, magazines, atlases, and encyclopedias. Read safety rules, instructions in the use and maintenance of shop tools and equipment, and methods and procedures in mechanical drawing and layout work. Writing: Write reports and essays with proper format, punctuation, spelling, and grammar, using all parts of speech. Speaking: Speak before an audience with poise, voice control, and confidence, using correct English and well-modulated voice.
2	Apply commonsense understanding to carry out detailed but uninvolved written or oral instructions. Deal with problems involving a few concrete variables in or from standardized situations.	Add, subtract, multiply, and divide all units of measure. Perform the four operations with like common and decimal fractions. Compute ratio, rate, and percent. Draw and interpret bar graphs. Perform arithmetic operations involving all American monetary units.	Reading: Passtive vocabulary of 5,000–6,000 words. Read at rate of 190–215 words per minute. Read adventure stories and comic books, looking up unfamiliar words in dictionary for meaning, spelling, and pronunciation. Read instructions for assembling model cars and airplanes. Writing: Write compound and complex sentences, using cursive style, proper end punctuation, and employing adjectives and adverbs. Speaking: Speak clearly and distinctly with appropiate pauses and emphasis, correct pronunciation, variations in word order, using present, perfect, and future tenses.
1	Apply commonsense understanding to carry out simple one- or two-step instructions. Deal with standardized situations with occasional or no variables in or from these situations encountered on the job.	Add and subtract two digit numbers. Multiply and divide 10's and 100's by 2, 3, 4, 5. Perform the four basic arithmetic operations with coins as part of a dollar. Perform operations with units such as cup, pint, and quart; inch, foot, and yard; and ounce and pound.	Reading: Recognize meaning of 2,500 (two- or three-syllable) words. Read at rate of 95–120 words per minute. Compare similarities and differences between words and between series of numbers. Writing: Print simple sentences containing subject, verb, and object, and series of numbers, names, and addresses. Speaking: Speak simple sentences, using normal word order, and present and past tenses.

cation of a general nature which does not have a recognized, fairly specific occupational objective. Ordinarily, such education is obtained in elementary school, high school, or college. However, it may be obtained from experience and self-study.

The GED Scale is composed of three divisions: Reasoning Development, Mathematical Development, and Language Development. The description of the various levels of language and mathematical development are based on the curricula taught in schools throughout the United States. An analysis of mathematics courses in school curricula reveals distinct levels of progression in the primary and secondary grades and in college. These levels of progression facilitated the selection and assignment of six levels of GED for the mathematical development scale.

However, though language courses follow a similar pattern of progression in primary and secondary school, particularly in learning and applying the principles of grammar, this pattern changes at the college level. The diversity of language courses offered at the college level precludes the establishment of distinct levels of language progression for these four years. Consequently, language development is limited to five defined levels of GED inasmuch as levels 5 and 6 share a common definition, even though they are distinct levels.

IV. PHYSICAL DEMANDS - STRENGTH RATING (Strength)

The Physical Demands Strength Rating reflects the estimated overall strength requirement of the job, expressed in terms of the letter corresponding to the particular strength rating. It represents the strength requirements which are considered to be important for average, successful work performance.

The strength rating is expressed by one of five terms: Sedentary, Light, Medium, Heavy, and Very Heavy. In order to determine the overall rating, an evaluation is made of the worker's involvement in the following activities:

a. Standing, Walking, Sitting

Standing - Remaining on one's feet in an upright position at a work station without moving about.

Walking - Moving about on foot.

Sitting - Remaining in a seated position.

b. Lifting, Carrying, Pushing, Pulling

Lifting - Raising or lowering an object from one level to another (includes upward pulling).

Carrying - Transporting an object, usually holding it in the hands or arms, or on the shoulder.

Pushing - Exerting force upon an object so that the object moves away from the force (includes slapping, striking, kicking, and treadle actions).

Pulling - Exerting force upon an object so that the object moves toward the force (includes jerking).

Lifting, pushing, and pulling are evaluated in terms of both intensity and duration. Consideration is given to the weight handled, position of the worker's body, and the aid given by helpers or mechanical equipment. Carrying most often is evaluated in terms of duration, weight carried, and distance carried.

Estimating the Strength factor rating for an occupation requires the exercise of care on the part of occupational analysts in evaluating the force and physical effort a worker must exert. For instance, if the worker is in a crouching position, it may be much more difficult to push an object than if pushed at waist height. Also, if the worker is required to lift and carry continuously or push and pull objects over long distances,

the worker may exert as much physical effort as is required to similarly move objects twice as heavy, but less frequently and/or over shorter distances.

c. Controls

Controls entail the use of one or both arms or hands (hand/arm) and/or one or both feet or legs (foot/leg) to move controls on machinery or equipment. Controls include but are not limited to buttons, knobs, pedals, levers, and cranks.

Following are descriptions of the five terms in which the Strength Factor is expressed:

S-Sedentary Work - Exerting up to 10 pounds of force occasionally (Occasionally: activity or condition exists up to 1/3 of the time) and/or a negligible amount of force frequently (Frequently: activity or condition exists from 1/3 to 2/3 of the time) to lift, carry, push, pull, or otherwise move objects, including the human body. Sedentary work involves sitting most of the time, but may involve walking or standing for brief periods of time. Jobs are sedentary if walking and standing are required only occasionally and all other sedentary criteria are met.

L-Light Work - Exerting up to 20 pounds of force occasionally, and/or up to 10 pounds of force frequently, and/or a negligible amount of force constantly (Constantly: activity or condition exists 2/3 or more of the time) to move objects. Physical demand requirements are in excess of those for Sedentary Work. Even though the weight lifted may be only a negligible amount, a job should be rated Light Work: (1) when it requires walking or standing to a significant degree; or (2) when it requires sitting most of the time but entails pushing and/or pulling of arm or leg controls; and/or (3) when the job requires working at a production rate pace entailing the constant pushing and/or pulling of materials even though the weight of those materials is negligible. NOTE: The constant stress and strain of maintaining a production rate pace, especially in an industrial setting, can be and is physically demanding of a worker even though the amount of force exerted is negligible.

M-Medium Work - Exerting 20 to 50 pounds of force occasionally, and/or 10 to 25 pounds of force frequently, and/or greater than negligible up to 10 pounds of force constantly to move objects. Physical Demand requirements are in excess of those for Light Work.

H-Heavy Work - Exerting 50 to 100 pounds of force occasionally, and/or 25 to 50 pounds of force frequently, and/or 10 to 20 pounds of force constantly to move objects. Physical Demand requirements are in excess of those for Medium Work.

V-Very Heavy Work - Exerting in excess of 100 pounds of force occasionally, and/or in excess of 50 pounds of force frequently, and/or in excess of 20 pounds of force constantly to move objects. Physical Demand requirements are in excess of those for Heavy Work.

V. GUIDE FOR OCCUPATIONAL EXPLORATION (GOE)

Many youths and other jobseekers are unprepared for an effective job search because of a lack of knowledge about the kinds of jobs to look for. They have difficulty relating their interest, skills, and potentials to appropriate occupations. To be effective, vocational counselors must have sufficient information to match an individual's interest, temperaments, potential ability and other personal traits to specific career fields and work requirements.

The *Guide for Occupational Exploration* was designed by the US Employment Service to provide career counselors and other DOT users with additional information about the interests, aptitudes, entry level preparation and other traits required for successful performance in various occupations. The GOE is also useful in self-assessment and counselor-assisted settings to help people understand themselves realistically in regard to their ability to meet job requirements. Descriptive information provided for

each work group assists the individual in evaluating his or her own interests and relating them to pertinent fields of work.

The GOE code assigned to a definition provides a link between the occupation defined and the GOE arrangement of occupations with similar interests, aptitudes, adaptability requirements, and other descriptors.

The GOE coding structure classifies jobs at three levels of consideration. The first level divides occupations according to twelve interest areas corresponding to interest factors identified through research conducted by the former Division of Testing in the US Employment Service. The interest factors, identified by a two-digit code, are defined in terms of broad interest requirements of occupations as well as vocational interests of individuals. The twelve interest areas are defined as follows:

01 Artistic	05 Mechanical	09 Accommodating
02 Scientific	06 Industrial	10 Humanitarian
03 Plants-Animals	07 Business Detail	11 Leading-Influencing
04 Protective	08 Selling	12 Physical Performing

The interest areas are then subdivided into work groups (the second set of two digits within the six-digit GOE code). Each work group contains occupations requiring similar worker traits and capabilities in related work settings. The GOE contains descriptive information for each work group and identifies each occupation in the group with a four-digit code and title. In many interest areas, occupations that require the most education, training, and experience are in the first group, while those requiring less formal education or experience are listed in the last group.

Work groups are then subdivided into subgroups (the third two-digit set in the GOE code) of occupations with even more homogeneous interests, aptitudes, and adaptability requirements. Each subgroup is identified by its unique six-digit code and title. Individual occupations are listed alphabetically within subgroups. Some subgroups contain occupations from more than one industry, listed within alphabetized industries.

APPENDIX D

HOW TO USE THE DOT FOR JOB PLACEMENT

Within the public Employment Service system the primary purpose for assigning a DOT code and title to a job applicant or employer job order is to facilitate the process of "finding people for jobs and jobs for people". The occupational code is a method of searching files to locate qualified applicants and to match their qualifications with available job orders. In some Employment Service offices, the Employment Service automated system provides on-line computerized access to job openings arranged in terms of DOT occupational codes making it possible for applicants to match their background and experience to job openings related to their interests.

Proper classification of both job openings and job applicants is vital to the efficient operation of the Employment Service system, and to maintain the accuracy of statistical reporting systems which are based on the DOT coding structure. The coding structure of the DOT is specifically designed to facilitate this process. The unique 9-digit code shown for each occupation allows job interviewers to perform file searches providing the linkage between an applicant's work experience and employer job orders.

The section entitled "How to Find an Occupational Title and Code" describes how to use the Occupational Group Arrangement, the Industry Arrangement, the Alphabetical Index and other DOT components to assure proper occupational coding of jobs and applicants. The occupational classification system in the revised fourth edition of the DOT arranges occupational titles within a given technology in order of work-performance complexity. It can assist in identifying occupational progression and skill transfers vertically within a technology or horizontally among closely related technologies. Each occupational definition also provides essential job placement information by indicating the industry or industries in which a given occupation is found and by describing job tasks and task variables.

The use of the DOT for job placement is summarized here in relation to the following Employment Service operations: Classifying Job Applications; Classifying Job Orders; Matching Workers to Orders; and Assisting Special Applicant Groups.

(1) Classifying Job Applicants

Job interviewers will find it useful to structure the applicant interview in accordance with the way information is provided in a DOT occupational definition. By framing specific questions to elicit detailed information concerning the jobseeker's training, experience and preferences, a job interviewer can assess the individual in terms of fields of work, job content and worker requirements for an individual occupation in the *Dictionary*. An appropriate code number and job title can then be assigned to complete the interview process. (See "How to Find an Occupational Title and Code".)

To ensure the correct occupational code and title is assigned to each application, the following steps should be followed:

(a) Using information obtained from the job seeker, make a tentative selection of an occupational code and title.
(b) Review the requirements of the particular occupation selected, and match them against past experience, training, job preferences, job interests and any test or assessment results of the applicant to verify that the occupation best fits the applicant for purposes of job placement.
(c) Supplement the data with labor market information reflecting job opportunities in the local area. Review all the information obtained and assign a final primary occupational code and title to the applicant. Be sure the assigned code reflects the jobseeker's highest level of achievement and ability.
(d) Additional codes and titles should be assigned as appropriate by repeating the steps outlined above to identify the applicant's related skills and training.

(2) Classifying Job Orders

Assigning appropriate classification codes and titles to job openings is a process complementary to that of classifying job applicants.

The order taker should review the structure content of job definitions in the *Dictionary* to assure that all of the required information needed for proper classification is obtained. The information needed is that contained in the lead statement and task element statements of each occupational definition. (See "Parts of the Occupational Definition".)

Occupational definitions in the DOT are written to reflect the most typical characteristics of a job as it occurs in the American economy. Task element statements in the definitions may not always coincide with the way work is performed in particular establishments or localities.

If the occupational code and title is not easily determined, the DOT definition finally selected should be reviewed carefully. If alternate methods of performing a job are described in the DOT definition, the order taker should review the definition with the employer to determine which description fits the firm's operation. After determining which methods described in the DOT definition are actually used in the particular establishment involved, the order taker may assign an appropriate DOT code.

Only part of the jobs contained in the DOT are found in any given labor market area. In some instances, carefully developed desk aids containing titles, codes and definitions may be useful in assigning DOT codes and titles. However, a person or job should never be forced into a code simply because it is common in the local labor market.

(3) Matching Workers to Orders

The DOT occupational definitions are the bridge in the job-matching process, linking qualified applicants with suitable job openings. Whether a placement office operates under a manual or computerized system, or is in transition, a successful job match is critically dependent upon correct input into the system.

The importance of correct input is more crucial, and reliance on the DOT classification system may be even greater, in the case of computer-assisted placement systems which include job matching.

Keep in mind that it is generally easier to find a good match when you know the following information:

- Job tasks workers are required to perform
- The purpose of the work
- Machines, tools, equipment or work aids used
- Materials, products, subject matter (academic discipline) or services involved
- Instructions received and the independent judgment that a worker exercises during job performance
- Where the work is located (outdoors: on a farm, a forest tract, on water, etc.; indoors: an office, a factory, school, etc.).

Computerized Job Service matching can improve the efficiency of placement activities in a system by allowing interviewers to use the DOT to:

(a) verify the accuracy and completeness of applications and job orders and ensure appropriate classifications are assigned;
(b) verify data on intake forms at the point of data entry and monitor the output of program or labor market information; and
(c) provide alternate search strategies using the DOT classification system within the capabilities of the computerized system.

(4) Assisting Special Applicant Groups

Entry Level Workers

Entry workers often have little or no training, education or job experience geared to specific occupational requirements. They may also lack the necessary licenses or certification for certain jobs in which they express interest. In one way or another, they may not be fully competitive with more experienced jobseekers.

An effective method of classifying such workers is to review the individual's educational background, interests, hobbies, casual or leisure time work experience, worker traits, and other indicators of potential occupational abilities and skills. For example, if the applicant had an interest in science activities in school, they might be considered for a laboratory job if such openings are available in the area. The final code assigned should allow the individual the greatest possible exposure to work or training opportunities in relation to interests, skills and abilities.

In a manual matching system, it is not usually possible to assign a 9-digit code to an entry worker, but every effort should be made to assign an appropriate 6-digit code and generalized title. One method of indicating that the individual is an entry worker is to replace the period after the third digit in the occupational code with an (x). For example, if an entry worker is assigned the job title LABORATORY TESTER (any industry), the 6-digit code assigned would be 029x261. In a computerized matching system, there is no standard method of recording entry classifications, since the recording procedures can vary from state to state.

Veterans

U.S. veterans seeking civilian jobs are usually given preference in file search and referral activities by public employment service offices. To give veterans the maximum opportunity to qualify for openings, both their civilian experience and the occupational training they received during their military careers must be fully reflected in their occupational classification and code. The inclusion of significant military occupations in the DOT assists in providing correct input and increases the chances of finding a job match.

The Department of Defense *Military Career Guide 1988-1989*, prepared in cooperation with the Department of Labor and published in 1987, is an important reference document in this area. It consolidates occupational information from all branches of the Armed Services and related military-to-DOT occupations.

Disabled Workers

The procedure for coding entry workers may also be applied to disabled or differently-abled workers and applicants with limited or nonrelevant work experience registering under various assistance or human resource development programs. The interviewer must not assume that a disability automatically precludes a worker from performing a particular job. Companies will often make special accommodations to employ disabled persons (in fact, some accommodations are legally required).

If a person has strong or special physical capabilities which would allow them to accommodate to certain tasks, these also should be taken into account. The interviewer may refer to the *Handbook for Analyzing Jobs* or his or her regional Occupational Analysis Field Center if he or she has any questions regarding the physical demands listed for a specific occupation in the DOT. Remember that additional information from testing and reinterviewing applicants may be used to review and/or revise an individual's assigned occupational classification.

Other Special Applicants

Persons in certain life situations may, based on the stressful nature of these situations, be considered in the category of special applicant. In addition to the applicant groups

cited above, interviewers may be called upon to assist applicants who are difficult to place such as low-skilled youth, older workers, ex-offenders, drug abusers, seasonal or displaced reentrants to the labor market and others who need to work but challenge a counselor's placement skills. To most effectively place clients in available local jobs, interviewers must sometimes evaluate the broader needs and values of applicants including their work attitudes, personality and need for transitional support such as remedial education, medical or mental health care, transportation and day care.

The employment interviewer, to respond to this challenge, must try to determine the applicant's work resources including abilities, interests, physical capabilities, work history and experience, education and leisure activities. Use of support material such as the *Guide for Occupational Exploration* and the *Occupational Outlook Handbook* (available at most libraries) is usually advisable. These easy-to-read books, published by the Department of Labor, provide information on several job factors including specific work duties, training and education, earnings, working conditions and future opportunities.

The important thing is not the job title, but the skills and abilities required by the job. An applicant whose experience and aptitudes are matched to an occupation never considered before is a real success story. The interviewer, with effective use of the DOT, can play a pivotal role in that process.

APPENDIX E

OCCUPATIONAL CODE REQUESTS

Users of the revised fourth edition DOT may be unable to locate a specific job title, code, or definition in the DOT or the specific information for a definition in the DOT may appear to be incorrect. This situation could occur for several reasons including:

1. The job title the user seeks is new or was created as the result of recent technological changes or labor force pressures.
2. The user seeks job information that may be more specific or may be organized differently than the information provided in the composite revised DOT definition.
3. The user may not be completely familiar with the taxonomic structure of the revised DOT.
4. Job analysts may have missed occupational information due to technological advances or changes in that industry.
5. The job title may not have enough workers performing the work to facilitate data collection.

The Occupational Code Request (Form ETA-741) was developed by the OA program to allow users of the revised DOT a means to provide input to, or obtain from USES OA Field Centers, information on job titles or occupational definitions they cannot find in the DOT. Users who have searched the DOT for needed information and have been unsuccessful should contact the nearest Job Service office for assistance in locating an appropriate DOT classification for the job in question. If the Job Service office cannot supply the needed occupational information, the DOT user should submit a typed Occupational Code Request (OCR) form to the appropriate OA Field Center. A copy of the OCR showing action taken by the OAFC will be returned to the user in a timely manner.

If it is not convenient to seek the help of the local Job Service office, you may send your requests for a DOT title and code directly to an Occupational Analysis Field Center. In your correspondence, please include the OCR so that the request can be processed correctly. DOT users who find incorrect or inaccurate occupational information in the DOT may contact the nearest Occupational Analysis Field Center directly.

The OCR procedure, which has been set up to provide supplementary occupational information to users, serves as an additional method of securing job information for subsequent publications. Classifications established as a result of an OCR are usable on an interim basis until the job is studied by an occupational analyst and a definition is published in the DOT.

The Field Centers responsible for processing OCR forms for individual States are as indicated in the list on the following page:

Massachusetts Occupational Analysis Field Center (617) 727-6718
Research and Statistics Section
Charles Hurley Building, Second Floor
Government Center
Boston, Massachusetts 02114

Connecticut	New York
Delaware	Pennsylvania
Maine	Puerto Rico
Massachusetts	Rhode Island
New Hampshire	Vermont
New Jersey	Virgin Islands

Michigan Occupational Analysis Field Center (313) 876-5140
Michigan Employment Security Commission
7310 Woodard Avenue, Room 425
Detroit, Michigan 48202

Illinois	Ohio
Indiana	West Virginia
Michigan	Wisconsin
Minnesota	

Missouri Occupational Analysis Field Center (314) 340-4780
Division of Employment Security
505 Washington Avenue
St. Louis, Missouri 63101

Arkansas	Nebraska
Iowa	North Dakota
Kansas	Oklahoma
Louisiana	South Dakota
Missouri	Texas

North Carolina Occupational Analysis Field Center (919) 733-7917
Employment Security Commission of North Carolina
Post Office Box 27625
Raleigh, NC 27611

Alabama	Mississippi
District of Columbia	North Carolina
Florida	South Carolina
Georgia	Tennessee
Kentucky	Virginia
Maryland	

Utah Occupational Analysis Field Center (801) 533-2225
Department of Employment Security
174 Social Hall Avenue
Salt Lake City, Utah 84111

Alaska	Montana
American Samoa	Nevada
Arizona	New Mexico
California	Oregon
Colorado	Utah
Guam	Washington
Hawaii	Wyoming
Idaho	

Occupational Code Request

U.S. Department of Labor
Employment and Training Administration

A. Originating Office

1. State

2. Date Transmitted

3. Local Office *(Name, I.D. No., Address, Phone No.)*

Date Received by OAFC:

OMB No. 12050137

Expires: 11/30/92

B. Information Obtained From:

1. CHECK APPROPRIATE BOX

☐ Employer ☐ Applicant ☐ Training Program

☐ Other *(specify)*

2. Establishment *(Name and Address)*

3. Establishment Contact *(Name, Title, Phone No.)*

4. Requested By *(Name, Title, Phone No.)*

4. Product(s)/Service(s)

5. SIC Code *(4-digits)*

C. Job Description *(Instructions on Reverse Side)*

1. Establishment Job Title(s):

2. List Overall Purpose or Summary of this Job:

3. List Important or Regularly Performed Tasks:

4. (a) List Employer's Hiring Requirements: *(Education, vocational training, experience, other)*

4. (b) List Machines, Tools, Equipment or Work Aids the Worker Uses To Perform Duties:

D. APPROVED TITLE AND CODE:	Occupational Title	Occupational Code *(9-digits)*
	Industry	GOE Code *(6-digits)*

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Information Management, Department of Labor, Room N–1301, 200 Constitution Avenue, N.W., Washington, DC 20210; and to the Office of Management and Budget, Paperwork Reduction Project (1205–0137), Washington, DC 20503.

Occupational Code Request (con't)

State

E. Additional Information and Comments

List any additional information and comments not covered elsewhere. *(Use additional sheets, if necessary.)*

F. Reply to Originating Office and State Coordinator

"X" One

1. ☐ Use DOT Definition *(4th Edition Title and 9-digit Code)*
2. ☐ Use Approved O.C.R. Code *(Full 9-digit Code)*
3. ☐ Use New Code and Title *(See Item D—Approved Title and Code, on other side)*
4. ☐ Send more information *(See Attached Letter)*

G. Transmittal Action Approved By:

Name and Title

Date Returned to Originating Office

Date Sent to DOA/ Other OAFC

Instructions for Completing Part C, Job Description

1. Summarize, in one sentence, the overall objective or purposes of the job *(such as, "Operates injection molding machine.")*
2. List the more important or regularly performed tasks. A good job description should include these five kinds of information:
   a. Worker actions (what actions a worker takes), such as "Sets-up. . . ."
   b. Machines, tools, equipment, and/or work aids (include with the task where pertinent), such as "injection molding machine."
   c. Purpose of worker actions (the results of the work, the purpose of the task), such as "to mold. . . ."
   d. Materials used, such as "granulated resin pellets," products made, such as "plastic bottles," subject matter employed, (academic discipline), such as "accounting principles," "machine shop math," etc., or service rendered, such as "hair styling."
   e. Kind of instructions received, such as "simple worksheet," "complex blue-prints," or basis for judgments, such as "following supervisor's directions," or "according to work order and knowledge of machine operations."

NOTE: Use more than one sentence, if necessary, to describe all important or regularly performed tasks. For example of a related published job definition using the components, see Injection-molding-machine Operator, 556.382-014 in the Dictionary of Occupational Titles.

INDUSTRY INDEX

This index lists industries included in the section entitles "Occupational Titles Arranged by Industry Designation". The industry designations (abbreviations) and full industry titles are both listed. Entries in capital letters refer to the full industry titles and those in lower case to the industry designations.

ABRASIVE, ASBESTOS, AND MISCELLANEOUS NONMETALLIC MINERAL PRODUCTS INDUSTRY ... 1143
agric. equip. ... 1027
AGRICULTURAL EQUIPMENT INDUSTRY ... 1027
agriculture ... 1027
AGRICULTURE AND AGRICULTURAL SERVICE ... 1027
air trans. ... 1032
AIR TRANSPORTATION INDUSTRY ... 1032
AIRCRAFT-AEROSPACE MANUFACTURING INDUSTRY ... 1030
aircraft mfg. ... 1030
amuse. & rec. ... 1033
AMUSEMENT AND RECREATION ... 1033
ANIMAL AND VEGETABLE OILS, FATS, AND GREASE INDUSTRY ... 1145
any industry ... 1036
ANY INDUSTRY ... 1036
auto. mfg. ... 1049
AUTOMOBILE MANUFACTURING INDUSTRY ... 1049
AUTOMOTIVE SERVICES ... 1050
automotive ser. ... 1050
bakery products ... 1051
BAKERY PRODUCTS INDUSTRY ... 1051
beverage ... 1052
BEVERAGE INDUSTRY ... 1052
BLAST FURNACE, STEEL WORK, AND ROLLING AND FINISHING MILL INDUSTRY ... 1189
boot & shoe ... 1054
BOOT AND SHOE INDUSTRY ... 1054
brick & tile ... 1058
BRICK, TILE, AND NONCLAY REFRACTORIES INDUSTRY ... 1058
BUILDING MATERIALS INDUSTRY, NOT ELSEWHERE CLASSIFIED ... 1059
build. mat., nec ... 1059
business ser. ... 1060
BUSINESS SERVICES ... 1060
button & notion ... 1061
BUTTON AND MISCELLANEOUS NOTIONS INDUSTRY 1061
can. & preserv. ... 1062
CANNING AND PRESERVING INDUSTRY ... 1062
carpet & rug ... 1063
CARPET AND RUG INDUSTRY ... 1063
cement ... 1064
CEMENT INDUSTRY ... 1064
chemical ... 1064
CHEMICAL INDUSTRY ... 1064
clerical ... 1069
CLERICAL AND KINDRED OCCUPATIONS ... 1069
clock & watch ... 1072
CLOCKS, WATCHES, AND ALLIED PRODUCTS INDUSTRY ... 1072
COAL, METAL, AND NONMETAL MINING AND QUARRYING INDUSTRY ... 1136
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NONPROFIT MEMBERSHIP, CHARITABLE, AND RELIGIOUS ORGANIZATIONS 1144
nonprofit org. 1144
nut & bolt 1144
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office machines 1144
oils & grease 1145
optical goods 1146
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ordnance 1147
ORDNANCE AND ACCESSORIES (EXCEPT VEHICLES AND GUIDED MISSILES) INDUSTRY 1147
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PAINT AND VARNISH INDUSTRY 1149
paper & pulp 1150
PAPER AND PULP INDUSTRY 1150
paper goods 1151
PAPER GOODS INDUSTRY 1151
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saw. & plan. 1185
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SHIP AND BOAT MANUFACTURING AND REPAIRINGINDUSTRY 1186
ship-boat mfg. 1186
smelt. & refin. 1187
SMELTING AND REFINING INDUSTRY 1187
soap & rel. 1189
SOAP, CLEANING, AND TOILET PREPARATIONINDUSTRY 1189
social ser. 1189
SOCIAL SERVICES 1189
steel & rel. 1189
stonework 1191
STONEWORK INDUSTRY 1191
struct. metal 1192
STRUCTURAL AND ORNAMENTAL METAL PRODUCTSINDUSTRY 1192
sugar & conf. 1193
SUGAR & CONFECTIONERY PRODUCTS INDUSTRY 1193
svc. ind. mach. 1195
tel. & tel. 1195
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OCCUPATIONAL TITLES ARRANGED BY INDUSTRY DESIGNATION

agric. equip.—AGRICULTURAL EQUIPMENT INDUSTRY: This designation includes occupations concerned with manufacturing and repairing implements and equipment used either exclusively or to a large extent on farms. Typical of the products included in the industry are barn and barnyard equipment, cultivators, harrows, harvesting machinery, listers, planting and fertilizing machinery, plows, rollers, tractors, and weeders. Occupations concerned with the manufacture of agricultural handtools are included in the CUTLERY, HANDTOOLS, AND HARDWARE INDUSTRY (cutlery-hrdwr.).

assembler, lawn-and-garden machinery 801.684-022
assembler, tractor 801.684-022
assembly inspector 801.381-018
ASSEMBLY INSPECTOR 706.361-014
ASSEMBLY-INSPECTOR HELPER 801.663-010
ASSEMBLY REPAIRER 624.381-010
BENCH ASSEMBLER 706.684-042
BLADE BALANCER 701.687-014
case assembler 801.684-022
Combine Inspector 624.361-010
Diesel-Mechanic, Farm 625.281-010
FARM-EQUIPMENT-MECHANIC APPRENTICE 624.281-014
FARM-EQUIPMENT MECHANIC I 624.281-010
FARM-EQUIPMENT MECHANIC II 624.381-014
FARM-MACHINERY SET-UP MECHANIC 624.381-018
farm mechanic 624.381-014
farm mechanic 624.281-010
farm-mechanic apprentice 624.281-014
field-equipment-maintenance mechanic, farm 624.381-014
finished-goods inspector 801.381-018
GREASER 624.684-010
INSPECTOR AND TESTER 624.361-010
inspector, finished machines and bundles 801.667-010
INSPECTOR, SHIPPING 801.667-010
main-line assembler 801.684-022
MAJOR-ASSEMBLY INSPECTOR 801.381-018
mechanical inspector 624.361-010
MILKING-SYSTEM INSTALLER 809.381-018
Motor-Assembly Supervisor 801.137-010
PROGRESSIVE ASSEMBLER AND FITTER 801.684-022
REEL-BLADE-BENDER FURNACE TENDER 504.685-030
Reel Fabricator 706.684-042
SPRINKLER-IRRIGATION-EQUIPMENT MECHANIC 624.361-014
subassembler 706.684-042
SUPERVISOR, ASSEMBLY 801.137-010
SUPERVISOR, FARM-EQUIPMENT MAINTENANCE 624.131-010
SUPERVISOR, INSPECTION 801.137-014
tester 624.361-010
TEST TECHNICIAN 019.261-022
Treadmill Inspector 624.361-010
Viner Mechanic 624.281-010

agriculture—AGRICULTURE AND AGRICULTURAL SERVICE: This designation includes occupations concerned with the following types of activity: (1) raising crops to be used as food, for industrial use, as in production of cotton textiles and of plastic materials and other chemicals, and for other purposes; (2) breeding and raising poultry, livestock, and other animals for food, furs, or hides, for show or utility purposes, or as pets; (3) functions related to the above that are frequently performed by persons engaged in agriculture but that are also performed as services by organizations that specialize in such activities, including functions that are characteristically performed as services to farmers and others engaged in agriculture and directly related to agriculture. Occupations of a professional character, such as agronomists, entomologists, and plant pathologists, are included in PROFESSIONAL AND KINDRED OCCUPATIONS (profess. & kin.). Occupations concerned with farming aquatic life are included in FISHING, HUNTING, AND TRAPPING (fishing & hunt.). Occupations concerned with the practice of veterinary medicine are included in MEDICAL SERVICES (medical ser.).

aerial-applicator pilot 196.263-010
AGRICULTURAL AIDE ..... term
agricultural-aircraft pilot 196.263-010
aircraft pilot 196.263-010
AIRPLANE PILOT 196.263-010
airplane pilot, crop dusting 196.263-010
AIRPLANE-PILOT HELPER 409.667-010
ANIMAL BREEDER 410.161-010
apiarist 413.161-010
Apple Checker 221.587-030
Apple Grower 403.161-010
Apple Packer 920.687-134
APPLE-PACKING HEADER 920.687-010
Apple-Picking Supervisor 409.131-010
Apple Sorter 529.687-186
Apple Washer 529.685-258
Apricot Packer 920.687-134
ARTIFICIAL-BREEDING DISTRIBUTOR 180.167-010
ARTIFICIAL-BREEDING TECHNICIAN 418.384-014
artificial-insemination technician 411.384-010
ARTIFICIAL INSEMINATOR 418.384-010
Asparagus Grader And Buncher 529.687-186
Asparagus Sorter 529.687-186
Avocado Packer 920.687-134
BALE SEWER 920.687-022
Banana Grader 529.687-186
BAND MAKER 619.685-010
BAND SALVAGER 929.686-014
Band Shover, Press 920.686-042
band splicer 619.685-010
band straightener 929.686-014
Basket Turner 920.687-134
Bean-Sprout Grower 405.161-018
Bean-Sprout Laborer 405.687-014
bee farmer 413.161-010
BEEKEEPER 413.161-010
Bee Producer 413.161-010
bee raiser 413.161-010
bee rancher 413.161-010
BEE WORKER 413.687-018
berry grower 403.161-014
BIOLOGICAL AIDE 049.364-018
Blacksmith, Farm 610.381-010
BLOOD TESTER, FOWL 411.364-010
Blueberry Grower 403.161-014
BONSAI CULTURIST 405.161-010
Boxer 920.687-134
breeding technician 418.384-014
BUDDER 405.684-010
Bulb Grower 405.161-014
Bulb Sorter 529.687-186
BUS DRIVER, DAY-HAUL OR FARM CHARTER 913.363-010
CAMP TENDER 410.137-010
CANARY BREEDER 411.161-010
CAPONIZER 411.684-010
Capper 920.687-134
Capper Picker 529.687-186
CARETAKER, FARM ..... term
Carrot Grader-Inspector 409.687-010
Carrot Washer 529.685-258
cash grain grower 401.161-010
Cat Breeder 410.161-010
Cattle Rancher 410.161-018
Cauliflower-Harvesting-And-Packing Supervisor 409.131-010
Cherry Grower 403.161-010
Cherry Packer 920.687-134
Cherry Sorter 529.687-186
chicken fancier 411.161-014
Chicken Vaccinator 411.684-014
CHICK GRADER 411.687-010
CHICK SEXER 411.687-014
Chinchilla Farmer 410.161-014
chore tender 421.687-010
Citrus-Fruit Packer 920.687-134
Citrus-Fruit-Packing Grader 529.687-186
Compress Trucker 929.687-030
Contractor, Broomcorn Threshing 409.117-010
Contractor, Field Hauling 409.117-010
Cook, Ranch 315.361-010
Corn Grower 401.161-010
COTTON BALER 920.685-114
COTTON CLASSER 429.387-010
COTTON CLASSER AIDE 429.587-010
Cotton Farmworker 404.687-010
cotton grader 429.387-010
Cotton Grower 404.161-010
COTTON SAMPLER 922.687-042
COTTON TIER 920.687-074
Cotton Weigher 221.587-030
COWPUNCHER 410.674-014
Cranberry-Farm Supervisor 403.131-014
Cranberry Grower 403.161-014
Cranberry Sorter 529.687-186
Crater 920.687-134
Crate Tier 920.687-134

agriculture

crew boss 180.167-022
crew leader 180.167-022
crew leader 180.167-050
crew manager 408.131-010
Culled-Fruit Packer 920.687-134
Cull Grader 529.687-186
cutter 404.686-010
Dairy Farmer 410.161-018
Day-Haul Youth Supervisor 913.363-010
debeaker 411.687-026
disease-and-insect-control boss 408.137-010
Dog Breeder 410.161-010
Driver 404.131-010
Duck Farmer 411.161-018
dwarf tree grower 405.161-010
Egg Packer 920.687-134
EGG PASTEURIZER 529.682-038
EGG WASHER, MACHINE 529.686-030
ELECTRIC-FORK OPERATOR 921.685-042
Face-And-Fill Packer 920.687-134
farm butcher 525.664-010
farm-crew leader 180.167-050
FARMER ..... term
FARMER, CASH GRAIN 401.161-010
FARMER, CONTRACT ..... term
FARMER, DIVERSIFIED CROPS 407.161-010
FARMER, DRY LAND ..... term
FARMER, FIELD CROP 404.161-010
FARMER, FRUIT CROPS, BUSH AND VINE 403.161-014
FARMER, GENERAL 421.161-010
FARMER, TENANT ..... term
FARMER, TREE-FRUIT-AND-NUT CROPS 403.161-010
FARMER, VEGETABLE 402.161-010
farm-labor contractor 409.117-010
farm laborer 421.687-010
FARM-MACHINE OPERATOR 409.683-010
FARM-MACHINE TENDER 409.685-010
FARMWORKER ..... term
Farmworker, Berry 403.687-010
Farmworker, Brooder Farm 411.584-010
FARMWORKER, BULBS 405.683-010
Farmworker, Chicken Farm 411.584-010
Farmworker, Cranberry 403.687-010
FARMWORKER, DAIRY 410.684-010
FARMWORKER, DIVERSIFIED CROPS I 407.663-010
FARMWORKER, DIVERSIFIED CROPS II 407.687-010
Farmworker, Egg-Producing Farm 411.584-010
FARMWORKER, FIELD CROP I 404.663-010
FARMWORKER, FIELD CROP II 404.687-010
FARMWORKER, FRUIT I 403.683-010
FARMWORKER, FRUIT II 403.687-010
Farmworker, Fryer Farm 411.584-010
Farmworker, Fur 410.674-010
FARMWORKER, GENERAL I 421.683-010
FARMWORKER, GENERAL II 421.687-010
FARMWORKER, GRAIN I 401.683-010
FARMWORKER, GRAIN II 401.687-010
FARMWORKER, LIVESTOCK 410.664-010
FARMWORKER, MACHINE 409.686-010
FARMWORKER, POULTRY 411.584-010
Farmworker, Pullet Farm 411.584-010
FARMWORKER, RICE 401.683-014
FARMWORKER, SEASONAL ..... term
Farmworker, Turkey Farm 411.584-010
FARMWORKER, VEGETABLE I 402.663-010
FARMWORKER, VEGETABLE II 402.687-010
FEED AND FARM MANAGEMENT ADVISER 096.127-018
FEED-RESEARCH AIDE 049.364-010
Fence-Post Cutter 454.684-026
FIELD HAULER 409.683-014
FIELD INSPECTOR, DISEASE AND INSECT CONTROL 408.687-010
FIELD SERVICE TECHNICIAN, POULTRY 411.267-010
field supervisor 402.131-010
FIELD SUPERVISOR, SEED PRODUCTION 180.167-014
FIG CAPRIFIER 403.687-014
Fig Sorter 529.687-186
Filbert Grower 403.161-010
fish-bait picker 413.687-010
fish-worm grower 413.161-018
FLEECE TIER 410.687-010
Flower Grader 529.687-186
Flower Grower 405.161-014
FLOWER PICKER 405.687-010
FOREST-PRODUCTS GATHERER 453.687-010
Fox Farmer 410.161-014
FRUIT DISTRIBUTOR 921.685-046
FRUIT-GRADER OPERATOR 529.665-010
Fruit Packer, Face-And-Fill 920.687-134
Fruit Packer, Wrap-And-Place 920.687-134
fruit picker 403.687-018
Fruit Sorter 529.687-186
FRUIT WORKER ..... term
FUR FARMER 410.161-014
GAME-BIRD FARMER 412.161-010
GAME-FARM HELPER 412.684-010
GAMEKEEPER 169.171-010
gardener-florist 406.684-018
garden farmer 402.161-010
garden worker 402.687-010
GARDEN WORKER 406.684-018
GENERAL MANAGER, FARM 180.167-018
GIN CLERK 221.467-010
GINNER 429.685-010
Ginseng Farmer 404.161-010
Goat Farmer 410.161-018
GOAT HERDER 410.687-014
GOAT-TRUCK DRIVER ..... term
GRADER TENDER 521.685-154
grain farmer 401.161-010
Grape Grower 403.161-014
Grass Farmer 405.161-014
Grass-Farm Laborer 405.687-014
Greenhouse Laborer 405.687-014
green house manager 405.131-010
Greenhouse Superintendent 405.131-010
Greenhouse Worker 405.684-014
GROUP LEADER 180.167-022
grove superintendent 180.167-058
GROWTH-MEDIA MIXER, MUSHROOM 405.683-014
Guinea-Pig Breeder 410.161-010
HARVEST CONTRACTOR 409.117-010
harvesting manager 405.131-010
harvest supervisor 409.131-010
HARVEST WORKER, FIELD CROP 404.687-014
HARVEST WORKER, FRUIT 403.687-018
HARVEST WORKER, VEGETABLE 402.687-014
hatchery helper 411.687-022
Hay Farmer 404.161-010
Header 920.687-134
head rose grader 405.137-010
helper, chicken farm 411.584-010
herder 410.687-022
hired worker 421.683-010
Hoer 409.687-018
HOG-CONFINEMENT-SYSTEM MANAGER 410.161-022
hoist worker 929.687-018
honey producer 413.161-010
Hop Grower 404.161-010
Hops Farmworker 404.687-010
Hop Sorter 529.687-186
Horse Rancher 410.161-018
HORSESHOER 418.381-010
HORSE TRAINER 419.224-010
HORTICULTURAL-SPECIALTY GROWER, FIELD 405.161-014
HORTICULTURAL-SPECIALTY GROWER, INSIDE 405.161-018
HORTICULTURAL WORKER I 405.684-014
HORTICULTURAL WORKER II 405.687-014
house supervisor 920.137-010
Hydroponics Grower 405.161-018
Hydroponics Worker 405.684-014
HYDRO-SPRAYER OPERATOR 408.662-010
incubator helper 411.687-022
inseminator 418.384-010
INSPECTOR-GRADER, AGRICULTURAL ESTABLISHMENT 409.687-010
interior horticulturist 408.364-010
Irrigating-Pump Operator 914.682-010
IRRIGATOR, GRAVITY FLOW 409.687-014
IRRIGATOR, HEAD 409.137-010
irrigator, overhead 409.685-014
IRRIGATOR, SPRINKLING SYSTEM 409.685-014
IRRIGATOR, VALVE PIPE 409.684-010
Kennel Attendant 410.674-010
LABORATORY TECHNICIAN, ARTIFICIAL BREEDING 040.361-010
Laborer, Brooder Farm 411.687-018
Laborer, Chicken Farm 411.687-018
laborer, dairy farm 410.684-010
Laborer, Egg-Producing Farm 411.687-018
Laborer, Fryer Farm 411.687-018
laborer, game farm 412.684-010

LABORER, HIGH-DENSITY PRESS 929.687-018
LABORER, LANDSCAPE 408.687-014
laboret, livestock 410.664-010
Laborer, Orchard 403.687-010
LABORER, POULTRY FARM 411.687-018
LABORER, POULTRY HATCHERY 411.687-022
Laborer, Pullet Farm 411.687-018
LABORER, TREE TAPPING 453.687-014
Laborer, Turkey Farm 411.687-018
laborer, vegetable farm 402.687-010
Laborer, Vineyard 403.687-010
LAMBER 410.364-010
LANDSCAPE GARDENER 408.161-010
landscaper 408.161-010
LAWN-SERVICE WORKER 408.684-010
lead rider 410.137-014
Lemon Grower 403.161-010
Lettuce Trimmer 920.687-134
Lidder 920.687-134
LIQUID-FERTILIZER SERVICER 906.683-014
livestock breeder 410.161-018
Livestock Counter 221.587-030
livestock farmer 410.161-018
LIVESTOCK RANCHER 410.161-018
Lugger 929.687-030
Make-Up Market Worker, Truck Garden 920.687-134
MANAGER, AERIAL PLANTING AND CULTIVATION 180.167-062
Manager, Chicken Hatchery 180.167-046
MANAGER, DAIRY FARM 180.167-026
Manager, Duck Hatchery 180.167-046
Manager, Game-Animal Farm 180.167-034
Manager, Game-Bird Farm 180.167-034
MANAGER, GAME BREEDING FARM 180.167-034
MANAGER, GAME PRESERVE 180.167-038
Manager, Hydroponics Nursery 180.167-042
MANAGER, NURSERY 180.167-042
MANAGER, ORCHARD 180.167-066
MANAGER, POULTRY HATCHERY 180.167-046
manager, production 180.167-058
MANAGER, PRODUCTION, SEED CORN 180.161-010
manager, regional 180.161-010
Manager, Retail Nursery 180.167-042
Manager, Turkey Hatchery 180.167-046
MEAT DRESSER 525.664-010
Medicinal-Plant Picker 453.687-010
Melon Packer 920.687-134
MIGRANT LEADER 180.167-050
MIGRANT WORKER ..... term
MILKER, MACHINE 410.685-010
milking-machine operator 410.685-010
MILK SAMPLER 410.357-010
Mink Farmer 410.161-014
Monkey Breeder 410.161-010
Moss Picker 453.687-010
Mouse Breeder 410.161-010
Mushroom Grower 405.161-018
Mushroom-Growing Supervisor 405.131-010
Mushroom Laborer 405.687-014
Mushroom Packer 920.687-134
mutton puncher 410.687-022
Nursery Laborer 405.687-014
Nut Orchardist 403.161-010
Nut Sorter 529.687-186
Onion Farmer 402.161-010
Onion-Harvesting Supervisor 409.131-010
Orange Grower 403.161-010
Orange-Picking Supervisor 409.131-010
Orange Washer 529.685-258
orchardist 403.161-010
Orchard Pruner 408.684-018
Orchid Grower 405.161-018
Orchid Superintendent 405.131-010
Orchid Worker 405.684-014
PACE SETTER ..... term
packer 920.687-134
PACKER, AGRICULTURAL PRODUCE 920.687-134
PACKING-HOUSE SUPERVISOR 920.137-010
packing-shed supervisor 920.137-010
Partridge Farmer 412.161-010
PATCH WORKER 381.687-030
Peach Grower 403.161-010
Peach Harvesting Supervisor 409.131-010
Peach Sorter 529.687-186
Peanut Farmer 404.161-010
Pear Packer 920.687-134
Pecan Grower 403.161-010
PELTER 410.687-018
Pest-Control Pilot 196.263-010
pest-control worker 408.381-010
Pheasant Farmer 412.161-010
PLANT-CARE WORKER 408.364-010
PLANTER ..... term
Plant Packer 920.687-134
PLANT PROPAGATOR 405.361-010
plant tender 408.364-010
Plant Wrapper 920.687-134
plater 418.381-010
Plum Packer 920.687-134
Potato Grader 529.687-186
potato-seed cutter 404.686-010
Potato Sorter 529.687-186
POULTRY BREEDER 411.161-014
poultry culler 411.687-010
POULTRY DEBEAKER 411.687-026
POULTRY DRESSER 525.687-070
POULTRY FARMER 411.161-018
Poultry Farmer, Egg 411.161-018
Poultry Farmer, Meat 411.161-018
poultry helper 411.584-010
POULTRY INSEMINATOR 411.384-010
POULTRY TENDER 411.364-014
POULTRY VACCINATOR 411.684-014
presser, cotton ginning 920.685-114
PRESS FEEDER, BROOMCORN 429.686-010
puncher 410.674-014
Quail Farmer 412.161-010
Queen Producer 413.161-010
Rabbit Breeder 410.161-010
ramrod 410.137-014
ranch hand, livestock 410.664-010
ranch manager 180.167-018
ranch rider 410.674-014
Raspberry Grower 403.161-014
Rat Breeder 410.161-010
Rattlesnake Farmer 413.161-014
Reindeer Rancher 410.161-018
REPTILE FARMER 413.161-014
Returner 920.687-074
Rice Farmer 401.161-010
rider 410.674-014
Ring Facer 920.687-134
Ring Packer 920.687-134
Roper 929.687-030
Rose-Farm Laborer 405.687-014
Rose Grader 409.687-010
Rose Grower 405.161-014
row boss 180.167-022
ROW BOSS, HOEING 409.137-014
sampler 410.357-010
sampler 922.687-042
scale clerk 221.467-010
SCOUT 408.381-010
seed cleaner 599.665-010
SEED-CLEANER OPERATOR 599.665-010
seed-cleaning-machine operator 599.665-010
SEED CUTTER 404.686-010
Seed Grower 405.161-014
Seed Packer 920.687-134
SEED PELLETER 599.685-126
SEED-POTATO ARRANGER 404.685-010
Seed Sorter 529.687-186
Segregator 929.687-030
Sewer, Head 920.687-022
SHARECROPPER ..... term
shed boss 404.131-014
SHED WORKER ..... term
sheep clipper 410.684-014
SHEEP HERDER 410.687-022
Sheep Rancher 410.161-018
SHEEP SHEARER 410.684-014
shepherd 410.687-022
SHREDDER TENDER, PEAT 599.685-086
Shrub Grower 405.161-014
skinner, pelts 410.687-018
SORTER, AGRICULTURAL PRODUCE 529.687-186
sorter, food products 529.687-186
Soybean Grower 401.161-010
SPRAYER, HAND 408.684-014
Spray Supervisor 408.131-010
Stallion Keeper 410.674-022

aircraft mfg.

STILL OPERATOR 522.685-098
stock clipper 410.684-014
Strawberry Grower 403.161-014
Suction Operator 921.662-018
Sugarcane Planter 404.161-010
SUPERINTENDENT 180.167-054
SUPERINTENDENT, PRODUCTION 180.167-058
SUPERINTENDENT, SEED MILL 599.137-010
SUPERVISOR, AREA 401.137-010
SUPERVISOR, ARTIFICIAL BREEDING RANCH 410.131-014
Supervisor, Brooder Farm 411.131-010
Supervisor, Chicken Hatchery 411.137-010
SUPERVISOR, DAIRY FARM 410.131-018
SUPERVISOR, DETASSELING CREW 401.137-014
SUPERVISOR, DIVERSIFIED CROPS 407.131-010
Supervisor, Egg-Producing Farm 411.131-010
SUPERVISOR, FIELD-CROP FARMING 404.131-010
Supervisor, Fryer Farm 411.131-010
SUPERVISOR, GAME FARM 412.131-010
supervisor, grove 403.131-010
SUPERVISOR, HORTICULTURAL-SPECIALTY FARMING 405.131-010
SUPERVISOR, INSECT AND DISEASE INSPECTION 408.137-010
supervisor, irrigation 409.137-010
SUPERVISOR, LABORATORY ANIMAL FACILITY 418.137-010
supervisor, orchard 403.131-010
SUPERVISOR, PICKING CREW 409.131-010
SUPERVISOR, POULTRY FARM 411.131-010
SUPERVISOR, POULTRY HATCHERY 411.137-010
Supervisor, Pullet Farm 411.131-010
SUPERVISOR, RESEARCH DAIRY FARM 410.134-022
SUPERVISOR, RESEARCH KENNEL 418.137-014
SUPERVISOR, ROSE-GRADING 405.137-010
SUPERVISOR, SHED WORKERS 404.131-014
SUPERVISOR, SPRAY, LAWN AND TREE SERVICE 408.131-010
SUPERVISOR, STOCK RANCH 410.131-022
SUPERVISOR, TREE-FRUIT-AND-NUT FARMING 403.131-010
Supervisor, Turkey Farm 411.131-010
Supervisor, Turkey Hatchery 411.137-010
SUPERVISOR, VEGETABLE FARMING 402.131-010
SUPERVISOR, VINE-FRUIT FARMING 403.131-014
SUPERVISOR, WOOL-SHEARING 410.134-014
Swine Rancher 410.161-018
Thorough Bred Horse Farm Manager 410.161-018
THRESHER, BROOMCORN 429.685-014
tie-out worker 920.687-074
tipper 525.687-070
TOBACCO CURER 523.682-038
Tobacco Farmworker 404.687-010
Tobacco Grader 409.687-010
Tobacco Grower 404.161-010
Tobacco Packer 920.687-134
Topper Packer 920.687-134
TOP SCREW 410.137-014
top waddy 410.137-014
TRANSPLANTER, ORCHID 405.687-018
TREE CUTTER 454.684-026
TREE PRUNER 408.684-018
Tree-Service Supervisor 408.131-010
TREE SURGEON 408.181-010
Tree-Surgeon Helper I 408.684-018
TREE-SURGEON HELPER II 408.687-018
Tree Wrapper 920.687-134
tromper 920.687-198
Truck Farmer 402.161-010
Tung-Nut Grower 403.161-010
Turkey Farmer 411.161-018
vegetable grower 402.161-010
Vegetable Sorter 529.687-186
vegetable worker 402.687-010
VETERINARIAN, POULTRY 073.101-014
VINE PRUNER 403.687-022
Vineyard Supervisor 403.131-014
wage worker see FARMWORKER, SEASONAL .....
Walnut Grower 403.161-010
WASHER, AGRICULTURAL PRODUCE 529.685-258
Washing-And-Waxing-Machine Operator 529.685-258
Watermelon-Harvesting Supervisor 409.131-010
Watermelon Inspector 409.687-010
WEEDER-THINNER 409.687-018
WEED INSPECTOR 408.381-014
Wheat Grower 401.161-010
WOOL-FLEECE GRADER 589.687-054
WOOL-FLEECE SORTER 410.687-026
WOOL SACKER 920.687-198
wool shearer 410.684-014
wool tamper 920.687-198
worm-bed attendant 413.687-014
WORM-FARM LABORER 413.687-014
WORM GROWER 413.161-018
WORM PACKER 920.687-202
WORM PICKER 413.687-010
worm raiser 413.687-014
worm sorter 920.687-202
YARD SUPERVISOR, COTTON GIN 929.137-034
YARD WORKER 929.583-010

aircraft mfg.—AIRCRAFT-AEROSPACE MANUFACTURING INDUSTRY: This designation includes occupations concerned with manufacturing and repairing aerospace and aircraft vehicles, including guided missiles, spacecraft, fixed and rotary wing aircraft, gliders, helicopters, airships, balloons, and surface-effect vehicles; and manufacturing parts, such as engines, propulsion units, hydraulic and mechanical equipment, and landing gear. Occupations concerned with the manufacture of navigational, guidance, and communications systems are included in the INSTRUMENTS AND APPARATUS INDUSTRY (inst. & app.).

Abrasive Water Jet Cutter Operator 699.382-010
AERODYNAMICIST 002.061-010
aerodynamics engineer 002.061-010
AERONAUTICAL-DESIGN ENGINEER 002.061-022
AERONAUTICAL ENGINEER 002.061-014
AERONAUTICAL PROJECT ENGINEER 002.167-018
AERONAUTICAL-RESEARCH ENGINEER 002.061-026
AERONAUTICAL TEST ENGINEER 002.061-018
aerophysics engineer 002.061-010
aerospace project engineer 002.167-018
aircraft and engine electrician, field and hangar 825.261-018
Aircraft-And-Engine Mechanic, Field-And-Hangar 621.281-014
aircraft-delivery checker 222.387-010
aircraft mechanic 621.281-014
AIRCRAFT MECHANIC, ARMAMENT 806.361-030
aircraft mechanic, electrical 825.261-018
AIRCRAFT MECHANIC, ELECTRICAL AND RADIO 825.381-010
AIRCRAFT MECHANIC, ENVIRONMENTAL CONTROL SYSTEM 806.381-014
AIRCRAFT MECHANIC, PLUMBING AND HYDRAULICS 806.381-066
aircraft mechanic, rigger 806.381-018
AIRCRAFT MECHANIC, RIGGING AND CONTROLS 806.381-018
aircraft mechanic, structures 806.381-026
AIRCRAFT-SHIPPING CHECKER 222.387-010
AIRCRAFT SKIN BURNISHER 807.684-018
AIRFRAME-AND-POWER-PLANT MECHANIC 621.281-014
AIRFRAME-AND-POWER-PLANT-MECHANIC HELPER 621.684-010
AIRPLANE COVERER 849.381-010
airplane mechanic 621.281-014
airplane-mechanic helper 621.684-010
armament assembler 806.361-030
armament installer 806.361-030
assembler, aircraft, plumbing and hydraulics 806.381-066
ASSEMBLER, AIRCRAFT POWER PLANT 806.381-022
ASSEMBLER, AIRCRAFT, STRUCTURES AND SURFACES 806.381-026
assembler, bonding 806.384-030
ASSEMBLER, ELECTROMECHANICAL 828.381-018
ASSEMBLER, GROUND SUPPORT EQUIPMENT 809.261-010
assembler-installer, cable controlled systems 806.381-018
ASSEMBLER-INSTALLER, GENERAL 806.361-014
assembler-installer, structures 806.381-026
Assembler-Installer, Wing Structures 806.381-026
ASSEMBLER, METAL BONDING 806.384-030
assembler, radio and electrical 729.384-026
ASSEMBLER, SUBASSEMBLY 806.384-034
ASSEMBLER, TUBING 806.381-034
assembler, wire group 729.384-026
Assembly Line Robot Operator 606.382-026
AUTOCLAVE OPERATOR 553.362-014
AUTOMATED CUTTING MACHINE OPERATOR 699.362-010
avionics and radar technician 823.261-026
avionics mechanic 823.261-026
AVIONICS TECHNICIAN 823.261-026
Bagger 754.684-042
bench assembler, electrical 729.384-026
blacksmith, hammer operator 610.362-010
blue print control clerk 206.367-010
BONDED STRUCTURES REPAIRER 807.381-014
bonder, rework and repair 807.381-014
Bonding And Composite Fabricator 754.381-018

bonding equipment operator 553.362-014
cabin furnishings installer 806.381-078
cable assembler 806.381-042
CABLE ASSEMBLER AND SWAGER 806.381-042
cable cutter and swager 806.381-042
CALIBRATION LABORATORY TECHNICIAN 019.281-010
Checkout Mechanic, Hydraulic And Rigging 806.261-050
CHEMICAL-ETCHING PROCESSOR 704.381-014
chemical-milling processor 704.381-014
commodities requirements analyst 012.167-082
Composite Assembler 754.684-042
Composite Bond Worker 754.684-042
Composite Laminator 754.684-042
Composite Layup Worker 754.684-042
Composites Fabricator And Assembler 754.381-018
Composite Trim And Drill Worker 754.684-042
composite worker 754.684-042
computer-numerical-control nesting operator 007.362-010
CONTROLLER, REMOTELY-PILOTED VEHICLE (RPV) 196.263-026
Controls Development Mechanic 693.261-014
cost development engineer 002.167-010
Crane Operator-Hooktender 921.663-010
data acquisition laboratory technician 002.262-010
design specialist, producibility, cost and component technology 002.167-010
detail assembler 806.384-034
detail bench assembler 706.381-050
DEVELOPER PROVER, INTERIOR ASSEMBLIES 693.261-010
Developer-Prover, Mechanical 693.261-014
developer prover, upholstering 693.261-010
DEVELOPMENT MECHANIC 693.261-014
dope-and-fabric worker 849.381-010
doper 849.381-010
DRAFTER, AERONAUTICAL 002.261-010
drawing-release clerk 206.367-010
DROPHAMMER OPERATOR 610.362-010
ELECTRICAL AND RADIO MOCK-UP MECHANIC 693.381-026
ELECTRICAL ASSEMBLER 729.384-026
Electrical Checkout Mechanic 806.261-050
ELECTRICAL-EQUIPMENT TESTER 729.381-010
ELECTRICAL INSPECTOR 825.381-026
ELECTRICIAN, AIRCRAFT 825.261-018
ELECTRICIAN, RESEARCH 726.261-014
ENCAPSULATOR 556.684-014
engine buildup mechanic 806.381-022
ENGINEERING-DOCUMENT-CONTROL CLERK 206.367-010
engineering laboratory technician 019.281-010
engineering-release clerk 206.367-010
engineering test mechanic 710.361-014
engineering test pilot 196.263-042
ENGINE TESTER 621.261-014
etcher, aircraft 704.381-014
experimental aircraft and engine mechanic, field and hangar 621.261-022
EXPERIMENTAL AIRCRAFT MECHANIC 621.261-022
Experimental Electronics Developer 003.161-014
experimental flight test mechanic 621.261-022
experimental mechanic 693.261-014
Experimental Mechanic, Spacecraft 621.261-022
Experimental Plastics Fabricator 754.381-018
experimental preflight mechanic 621.261-022
EXPERIMENTAL-ROCKET-SLED MECHANIC 825.281-038
Fabrication And Structures Development Mechanic 693.261-014
FIELD-SERVICE ENGINEER 002.167-014
FIELD-SERVICE REPRESENTATIVE 621.221-010
Filament-Wound Parts Fabricator 754.381-018
Flight-Line Mechanic 621.281-014
Flight Line Service Attendant 621.684-010
FLIGHT-TEST DATA ACQUISITION TECHNICIAN 002.262-010
FLUID JET CUTTER OPERATOR 699.382-010
Form Block Maker 693.281-030
Fuel Tank Sealer And Tester 806.384-038
general helper 809.687-014
ground equipment mechanic 809.261-010
HAMMER OPERATOR 617.382-014
HELPER, MANUFACTURING 809.687-014
HELPER, METAL BONDING 806.687-022
HIGH-ENERGY-FORMING WORKER 619.380-010
Hydraulic And Plumbing Development Mechanic 693.261-014
hydraulic and plumbing installer 806.381-066
industrial robot operator 606.382-026
Inspector, Advanced Composit 806.261-046
INSPECTOR, ASSEMBLIES AND INSTALLATIONS 806.261-030
inspector, assembly 806.261-030
INSPECTOR, BENCH ASSEMBLY 806.281-026
Inspector, Electrical And Electronic Installations 806.261-030
inspector, electrical bench 825.381-026
Inspector, Engines And Components Assembly 806.261-030
Inspector, Experimental Assembly 806.261-030
INSPECTOR, FABRICATION 806.361-022
Inspector, Final Assembly 806.261-030
Inspector, Final Assembly - Electrical 806.261-030
Inspector, Final Assembly - Mechanical 806.261-030
Inspector, Machined Parts 806.361-022
INSPECTOR, MATERIAL DISPOSITION 806.261-034
INSPECTOR, MISSILE 806.261-038
Inspector, Missile Final Assembly 806.261-038
INSPECTOR, OUTSIDE PRODUCTION 806.261-042
INSPECTOR, PLASTICS AND COMPOSITES 806.261-046
Inspector, Plastics Fabrication-Developmental 806.261-046
inspector, precision electrical assembly 825.381-026
inspector, precision electrical assembly 729.381-010
INSPECTOR, PROCESSING 806.381-074
Inspector, Production Plastic Parts 806.261-046
Inspector, Radar And Electronics 722.381-014
INSPECTOR, RECEIVING 222.384-010
Inspector, Sheet Metal Parts 806.361-022
Inspector, Structural Bonding 806.261-046
Inspector, Structures 806.261-030
Inspector, Subassembly 806.261-030
Inspector, Welded Parts 806.361-022
INSTALLER, INTERIOR ASSEMBLIES 806.381-078
INSTRUMENT INSPECTOR 722.381-014
Integral Tank Sealer 806.384-038
Jig And Fixture Builder 693.281-030
Kitter 754.684-042
laboratory test mechanic 002.261-014
LIAISON ENGINEER 012.167-038
line assembler, aircraft 806.361-014
LOAD-TEST MECHANIC 929.382-010
loft patternmaker 777.281-018
Machine Tool Fixture Builder 693.281-030
material planning and acquisition analyst 012.167-082
Material Review Board Representative, Quality Control 806.261-034
MATERIAL SCHEDULER 012.167-082
MECHANIC, AIRCRAFT RIGGING AND CONTROLS 806.261-050
Mechanic, Electrical Operational Test 806.261-050
Mechanic, Experimental Structural Assembly 693.261-014
Mechanic, Field-Service 621.281-014
Mechanic, General Operational Test 806.261-050
METAL-BONDING PRESS OPERATOR 553.382-026
metal-bonding worker 806.687-022
Metal Bond Inspector 806.261-046
Missile-Control Pilot 196.263-026
Missile Inspector, Preflight 806.261-038
MOCK-UP BUILDER 693.361-014
Model Builder, Display 693.261-018
Model Builder, Wind Tunnel 693.261-018
MODEL MAKER 693.261-018
model maker, plaster and plastic 777.281-018
molder 502.381-014
MOLDER 518.361-010
MOLDER APPRENTICE 518.361-014
molder, closed molds 502.381-014
MOLDER, PUNCH 502.381-014
molder, resin 556.684-014
NESTING OPERATOR, NUMERICAL CONTROL 007.362-010
NUMERICAL-CONTROL ROUTER OPERATOR 605.382-046
Numerical-Control-Wire-Preparation-Machine-Tender 728.685-010
OVEN CURING ATTENDANT 590.685-090
Overhaul and Repair Mechanic 621.281-014
Painter, Aircraft 845.381-014
Painter, Aircraft-Production 845.381-014
PAINTER APPRENTICE, TRANSPORTATION EQUIPMENT 845.381-010
Painter, Decorative-Commercial Aircraft 845.381-014
Painter, Insignia 741.684-026
PAINTER, TRANSPORTATION EQUIPMENT 845.381-014
Paint Stocker 222.387-058
pattern data operator 007.362-010
PATTERNMAKER, PLASTER 777.281-018
patternmaker, plaster and plastic 777.281-018
planishing-hammer operator 617.382-014
Plastic Parts Fabricator 754.381-018
Plastic Parts Fabricator-Trimmer 754.684-042
plastics bench mechanic 754.381-018
PLASTICS FABRICATOR 754.381-018
plastics fabricator and assembler 754.381-018
Plastics Rework And Repair Mechanic 754.381-018
PLASTICS WORKER 754.684-042
platen operator, metal bond 553.382-026

air trans.

power-hammer operator 617.382-014
PRECISION ASSEMBLER 806.381-082
PRECISION ASSEMBLER, BENCH 706.381-050
PRESSURE SEALER-AND-TESTER 806.384-038
Pressurization Mechanic 806.384-038
Pressurization Mechanic, Air Controls 806.384-038
Pressurizer 806.384-038
Primer Sprayer 741.684-026
Process Equipment Operator 704.381-014
PROCUREMENT ENGINEER 162.157-034
production control scheduler 012.167-082
proof-load mechanic 929.382-010
quality assurance calibrator 019.281-010
radio and radar technician 823.261-026
radio operator, ground 193.262-026
RADIO STATION OPERATOR 193.262-026
release and technical records clerk 206.367-010
RESEARCH MECHANIC 002.261-014
RIVETING MACHINE OPERATOR 806.380-010
Riveting Machine Operator, Programmed Control 806.380-010
Riveting Machine Operator, Tape Control 806.380-010
ROBOTIC MACHINE OPERATOR 606.382-026
ROCKET-ENGINE-COMPONENT MECHANIC 621.281-030
Rocket-Engine Mechanic, Liquid 693.261-022
ROCKET-MOTOR MECHANIC 693.261-022
ROUTER OPERATOR, HAND 806.684-150
Router Operator, Pin 605.382-034
Router Operator, Radial 605.382-034
SALES ENGINEER, AERONAUTICAL PRODUCTS 002.151-010
sand molder 518.361-010
sand-molder apprentice 518.361-014
SAW OPERATOR 607.382-014
Sealant Mixer 550.685-062
sealer, aircraft 806.384-038
sheet metal assembler 806.384-034
SHOT-PEENING OPERATOR 617.280-010
SKIN-LAP BONDER 806.684-130
Smooth And Burr Worker, Composites 754.684-042
Space Vehicle Inspector, Preflight 806.261-038
Spares Rework Mechanic 621.281-014
standards laboratory technician 019.281-010
STRESS ANALYST 002.061-030
structural test mechanic 710.361-014
structures assembler 806.381-026
SUPERVISOR, INSPECTION 806.131-038
SUPERVISOR, PRODUCTION DEPARTMENT 806.131-042
systems checkout mechanic 806.261-050
technical aide, flight test data 002.262-010
technical specialist, aircraft systems 621.221-010
TEMPLATE REPRODUCTION TECHNICIAN 976.381-022
Test Cell Technician 621.261-014
test equipment certification technician 019.281-010
TEST EQUIPMENT MECHANIC 710.361-014
tester, electrical accessories 729.381-010
tester, rocket engine 806.261-022
TESTER, ROCKET MOTOR 806.261-022
TEST PILOT 196.263-042
Thermodynamics Engineer 002.061-010
TOOL BUILDER 693.281-030
TOOL DESIGN CHECKER 007.267-014
tool-drawing checker 007.267-014
TOOLING COORDINATOR, PRODUCTION ENGINEERING 169.167-054
tooling reproduction technician 976.381-022
Tool Liaison 012.167-038
tool procurement coordinator 169.167-054
trimmer 693.261-010
tube bender-assembler 806.381-034
Undercoat Sprayer 741.687-018
UPHOLSTERER 780.384-014
VALUE ENGINEER 002.167-010
Water Router Operator 699.382-010
WIND TUNNEL MECHANIC 869.261-026
Wood-Tool Maker 693.281-030
Wrapper And Preserver 920.587-018

air trans.—AIR TRANSPORTATION INDUSTRY: This designation includes occupations concerned with operating, maintaining, and repairing aircraft; controlling and operating air transportation systems; and operating airports.

aerial navigator 196.167-014
aircraft and engine electrician, field and hangar 825.261-018
AIRCRAFT BODY REPAIRER 807.261-010
aircraft charter dispatcher 295.367-010
Aircraft-Engine Assembler 621.281-014
Aircraft-Engine-Cylinder Mechanic 621.281-014
Aircraft-Engine Dismantler 621.281-014
Aircraft-Engine Installer 621.281-014
Aircraft-Engine Mechanic 621.281-014
Aircraft-Engine Mechanic, Overhaul 621.281-014
aircraft-inspection-record clerk 221.362-010
Aircraft Instrument Repairer 710.281-026
AIRCRAFT-LOG CLERK 221.362-010
aircraft mechanic 621.281-014
aircraft mechanic, electrical 825.261-018
aircraft-time clerk 221.362-010
AIRFRAME-AND-POWER-PLANT MECHANIC 621.281-014
AIRFRAME-AND-POWER-PLANT-MECHANIC APPRENTICE 621.281-018
AIRFRAME-AND-POWER-PLANT-MECHANIC HELPER 621.684-010
Airframe-And-Power-Plant Mechanic, Line Service 621.281-014
air-freight agent 248.367-018
AIRLINE-RADIO OPERATOR 193.262-010
AIRLINE-RADIO OPERATOR, CHIEF 193.162-022
AIRLINE SECURITY REPRESENTATIVE 372.667-010
airplane-and-engine inspector 621.261-010
airplane-cabin attendant 352.367-010
Airplane Captain 196.263-014
AIRPLANE-CHARTER CLERK 295.367-010
Airplane Cleaner 919.687-014
AIRPLANE COVERER 849.381-010
AIRPLANE-DISPATCH CLERK 248.367-010
airplane dispatcher 912.167-010
Airplane First-Officer 196.263-014
AIRPLANE-FLIGHT ATTENDANT 352.367-010
AIRPLANE INSPECTOR 621.261-010
airplane mechanic 621.281-014
airplane-mechanic apprentice 621.281-018
airplane-mechanic helper 621.684-010
airplane navigator 196.167-014
Airplane Pilot 196.263-014
airplane pilot, chief 196.167-010
AIRPLANE PILOT, COMMERCIAL 196.263-014
airplane-rental clerk 295.367-010
AIRPORT ATTENDANT 912.364-010
Airport Clerk 219.362-010
AIRPORT ELECTRICIAN 824.281-010
Airport Guide 353.367-014
AIRPORT-MAINTENANCE CHIEF 899.137-010
AIRPORT UTILITY WORKER 912.663-010
avionics and radar technician 823.261-026
avionics mechanic 823.261-026
AVIONICS TECHNICIAN 823.261-026
BAGGAGE CHECKER 357.477-010
CABIN-EQUIPMENT SUPERVISOR 869.131-010
Cabin-Service Agent 919.687-014
Carburetor Mechanic 621.281-014
CARGO AGENT 248.367-018
CHECK PILOT 196.263-022
CHIEF PILOT 196.167-010
commercial pilot 196.263-014
Commissary Agent 922.687-058
COMMUNICATION-CENTER COORDINATOR 235.132-014
COMMUNICATION-CENTER OPERATOR 235.662-014
Copilot 196.263-014
Corporate Pilot 196.263-014
CREW SCHEDULER 215.362-010
CREW SCHEDULER, CHIEF 215.137-010
customer security clerk 372.667-010
customer service agent 248.367-018
customer services instructor 099.227-018
departure clerk 912.367-014
director, airport 184.117-026
Director, Airport Operations 184.117-026
DISPATCHER 912.167-010
DOCK HAND 919.683-010
DOCUMENTATION-BILLING CLERK 214.362-014
dope-and-fabric worker 849.381-010
doper 849.381-010
ELECTRICAL INSPECTOR 825.381-026
ELECTRICIAN, AIRCRAFT 825.261-018
Electrician Supervisor, Airplane 829.131-014
ENGINE TESTER 621.261-014
equipment scheduler 221.362-010
fire fighter, airport 373.663-010
FIRE FIGHTER, CRASH, FIRE, AND RESCUE 373.663-010
FLIGHT ATTENDANT, RAMP 352.367-014
FLIGHT-CREW-TIME CLERK 215.362-018
FLIGHT ENGINEER 621.261-018

flight follower 209.367-050
FLIGHT-INFORMATION EXPEDITER 912.367-010
flight mechanic 621.261-018
flight-operations-dispatch clerk 248.367-010
flight security specialist 372.667-010
Freight-Traffic Agent 252.257-010
GATE AGENT 238.367-010
GENERAL AGENT, OPERATIONS 184.167-042
GENERAL CLAIMS AGENT 186.117-030
ground instructor, advanced 099.227-018
GUIDE, CHIEF AIRPORT 353.137-010
helicopter dispatcher 912.167-010
Helicopter Mechanic 621.281-014
HOST/HOSTESS, GROUND 352.377-010
Hydraulic Tester 621.281-014
Ignition Specialist 621.281-014
inspector, electrical bench 825.381-026
inspector, precision electrical assembly 825.381-026
INSTRUCTOR, GROUND SERVICES 099.227-018
INSTRUCTOR, PILOT 196.223-014
INSTRUMENT INSPECTOR 722.381-014
LABORER, AIRPORT MAINTENANCE 899.687-014
lead ticket-sales agent 238.137-022
LINE-SERVICE ATTENDANT 912.687-010
luggage checker 357.477-010
maintenance-planning clerk 221.362-010
MANAGER, AIRPORT 184.117-026
Manager, Airport-Property-And-Development 184.117-026
MANAGER, CARGO-AND-RAMP-SERVICES 184.167-058
Manager, Commissary Service 184.167-082
MANAGER, FLIGHT CONTROL 184.167-066
Manager, Flight Dispatching 184.167-082
MANAGER, FLIGHT OPERATIONS 184.117-038
MANAGER, FLIGHT-RESERVATIONS 184.167-070
Manager, Flight Service 184.167-082
MANAGER, OPERATIONS 184.117-050
Manager, Passenger Service 184.167-082
manager, rates and schedules 184.117-066
Manager, Reservations-And-Ticketing 184.167-082
MANAGER, SCHEDULE PLANNING 184.117-058
MANAGER, STATION 184.167-082
MANAGER, TRAFFIC 184.117-066
Manifest Clerk 214.362-014
Master Rigger 912.684-010
NAVIGATOR 196.167-014
operations agent 912.367-014
operations manager 184.117-050
Painter, Aircraft 845.381-014
PAINTER APPRENTICE, TRANSPORTATION EQUIPMENT 845.381-010
PAINTER, TRANSPORTATION EQUIPMENT 845.381-014
parachute packer 912.684-010
PARACHUTE RIGGER 912.684-010
Passenger-Interline Clerk 214.382-022
PASSENGER SERVICE REPRESENTATIVE 359.677-022
Passenger Traffic Agent 252.257-010
pilot 196.263-014
PORTER 357.677-010
porter, baggage 357.677-010
radio and radar technician 823.261-026
RATE ANALYST, FREIGHT 214.267-010
RECEPTIONIST, AIRLINE LOUNGE 352.677-014
redcap 357.677-010
RESERVATIONS AGENT 238.367-018
sales representative 252.257-010
screening representative 372.667-010
SENIOR-COMMISSARY AGENT 922.137-010
senior gate agent 238.137-018
senior passenger agent 238.137-022
senior radio operator 193.162-022
SENIOR RESERVATIONS AGENT 238.137-014
senior ticket-sales agent 238.137-022
service center manager 184.167-042
service coordinator 912.367-014
Skycap 357.677-010
Supercharger Mechanic 621.281-014
SUPERCHARGER-REPAIR SUPERVISOR 621.131-010
superintendent, airport 184.117-026
Superintendent, Airport-Buildings-Maintenance 184.117-026
Superintendent, Airport-Facilities-Repair-And-Maintenance 184.117-026
SUPERINTENDENT, MAINTENANCE 184.167-174
superintendent, maintenance, airports 899.137-010
SUPERVISOR, AIRCRAFT CLEANING 891.137-014
SUPERVISOR, AIRCRAFT MAINTENANCE 621.131-014
SUPERVISOR, AIRPLANE-FLIGHT ATTENDANT 352.137-010
SUPERVISOR, AVIONICS SHOP 823.131-018
SUPERVISOR, GATE SERVICES 238.137-018
Supervisor, Lost And Found 241.137-014
SUPERVISOR, TICKET SALES 238.137-022
telephone-sales agent 238.367-018
teleticketing agent 248.382-010
ticket agent 248.382-010
TICKETING CLERK 248.382-010
ticket sales instructor 099.227-018
Tire Changer, Aircraft 915.684-010
TRAFFIC AGENT 252.257-010
TRANSPORTATION AGENT 912.367-014
Transport Pilot 196.263-014
Traveling-Freight-And-Passenger Agent 252.257-010
TRIP FOLLOWER 209.367-050
watch supervisor 193.162-022
Waybill Clerk 214.362-014
WEATHER CLERK 248.362-014

amuse. & rec.—AMUSEMENT AND RECREATION: This designation includes occupations concerned with providing amusement and recreation facilities, and presenting commerical entertainment in the flesh, in motion pictures, and in broadcasting. Included are occupations concerned with presenting shows and athletic contests, preparing facilities for such entertainment, and training and conditioning persons and animals taking part in such entertainment. Professional entertaining jobs in all branches of the industry are included, but entertaining jobs in the production of motion pictures and radio and television broadcasts are included in the MOTION PICTURE INDUSTRY (motion picture) and the RADIO AND TELEVISION BROADCASTING INDUSTRY (radio-tv broad.). Jobs of a personal service character that typically occur in establishments primarily engaged in supplying amusement and recreation are included in PERSONAL SERVICE (personal ser.).

Accompanist 152.041-010
ACROBAT 159.247-010
Acrobatic Dancer 151.047-010
ACROBATIC RIGGER 962.684-010
ACTOR 150.047-010
Actress 150.047-010
ADVANCE AGENT 191.167-010
AERIALIST 159.247-014
amusement-equipment operator 342.663-010
AMUSEMENT PARK ENTERTAINER 159.647-010
AMUSEMENT PARK WORKER 349.664-010
animal caretaker 412.674-010
Animal Impersonator 159.047-018
ANIMAL KEEPER 412.674-010
ANIMAL KEEPER, HEAD 412.137-010
ANIMAL-NURSERY WORKER 412.674-014
ANIMAL-RIDE ATTENDANT 349.674-010
ANIMAL-RIDE MANAGER 349.224-010
ANIMAL TRAINER 159.224-010
ANNOUNCER 159.347-010
AQUARIST 449.674-010
aquarium tank attendant 449.674-010
AQUATIC PERFORMER 159.347-014
ARTIST AND REPERTOIRE MANAGER 159.167-010
artist consultant 191.117-010
Artists' Booking Representative 191.117-014
ARTIST'S MANAGER 191.117-010
artist's representative 191.117-010
ASTROLOGER 159.207-010
athletic coach 153.227-018
ATHLETIC TRAINER 153.224-010
Athletic Turf Worker 408.684-010
ATTENDANT, ARCADE 342.667-014
ATTENDANT, CAMPGROUND 329.683-010
audiovisual equipment operator 960.362-010
AUTOMOBILE RACER 153.243-010
Auto-Speedway Operator 342.663-010
Baccarat Dealer 343.464-010
Ballet Dancer 151.047-010
ball racker 340.477-010
Ballroom Dancer 151.047-010
Band Booker 191.117-014
Bareback Rider 159.344-010
BARKER 342.657-010
barker 353.363-010
Baseball Scout 153.117-018
Basketball Coach 153.227-010
Basketball Scout 153.117-018
Bat Boy/Girl 358.677-014
BEACH LIFEGUARD 379.364-014
Bear Keeper 412.674-010

Belly Dancer 151.047-010
Bet Taker 211.462-022
Bird Keeper 412.674-010
BOARD ATTENDANT 249.587-010
BOAT-RENTAL CLERK 295.467-014
boat-ride operator 342.667-010
Boat-Tank Attendant 342.667-010
BODY-MAKE-UP ARTIST 333.271-010
booker 191.117-014
bookie 187.167-014
booking agent 191.117-014
BOOKING MANAGER 191.117-014
BOOKMAKER 187.167-014
BOUNCER 376.667-010
business agent 191.117-018
BUSINESS MANAGER 191.117-018
CABANA ATTENDANT 349.677-010
CADDIE 341.677-010
CADDIE SUPERVISOR 341.137-010
Calliope Player 152.041-010
campground hand 329.683-010
card grader 343.687-010
CARD PLAYER 343.367-010
Card Reader 159.647-018
CARDROOM ATTENDANT I 343.467-010
CARDROOM ATTENDANT II 343.577-010
Caricaturist 149.041-010
carney 342.657-010
Cashier, Box Office 211.467-030
CASHIER, GAMBLING 211.462-022
Change-Booth Cashier 211.462-010
CHANGE PERSON 211.467-034
Character Actor 150.047-010
Character Actress 150.047-010
CHARTER 249.367-018
Charter-Boat Operator 911.663-010
CHILDREN'S ATTENDANT 349.677-018
children's zoo caretaker 412.674-014
chip 343.467-010
CHOREOGRAPHER 151.027-010
Chorus Dancer 151.047-010
cicerone 353.363-010
CIRCUS AGENT 191.117-022
CIRCUS LABORER 969.687-010
CIRCUS-TRAIN SUPERVISOR 910.137-018
CLERK-OF-SCALES 153.467-010
CLOCKER 153.367-010
CLOWN 159.047-010
Clubhouse Attendant 358.677-014
coach 153.227-010
Coach-Player 153.117-010
COACH, PROFESSIONAL ATHLETES 153.227-010
colors custodian 346.677-014
COMEDIAN 159.047-014
Comedy Diver 159.347-018
comic 159.047-014
COMMISSARY ASSISTANT 412.687-010
commissary helper 412.687-010
Company Manager 191.117-038
Concert Or Lecture Hall Manager 191.117-014
Contortionist 159.247-010
COUNSELOR, CAMP 159.124-010
Crystal Gazer 159.647-018
CUSTODIAN, ATHLETIC EQUIPMENT 969.367-010
DANCER 151.047-010
Defensive-Line Coach 153.227-010
DESK CLERK, BOWLING FLOOR 340.357-010
Detective, Bowling Alley 376.667-014
Dice Dealer 343.464-010
director, dance 151.027-010
DIRECTOR, FOOD AND BEVERAGE 187.167-210
DIRECTOR, STAGE 150.067-010
DIVER 349.247-010
dock attendant 342.667-010
Dramatic Reader 150.047-010
DRESSER 346.674-010
DRIVE-IN THEATER ATTENDANT 349.673-010
DRIVER, STARTING GATE 919.683-030
Drummer 152.041-010
DUDE WRANGLER 353.364-010
ELECTRIC-GOLF-CART REPAIRER 620.261-026
electrician, front 962.381-014
electrician, master 962.267-010
Elephant Keeper 412.674-010
ENTERTAINER ..... term
EQUESTRIAN 159.344-010
EXERCISER, HORSE 153.674-010
EXTRA 159.647-014
Fan-Mail Clerk 209.362-034
FEATURED PLAYER ..... term
Female Impersonator 159.047-018
Ferris-Wheel Operator 342.663-010
field attendant 349.673-010
field captain 153.267-018
Film Booker 191.117-014
Finish Judge 153.267-018
Fire Eater 159.647-010
FLAGGER 372.667-026
FLOOR ATTENDANT 343.467-014
Flume-Ride Operator 342.663-010
FLYER 962.687-018
food preparer 412.687-010
Football Coach 153.227-010
Football Scout 153.117-018
Fortune Teller 159.647-018
Fun-House Attendant 376.667-010
FUN-HOUSE OPERATOR 342.665-010
gambling broker 249.587-010
GAMBLING DEALER 343.464-010
GAMBLING MONITOR 343.367-014
GAME ATTENDANT 342.657-014
game operator 342.657-014
Gate Attendant 344.667-010
General Extra 159.647-014
GENERAL MANAGER, ROAD PRODUCTION 187.117-034
Goal Umpire 153.267-018
golf caddie 341.677-010
golf-cart mechanic 620.261-026
golf-course patroller 379.667-010
GOLF-COURSE RANGER 379.667-010
Golf-Course Starter 341.367-010
GOLF-RANGE ATTENDANT 341.683-010
GRIP 962.684-014
GROUP-SALES REPRESENTATIVE 259.357-010
Guard, Dance Hall 376.667-010
GUIDE, HUNTING AND FISHING 353.161-010
GUIDE, SIGHTSEEING 353.363-010
HANDICAPPER, HARNESS RACING 219.267-010
harness racer 153.244-014
Harpist 152.041-010
Head Animal Trainer 159.224-010
HEAD COACH 153.117-010
Head Scorer 153.387-014
HIGH RIGGER 962.664-010
high-wire artist 159.347-022
HOOF AND SHOE INSPECTOR 153.287-010
HORSE-RACE STARTER 153.267-010
HORSE-RACE TIMER 153.367-014
HOST/HOSTESS, DANCE HALL 349.667-010
HOST/HOSTESS, HEAD 349.667-014
house detective 376.667-010
Human Projectile 159.347-018
Hypnotist 159.647-010
Ice Guard, Skating Rink 376.667-010
ICE MAKER, SKATING RINK 969.687-014
IDENTIFIER, HORSE 153.387-010
imitator 159.047-018
IMPERSONATOR 159.047-018
Impresario 191.117-014
INFORMATION CLERK-CASHIER 249.467-010
ingenue 150.047-010
INSTRUCTOR, PHYSICAL 153.227-014
INSTRUCTOR, SPORTS 153.227-018
Interpretative Dancer 151.047-010
JINRIKISHA DRIVER 349.477-010
JOCKEY 153.244-010
JOCKEY AGENT 191.117-026
JOCKEY-ROOM CUSTODIAN 346.667-010
JOCKEY VALET 346.677-010
judge 153.267-018
JUGGLER 159.341-010
Juvenile 150.047-010
keeper, head 412.137-010
KENNEL MANAGER, DOG TRACK 349.367-010
KENO WRITER 343.467-022
lap checker 153.387-014
LASERIST 159.042-010
LEAD PONY RIDER 153.674-014
LIFEGUARD 379.667-014
LIGHTING-EQUIPMENT OPERATOR 962.381-014

Line Umpire 153.267-018
MAGICIAN 159.041-010
MAKE-UP ARTIST 333.071-010
Male Impersonator 159.047-018
Mammal Keeper 412.674-010
MANAGER, AQUATIC FACILITY 187.167-054
MANAGER, ATHLETE 153.117-014
manager, athletic team 153.117-010
MANAGER, BOWLING ALLEY 187.167-222
Manager, Boxer 153.117-014
MANAGER, CAMP 329.161-010
MANAGER, CARDROOM 343.137-010
MANAGER, CASINO 187.167-070
Manager, Dance Floor 187.117-042
MANAGER, DUDE RANCH 187.167-094
manager, equipment 969.367-010
MANAGER, FISH-AND-GAME CLUB 187.167-102
MANAGER, GOLF CLUB 187.167-114
MANAGER, GUN CLUB 187.167-118
MANAGER, HANDICRAFT-OR-HOBBY SHOP 187.161-014
MANAGER, HOTEL RECREATIONAL FACILITIES 187.167-122
manager, house 187.167-154
Manager, Ice-Skating Rink 187.167-146
MANAGER, MARINA DRY DOCK 187.167-226
MANAGER, MUTUEL DEPARTMENT 187.167-134
MANAGER, POOL 153.137-010
manager, range 187.167-118
MANAGER, RECREATION ESTABLISHMENT 187.117-042
MANAGER, RECREATION FACILITY 187.167-230
Manager, Roller-Skating Rink 187.167-146
MANAGER, SKATING RINK 187.167-146
MANAGER, STAGE 159.167-018
MANAGER, THEATER 187.167-154
manager, theatrical production 191.117-038
manager, touring 191.117-038
MANAGER, TOURING PRODUCTION 191.117-038
MANAGER, WINTER SPORTS 187.167-166
Manager, Wrestler 153.117-014
MARSHALL 153.384-010
menagerie caretaker 412.674-010
Merry-Go-Round Operator 342.663-010
MIME 159.047-022
mimic 159.047-018
Mind Reader 159.647-018
MONEY COUNTER 211.467-014
money-room teller 211.467-014
Monkey Keeper 412.674-010
Monorail Operator 342.663-010
MOTION-PICTURE PROJECTIONIST 960.362-010
MOTORCYCLE RACER 153.243-014
MUSICIAN, INSTRUMENTAL 152.041-010
mutuel cashier 211.467-018
mutuel clerk 211.467-022
Narrator 139.167-010
Organ Grinder 159.647-010
Organist 152.041-010
PADDOCK JUDGE 153.167-010
Palmist 159.647-018
pantomimist 159.047-022
Parachutist 159.347-018
parimutuel cashier 211.467-018
parimutuel clerk 211.467-022
PARIMUTUEL-TICKET CASHIER 211.467-018
PARIMUTUEL-TICKET CHECKER 219.587-010
PARIMUTUEL-TICKET SELLER 211.467-022
Park Guard 372.667-034
PATROL JUDGE 153.267-014
PAYMASTER OF PURSES 211.367-010
peddler 291.457-022
performer see ENTERTAINER
personal agent 191.117-010
personal manager 191.117-010
photo-finish photographer 143.382-014
PHOTOGRAPHER 143.457-010
PHOTOGRAPHER, FINISH 143.382-014
Photographic Double 961.364-010
Phrenologist 159.647-010
Physiognomist 159.647-010
Pianist 152.041-010
pit boss 153.167-014
Pitching Coach 153.227-010
PIT STEWARD 153.167-014
Placing Judge 153.267-014
PLASTIC-CARD GRADER, CARDROOM 343.687-010
plating inspector 153.287-010
Player-Manager 153.117-010
Pony-Ride Attendant 349.674-010
poolroom attendant 340.477-010
PRESS-BOX CUSTODIAN 344.677-010
process projectionist 960.362-010
PRODUCER 187.167-178
PROFESSIONAL ATHLETE 153.341-010
PROGRAM COORDINATOR 139.167-010
projectionist 960.362-010
promotor, group-ticket sales 259.357-010
PROMPTER 152.367-010
PROP ATTENDANT 962.684-022
PROPERTY COORDINATOR 962.167-018
PROP MAKER 962.281-010
proposition player 343.367-010
PSYCHIC READER 159.647-018
public-address announcer 159.347-010
public-relations player 343.367-010
PUPPETEER 159.041-014
QUICK SKETCH ARTIST 149.041-010
racing-board marker 249.587-010
RACING SECRETARY AND HANDICAPPER 153.167-018
RACKER 340.477-010
Railroad Operator 342.663-010
range master 187.167-118
RECEIVING-BARN CUSTODIAN 349.367-014
RECREATION-FACILITY ATTENDANT 341.367-010
referee 153.267-018
referee 153.167-014
rickshaw driver 349.477-010
RIDE ATTENDANT 342.677-010
RIDE OPERATOR 342.663-010
Riding Double 961.364-010
RIDING-SILKS CUSTODIAN 346.677-014
rigger 962.684-010
RING CONDUCTOR 159.367-010
Road Manager 191.117-038
RODEO PERFORMER 159.344-014
Roller-Coaster Operator 342.663-010
Roulette Dealer 343.464-010
scenic designer 142.061-050
SCOREBOARD OPERATOR 349.665-010
SCORER 153.387-014
SCOUT, PROFESSIONAL SPORTS 153.117-018
SECOND 346.677-018
Second-Ride-Fare Collector 211.467-030
Senior Animal Trainer 159.224-010
SET DESIGNER 142.061-050
SHEET WRITER 211.467-026
shill 343.367-010
Shooting Gallery Operator 342.657-014
SHOW GIRL 159.647-022
SHOW-HORSE DRIVER 159.344-018
Showplace Manager 191.117-014
Side-Show Entertainer 159.647-010
SIGHT-EFFECTS SPECIALIST 962.267-010
Silent Bit Extra 159.647-014
SILHOUETTE ARTIST 149.051-010
SINGER 152.047-022
SKATE-SHOP ATTENDANT 341.464-010
ski-lift operator 341.665-010
SKI PATROLLER 379.664-010
SKI-TOW OPERATOR 341.665-010
Snake Charmer 159.647-010
SNOWMAKER 969.685-010
SOUND CONTROLLER 194.262-014
Special Ability Extra 159.647-014
SPECIAL EFFECTS SPECIALIST 962.281-018
Speedboat Operator 342.663-010
spieler 353.363-010
spieler 342.657-010
Sports-Bookmaker 187.167-014
STAGE HAND ..... term
STAGE TECHNICIAN 962.261-014
stage technician see STAGE HAND
stakes player 343.367-010
starter 153.267-010
STARTER 153.667-010
STEWARD, RACETRACK 153.117-022
Strip-Tease Dancer 151.047-010
STUNT PERFORMER 159.341-014
SULKY DRIVER 153.244-014
Superintendent, Circus 187.117-034
SUPERINTENDENT, GREENS 406.137-014
superintendent, menagerie 412.137-010

SUPERVISOR, CARDROOM 343.137-014
SUPERVISOR, CIRCUS 969.137-010
SUPERVISOR, HOSPITALITY HOUSE 359.137-010
SUPERVISOR, MONEY-ROOM 211.137-018
SUPERVISOR, RIDE ASSEMBLY 801.131-018
SUPERVISOR, RIDES 342.137-010
SUPERVISOR, SHOW OPERATIONS 969.137-014
Swimming Coach 153.227-010
Swing-Ride Operator 342.663-010
Sword Swallower 159.647-010
table attendant 340.477-010
talent agent 191.117-010
Tap Dancer 151.047-010
TAPROOM ATTENDANT 312.677-010
Tea-Leaf Reader 159.647-018
Tennis Coach 153.227-010
Tennis-Court Attendant 341.367-010
theater projectionist 960.362-010
theatrical performer see ENTERTAINER .....
theatrical-scenic designer 142.061-050
Theatrical Variety Agent 191.117-014
THRILL PERFORMER 159.347-018
TICKET BROKER 259.357-034
ticket counter 219.587-010
TICKET-DISPENSER CHANGER 349.580-010
TICKET TAKER 344.667-010
tight-rope walker 159.347-022
Timer 153.387-014
Train Operator 342.663-010
Tram Operator 353.363-010
trapeze artist 159.247-014
trapeze performer 159.247-014
tumbler 159.247-010
Turnstile Attendant 344.667-010
Twenty-One Dealer 343.464-010
UMPIRE 153.267-018
USHER 344.677-014
USHER, HEAD 344.137-010
VENDOR 291.457-022
VENTRILOQUIST 159.044-010
Violinist 152.041-010
walk-through operator 342.665-010
wall attendant 249.587-010
WARDROBE SUPERVISOR 346.361-010
Watchguard, Racetrack 372.667-034
WEIGHT GUESSER 342.357-010
WHARF ATTENDANT 342.667-010
Whip Operator 342.663-010
WIRE WALKER 159.347-022
zoo caretaker 412.674-010

any industry—ANY INDUSTRY: This designation includes occupations that are not allocated to other classifications. The principal groups of jobs included under this designation are: (1) occupations that characteristically occur in practically all industries; (2) occupations that occur in a number of industries (which number is not exactly determinable) but that do not characteristically occur in most industries; and (3) occupations that are not considered to have any particular industrial attachment. The occupations included under this designation are considered to be essentially the same wherever they occur, in that they involve the same fundamental functions, and are performed for the same general purpose wherever they exist. Familiarity with a given job in one industry, however, may not permit a worker to transfer to the same job in another industry without some training period to acquaint the worker with the processes, terminology, hazards, or other factors in the industry to which he or she is being transferred that would affect the occupation in question in that industry. Many occupations that occur in various industries, and could logically fall within this group as defined above, are allocated to such classifications as CLERICAL AND KINDRED OCCUPATIONS (clerical); FOUNDRY (foundry); MACHINE SHOP (machine shop), PROFESSIONAL AND KINDRED OCCUPATIONS (profess. & kin.); and WOODWORKING (woodworking); all of which embrace occupations that cut across industry lines.

abrasive-blasting equipment operator 503.687-010
ACCORDION REPAIRER 730.281-014
ACCORDION TUNER 730.381-010
Accounting-Machine Servicer 633.281-018
Acid-Concentration-Plant-Equipment Engineer 950.382-026
acid dipper 503.685-030
Adding-Machine Servicer 633.281-018
Adhesive Sprayer 795.687-014
adjuster see MACHINE ADJUSTER .....
administrative analyst 169.167-010
ADMINISTRATIVE ASSISTANT 169.167-010
administrative officer 169.167-010
ADMINISTRATIVE SECRETARY 169.167-014
ADVERTISING-MATERIAL DISTRIBUTOR 230.687-010
adviser 187.167-186
Aerosol-Line Operator 920.685-078
agent 183.117-010
AIR AND HYDRONIC BALANCING TECHNICIAN 637.261-034
AIR-COMPRESSOR OPERATOR 950.685-010
Air-Compressor Operator, Stationary 950.685-010
Air-Compressor-Station Engineer 950.382-026
Air-Conditioning-Mechanic Helper, Industrial 637.664-010
Air-Conditioning Mechanic, Industrial 637.261-014
air-control tender 950.585-010
air-motor repairer 630.281-010
AIR-PRESS OPERATOR ..... term
alarm-signal operator 379.362-014
Alligator-Shear Operator 615.685-034
ammonia-print operator 979.682-014
Angledozer Operator 850.683-010
Angle-Roll Operator 619.362-014
ANGLE SHEAR OPERATOR 615.482-010
animal attendant 410.674-010
ANIMAL CARETAKER 410.674-010
ANODIZER 500.682-010
ANTENNA INSTALLER 823.684-010
ANTENNA INSTALLER, SATELLITE COMMUNICATIONS 823.261-022
apparatus-repair mechanic 626.381-014
appliance painter-and-refinisher 741.584-030
APPLIANCE REPAIRER ..... term
appliance servicer 637.261-018
appliance-service representative 827.261-010
appliance-service representative 723.381-010
applicator 582.687-030
applier 582.687-030
APPRAISER 191.287-010
APPRENTICE ..... master
ARBOR-PRESS OPERATOR I 616.682-010
Arbor-Press Operator II 690.685-014
Archery-Equipment Repairer 732.684-122
ARMATURE BANDER 724.684-010
armature repairer 724.684-018
Armature Varnisher 599.685-030
ARMATURE-WINDER HELPER, REPAIR 721.684-010
ARMATURE WINDER, REPAIR 724.684-018
artist 970.381-022
assembler 782.684-058
assembler 780.684-062
assembler, press operator 616.682-026
ASSEMBLER, PRODUCTION 706.687-010
ASSEMBLER, SMALL PRODUCTS I 706.684-022
ASSEMBLER, SMALL PRODUCTS II 739.687-030
ASSEMBLY-PRESS OPERATOR 690.685-014
ASSEMBLY SUPERVISOR 739.137-010
ASSISTANT ..... term
assistant superintendent see ASSISTANT .....
assistant supervisor see ASSISTANT .....
ATTENDANT, CHILDREN'S INSTITUTION 359.677-010
AUDIO-VIDEO REPAIRER 729.281-010
audiovisual-aids technician 729.281-010
audiovisual-equipment operator 960.382-010
AUDIOVISUAL TECHNICIAN 960.382-010
Automatic-Beading-Lathe Operator 619.685-082
automatic-spray-machine operator 741.685-010
Automobile Radio Repairer 720.281-010
automotive-maintenance-equipment repairer 620.281-018
AUTOMOTIVE-MAINTENANCE-EQUIPMENT SERVICER 620.281-018
Ax Sharpener 603.664-010
BACKFILLER OPERATOR ..... term
Back-Hoe Operator 850.683-030
Baggage Checker 358.677-010
Bagger 920.587-018
bag patcher 782.687-046
Bag Washer 361.685-018
BALANCING-MACHINE OPERATOR 609.462-010
BALANCING-MACHINE SET-UP WORKER 809.382-010
baler 929.687-058
baler operator 920.685-010
BALING-MACHINE TENDER 920.685-010
baling-press operator 920.685-010
Ball-Mill Operator 599.685-058
bander 782.684-058
BANDER, HAND 929.687-058
Band-Saw Filer 701.381-014
band sewer 782.684-058

Band Tacker 787.685-042
Barber-Tool Sharpener 701.381-018
BARN BOSS 410.131-010
barnworker, groom 410.674-022
Barrel Filler, Head 920.132-010
barrel painter 599.685-070
Barrel Washer, Machine 529.685-074
Bar-Straightening-Machine Operator 613.662-022
Bar Tacker 787.685-042
Bass-Viol Repairer 730.281-050
BATTERY CHARGER 825.684-018
BATTERY REPAIRER 727.381-014
battery tester 727.381-014
bead blasting machine tender 503.685-042
Beading-Machine Operator I 617.482-014
Beading-Machine Operator II 619.685-046
beam-machine operator 699.682-022
Beer-Coil Cleaner 599.684-010
BELT REPAIRER 630.684-014
belt tender 921.685-026
bench assembler 706.684-022
BENCH GRINDER 705.684-010
bench inspector 609.684-010
bench-press operator 616.682-026
bench-press operator 690.685-014
bender, hand 709.684-090
Bending-Machine-Operator Helper 619.687-014
BENDING-MACHINE OPERATOR I 617.482-010
BENDING-MACHINE OPERATOR II 617.685-010
bending-press operator 617.260-010
bending-roll operator 619.362-014
bicycle mechanic 639.681-010
BICYCLE REPAIRER 639.681-010
BILLPOSTER 299.667-010
BINDER 787.682-010
binding-end stitcher 787.682-010
binding-machine operator 787.682-010
bit grinder 603.685-026
BIT SHARPENER 603.685-026
Blanking-Machine Operator 617.685-026
BLASTER 859.261-010
BLASTER HELPER 859.687-010
blender operator 680.685-082
Blister-Packing-Machine Tender 920.685-078
blocker 363.685-018
blower-room attendant 950.585-010
blue-line operator 979.682-014
blueprint assembler 920.687-038
BLUEPRINTING-MACHINE OPERATOR 979.682-014
blueprint maker 979.682-014
BLUEPRINT TRIMMER 920.687-038
body masker 749.687-018
Boiler Cleaner 891.687-022
boiler cleaner, chief 805.667-010
BOILER HOUSE INSPECTOR 805.667-010
BOILER HOUSE MECHANIC 805.361-010
boiler house operator 950.382-010
boiler house supervisor 950.131-014
boiler mechanic 805.361-010
BOILER OPERATOR 950.382-010
boiler operator 951.685-014
boiler-operator helper 950.685-014
boiler-room helper 699.687-018
BOILER-ROOM HELPER 950.685-014
Boiler-Shop Supervisor 809.130-014
boiler tender 951.685-010
Boiler-Tube Blower 891.687-030
Boiler-Tube Reamer 891.687-030
Bonderite Operator 599.382-010
bonding-machine operator 690.685-154
book mender 977.684-010
BOOK REPAIRER 977.684-010
BOOM-CONVEYOR OPERATOR 921.683-014
boss 899.133-010
boss see SUPERVISOR
Bottle-Packing-Machine Cleaner 699.687-014
Bottle Washer, Machine I 529.685-074
Bottle Washer, Machine II 920.685-078
Bottling Supervisor 920.132-010
bowling-pin-machine mechanic 638.261-022
BOW MAKER 789.684-010
Bow Maker, Gift Wrapping 920.587-018
BOW REHAIRER 730.684-022
Bow Repairer 730.281-050
boxer 920.684-010
box labeler 652.682-010
box maker 669.682-058
Box Maker, Cardboard 920.587-018
BOX MAKER, PAPERBOARD 794.684-014
Box Maker, Wood 762.684-050
BOX PRINTER 652.682-010
box-printing-machine operator 652.682-010
Box Repairer 762.684-050
Box-Sealing-Machine Catcher 920.685-074
Box-Sealing-Machine Feeder 920.685-074
Box Wrapper 920.587-018
Brake Coupler, Dinkey 910.664-010
BRAKE HOLDER 932.664-010
Brake Machine Setter 616.360-022
Brake Operator, Heavy Duty 617.360-010
Brake-Operator Helper 619.687-014
BRAKE OPERATOR I 617.360-010
BRAKE OPERATOR II 619.685-026
Brake Operator, Sheet Metal I 617.360-010
Brake Operator, Sheet Metal II 619.685-026
Brasswind-Instrument Repairer 730.281-054
Bricklayer, Maintenance 861.381-018
Bridge Crane Operator 921.663-010
Brush Clearer, Surveying 869.567-010
BRUSHER ..... term
brusher 459.687-010
buckle-and-button maker 734.687-046
buck presser 363.682-018
Buffer, Chrome 705.684-014
Buffer, Copper 705.684-014
BUFFER I 705.684-014
Buffer II 705.687-014
Buffer, Nickel 705.684-014
BUFFING-AND-POLISHING-WHEEL REPAIRER 739.684-030
BUFFING-LINE SET-UP WORKER 603.360-010
BUFFING-MACHINE OPERATOR 603.382-010
BUFFING-MACHINE TENDER 603.665-010
buff-wheel fabricator 739.684-030
building-and-grounds supervisor 891.137-010
BUILDING CLEANER 891.684-022
Building-Maintenance Supervisor, Electrical 829.131-014
building-maintenance supervisor, mechanical 891.137-010
building repairer 899.381-010
building-service supervisor 187.167-190
building supervisor 891.137-010
bulk loader 921.667-018
BULLDOZER OPERATOR I 850.683-010
Bulldozer Operator II 617.260-010
bull-gang supervisor 899.133-010
bull riveter 800.662-010
Bundler 920.587-018
business-machine mechanic 633.281-018
business-machine-mechanic apprentice 633.281-022
BUTTON-AND-BUCKLE MAKER 734.687-046
Button-Attaching-Machine Operator 699.685-018
button bradder 699.685-018
button clamper 699.685-018
button riveter 699.685-018
BUZZSAW OPERATOR 667.685-026
BUZZSAW-OPERATOR HELPER 667.687-010
Cabinet-Abrasive Sandblaster 503.687-010
Cableway Operator 921.663-030
Cage Operator 921.663-030
Calculating-Machine Servicer 633.281-018
Camp Guard 372.667-034
camp-laundry operator 361.684-014
Can Supervisor 920.132-010
CANTEEN OPERATOR 311.674-010
CANVAS REPAIRER 782.684-010
Can Washer, Machine 529.685-074
cap-lining-machine operator 692.685-062
Capping-Machine Operator 920.685-078
CAR BLOCKER 860.684-018
CAR COOPER 910.687-014
card assembler 920.685-034
Cardboard Cutter 690.685-122
CARDER 920.685-034
carding-machine operator 920.685-034
Car Dumper 921.667-018
car-dumper operator 921.685-038
card writer, hand 970.281-022
caretaker, grounds 406.684-014
car filler 914.667-010
Car Loader 929.687-030
CARPENTER INSPECTOR 860.261-010

CARPENTER, MAINTENANCE 860.281-010
carpenter, packing 920.684-010
carpenter, repair 860.281-010
car rider 932.664-010
Cart Driver 919.664-010
carton catcher 921.686-014
Carton-Forming-Machine Adjuster 638.281-014
CARTON-FORMING-MACHINE HELPER 641.686-014
CARTON-FORMING-MACHINE OPERATOR 641.685-022
Carton-Gluing-Machine Operator 920.685-078
carton-lettering-machine operator 652.682-010
Carton Stapler 920.587-018
Carton Stenciler 920.687-178
car whacker 910.687-014
case maker 920.684-010
cash-register repairer 633.281-010
CASH-REGISTER SERVICER 633.281-010
CASTING REPAIRER 619.281-010
caulker 843.684-010
Ceiling Cleaner 381.687-018
Cellophane Sheeter 699.682-018
Cellophane Wrapper, Machine 920.685-078
cementer 795.687-014
cementer 780.684-062
Cement Mason, Maintenance 844.364-010
centrifugal-extractor operator 581.685-038
CERAMIC COATER, MACHINE 509.685-022
ceramic plater 509.685-022
chain-saw mechanic 625.281-030
CHANGE-HOUSE ATTENDANT 358.687-010
chaperon 187.167-186
CHAUFFEUR 913.663-010
check-and-transfer beader 509.687-014
CHECKROOM ATTENDANT 358.677-010
CHECKROOM CHIEF 358.137-010
chemical weigher 550.684-014
chief see SUPERVISOR .....
chief clerk 169.167-034
chief engineer 959.131-010
chief technician 823.131-010
chief, vendor quality 012.167-062
child-care attendant 359.677-010
child-care leader 359.677-018
child-day-care center worker 359.677-018
chimney cleaner 891.687-010
CHIMNEY SWEEP 891.687-010
Chipper I 705.684-030
Chipper II 809.684-026
Chisel Grinder 603.664-010
CHRISTMAS-TREE CONTRACTOR 162.117-010
Chrome Cleaner 709.687-010
CIGARETTE-LIGHTER REPAIRER 709.684-034
Circular-Knife Cutter, Machine 781.684-014
Circular-Saw Filer 701.381-014
circular-shear operator 615.482-030
circulator 914.682-010
claims agent, right-of-way 191.117-046
Clamshell Operator I 921.663-058
Clamshell Operator II 921.663-062
CLAY MODELER 779.281-010
cleaner 599.687-030
cleaner 503.685-030
CLEANER AND POLISHER 709.687-010
cleaner, carpet and upholstery 389.664-010
CLEANER, COMMERCIAL OR INSTITUTIONAL 381.687-014
CLEANER, HOME RESTORATION SERVICE 389.664-010
CLEANER, HOUSEKEEPING 323.687-014
CLEANER I ..... master
CLEANER II 919.687-014
CLEANER III 911.687-014
CLEANER, INDUSTRIAL 381.687-018
CLEANER, LABORATORY EQUIPMENT 381.687-022
cleaner operator 503.362-010
cleaner operator 389.683-010
CLEANER, WALL 381.687-026
CLEANER, WINDOW 389.687-014
cleaning operator 891.687-010
clean-up worker 381.687-014
clean-up worker 381.687-018
clicker 699.682-022
clicker operator 699.682-022
clicking-machine operator 699.682-022
CLIPPER 789.687-030
clipper and turner 789.687-182
cloth-cutting-machine operator 781.684-014
Clothes-Drier Repairer 827.261-010
clothes wringer 581.685-038
cloth layer 781.687-058
CLOTH PRINTER 652.382-010
CLOTH-PRINTER HELPER 652.686-010
cloth spreader 781.687-058
Cloth Washer 361.685-018
coal-and-ash supervisor 921.137-010
Coal-Conveyor Operator 921.662-018
Coal Hauler 902.683-010
Coal Passer 929.687-030
Coal-Pulverizer Operator 544.582-010
COAL-YARD SUPERVISOR 921.137-010
Coat Checker 358.677-010
COATER OPERATOR 509.382-010
COATING-AND-BAKING OPERATOR 554.685-014
coating-machine operator 599.685-046
Coat Presser 363.682-018
Coffee-Maker Servicer 827.261-010
COIL SHAPER 724.684-022
coil spreader 724.684-022
COIL WINDER, REPAIR 721.381-014
Coin-Vault Guard 372.667-034
color buffer 705.684-014
color-mixer helper 550.687-018
color-shop helper 550.687-018
color weigher 550.684-014
COMMERCIAL DECORATOR ..... term
commercial decorator 298.381-010
COMMISSARY MANAGER 185.167-010
COMMUNICATIONS ELECTRICIAN SUPERVISOR 823.131-010
communication technician 828.261-022
Commutator Repairer 721.281-018
company laundry worker 361.684-014
company pilot 196.263-030
COMPARATOR OPERATOR 699.384-010
compressor engineer 950.685-010
compressor operator 950.685-010
Compressor Operator, Portable 950.685-010
computer-programmer, numerical control 007.167-018
Cone Spooler 681.685-154
consultant 199.251-010
Container Filler 920.587-018
Container-Maker-Filler-Packer Operator 920.685-078
container repairer 619.685-034
CONTAINER WASHER, MACHINE 529.685-074
continuous-dryout operator 503.362-010
continuous-dryout-operator helper 503.686-010
CONTRACT ADMINISTRATOR 162.117-014
Controlled-Area Checker 372.667-030
control-room operator 950.382-010
Convertible-Power-Shovel Operator 850.683-030
Conveyor-Belt Repairer 630.684-014
conveyor console operator 921.662-018
CONVEYOR FEEDER-OFFBEARER 921.686-014
CONVEYOR-MAINTENANCE MECHANIC 630.381-010
conveyor monitor 921.685-026
CONVEYOR-SYSTEM OPERATOR 921.662-018
CONVEYOR TENDER 921.685-026
COOK 315.361-010
Cook, Camp 315.361-010
Cook, Institution 315.361-010
cook, mess 315.361-010
cooler servicer 637.381-010
cooling-system operator 950.362-014
Coppersmith 804.281-010
copy-camera operator 976.361-010
COPYIST 152.267-010
corder 787.682-082
cording-machine operator 787.682-082
cordwood-cutter helper 667.687-010
CORE-DRILL OPERATOR 930.682-010
CORE-DRILL-OPERATOR HELPER 930.687-014
Cornice Upholsterer 780.381-018
corporation pilot 196.263-030
corral boss 410.131-010
cottage parent 187.167-186
COUPLE ..... term
coupler 932.664-010
covered button maker 734.687-046
craft supervisor 638.131-022
CRANE-CREW SUPERVISOR 921.133-010
crane engineer see CRANE OPERATOR .....
crane follower 921.667-022
crane hooker 921.667-022

crane operator 921.663-022
CRANE OPERATOR ..... term
crane operator, cab 921.663-010
crane operator, ground control 921.663-010
crane rigger 921.260-010
CRATER 920.684-010
Crate Repairer 920.684-010
crawler-crane operator 921.663-058
Crawler-Dragline Operator 850.683-018
Crawler-Tractor Operator 850.683-010
CREELER 689.687-030
Crew-Truck Driver 906.683-022
CRIMPING-MACHINE OPERATOR 616.682-022
CROSSING TENDER 371.667-010
CROWN-ASSEMBLY-MACHINE OPERATOR 692.685-062
crusher operator 570.685-022
CRUSHER TENDER 570.685-022
custodial services manager 187.167-046
customer engineer 633.281-030
customer servicer 637.261-018
customer-servicer helper 637.684-010
cutlery grinder 701.381-018
CUTTER ..... term
cutter 775.684-022
cutter 920.687-038
CUTTER APPRENTICE, HAND 781.684-078
CUTTER, HAND I 781.684-074
CUTTER, HAND II 781.687-026
CUTTER, HAND III 781.687-030
CUTTER HELPER 781.687-022
CUTTER, MACHINE I 781.684-014
CUTTER, MACHINE II 699.685-014
CUTTER OPERATOR 699.682-018
CUTTING-MACHINE TENDER 690.685-122
CUTTING-MACHINE-TENDER HELPER 690.686-030
cycle repairer 639.681-010
Darning-Machine Operator 787.682-030
DATA COMMUNICATIONS ANALYST 031.262-010
DATA COMMUNICATIONS TECHNICIAN 823.261-030
data communications technician supervisor 031.132-010
day care worker 359.677-018
Day Guard 372.667-034
DECAL APPLIER 749.684-010
decal transferrer 749.684-010
DECONTAMINATOR 199.384-010
decorator 970.381-022
decorator 979.684-034
DECORATOR 298.381-010
DECORATOR, STREET AND BUILDING 899.687-010
dedenter 619.685-034
Degreaser 503.685-030
Delivery-Truck Driver, Heavy 905.663-014
Demolition-Crane Operator I 921.663-058
Demolition-Crane Operator II 921.663-062
Depalletizer Operator 921.682-014
department head 189.167-022
department supervisor 183.167-018
DERRICK OPERATOR 921.663-022
design transferrer 749.684-010
DETECTIVE I 376.367-014
DETECTIVE II 376.667-014
developer-prover, electrical 726.261-010
Diamond Driller 930.682-010
Diamond-Driller Helper 930.687-014
Diathermy-Equipment Repairer 729.281-030
DICTATING-TRANSCRIBING-MACHINE SERVICER 633.281-014
Dictating-Transcribing-Machine Servicer, Grooved Tape 633.281-014
Dictating-Transcribing-Machine Servicer, Magnetic Tape 633.281-014
DIE CUTTER 699.682-022
dielectric-heat-sealing-machine operator 690.685-154
die-press operator 699.682-022
Diesel-Dragline Operator 850.683-018
diesel-engine-mechanic apprentice 625.281-014
Diesel-Engine Operator, Stationary 950.382-026
Diesel-Locomotive-Crane Operator 921.663-038
DIESEL MECHANIC 625.281-010
DIESEL-MECHANIC APPRENTICE 625.281-014
DIESEL-MECHANIC HELPER 625.684-010
Diesel-Power-Shovel Operator 850.683-030
Diesel-Tractor Operator 929.683-014
Diesel-Truck-Crane Operator 921.663-062
dinker 781.687-030
DINKEY OPERATOR 919.663-014
Dinkey Operator, Compressed Air 919.663-014
Dinkey-Operator Helper 932.664-010
dinking-machine operator 699.682-022
dip painter 599.685-026
DIPPER 599.685-026
DIPPER AND BAKER 599.685-030
director, advertising 164.117-010
director, housekeeping 187.167-046
DIRECTOR, INSTITUTION 187.117-018
director of consumer services 199.251-010
DIRECTOR, RESEARCH AND DEVELOPMENT 189.117-014
Dishing-Machine Operator 617.260-010
Dishwasher Preparer 827.584-010
Dishwashing-Machine Repairer 827.261-010
disk recoater 739.684-030
Dispatcher, Industrial Locomotive 910.367-018
display-card writer 659.682-026
distributor 929.687-030
distributor, advertising material 230.687-010
DIVER 899.261-010
diver assistant 899.664-010
DIVER HELPER 899.664-010
diver tender 899.664-010
division supervisor 183.167-018
Dock Guard 372.667-034
DOLL REPAIRER 731.684-014
DOOR-CLOSER MECHANIC 630.381-014
DOORKEEPER 324.677-014
Double-Bottom Driver 904.383-010
DRAGLINE OPERATOR 850.683-018
DRAW-BENCH OPERATOR 614.682-010
Draw-Press Operator 615.382-010
Dray Driver 919.664-010
DRESSMAKER 785.361-010
drill doctor 630.281-010
DRILLER, HAND 809.684-018
driller, portable 809.684-018
drill-runner helper 930.687-014
drill-sharpener operator 601.682-010
driver helper 905.687-010
drop-board operator 379.362-014
drug-room clerk 550.684-014
drum operator 699.587-010
DRUM STRAIGHTENER I 619.685-034
Drum Straightener II 619.685-046
dry boss 358.687-010
drying-machine tender 581.685-038
dry janitor 358.687-010
dukey rider 932.664-010
DUMPER 921.667-018
dumper-bulk system 921.686-014
DUMP OPERATOR 921.685-038
DUMP-TRUCK DRIVER 902.683-010
Dump-Truck Driver, Off-Highway 902.683-010
Duplicating-Machine Servicer 633.281-018
duplicator 809.381-014
DUPLICATOR-PUNCH OPERATOR 615.482-014
Dust-Truck Driver 902.683-010
dx board operator 379.362-014
dye maker 550.684-014
dyer assistant 550.684-014
DYE WEIGHER 550.684-014
DYE-WEIGHER HELPER 550.687-018
dynamic-balancer set-up worker 809.382-010
Dynamotor Repairer 721.281-018
Easter Bunny 299.647-010
edging-machine operator see SERGING-MACHINE OPERATOR
EGG BREAKER 521.687-042
EGG CANDLER 529.687-074
Egg Grader 529.687-074
Egg Smeller 521.687-042
Elastic Cutter, Hand 781.687-026
electrical and electronics development mechanic 726.261-010
ELECTRICAL-APPLIANCE PREPARER 827.584-010
ELECTRICAL-APPLIANCE REPAIRER 723.381-010
ELECTRICAL-APPLIANCE SERVICER 827.261-010
ELECTRICAL-APPLIANCE-SERVICER APPRENTICE 827.261-014
ELECTRICAL-APPLIANCE-SERVICER SUPERVISOR 827.131-010
ELECTRICAL-INSTRUMENT REPAIRER 729.281-026
electrical repairer 829.261-018
Electric-Dragline Operator 850.683-018
electrician apprentice, elevator maintenance 825.281-034
Electrician, Crane Maintenance 829.261-018
electrician, elevator-maintenance 825.281-030
ELECTRICIAN HELPER 829.684-022
ELECTRICIAN, MAINTENANCE 829.261-018

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ELECTRICIAN, RADIO 823.281-014
ELECTRICIAN SUPERVISOR 829.131-014
Electrician Supervisor, Maintenance 829.131-014
electrician, telephone 822.281-018
Electric-Locomotive-Crane Operator 921.663-038
ELECTRIC-MOTOR ANALYST 721.261-010
ELECTRIC-MOTOR ASSEMBLER AND TESTER 721.281-014
ELECTRIC-MOTOR REPAIRER 721.281-018
ELECTRIC MOTOR REPAIRING SUPERVISOR 721.131-010
electric-organ technician 828.261-010
Electric-Power-Shovel Operator 850.683-030
Electric-Range Preparer 827.584-010
Electric-Range Servicer 827.261-010
Electric-Refrigerator Preparer 827.584-010
Electric-Refrigerator Servicer 827.261-010
ELECTRIC-SEALING-MACHINE OPERATOR 690.685-154
ELECTRIC-TOOL REPAIRER 729.281-022
Electric-Truck-Crane Operator 921.683-050
Electric-Truck Operator 921.683-050
Electrocardiograph Repairer 729.281-030
ELECTROLESS PLATER 505.684-010
Electrolytic De-Scaler 503.362-010
Electromagnet-Crane Operator I 921.663-058
Electromagnet-Crane Operator II 921.663-062
ELECTROMEDICAL-EQUIPMENT REPAIRER 729.281-030
electromedical service engineer 729.281-030
Electronic-Organ Installer 828.261-010
ELECTRONIC-ORGAN TECHNICIAN 828.261-010
electronic paint operator 599.682-010
Electronic-Piano Installer 828.261-010
ELECTRONICS ASSEMBLER, DEVELOPMENTAL 726.261-010
electronics-equipment mechanic 828.261-022
ELECTRONICS MECHANIC 828.261-022
ELECTRONICS-MECHANIC APPRENTICE 828.261-026
Electronics Mechanic, Computer 828.261-022
electronic-sound technician 823.261-010
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hook-and-eye-sewing-machine operator 787.685-010
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letterer 970.381-026
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maintenance engineer 828.261-022
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maintenance engineer 382.664-010
maintenance engineer, oil field 638.131-026
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MULTI-OPERATION-FORMING-MACHINE SETTER 616.260-014
MULTI-OPERATION-MACHINE OPERATOR 612.462-010
multiple-pressure-riveter operator 800.662-010
Multiple-Punch-Press Operator I 615.382-010
Multiple-Punch-Press Operator II 615.685-030
multiple-slide operator 619.382-018
multi-punch operator 615.482-038
multi-slide-machine tender 619.685-050
NAILER, HAND 762.684-050
nailer, machine 669.682-058
NAILING-MACHINE OPERATOR 669.682-058
NAILING-MACHINE OPERATOR, AUTOMATIC 669.685-066
NAME-PLATE STAMPER 652.685-054
needleworker 782.684-058
NETWORK CONTROL OPERATOR 031.262-014
neutralizer 503.685-030
NIBBLER OPERATOR 615.685-026
Nickel Cleaner 709.687-010
night cleaner 599.684-010
Night Guard 372.667-034
nipper 932.664-010
Notching-Press Operator 615.682-014
Nuclear-Waste-Process Operator 955.382-014
nurse, first aid 354.677-010
NURSERY SCHOOL ATTENDANT 359.677-018
nutrition consultant 199.251-010
office-equipment mechanic 633.281-018
office-machine inspector 633.281-018
Office-Machine-Repair-Shop Supervisor 633.131-010
OFFICE-MACHINE SERVICER 633.281-018
OFFICE-MACHINE-SERVICER APPRENTICE 633.281-022
OFFICE-MACHINE-SERVICE SUPERVISOR 633.131-010
office-planning representative 019.261-018
OIL-BURNER-SERVICER-AND-INSTALLER 862.281-018
OIL-BURNER-SERVICER-AND-INSTALLER HELPER 862.687-022
OILER 699.687-018
oiler 950.685-014

oiler 921.667-022
oiler and greaser 699.687-018
Oil-Rag Washer 361.685-018
operating engineer 950.362-014
operating engineer 950.382-026
operating-engineer apprentice, stationary 950.382-030
operator, circuit 379.362-014
operator, direct wire 379.362-014
Orange-Peel Operator I 921.663-058
Orange-Peel Operator II 921.663-062
ORDER-DEPARTMENT SUPERVISOR 169.167-038
Order Filler 922.687-058
order picker 922.687-058
Organ Tuner, Electronic 828.261-010
ORIENTAL-RUG REPAIRER 782.381-014
ORIENTAL-RUG STRETCHER 580.687-010
Outside Trucker 929.687-030
Oven Stripper 929.687-030
Oven Unloader 929.687-030
overcasting-machine operator see SERGING-MACHINE OPERATOR 787.682-034
overedge-machine operator see SERGING-MACHINE OPERATOR 787.682-034
OVEREDGE SEWER 787.682-034
Overhead Cleaner 381.687-018
OVERHEAD CRANE OPERATOR 921.663-010
overlock-machine operator see SERGING-MACHINE OPERATOR 787.682-034
overseaming-machine operator see SERGING-MACHINE OPERATOR 787.682-034
overseer see SUPERVISOR 899.133-010
overseer 899.133-010
OXIDIZED-FINISH PLATER 599.685-062
pacer see STRAW BOSS 929.687-058
Package-Lift Operator 921.683-050
packager and strapper 929.687-058
PACKAGER, HAND 920.587-018
PACKAGER, MACHINE 920.685-078
PACKAGE SEALER, MACHINE 920.685-074
Packaging-Line Attendant 920.587-018
PACKAGING SUPERVISOR 920.132-010
Packer, Foamed-in-Place 920.587-018
Packing-Machine Tender 920.685-078
pack-train driver 919.687-022
Pad Attacher 795.687-014
Paint Cleaner 381.687-014
paint-coating-machine operator 599.685-046
Paint Dipper 599.685-026
PAINTER, AIRBRUSH 741.684-018
PAINTER, BRUSH 740.684-022
Painter, Drum 740.684-022
Painter, Electric Motor 741.687-018
PAINTER, ELECTROSTATIC 599.682-010
PAINTER, EMBOSSED OR IMPRESSED LETTERING 740.687-018
painter, hand 740.684-022
PAINTER, HAND 970.381-022
PAINTER HELPER, SIGN 970.664-010
PAINTER HELPER, SPRAY 741.687-014
Painter, Maintenance 840.381-010
painter, rough 741.687-018
PAINTER, SIGN 970.381-026
PAINTER, SPRAY I 741.684-026
PAINTER, SPRAY II 741.687-018
PAINTER, TOUCH-UP 749.684-038
PAINTER, TUMBLING BARREL 599.685-070
PAINTING-MACHINE OPERATOR 599.685-074
PAINT MIXER, HAND 550.684-018
PAINT MIXER, MACHINE 550.485-018
PAINT-SPRAYER OPERATOR, AUTOMATIC 599.382-010
paint-spraying-machine-operator helper 741.687-014
PAINT-SPRAY INSPECTOR 741.687-010
PALLETIZER OPERATOR I 921.682-014
Palletizer Operator II 920.685-078
Pamphlet Distributor 230.687-010
Panel-Instrument Repairer 710.281-026
Pants Presser 363.682-018
Paper Cutter 690.685-122
Paper Cutter, Hand 690.685-122
Paper Sheeter 699.682-018
PARTITION-ASSEMBLY-MACHINE OPERATOR 649.582-010
PARTS CATALOGER 229.267-010
parts data writer 229.267-010
parts inspector 609.684-010
parts mechanic 600.280-010
parts picker 922.687-058
PARTS SALVAGER 638.281-026
passenger agent 238.367-026
passenger-booking clerk 238.367-026
patcher 932.664-010
patrol guard 372.667-034
pattern cutter 775.684-022
pattern marker 781.384-014
pattern-punching-machine operator 781.684-058
PEN-AND-PENCIL REPAIRER 733.684-014
pencil striper 741.687-022
PERCUSSION-INSTRUMENT REPAIRER 730.381-042
permit agent 191.117-046
pest control worker helper 383.684-010
phone-circuit operator 193.262-034
photocopy operator 976.382-022
PHOTOGRAPHER HELPER 976.667-010
photolith operator 976.361-010
PHOTOSTAT OPERATOR 976.382-022
PHOTOSTAT-OPERATOR HELPER 979.687-014
PIANO TECHNICIAN 730.281-038
PIANO TUNER 730.361-010
PICKING-MACHINE OPERATOR 680.685-082
pickler 503.685-030
PICKLER, CONTINUOUS PICKLING LINE 503.362-010
PICKLER HELPER, CONTINUOUS PICKLING LINE 503.686-010
pickler operator 503.362-010
pickling operator 503.685-030
pickling-tank operator 503.685-030
PILOT, SUBMERSIBLE 029.383-010
Pin Inserter 920.685-034
PINSETTER MECHANIC, AUTOMATIC 638.261-022
PINSETTER-MECHANIC HELPER 829.667-014
Pin-Ticket-Machine Operator 652.685-098
Pipe Fitter, Maintenance 862.281-022
Pipe-Fitter Supervisor, Maintenance 862.131-010
PIPE-ORGAN TUNER AND REPAIRER 730.361-014
PITCH FILLER 619.687-018
Pit-Worker, Power Shovel 921.667-022
plain-goods hemmer 787.682-026
plant-maintenance worker 899.261-014
Plant-Protection Supervisor 372.167-014
plant superintendent, industrial organization 189.117-022
plant supervisor 183.117-014
plant tour guide 353.367-018
plastic-welding-machine operator 690.685-154
Plate-And-Frame-Filter Operator 551.685-082
plate-and-weld inspector 619.261-010
plater helper 599.685-062
Plate Roller 613.662-022
plate-shear operator 615.682-018
plate-shop helper 619.686-022
plate-shop inspector 619.261-010
plate stacker, machine 692.682-054
plate-worker helper 801.687-014
Platform Loader 929.687-030
Platform Supervisor 922.137-018
PLAYROOM ATTENDANT 359.677-026
pleater 787.682-082
PLEATING-MACHINE OPERATOR 583.685-082
Plumber, Maintenance 862.381-030
pneumatic-press operator see AIR-PRESS OPERATOR 862.687-018
Pneumatic Tester 862.687-018
PNEUMATIC-TOOL REPAIRER 630.281-010
PNEUMATIC-TUBE REPAIRER 630.281-014
POLISHER 705.684-058
Polisher, Aluminum 705.684-058
Polisher And Buffer I 705.684-014
POLISHER AND BUFFER II 705.684-062
POLISHER APPRENTICE 705.684-066
Polisher, Brass 705.684-058
Polisher, Bronze 705.684-058
Polisher, Zinc 705.684-058
POLISHING-MACHINE OPERATOR 603.682-026
POLISHING-MACHINE-OPERATOR HELPER 603.686-010
polishing-wheel repairer 739.684-030
POLISHING-WHEEL SETTER 776.684-014
pool servicer 891.684-018
PORCELAIN-ENAMELING SUPERVISOR 590.131-010
PORCELAIN-ENAMEL LABORER 509.687-014
PORCELAIN-ENAMEL REPAIRER 741.684-030
Porcelain-Enamel Sprayer 741.684-026
Porcelain Slusher 599.685-026
portable grinder operator 705.684-030
porter 381.687-014
porter, head 381.137-010

powder carrier 859.687-010
power-brake operator 617.360-010
power-cleaner operator 389.683-010
powerhouse oiler 950.685-014
power-nut-runner operator 699.685-026
power-plant operator 950.382-026
power-plant-operator apprentice 950.382-030
power-press operator 699.682-022
POWER-PRESS OPERATOR ..... term
POWER-PRESS TENDER 617.685-026
POWER-SAW MECHANIC 625.281-030
POWER-SCREWDRIVER OPERATOR 699.685-026
power-shear operator 615.682-018
power-shear operator 615.685-034
POWER-SHOVEL OPERATOR 850.683-030
Power-Shovel-Operator Helper 921.667-022
Power-Sweeper Operator 919.683-022
power-tool repairer 729.281-022
power washer 503.685-030
precision-instrument and tool maker 600.280-010
precision-mechanical-instrument maker 600.280-010
precision-mechanical-instrument-maker apprentice 600.280-018
PRESIDENT 189.117-026
press-brake operator 619.685-026
press-brake operator 617.360-010
PRESS BUCKER 920.686-042
PRESSER, FORM 363.685-018
PRESSER, HAND 363.684-018
PRESSER, MACHINE 363.682-018
pressing-machine operator 363.685-018
pressing machine operator 363.682-018
press operator 920.685-010
PRESS OPERATOR, HEAVY DUTY 617.260-010
PREVENTIVE MAINTENANCE COORDINATOR 169.167-074
primary-crusher operator 570.685-022
principal see SUPERVISOR .....
print applier 749.684-010
printer 652.382-010
printing-machine operator 652.382-010
private pilot 196.263-030
processor 012.167-074
process supervisor 183.167-018
process treater 503.685-030
Product-Development Worker 804.281-010
production helper 619.686-022
PRODUCTION SUPERINTENDENT 183.117-014
PRODUCTION SUPERVISOR 699.130-010
production supervisor 183.167-018
programmer, numerical control 007.167-018
PROJECT-CREW WORKER 891.687-018
projectionist 960.382-010
PROPERTY-DISPOSAL OFFICER 163.167-026
PROSPECTOR 024.284-010
protection chief, industrial plant 189.167-050
PROTECTIVE-SIGNAL OPERATOR 379.362-014
prototype assembler, electronics 726.261-010
PUBLIC-ADDRESS SERVICER 823.261-010
public-address-system operator 823.261-010
pump-and-tank servicer 620.281-018
PUMPER 914.682-010
PUMPER HELPER 914.687-018
PUMP INSTALLER 630.684-018
pump-machine operator 914.682-010
pump operator 914.682-010
pump repairer 630.281-018
pump runner 914.682-010
PUMP SERVICER 630.281-018
PUMP-SERVICER HELPER 630.684-022
PUMP-SERVICER SUPERVISOR 630.131-010
pump tender 914.682-010
Punch-Press Feeder 699.686-010
Punch-Press Offbearer 699.686-010
PUNCH-PRESS OPERATOR, AUTOMATIC 615.482-026
Punch-Press-Operator Helper 619.687-014
PUNCH-PRESS OPERATOR I 615.382-010
PUNCH-PRESS OPERATOR II 615.685-030
PUNCH-PRESS OPERATOR III 615.682-014
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Punch-Press Supervisor 619.130-030
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PUTTY GLAZER 749.684-042
quality-control-assembly-test technician 726.261-018
Racker 929.687-030
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Radar Mechanic 828.261-022
radio-communications mechanician 823.281-014
RADIOGRAPHER 199.361-010
RADIO MECHANIC 823.261-018
radio mechanic 823.281-014
radiophone operator 193.262-034
RADIO REPAIRER 720.281-010
Radio Repairer, Domestic 720.281-010
Radiotelegraph Operator-Servicer 823.281-014
RADIOTELEPHONE OPERATOR 193.262-034
radiotelephone-technical operator 193.262-034
Rag Sorter 929.687-022
railroad-crane operator 921.663-038
rapid-extractor operator 581.685-038
receiver, bulk system 921.685-026
receptionist 352.667-010
Reciprocating-Drill Operator 850.683-034
reclaimer 929.687-022
RECTIFICATION PRINTER 976.682-018
redistribution-and-marketing officer 163.167-026
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REFRIGERATING ENGINEER, HEAD 950.131-010
REFRIGERATION MECHANIC 637.261-026
REFRIGERATION-MECHANIC HELPER 637.687-014
refrigeration operator, head 950.131-010
refrigeration supervisor 950.131-010
Refrigeration-System Installer 637.261-026
RELIEF-MAP MODELER 777.381-042
repairer 632.281-010
REPAIRER, ART OBJECTS 779.381-018
REPAIRER, FINISHED METAL 809.684-034
repair helper 638.684-018
repair mechanic 638.281-014
REPRODUCTION TECHNICIAN 976.361-010
RESEARCH SUBJECT 359.677-030
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RESIDENCE SUPERVISOR 187.167-186
RESTROOM ATTENDANT 358.677-018
retoucher 740.684-026
rewinder 699.587-010
rewinder-operator helper 699.587-010
RIGGER 921.260-010
RIGGER HELPER 921.687-026
RIGHT-OF-WAY AGENT 191.117-046
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rip-machine operator 699.682-030
RISK AND INSURANCE MANAGER 186.117-066
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rivet catcher 800.687-010
RIVETER, HAND 709.684-066
RIVETER HELPER 800.687-010
RIVETER, HYDRAULIC 800.662-010
RIVETER, PNEUMATIC 800.684-014
Riveter, Portable Machine 800.662-010
RIVETER, PORTABLE PINCH 800.682-010
RIVETING-MACHINE OPERATOR I 699.482-010
RIVETING-MACHINE OPERATOR II 699.685-030
Rivet Spinner 699.685-030
rivet sticker 800.687-010
Rod-Bending-Machine Operator I 617.482-010
Rod-Bending-Machine Operator II 617.685-010
Rod-Mill Operator 599.685-058
roll attendant 570.685-022
roll-cutting operator 699.682-030
roller embosser 583.685-030
ROLLER-SKATE REPAIRER 732.684-102
roll former 619.362-014
ROLL-FORMING-MACHINE OPERATOR I 617.482-018
ROLL-FORMING-MACHINE OPERATOR II 617.685-034
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Rolling-Machine Operator, Automatic 619.685-082
roll-mill operator 616.685-042
Roll-Operator Helper 619.687-014
ROLL OPERATOR I 619.362-014
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Roll Operator, Sheet Metal 619.362-014
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Rotary-Rock-Drilling-Machine Operator 850.683-034
ROTARY-SHEAR OPERATOR 615.482-030
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RUBBER-GOODS REPAIRER 759.684-054
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ruching-machine operator 787.682-082
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sack mender 782.687-046
SACK REPAIRER 782.687-046
Sack Sewer, Hand 920.587-018
Sack Sewer, Machine 920.685-078
Sack Sorter 929.687-022
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safety technician 168.264-014
sales promotion director 164.117-010
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SCREENER OPERATOR 599.685-082
SCREEN MAKER, PHOTOGRAPHIC PROCESS 979.384-010
SCREEN PRINTER 979.684-034
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scrubber 381.687-018
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separator-machine operator 599.685-082
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SETTER, AUTOMATIC-SPINNING LATHE 604.360-010
setter-up, silk-screen frame 709.484-010
SET-UP MECHANIC, CROWN ASSEMBLY MACHINE 692.362-010
SEWER, HAND 782.684-058
sewing-machine adjuster 639.281-018
SEWING-MACHINE OPERATOR 787.682-046
SEWING-MACHINE OPERATOR, AUTOMATIC ..... master
SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT ..... master
SEWING-MACHINE REPAIRER 639.281-018
SEWING-MACHINE-REPAIRER HELPER 639.684-010
SEWING SUPERVISOR 787.132-010
shadowgraph operator 699.384-010
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shearer 699.685-014
Shear Operator, Automatic I 615.682-018
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sheeter operator 699.682-018
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Sheet-Metal Installer 804.281-010
Sheet-Metal Lay-Out Worker 809.281-010
sheet-metal mechanic 804.281-010
Sheet-Metal Production Worker 619.685-062
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Sheet Metal-Shop Supervisor 809.130-014
SHEET-METAL WORKER 804.281-010
SHEET-METAL-WORKER APPRENTICE 804.281-014
Sheet-Metal Worker, Maintenance 804.281-010
SHIRRING-MACHINE OPERATOR 787.682-078
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shooter's helper 859.687-010
Shop Mechanic 804.281-010
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shop supervisor 809.130-014
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shot-core-drill operator 930.682-010
shot-core-drill-operator helper 930.687-014
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shower room attendant 358.687-010
shredder 680.685-082
signaler 921.667-022
signal timer 379.362-014
sign poster 299.667-010
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SIGN WRITER, HAND 970.281-022
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SILK-SCREEN CUTTER 979.681-022
SILK-SCREEN-FRAME ASSEMBLER 709.484-010
Silk-Screen-Layout Drafter 979.681-022
silk-screen maker 979.681-022
silk-screen operator 979.684-034
silk-screen painter 979.684-034
SILK-SCREEN PRINTER, MACHINE 979.685-010
SILK-SCREEN REPAIRER 979.684-038
siphoner 914.682-010
Six-Horse Hitch Driver 919.664-010
sizing-machine operator 599.685-046
SKEIN-WINDING OPERATOR 559.687-054
Skimmer-Scoop Operator 850.683-030
skinner 919.664-010
Skip-Hoist Operator 921.663-030
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slide-forming-machine operator 619.382-018
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slinger 921.260-010
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slitter-and-rewinder-machine operator 699.682-030
slitter helper 699.587-010
slitter sheeter operator 699.682-018
SLITTING-MACHINE-OPERATOR HELPER I 699.587-010
Slitting-Machine-Operator Helper II 619.687-014
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SLITTING-MACHINE OPERATOR II 615.662-010
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slusher 741.684-030
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Snap Attacher 699.685-018
Snap-Fastener-Machine Operator 699.685-018
SOLAR-ENERGY-SYSTEM INSTALLER 637.261-030
SOLAR-ENERGY-SYSTEM-INSTALLER HELPER 637.687-018
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SOUNDER 911.667-018
SOUND TECHNICIAN 829.281-022
Sound-Truck Operator 823.261-010
SPECIAL-DELIVERY DRIVER ..... term
Special-Lining Applier 741.687-018
special police officer 372.667-034
SPINNER, HAND 619.362-018
SPINNER, HYDRAULIC 619.362-022
spinning-lathe operator 619.362-018
SPINNING-LATHE OPERATOR, AUTOMATIC 619.685-082
spinning-lathe-operator, hydraulic 619.362-022
splitter operator 699.682-030
SPORTS-EQUIPMENT REPAIRER 732.684-122

Spot Cutter 699.682-018
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Spout Positioner 921.667-018
Spray Blender 550.684-018
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sprayer helper 741.687-014
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SPRAY-GUN REPAIRER 630.381-026
SPRAY-GUN-REPAIRER HELPER 630.684-034
spray-machine operator 599.382-010
spray-machine operator 599.685-074
SPRAY-PAINTING-MACHINE OPERATOR 741.685-010
SPRAY-UNIT FEEDER 599.686-014
SPREADER I 781.687-058
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Sprinkler-Truck Driver 906.683-022
Square-Shear Operator I 615.682-018
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STABLE ATTENDANT 410.674-022
stable manager 410.131-010
stacker 929.687-030
stacker attendant 921.683-014
Stacker Operator 921.683-014
STACKING-MACHINE OPERATOR I 692.682-054
STACKING-MACHINE OPERATOR II 739.685-038
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Stamper 920.587-018
stamper 652.682-030
STAMPING-PRESS OPERATOR 652.682-030
Stamping-Press Operator 617.685-026
STAPLING-MACHINE OPERATOR 692.685-202
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STATIONARY-ENGINEER APPRENTICE 950.382-030
stationary engineer, refrigeration 950.362-014
STATIONARY-ENGINEER SUPERVISOR 950.131-014
station mechanic 805.361-010
station mechanic 823.281-014
station supervisor 950.131-014
STATISTICAL-MACHINE SERVICER 633.281-030
Stator Repairer 721.281-018
Steam-Fitter Supervisor, Maintenance 862.131-010
steam flattener 363.682-018
steam-power-plant operator 950.382-010
steam presser 363.682-018
steam-press operator 363.682-018
steam-station supervisor 950.131-014
steel fabricating supervisor 809.130-014
STEEL-PLATE CAULKER 843.684-010
stencil cutter 979.681-022
Stencil Cutter, Machine 920.685-078
STENCILER 920.687-178
STILL OPERATOR ..... term
STILL TENDER 552.685-026
stock selector 922.687-058
stock supervisor 921.133-018
stoker 951.685-010
STOKER ERECTOR-AND-SERVICER 637.281-014
stoker-installation mechanic 637.281-014
storage-battery charger 727.381-014
storekeeper 184.167-114
STOVE REFINISHER 749.684-046
straddle buggy operator 921.683-070
STRADDLE-TRUCK OPERATOR 921.683-070
straight cutter 699.685-014
straight cutter 775.684-022
straightener 617.482-026
STRAIGHTENER, HAND 709.484-014
straightener, torch 709.684-086
Straightening-Machine Feeder 699.686-010
straightening-machine operator 613.662-022
Straightening-Press-Operator Helper 619.687-014
Straightening-Press Operator I 615.382-010
STRAIGHTENING-PRESS OPERATOR II 617.482-026
STRAIGHTENING-ROLL OPERATOR 613.662-022
Straight-Knife Cutter, Machine 781.684-014
STRAW BOSS ..... term
Stretching-Press Operator 615.382-010
Stretch-Press Operator 617.260-010
strip cleaner 503.362-010
STRIPER, HAND 740.484-010
STRIPER, SPRAY GUN 741.687-022
STRIPPER ..... term
structural inspector 619.261-010
structural-metal-fabricator apprentice 619.361-018
structural-shop helper 619.686-022
Structural-Steel Lay-Out Worker 809.281-010
Structural-Steel-Shop Supervisor 809.130-014
subject, scientific research 359.677-030
submarine worker 899.261-010
superintendent 189.167-022
superintendent, automotive 184.167-226
SUPERINTENDENT, BUILDING 187.167-190
superintendent, building 382.664-010
SUPERINTENDENT, COLD STORAGE 184.167-142
superintendent, factory 183.117-014
superintendent, general 183.117-014
superintendent, institution 187.117-018
SUPERINTENDENT, LABOR UTILIZATION 189.167-042
SUPERINTENDENT, MAINTENANCE 189.167-046
superintendent, mill 183.117-014
superintendent, plant 183.117-014
SUPERINTENDENT, PLANT PROTECTION 189.167-050
superintendent, service establishment ..... see MANAGER SERVICE ESTABLISHMENT
superintendent, storage area 184.167-114
SUPERINTENDENT, TRANSPORTATION 184.167-226
superintendent, warehouse 184.167-114
SUPERVISOR ..... master
SUPERVISOR, AIR-CONDITIONING INSTALLER 827.131-018
SUPERVISOR, BLUEPRINTING-AND-PHOTOCOPY 979.130-010
SUPERVISOR, BOILER REPAIR 805.137-010
supervisor, building maintenance 381.137-010
supervisor, coal handling 921.137-010
SUPERVISOR, CUTTING DEPARTMENT 781.134-010
SUPERVISOR, ELECTRONICS SYSTEMS MAINTENANCE 828.161-010
SUPERVISOR, FITTING 801.131-014
SUPERVISOR, GRINDING 603.130-010
SUPERVISOR, HOME RESTORATION SERVICE 389.137-010
SUPERVISOR, INSTRUMENT MAINTENANCE 710.131-015
SUPERVISOR, INSTRUMENT REPAIR 710.131-022
SUPERVISOR, JANITORIAL SERVICES 381.137-010
SUPERVISOR, LABOR GANG 899.133-010
SUPERVISOR, LINE 619.130-030
SUPERVISOR, LIVESTOCK-YARD 410.134-010
SUPERVISOR, LOADING AND UNLOADING 922.137-018
Supervisor, Loading 922.137-018
SUPERVISOR, LUBRICATION 699.131-010
SUPERVISOR, MACHINE SETTER 619.130-034
SUPERVISOR, METAL FABRICATING 809.130-014
SUPERVISOR, METALIZING 505.130-010
SUPERVISOR, NETWORK CONTROL OPERATORS 031.132-010
SUPERVISOR OF COMMUNICATIONS 184.167-230
SUPERVISOR, PACKING AND WRAPPING 920.137-026
SUPERVISOR, PAINT DEPARTMENT 749.131-014
supervisor, permits, easements, and right-of-way 191.117-050
Supervisor, Photostat 979.130-010
SUPERVISOR, SHEARING 615.132-010
SUPERVISOR, SILK-SCREEN CUTTING AND PRINTING 979.131-018
Supervisor, Unloading 922.137-018
SUPERVISOR, UPHOLSTERY DEPARTMENT 780.131-014
SUPERVISOR, VACUUM METALIZING 505.130-014
SUPERVISOR, VENDOR QUALITY 012.167-062
SUPPLIES PACKER 919.687-022
surplus-property disposal agent 163.167-026
surplus sales officer 163.167-026
SURVEYOR HELPER 869.567-010
Surveyor Helper, Chain 869.567-010
Surveyor Helper, Rod 869.567-010
swamper 459.687-010
swamper 932.664-010
sweeper 381.687-018
sweeper 381.687-014
SWEEPER-CLEANER, INDUSTRIAL 389.683-010
SWIMMING-POOL SERVICER 891.684-018
Table Worker 920.587-018
table worker, sewing 782.684-058
TACKING-MACHINE OPERATOR 787.685-042
tail-end rider 932.664-010
tank-car loader 914.667-010
TANK CLEANER 891.687-022
Tank-Shop Supervisor 809.130-014
taper 787.682-010
taper 749.687-018

any industry

TAPE-RECORDER REPAIRER 720.281-014
team driver 919.664-010
TEAMSTER 919.664-010
technical release analyst 229.267-010
technician, test systems 726.261-018
telemarketer 299.357-014
telephone sales representative 299.357-014
TELEPHONE SOLICITOR 299.357-014
TELEVISION-AND-RADIO REPAIRER 720.281-018
TELEVISION INSTALLER 823.361-010
television repairer 720.281-018
Template Inspector 619.261-010
TEMPLATE MAKER 601.381-038
TEMPLATE MAKER, TRACK 809.484-014
Tennis-Racket Repairer 732.684-122
test-bore helper 930.687-014
test borer 930.682-010
TESTER, FOOD PRODUCTS 199.251-010
tester helper 381.687-022
tester, systems 726.261-018
test-hole driller 930.682-010
test technician 726.261-018
Thermospray Operator 505.380-010
THREAD CUTTER 789.684-050
three-dimensional-map modeler 777.381-042
TICKET AGENT 238.367-026
ticket clerk 238.367-026
TICKETER 652.685-098
ticket maker 652.685-098
ticket printer 652.685-098
ticket seller 238.367-026
tie puller 920.685-010
Tier-Lift-Truck Operator 921.683-050
Tinsmith 804.281-010
tipple worker 921.685-038
toggle-press operator 617.260-010
toilet attendant 358.677-018
tonal regulator 730.361-010
tool-and-machine maintainer 638.281-014
Tool Bender, Hand 619.361-010
Tool Chaser 922.687-058
TOOL DRESSER 601.682-010
TOOL GRINDER I 701.381-018
TOOL GRINDER II 603.664-010
TOOL PLANNER 012.167-074
tool programmer 007.167-018
TOOL PROGRAMMER, NUMERICAL CONTROL 007.167-018
tool sharpener 603.664-010
tool sharpener 701.381-018
Tool Straightener 709.484-014
Top-Edge Beveler 705.687-014
TORCH-STRAIGHTENER-AND HEATER 709.684-086
toter 919.664-010
TOUCH-UP PAINTER, HAND 740.684-026
Tower-Whirler Operator 921.663-010
TRACKMOBILE OPERATOR 919.683-026
tractor-crane engineer 921.663-058
TRACTOR-CRANE OPERATOR 921.663-058
TRACTOR OPERATOR 929.683-014
Tractor Operator, Laser Leveling 929.683-014
TRACTOR-TRAILER-TRUCK DRIVER 904.383-010
Trade-Show Representative 297.367-010
traffic supervisor 921.133-018
trailer 932.664-010
trailer-truck driver 904.383-010
train conductor 932.664-010
TRAINEE ..... term
trammer 919.663-014
transformer assembler 724.381-018
transformer rebuilder 724.381-018
TRANSFORMER REPAIRER 724.381-018
TRANSFORMER SHOP SUPERVISOR 724.131-014
transportation department head 184.167-226
TRANSPORTATION-MAINTENANCE SUPERVISOR 184.167-266
trash collector 381.687-018
trash collector 929.687-022
traveling-crane operator 921.663-010
Traveling-Maintenance Supervisor 638.131-026
TREATER 582.687-030
trimmer 789.687-070
trimmer 782.684-058
trimmer 920.687-038
TRIMMER, HAND 781.687-070
trimming-machine operator 789.684-050
TRIM-STENCIL MAKER 781.684-058
trip rider 932.664-010
trouble shooter see MAINTENANCE WORKER .....
trouble shooter 726.261-018
trouble shooter, radio 720.281-010
TRUCK-CRANE OPERATOR 921.663-062
Truck-Crane-Operator Helper 921.667-022
TRUCK DRIVER ..... term
TRUCK DRIVER, HEAVY 905.663-014
TRUCK-DRIVER HELPER 905.687-010
TRUCK DRIVER, LIGHT 906.683-022
Trucker, Hand 929.687-030
trucker helper 905.687-010
truck loader 914.667-010
truck operator see TRUCK DRIVER .....
truck repairer 620.281-050
Trunk Repairer 365.361-010
TUBE BENDER, HAND I 709.684-090
TUBE BENDER, HAND II 709.687-050
Tube-Bending-Machine Operator I 617.482-010
Tube-Bending-Machine Operator II 617.685-010
TUBE CLEANER 891.687-030
tube filler 619.687-018
Tube Winder 681.685-154
Tubing-Mill Operator I 616.685-042
Tubing-Mill Operator II 616.360-026
Tubing-Mill Setter 616.260-014
tub rider 932.664-010
Tubular-Products Fabricator 809.381-010
TUCKING-MACHINE OPERATOR 787.682-082
TUMBLER OPERATOR 599.685-110
tuner 730.361-010
TURNER 789.687-182
TURRET-PUNCH-PRESS OPERATOR 615.482-038
TURRET-PUNCH-PRESS OPERATOR, TAPE-CONTROL 615.685-042
TWISTING-MACHINE OPERATOR 619.485-014
Tying-Machine Operator 920.685-078
Typewriter Servicer 633.281-018
Ultrasonic Cleaner 503.685-030
ULTRASONIC TESTER 739.281-014
UMBRELLA REPAIRER 369.684-018
uncrater 827.584-010
upholsterer 780.381-018
upholsterer apprentice 780.381-022
UPHOLSTERER HELPER 780.687-054
UPHOLSTERY SEWER 780.682-018
UTILITIES-AND-MAINTENANCE SUPERVISOR 899.131-018
utility repairer 899.261-014
utility worker 929.687-030
vacuum cleaner 381.687-018
vacuum-cleaner operator 389.683-010
VACUUM CLEANER REPAIRER 723.381-014
vacuum-filter operator 551.685-078
vacuum-frame operator 976.361-010
VACUUM-METALIZER OPERATOR 505.685-018
vapor coater 505.685-018
Vehicle Unloader 929.687-030
VENETIAN-BLIND CLEANER AND REPAIRER 739.687-198
VENTILATION EQUIPMENT TENDER 950.585-010
ventilation mechanic 950.585-010
Vertical-Roll Operator 619.362-014
VICE PRESIDENT 189.117-034
VIOLIN REPAIRER 730.281-050
Wagon Driver 919.664-010
Walking-Dragline Operator 850.683-018
wallpaper cleaner 381.687-026
wall washer 381.687-026
Warehouse Guard 372.667-034
warehouse supervisor 184.167-114
warehouse supervisor 921.133-018
WAREHOUSE SUPERVISOR 929.137-022
warehouse worker 922.687-058
wash driller 930.682-010
wash-driller helper 930.687-014
WASHER 599.687-030
Washer-Dryer Preparer 827.584-010
WASHER, MACHINE 599.685-114
WASHING-MACHINE OPERATOR 599.685-118
Washing-Machine Servicer 827.261-010
washroom attendant 358.677-018
waste baler 920.685-010
waste collector 929.687-022
waste collector 381.687-018
WASTE-DISPOSAL ATTENDANT 955.383-010
watch engineer 950.131-014
watch engineer 950.382-026

watchguard 372.667-034
watch guard, gate 372.667-030
Water-Pumping-Station Engineer 950.382-026
Water-Pump Servicer 630.281-018
WATER TENDER 599.685-122
WAXER, FLOOR 381.687-034
Weigher, Packing 929.687-062
WEIGHER, PRODUCTION 929.687-062
welder-fitter helper 801.687-014
WHEEL-AND-CASTER REPAIRER 630.684-038
wheel loader operator 921.683-042
wheel setter 776.684-014
white-metal corrosion proofer 500.682-010
whiteprinting-machine operator 979.682-014
willower 680.685-082
Wincher 921.667-018
WIND-INSTRUMENT REPAIRER 730.281-054
WINDOW REPAIRER 899.684-042
window washer 389.687-014
wiper 699.687-014
Wire Bender, Hand 709.687-050
Wire Brusher 705.687-014
WIRE PREPARATION MACHINE TENDER 728.685-010
wirer helper 829.684-022
wire-stitcher operator 692.685-202
Wire-Straightening-Machine Operator 613.662-022
Woodwind-Instrument Repairer 730.281-054
Wrap Checker 358.677-010
Wrapper 920.587-018
Wrapper Sheeter 699.682-018
Wrapping-And-Packing-Machine Operator 920.685-078
Wrapping-Machine Operator 920.685-078
Wrapping Remover 920.587-018
wringer 581.685-038
x-ray consultant 729.281-046
X-Ray-Control-Equipment Repairer 710.281-026
x-ray equipment servicer 729.281-046
X-RAY-EQUIPMENT TESTER 729.281-046
x-ray service engineer 729.281-046
X-Ray Technician 199.361-010
yard boss see YARD SUPERVISOR
yard-labor supervisor 899.133-010
YARD MANAGER 910.137-046
Yard Pumper 914.682-010
yard rigger 921.260-010
YARD SUPERVISOR ..... term
ZIPPER SETTER 787.682-086

auto. mfg.—AUTOMOBILE MANUFACTURING INDUSTRY: This designation includes occupations concerned with manufacturing automobiles and other motor vehicles, such as trucks, buses, ambulances, fire engines, taxicabs, truck and automobile bodies, and trailers. This designation also includes occupations in the manufacture of automobile parts and accessories, such as bearings, engines, brakes and brake parts, bumpers, bumperettes, bushings, carburetors, horns, piston rings, radiators, shock absorbers, and windshield wipers. Occupations concerned with the manufacture of tires and tubes are included in the RUBBER TIRE AND TUBE INDUSTRY (rubber tire). Occupations concerned with the manufacture and repair of automobile hardware are included in the CUTLERY, HANDTOOLS, AND HARDWARE INDUSTRY (cutlery-hrdwr.). Occupations concerned with the manufacture and repair of ignition apparatus, batteries, and starting systems are included in the ELECTRICAL EQUIPMENT INDUSTRY (elec. equip.). Occupations concerned with the manufacture and repair of lighting systems are included in the LIGHTING FIXTURES INDUSTRY (light. fix.). Occupations concerned with the manufacture and repair of automobile instruments and speedometers are included in the INSTRUMENTS AND APPARATUS INDUSTRY (inst. & app.). Occupations concerned with the manufacture of travel trailers are included in the MISCELLANEOUS VEHICLES AND TRANSPORTATION EQUIPMENT INDUSTRY, NOT ELSEWHERE CLASSIFIED (vehicles, nec.).

advisor 806.134-010
ASSEMBLER, AUTOMOBILE 806.684-010
Assembler, Body 806.684-010
Assembler, Chassis 806.684-010
Assembler, Engine 806.684-010
ASSEMBLER, FILTERS 739.687-026
Assembler, Final 806.684-010
Assembler, Seat 806.684-010
Assembler, Trim 806.684-010
assembler, truck-trailer 806.381-058
AUTO-DESIGN CHECKER 017.261-010
AUTO-DESIGN DETAILER 017.281-010
AUTOMOTIVE ENGINEER 007.061-010
body builder 807.281-010
BODY WIRER 829.684-014
Bonderizer 599.685-026
car driver 919.683-014
car tester 806.283-014
chassis driver 806.283-014
Chassis Inspector 806.687-018
checker 806.687-018
checker, product design 017.261-010
CLAIMS CLERK 241.387-010
coach wirer 829.684-014
Crankshaft Straightener 617.482-026
Custom-Frame Assembler 806.381-058
CUSTOM VAN CONVERTER 806.381-070
DIELECTRIC-PRESS OPERATOR 692.685-074
Differential Repairer 620.381-022
DRAFTER, AUTOMOTIVE DESIGN 017.261-042
DRAFTER, AUTOMOTIVE DESIGN LAYOUT 017.281-026
DRIVER 919.683-014
DRIVER-UTILITY WORKER 919.663-018
Dynamometer Tester, Chassis 806.281-010
DYNAMOMETER TESTER, MOTOR 806.281-010
electrician, wiring 829.684-014
Engine Repairer 620.381-022
engine tester 806.281-010
FINAL INSPECTOR 806.687-018
FINAL INSPECTOR, TRUCK TRAILER 806.361-018
Gear Straightener 617.482-026
gear tester 806.684-134
Glaze Sprayer 741.684-026
Grinder, Lead 705.684-026
group leader 806.367-010
INSPECTOR, EXHAUST EMISSIONS 806.364-010
Inspector, Filters 609.684-010
INSPECTOR, RETURNED MATERIALS 806.384-014
LABORATORY TECHNICIAN 019.261-030
LINE-UP WORKER 221.367-026
miniature-model maker 693.380-014
MODEL MAKER 693.380-014
overland driver 806.283-014
Painter, Chassis 741.687-018
Painter, Insignia 741.684-026
Primer Sprayer 741.684-026
PRODUCTION-MACHINE TENDER 699.685-050
QUALITY ASSURANCE GROUP LEADER 806.367-014
QUALITY ASSURANCE MONITOR 806.367-018
Quality Assurance Monitor, Body 806.367-018
Quality Assurance Monitor, Chassis 806.367-018
Quality Assurance Monitor, Final 806.367-018
Quality Assurance Monitor, Trim 806.367-018
QUALITY ASSURANCE SUPERVISOR 806.137-022
Quality Assurance Supervisor, Body 806.137-022
Quality Assurance Supervisor, Chassis 806.137-022
Quality Assurance Supervisor, Final 806.137-022
Quality Assurance Supervisor, Trim 806.137-022
quality worker 806.684-010
REPAIRER, GENERAL 806.684-118
REPAIRER, HEAVY 620.381-022
Rim-Roller Setter 616.260-014
ROADABILITY-MACHINE OPERATOR 806.383-010
road tester 806.283-014
Rust Proofer 599.685-026
salvage inspector 806.384-014
scheduler 221.367-026
scheduler, conveyor 221.367-026
service-claims inspector 806.384-014
service dismantler 806.384-014
SERVICE MECHANIC 807.381-022
SERVICE REPRESENTATIVE 191.167-022
Sprayer, Auto Parts 741.684-026
Supervisor, Body Assembly 806.134-010
Supervisor, Chassis Assembly 806.134-010
Supervisor, Engine Assembly 806.134-010
Supervisor, Final Assembly 806.134-010
SUPERVISOR, MOTOR VEHICLE ASSEMBLY 806.134-010
Supervisor, Seat Assembly 806.134-010
Supervisor, Trim Assembly 806.134-010
Supervisor, Truck-Trailer Assembly 806.134-010
team coordinator 806.367-014
team coordinator 806.367-010
team leader 806.134-010
team leader 806.367-014
team member 806.684-010
TEST DRIVER I 806.283-014
TEST DRIVER II 806.283-010
Thinner Sprayer 741.684-026

automotive ser.

Tinner Operator, Connecting Rods 599.685-026
TOOL, GAUGE, AND FIXTURE REPAIRER 601.281-030
TRAILER ASSEMBLER I 806.381-058
TRAILER ASSEMBLER II 806.684-082
trailer assembler, paneling 806.684-082
Trailer-Body Assembler 806.381-058
trailer-sections assembler 806.684-082
transfer and line-up worker 221.367-026
Transmission Repairer 620.381-022
TRANSMISSION TESTER 806.684-134
Trim Inspector 806.687-018
TRUCK-BODY BUILDER 807.281-010
Undercoat Sprayer 741.687-018
UPHOLSTERER, LIMOUSINE AND HEARSE 780.381-026
UTILITY WORKER, LINE ASSEMBLY 806.367-010
WATER LEAK REPAIRER 807.684-034
Wheel Filler 749.684-042
wirer 829.684-014

automotive ser.—AUTOMOTIVE SERVICES: This designation includesoccupations concerned with servicing automobiles, motorcycles,trucks, and other motor vehicles. It includes such activities asautomobile painting and washing; body and fender repairing, enginerepairing, radiator repairing; operating parking lots and garages;renting passenger automobiles, trucks, and trailers; and sellinggasoline and oil at service stations. Occupations concerned withthe sale of automobiles, and of automobile parts and accessories,are included in the RETAIL TRADE INDUSTRY (retail trade).

AIR-CONDITIONING MECHANIC 620.281-010
alignment mechanic 620.281-038
Armature Winder, Automotive 724.684-018
assembler, convertible top 807.684-026
Auto-Body Painter 845.381-014
AUTO-BODY REPAIRER, FIBERGLASS 807.381-030
auto-glass worker 865.684-010
Automatic-Transmission Mechanic 620.281-062
AUTOMATIC-WINDOW-SEAT-AND-TOP-LIFT REPAIRER 825.381-014
AUTOMOBILE-ACCESSORIES INSTALLER 806.684-038
automobile-and-truck-mechanic apprentice 620.261-012
AUTOMOBILE-BODY CUSTOMIZER 807.361-010
automobile-body repair chief 807.137-010
AUTOMOBILE-BODY REPAIRER 807.381-010
Automobile-Body Repairer, Combination 807.381-010
AUTOMOBILE-BODY-REPAIRER HELPER 807.687-010
automobile-body worker 807.381-010
AUTOMOBILE-BUMPER STRAIGHTENER 807.684-010
AUTOMOBILE DETAILER 915.687-034
automobile inspector 620.261-018
AUTOMOBILE MECHANIC 620.261-010
AUTOMOBILE-MECHANIC APPRENTICE 620.261-012
automobile-mechanic assistant 620.684-014
AUTOMOBILE-MECHANIC HELPER 620.684-014
Automobile Mechanic, Motor 620.261-010
automobile mechanic, radiator 620.381-010
automobile-mechanic supervisor 620.131-014
automobile parker 915.473-010
AUTOMOBILE-RADIATOR MECHANIC 620.381-010
automobile-refrigeration mechanic 620.281-010
automobile rental agent 295.467-026
AUTOMOBILE RENTAL CLERK 295.467-026
automobile rental representative 295.467-026
AUTOMOBILE-REPAIR-SERVICE ESTIMATOR 620.261-018
AUTOMOBILE-SEAT-COVER-AND-CONVERTIBLE-TOPINSTALLER 780.384-010
AUTOMOBILE-SEAT-COVER INSTALLER 915.687-010
AUTOMOBILE-SELF-SERVE-SERVICE-STATION ATTENDANT 915.477-010
AUTOMOBILE-SERVICE-STATION ATTENDANT 915.467-010
AUTOMOBILE-SERVICE-STATION MECHANIC 620.261-030
automobile-spring repairer 619.380-018
AUTOMOBILE TESTER 620.261-014
AUTOMOBILE UPHOLSTERER 780.381-010
AUTOMOBILE-UPHOLSTERER APPRENTICE 780.381-014
automobile-upholstery-trim installer 780.384-010
Automobile Washer 919.687-014
automobile washer, steam 915.687-026
Automotive Air-Conditioner Installer 620.281-010
AUTOMOTIVE-COOLING-SYSTEM DIAGNOSTIC TECHNICIAN 620.261-034
AUTOMOTIVE-GENERATOR-&-STARTER REPAIRER 721.281-010
Automotive-Generator Repairer 721.281-010
Automotive-Starter Repairer 721.281-010
axle-and-frame mechanic 620.281-038
body builder 807.281-010
body-line finisher 807.381-010
body repairer, bus 807.381-010
Body Trimmer 780.381-010
BONDER, AUTOMOBILE BRAKES 620.685-010
BRAKE ADJUSTER 620.684-018
BRAKE-DRUM-LATHE OPERATOR 620.682-010
brake mechanic 620.281-026
BRAKE REPAIRER 620.281-026
Brake Repairer, Air 620.281-026
Brake Repairer, Bus 620.281-026
Brake Repairer, Hydraulic 620.281-026
brake-repair mechanic 620.281-026
brakeshoe repairer 620.281-026
buffer 690.685-422
bumper straightener 807.684-010
Bus Cleaner 919.687-014
BUS INSPECTOR 620.281-030
Bus Mechanic 620.261-010
Bus Upholsterer 780.381-010
CARBURETOR MECHANIC 620.281-034
carburetor repairer 620.281-034
car checker 806.361-026
car driver 919.683-014
Car Jockey 919.683-014
car rental clerk 295.467-026
CAR-WASH ATTENDANT, AUTOMATIC 915.667-010
CAR-WASH SUPERVISOR 915.137-010
cashier, automobile services 915.477-010
Cashier, Parking Lot 211.462-010
Cashier, Self-Service Gasoline 211.462-010
cementer 750.684-038
Chassis Inspector 620.281-030
chassis mechanic 620.281-038
CLUTCH REBUILDER 620.684-022
collision estimator 620.261-018
Compressor Mechanic, Bus 620.261-010
CUSTOM VAN CONVERTER 806.381-070
Cylinder-Block-Hole Reliner 616.682-010
DELIVERER, CAR RENTAL 919.663-010
dent remover 807.381-010
Diesel-Engine Mechanic, Automobile 625.281-010
Diesel-Engine Mechanic, Bus 625.281-010
Diesel-Engine Mechanic, Truck 625.281-010
Differential Repairer 620.261-010
Dispatcher, Automobile Rental 249.167-014
Dispatcher, Tow Truck 249.167-014
Door-Engine Repairer 620.381-018
door repairer, bus 807.381-010
DRIVER 919.683-014
DRIVER-UTILITY WORKER 919.663-018
Drive-Shaft-And-Steering-Post Repairer 620.261-010
Dynamometer Tuner 620.281-066
Electrical Inspector 620.281-030
Electrical Repairer, Internal Combustion Engines 825.281-022
Electrical-Unit Rebuilder 825.281-022
ELECTRIC-GOLF-CART REPAIRER 620.261-026
ELECTRICIAN, AUTOMOTIVE 825.281-022
Electrician, Bus 825.281-022
ELECTRICIAN HELPER, AUTOMOTIVE 825.684-010
Electrician Supervisor, Automotive 829.131-014
Engine-Head Repairer 620.261-010
Engine Inspector 620.281-030
Engine-Repair Mechanic, Bus 620.261-010
filling-station attendant 915.467-010
FLAME DEGREASER 503.685-022
FLOOR SERVICE WORKER, SPRING 807.684-022
Foreign-Car Mechanic 620.261-010
FRONT-END MECHANIC 620.281-038
garage mechanic 620.261-010
gasateria attendant 915.477-010
gas-station attendant 915.467-010
gas tender 915.467-010
general lot attendant 915.667-014
Giant-Tire Repairer 915.684-010
GLASS INSTALLER 865.684-010
glazier 865.684-010
golf-cart mechanic 620.261-026
greaser 915.687-018
Ignition-And-Carburetor Mechanic 825.281-022
INSTALLER, SOFT TOP 807.684-026
Limousine Rental Clerk 295.467-026
LUBRICATION SERVICER 915.687-018
lubrication technician 915.687-018
MACHINIST APPRENTICE, AUTOMOTIVE 600.280-030

MACHINIST, AUTOMOTIVE 600.280-034
machinist, brake 620.682-010
make-ready mechanic 806.361-026
MANAGER, AUTO SPECIALTY SERVICES 185.167-074
manager, service 620.261-018
MANAGER, STORAGE GARAGE 187.167-150
manager, tire service 915.134-010
MANAGER, VEHICLE LEASING AND RENTAL 187.167-162
MECHANICAL-UNIT REPAIRER 620.381-018
mechanic, chief 620.131-014
MECHANIC, ENDLESS TRACK VEHICLE 620.381-014
mechanic helper 620.684-014
mechanic, trouble-shooting 620.261-018
metal bumper 807.381-010
metal shrinker 807.381-010
metal worker 807.381-010
Motor Analyst 620.261-014
Motor Assembler 620.261-010
motorcycle mechanic 620.281-054
MOTORCYCLE REPAIRER 620.281-054
motor-inspection mechanic 620.281-030
Motor-Scooter Repairer 620.281-054
MUFFLER INSTALLER 807.664-010
NEW-CAR GET-READY MECHANIC 806.361-026
oiler 915.687-018
PAINTER APPRENTICE, TRANSPORTATION EQUIPMENT 845.381-010
Painter, Automotive 845.381-014
PAINTER HELPER, AUTOMOTIVE 845.684-014
PAINTER, TRANSPORTATION EQUIPMENT 845.381-014
parking attendant 915.473-010
PARKING-LOT ATTENDANT 915.473-010
parking-lot chauffeur 915.473-010
PARKING LOT SIGNALER 915.667-014
parking-station attendant 915.473-010
passenger-car-upholsterer apprentice 780.381-014
patcher 750.684-038
PROPULSION-MOTOR-AND-GENERATOR REPAIRER 721.281-026
radiator repairer 620.381-010
Radio Installer, Automobile 806.684-038
retreader 750.684-022
Riveter, Automobile Brakes 620.685-010
rust proofer 843.684-014
SAFETY INSPECTOR, TRUCK 919.687-018
sales associate, garage service 620.261-018
sander 845.684-014
SERVICE MANAGER 185.167-058
Service-Parts Driver 906.683-022
service-station attendant 915.467-010
service writer 620.261-018
SHOP ESTIMATOR 807.267-010
spotter 915.473-010
spring-fitter helper 620.584-010
spring-maker helper, hand 620.584-010
SPRING REPAIRER, HAND 619.380-018
SPRING-REPAIRER HELPER, HAND 620.584-010
SQUEAK, RATTLE, AND LEAK REPAIRER 620.364-010
station attendant 915.477-010
STEAM CLEANER 915.687-026
Storage-Garage Attendant 915.473-010
SUPERVISOR, AUTOMOBILE BODY REPAIR 807.137-010
SUPERVISOR, ENDLESS TRACK VEHICLE 620.131-010
SUPERVISOR, GARAGE 620.131-014
SUPERVISOR, MOTORCYCLE REPAIR SHOP 620.131-018
SUPERVISOR, PARKING LOT 915.133-010
TAXIMETER REPAIRER 710.281-038
tear-up worker, spring 620.584-010
tire-and-tube repairer 915.684-010
tire-and-tube servicer 915.684-010
TIRE BUFFER 690.685-422
TIRE BUILDER 750.684-022
Tire Changer 915.684-010
Tire Changer, Road Service 915.684-010
tire fixer 915.684-010
TIRE GROOVER 750.684-026
TIRE INSPECTOR 750.687-018
tire rebuilder 750.684-022
TIRE RECAPPER 750.685-014
TIRE-REGROOVING-MACHINE OPERATOR 690.662-010
TIRE REPAIRER 915.684-010
tire servicer 915.684-010
TIRE-SERVICE SUPERVISOR 915.134-010
TIRE VULCANIZER 750.684-038
Tire Wrapper 920.685-078
top-and-seat-cover fitter 780.384-010
Top Installer 780.381-010
top-lift and automatic-window repairer 825.381-014
touch-up finisher, metal 807.381-010
tow-car driver 919.663-026
TOW-TRUCK OPERATOR 919.663-026
TRACTOR MECHANIC 620.281-058
TRACTOR-MECHANIC HELPER 620.684-030
TRAILER-RENTAL CLERK 295.467-022
TRANSMISSION MECHANIC 620.281-062
transportation-department supervisor 620.131-014
TRUCK-BODY BUILDER 807.281-010
Truck Mechanic 620.261-010
Truck-Mechanic Helper 620.684-014
Truck-Rental Clerk 295.467-022
Truck-Repair-Service Estimator 620.261-018
TUNE-UP MECHANIC 620.281-066
UNDERCOATER 843.684-014
upholsterer apprentice 780.381-014
VEHICLE-FUEL-SYSTEMS CONVERTER 620.281-070
washer driver 919.663-010
wheel-alignment mechanic 620.281-038
WHEELWRIGHT 706.381-046
windshield installer 865.684-010
Windshield-Wiper Repairer 825.281-022
Work Coordinator, Tower Control 221.167-018
wrecker operator 919.663-026

bakery products—BAKERY PRODUCTS INDUSTRY: This designation includes occupations concerned with the production and sale of breads, biscuits, crackers, cakes, pies, pastries, and other bakery products as carried on in commercial and manufacturing bakeries. Sales occupations found in establishments with no manufacturing are included in the RETAIL TRADE INDUSTRY (retail trade).

BAKER 526.381-010
BAKER APPRENTICE 526.381-014
baker, bench 520.384-010
baker, doughnut 526.684-010
BAKER HELPER 526.686-010
baker operator, automatic 526.685-070
BAKERY-MACHINE MECHANIC 629.281-010
BAKERY-MACHINE-MECHANIC SUPERVISOR 629.131-010
BAKERY SUPERVISOR 526.131-010
Bakery Worker 920.587-018
BAKERY WORKER, CONVEYOR LINE 524.687-022
Band-Saw Operator, Cake Cutting 521.685-302
Bar-Machine Operator 520.682-034
batter depositor 526.682-010
BATTER MIXER 520.685-010
Batter-Mixer Helper 526.686-010
BATTER SCALER 526.682-010
BENCH HAND 520.384-010
Bench-Hand Helper 526.686-010
bench hand, machine 520.685-214
BLENDER 520.585-010
bolter 520.585-010
Bread-Dough Mixer 520.685-234
Bread Icer 524.684-022
Bread Icer, Machine 524.685-034
Bread-Pan Greaser 526.685-034
Bread Slicer, Machine 521.685-302
Bread Supervisor 526.131-010
Bread-Wrapping-Machine Feeder 920.685-078
BROTH MIXER 520.585-014
broth setter 520.585-014
Cake-Batter Mixer 520.685-010
Cake-Batter Scaler 526.682-010
Cake Cutter, Machine 521.685-302
CAKE DECORATOR 524.381-010
Cake Icer 524.684-022
Cake Icer, Machine 524.685-034
Cake-Pan Greaser 526.685-034
Cake Supervisor 526.131-010
CHECKER, BAKERY PRODUCTS 222.487-010
chocolate-coating-machine operator 524.685-026
Chocolate-Machine Operator 524.382-014
chocolate maker 523.685-022
chocolate-mixer operator 523.685-022
CHOCOLATE TEMPERER 523.685-022
Cone Baker, Machine 526.685-066
control-panel operator 520.462-010
Conveyorized Oven Tender 526.685-070
Cooker, Pie Filling 520.685-114
Cookie Mixer 520.685-234

beverage

Cookie-Mixer Helper 526.686-010
CRACKER-AND-COOKIE-MACHINE OPERATOR 520.682-034
Cracker-And-Cookie-Machine-Operator Helper 526.686-010
Cracker-Dough Mixer 520.685-234
CRACKER SPRAYER 524.685-022
cruller maker 526.684-010
cruller maker, machine 526.682-022
decorator 524.684-022
DECORATOR 524.684-014
decorator, hand 524.684-014
depositing-machine operator 526.682-010
DEPOSITING-MACHINE OPERATOR 524.682-010
DESSERT-CUP-MACHINE FEEDER 520.686-014
divider 526.682-010
DIVIDING-MACHINE OPERATOR 520.685-086
Dividing-Machine-Operator Helper 526.686-010
Dog-Food Dough Mixer 520.685-234
DOUGH-BRAKE-MACHINE OPERATOR 520.685-090
DOUGH MIXER 520.685-234
Dough-Mixer Helper 526.686-010
DOUGH-MIXER OPERATOR 520.462-010
dough molder, hand 520.384-010
Doughnut-Batter Mixer 520.685-010
doughnut-cooking-machine operator 526.682-022
Doughnut-Dough Mixer 520.685-234
Doughnut Icer 524.684-022
Doughnut Icer, Machine 524.685-034
DOUGHNUT-MACHINE OPERATOR 526.682-022
Doughnut-Machine-Operator Helper 526.686-010
DOUGHNUT MAKER 526.684-010
Doughnut-Maker Helper, Hand 526.686-010
dough sheeter 520.685-214
Drop-Machine Operator 520.682-034
enrober 524.685-026
ENROBING-MACHINE OPERATOR 524.685-026
ENROBING-MACHINE OPERATOR 524.382-014
Fig-Bar-Machine Operator 520.682-034
filler mixer 520.685-114
filling-machine operator 524.682-010
FILLING MACHINE TENDER 524.685-030
finisher 524.684-022
finisher, machine 524.685-034
Flour-Blender Helper 526.686-010
flour mixer 520.585-010
Fortune Cookie Maker 526.685-070
fried-cake maker 526.682-022
froster 524.684-022
froster, machine 524.685-034
Fruit Mixer 520.685-114
GRAIN-WAFER-MACHINE OPERATOR 523.685-094
ICER, HAND 524.684-022
Icer Helper, Hand 526.686-010
ICER, MACHINE 524.685-034
icing-machine operator 524.685-034
ICING MIXER 520.685-114
icing spreader 524.684-022
ingredient mixer 529.684-014
INGREDIENT SCALER 529.684-014
Ingredient-Scaler Helper 526.686-010
LABORER, PIE BAKERY 529.686-054
machine captain 520.682-034
MANAGER, BAKERY 189.117-046
marshmallow-machine worker 524.682-010
Matzo-Forming-Machine Operator 520.682-034
mill operator 520.585-010
mixing-machine attendant 520.685-234
mixing-machine attendant 520.685-010
Molding-Machine Operator 520.685-086
Molding-Machine-Operator Helper 526.686-010
order filler, bakery products 222.487-010
ornamenter 524.684-014
OVEN OPERATOR, AUTOMATIC 526.685-070
OVEN TENDER 526.685-030
Oven Tender, Bagels 526.685-030
PAN GREASER, MACHINE 526.685-034
pastry decorator 524.381-010
Pastry Mixer 520.685-234
Peel Oven Tender 526.685-030
Pie Bottomer 526.685-038
Pie-Crimping-Machine Operator 526.685-038
Pie-Crust Mixer 520.685-234
Pie-Dough Roller 526.685-038
Pie Filler 526.685-038
Pie-Filling Mixer 520.685-114
Pie Icer 524.684-022
Pie Icer, Machine 524.685-034
PIE MAKER, MACHINE 526.685-038
Pie Topper 526.685-038
PRETZEL COOKER 526.685-054
Pretzel-Dough Mixer 520.685-234
Pretzel-Stick-Machine Operator 520.685-190
PRETZEL TWISTER 520.587-010
PRETZEL-TWISTING-MACHINE OPERATOR 520.685-190
QUALITY-CONTROL INSPECTOR 529.367-018
RACKER 524.687-018
Reel Oven Tender 526.685-070
roll-dough divider 520.685-086
Roll Icer 524.684-022
Roll Icer, Machine 524.685-034
roll-machine operator 520.685-086
Rotary-Machine Operator 520.682-034
Rotary-Peel Oven Tender 526.685-030
scaling-machine operator 526.682-010
SLICING-MACHINE OPERATOR 521.685-302
spreading-machine operator 524.682-010
Sticker 524.687-018
Sugar-Wafer-Machine Operator 526.685-066
Supervisor, Bakery Sanitation 529.137-014
Supervisor, Shipping 922.137-018
Sweet-Dough Mixer 520.685-234
SWEET-GOODS-MACHINE OPERATOR 520.685-214
TROLLEY OPERATOR 524.565-010
UNLEAVENED-DOUGH MIXER 520.685-226
Wafer-Batter Mixer 520.685-010
Wafer Cutter 521.685-302
WAFER-MACHINE OPERATOR 526.685-066
waffle baker 526.685-066
waffle-machine operator 526.685-066

beverage—BEVERAGE INDUSTRY: This designation includes occupations concerned with manufacturing beverages and related ingredients and byproducts. These include such products as malt, malt byproducts, malt beverages, wines, brandy, brandy spirits, wine blends, distilled and rectified liquors, blended cordials and alcoholic cocktails, bottled and canned soft drinks and carbonated waters, flavoring extracts and syrups, and drink powders and concentrates.

BARLEY STEEPER 522.685-114
Barrel Cutter 529.687-066
BARREL-DEDENTING-MACHINE OPERATOR 617.682-010
BARREL FILLER I 522.687-010
BARREL FILLER II 914.485-010
Barrel Roller 529.687-066
Barrel Scraper 529.687-066
beer-still runner compounder 522.382-026
beverage-inspection-machine tender 529.685-026
BIN CLEANER 529.687-014
blender 520.685-030
blending-kettle tender 520.685-030
BLENDING-TANK TENDER 520.685-030
BOTTLED-BEVERAGE INSPECTOR 529.685-026
BOTTLE GAUGER 529.587-010
Bottle-House Pumper 914.665-014
BOTTLE-HOUSE QUALITY-CONTROL TECHNICIAN 029.361-010
bottle inspector 529.685-026
Bottle-Label Inspector 920.687-042
BOTTLE PACKER 920.685-026
BOTTLING-LINE ATTENDANT 920.687-042
BREWERY CELLAR WORKER 522.685-014
BREWING DIRECTOR 183.167-010
brewing superintendent 183.167-010
Bung Remover 529.687-066
can-bander operator 920.685-042
Can-Filling-Room Sweeper 381.687-018
CAN INSPECTOR 920.687-050
carbonating-stone cleaner 529.687-190
CARBONATION EQUIPMENT TENDER 522.685-026
CARBONATION TESTER 522.587-010
CAR CHASER 910.167-010
CAR-DUMPER OPERATOR 921.662-010
CAR-DUMPER-OPERATOR HELPER 921.687-010
car spotter 910.167-010
Carton Repairer 529.687-066
car unloader 921.662-010
car-unloader helper 921.687-010
CASE-LOADER OPERATOR 920.685-042
caser 920.685-026
Cellar Pumper 914.665-014
CELLAR SUPERVISOR 529.131-010
cellar worker 914.665-014

Centrifuge Operator 521.685-118
Champagne Maker 183.161-014
checker 522.687-010
CHIP WASHER 522.686-010
CISTERN-ROOM OPERATOR 520.382-010
cistern-room working supervisor 520.382-010
CLARIFIER 521.685-058
cloth changer 529.667-014
COMPOUNDER, FLAVORINGS 529.381-010
content checker 522.667-010
cook 526.381-026
cooker 522.382-022
cooker 526.381-026
cooker, syrup 520.485-026
COOK, KETTLE 526.381-026
cook, pressure 526.381-026
COOK, SYRUP MAKER 526.682-018
cooler operator 523.685-042
COOLING-MACHINE OPERATOR 523.685-042
corker 920.665-014
couper 764.687-090
CRUSHING-MACHINE OPERATOR 521.685-094
Culture-Room Worker 522.662-010
cutting-machine operator 640.565-010
DE-ALCOHOLIZER 522.685-042
dedenter 617.682-010
DEFLECTOR OPERATOR 529.687-058
DEOILING-MACHINE AND PASTEURIZING-MACHINE OPERATOR 529.685-094
DISTILLERY WORKER, GENERAL 529.687-066
DISTILLING-DEPARTMENT SUPERVISOR 522.131-010
dropper 529.685-246
DROPPER, FERMENTING CELLAR 522.685-054
dropper, tank storage 529.685-246
Drum Cleaner 529.687-066
Drum Filler 522.687-010
DRUM LOADER AND UNLOADER 522.685-058
Drum Sealer 529.687-066
Drum Stenciler 920.687-178
dumper 921.662-010
Dumper 529.687-066
enologist 183.161-014
EXTRACTOR OPERATOR 521.685-118
FERMENTATION OPERATOR 522.382-014
Fermenter, Champagne 522.685-062
FERMENTER, WINE 522.685-062
filler 920.665-014
FILTER CHANGER 521.687-050
filter-machine operator 521.582-010
filter operator 522.382-018
FILTER OPERATOR 521.685-126
filter-press operator 521.565-014
FILTER-PRESS TENDER 521.685-130
FILTER-PRESS TENDER 599.685-042
filter-pulp washer 599.685-038
FILTER-SCREEN CLEANER 521.687-054
FILTER WASHER AND PRESSER 599.685-038
FLAVORING OIL FILTERER 521.685-382
FRUIT-PRESS OPERATOR 521.685-146
GAUGER 529.387-022
gauger 529.587-010
Gelatin-Powder Mixer 520.685-146
GENERAL SUPERVISOR 183.167-022
GERMINATION WORKER 522.585-014
Gin Inspector 522.667-010
GLASS-LINED TANK REPAIRER 779.684-026
Grain-Cleaner-And-Transfer Operator 521.362-014
GRAIN DRIER 523.685-086
GRAIN ELEVATOR CLERK 222.567-010
Grain Miller 521.362-014
grain-miller helper 521.687-082
grain weigher 222.567-010
grape crusher 521.685-094
hop separator 521.685-178
HOP STRAINER 521.685-178
HOP WEIGHER 520.687-042
HOT-WORT SETTLER 521.685-186
ION EXCHANGE OPERATOR 521.685-190
KETTLE OPERATOR 522.682-010
KETTLE TENDER 526.665-014
KILN LOADER 523.687-018
kiln loader 921.682-010
KILN OPERATOR, MALT HOUSE 523.682-030
LABEL REMOVER 920.687-106
Lautertub Tender 521.565-014
LEAK HUNTER 764.687-090
LIGHTOUT EXAMINER 529.687-146
lights inspector 529.687-058
Line Cleaner 599.684-010
line operator 920.687-042
LIQUOR BLENDER 522.382-018
LIQUOR INSPECTOR 522.667-010
LOADER, MALT HOUSE 921.682-010
MALT-HOUSE OPERATOR 522.685-074
malt loader 921.682-010
MALT ROASTER 526.682-026
MALT-SPECIFICATIONS-CONTROL ASSISTANT 022.261-014
MASHER 522.482-010
MASH-FILTER-CLOTH CHANGER 529.667-014
MASH-FILTER OPERATOR 521.565-014
mash-filter-press operator 521.565-014
MASH-TUB-COOKER OPERATOR 522.382-022
MILLER 521.585-014
MILLER, DISTILLERY 521.362-014
MILLER HELPER, DISTILLERY 521.687-082
MIXER OPERATOR 520.685-146
PAPER CUTTER 640.565-010
paper-cutting-machine operator 640.565-010
PASTEURIZER 523.685-110
patcher 764.687-090
Press Operator 521.685-118
PUMPER, BREWERY 914.665-014
quality-control technician 029.361-010
QUALITY-CONTROL TECHNICIAN 529.367-022
racker 920.665-014
RACK-ROOM WORKER 920.665-014
RECEIVER, FERMENTING CELLARS 522.662-010
Rectifying Attendant 522.382-018
REPACK-ROOM WORKER 920.687-146
repairer 764.687-090
RETURNED-CASE INSPECTOR 929.687-038
Revenue-Stamp Cutter 640.565-010
SAMPLER 529.687-178
sampler, pickup 529.687-178
sauce maker 520.485-026
seam checker 920.687-050
SILICA-FILTER OPERATOR 521.582-010
six-pack-loader operator 920.685-042
six-pack packer 920.685-042
soaker-soda worker 529.685-226
SODA-ROOM OPERATOR 559.682-046
soda worker 529.685-226
Soft-Drink-Powder Mixer 520.685-146
spent-grain dryer 523.685-086
stacker 920.665-014
stamp cutter 640.565-010
stamper 920.665-014
Stamp Presser 920.687-042
STEAMER 529.685-226
steeper 522.685-114
STERILIZER 920.687-182
sterilizer operator 920.687-182
Still Operator, Brandy 522.382-026
Still Operator, Gin 522.382-026
STILL OPERATOR I 522.382-030
STILL OPERATOR II 522.382-026
Still Operator, Whisky 522.382-026
still runner 522.382-026
STONE CLEANER 529.687-190
Strip-Stamp Straightener 920.687-042
subwarehouse supervisor 520.382-010
SUPERINTENDENT, GRAIN ELEVATOR 529.137-022
SUPERVISOR, BOTTLE-HOUSE CLEANERS 529.132-022
SUPERVISOR, BREW HOUSE 529.132-026
SUPERVISOR, CARTON AND CAN SUPPLY 920.132-014
Supervisor, Case Loading 922.137-018
SUPERVISOR, CELLARS 914.132-018
SUPERVISOR, CLEANING 699.137-010
SUPERVISOR, FERMENTING CELLARS 529.132-058
supervisor, finishing department 529.132-098
SUPERVISOR, GRAIN AND YEAST PLANTS 529.132-062
SUPERVISOR, MALT HOUSE 522.132-010
Supervisor, Shipping Room 922.137-018
SUPERVISOR, SOAKERS 529.132-082
SUPERVISOR, TANK STORAGE 529.132-098
SUPERVISOR, WASH HOUSE 529.132-106
SUPERVISOR, YARD 529.137-070
Syrup Blender 520.485-026
Syrup Filterer 520.485-026
SYRUP MAKER 520.485-026

TANK PUMPER, PANELBOARD 529.685-242
tank refinisher 779.684-026
TAPPER 529.685-246
Vinegar Maker 183.161-014
WASH-HOUSE WORKER 529.685-254
Whisky Filterer 522.382-018
Whisky Inspector 522.667-010
Whisky-Proof Reader 522.382-018
Whisky-Regauger 522.382-018
wine-bottle inspector 529.687-058
WINE MAKER 183.161-014
WINE PASTEURIZER 523.685-126
WINERY WORKER 521.685-370
Wort Pumper 914.665-014
YEAST-CULTURE DEVELOPER 022.381-010
YEAST DISTILLER 522.362-010
yeast maker 522.362-010
Yeast Pumper 914.665-014
YEAST PUSHER 522.665-014

boot & shoe—BOOT AND SHOE INDUSTRY: This designation includes occupations concerned with manufacturing and repair of boots, leggings, moccasins, sandals, shoes, slippers, and allied footwear, made of canvas and other textile fabrics, man-made materials, rubber, and leather. The designation also includes the manufacture of leather soles, inner soles, and boot and shoe cutstock and findings, such as leather welting, shanks, heel and toe caps, leather shoe laces, and finished wooden heels.

anchor tacker 690.685-162
anchor-tack puller 788.687-146
ANKLE-PATCH MOLDER 692.682-010
Antiquer 788.684-066
antisqueak applier 788.687-010
antisqueak chalker 788.687-010
ANTISQUEAK FILLER 788.687-010
apex trimmer 690.685-150
Apron Trimmer 690.685-434
archer 690.682-070
Arch-Pad Cementer 788.687-030
ASSEMBLER FOR PULLER-OVER, HAND 788.684-010
ASSEMBLER FOR PULLER-OVER, MACHINE 690.685-010
assembler, rubber footwear 753.687-026
ASSEMBLER, SANDAL PARTS 788.684-014
attacher 690.685-074
Back-Seam Stitcher 690.682-082
back-shoe operator 788.667-010
BACK-SHOE WORKER 221.387-010
Backstay Stitcher 690.682-082
BACK-STRIP-MACHINE OPERATOR 690.685-018
back tacker 788.684-010
ball laster 690.685-186
Ball-Point Splitter 585.685-114
Band Splitter 585.685-114
Barrer And Tacker 690.682-082
beater 690.685-074
beater-out, leveling machine 690.685-382
BED LASTER 690.682-018
beveler 690.685-378
Binding Cementer, French Cord 690.686-018
BINDING FOLDER, MACHINE 788.684-018
Binding Nicker 690.685-298
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STITCHER, TAPE-CONTROLLED MACHINE 690.685-494
Stitcher, Utility 690.682-082
stitch fudger 690.685-482

stitching-machine operator 690.682-082
stitch marker 690.685-282
Stitch Separator 690.685-482
stitch wheeler 690.685-482
STOCK FITTER 788.685-018
STOCKLAYER 753.687-042
Strap Stitcher 690.682-082
string cutter 788.687-074
STRING LASTER 690.685-406
stripper 585.685-114
STRIPPING CUTTER AND WINDER 585.685-118
STRIP PRESSER 583.685-118
sueding-and-buffing-machine operator 753.684-010
SUPERVISOR 788.131-010
SUPERVISOR, PACKING 788.137-010
SUPERVISOR, PLASTICS PRODUCTION 556.130-010
TABLE WORKER 788.687-142
tacker 690.685-162
TACK PULLER 788.687-146
TACK PULLER, MACHINE 690.685-410
taper 690.685-414
taper 690.685-074
TAPER, MACHINE 690.685-414
Tape Stitcher 690.682-082
thermo-cementing-folder operator 690.685-070
THREAD LASTER 788.684-114
TICKET SCHEDULER 221.587-038
Tip Burnisher 690.685-058
tip cementer 788.685-014
TIP FINISHER 690.685-418
Tip Puncher 690.685-114
Tip Stitcher 690.682-082
toe and heel laster 690.682-018
TOE FORMER, STITCHDOWNS 690.685-426
TOE LASTER, AUTOMATIC 690.685-430
toe laster, automatic 690.685-426
Toe-Lining Closer 690.682-082
Toe Pounder 690.685-314
Toe Stapler 690.685-162
TOGGLE-PRESS FOLDER-AND-FEEDER 690.686-066
Tongue And Quarter Stitcher 690.682-082
Tongue-Lining Stitcher 690.682-082
TONGUE PRESSER 788.685-022
Tongue Stitcher 690.682-082
TOP FORMER 788.685-026
top ironer 788.685-026
Top-Lift Compressor 690.685-210
Top-Lift Cutter 699.682-022
Top-Lift Nailer 690.685-162
Top-Lift Scourer 690.685-046
Top-Lift Trimmer 690.685-434
topline-beading-machine tender 788.685-014
Toppiece Chopper 699.685-014
Toppiece Cutter 699.682-022
Top Stitcher 690.682-082
Top Taper, Machine 690.685-414
Top Trimmer I 690.685-434
Top Trimmer II 690.682-086
TREE DRILLER 788.684-118
treer 788.687-122
trimmer 690.685-434
trimmer and reinforcer 690.685-246
TRIMMER, HAND 788.687-150
TRIMMER, MACHINE I 690.685-434
TRIMMER, MACHINE II 690.682-086
Trimming Cutter, Machine 699.682-022
Tuck-And-Insole Cementer 690.686-018
Twin-Beam Clicker 699.682-022
Underlay Stitcher 690.682-082
uniformer 788.687-034
UPPER-AND-BOTTOM LACER, HAND 788.684-122
Upper Cutter, Machine 699.682-022
upper cutter-out 788.684-082
Upper Doubler 788.687-030
upper edger 690.685-138
Upper Inspector 788.384-010
upper-leather cutter 788.684-082
UPPER-LEATHER SORTER 788.387-010
Upper-Lining Cementer 690.686-018
upper marker 788.584-014
Upper Muller 788.687-090
upper shaper 788.685-026
upper stamper 690.685-398
Upper Stitcher 690.682-082
Upper Trimmer 690.685-434
vamp-and-whole-shoe cutter, hand 788.684-082
VAMP CREASER 788.687-154
vamper 690.682-078
Vamp Marker 690.685-282
Vamp Presser 690.685-350
Vamp Stitcher 690.682-082
VAMP-STRAP IRONER 788.687-158
Vamp Wetter 788.687-090
VULCANIZER 690.685-462
VULCANIZING-PRESS OPERATOR 690.685-466
Waterproofer 741.687-018
weaver 788.684-070
WELT BEATER 690.685-470
WELT-BUTTER, HAND 788.687-162
WELT BUTTER, MACHINE 690.685-474
WELT CUTTER 690.685-478
welter 690.682-078
Welting Stitcher, Front 690.682-082
welt-insole channeler 690.685-086
welt maker 690.685-478
Welt Rougher 690.685-046
Welt-Sole Layer 690.685-074
Welt-Strip Cementer, Machine 690.686-018
Welt Treater 788.687-090
welt trimmer 690.685-238
WELT WHEELER 690.685-482
White-Shoe Examiner 788.384-010
WHITE-SHOE RAGGER 788.687-166
WIDTH STRIPPER 690.685-486
Wooden-Heel Beveler 690.685-198
WOOD-HEEL BACK-LINER 662.685-042
Wood-Heel Cementer 788.684-126
wood-heel cementer 788.684-058
Wood-Heel-Cover Ironer 788.684-130
WOOD-HEEL FINISHER 788.684-126
wood-heel fitter, machine 690.682-046
Wood-Heel-Flap Inserter 788.684-126
Wood-Heel-Flap Rubber 788.684-126
Wood-Heel-Flap Trimmer 788.684-126
wrapper laster 690.685-174
Wrapper Stitcher 690.682-082
WRAP TURNER 788.685-030
WRINKLE CHASER 788.684-130
Zig-Zag Stitcher 690.682-082

brick & tile—BRICK, TILE, AND NONCLAY REFRACTORIES INDUSTRY: This designation includes occupations concerned with manufacturing building and paving brick; architectural terra cotta; floor, roofing, ceramic, mosaic, enamel, faience, and wall tile; sewer pipe and drain tile; crucibles; fire brick and fire clay products; and other clay and nonclay refractories. Occupations concerned with manufacturing pottery and porcelain ware are included in the POTTERY AND PORCELAIN WARE INDUSTRY (pottery & porc.).

Adobe Maker 575.684-042
auger-machine offbearer 579.686-026
Auger-Press Operator 575.382-010
AUGER PRESS OPERATOR, MANUAL CONTROL 575.462-010
baker 573.682-010
BATCH MIXER 570.687-010
Bisque-Tile Burner 573.382-018
Blender Operator 570.382-010
blunger-machine operator 570.482-010
branch maker 862.684-010
BRICK-AND-TILE-MAKING-MACHINE OPERATOR 575.382-010
brick burner, head 573.132-010
Brick-Kiln Burner 573.682-010
BRICKLAYER 861.381-014
Brick-Molder, Hand 575.684-042
BRICK SETTER OPERATOR 579.685-058
Brick Sorter 573.687-034
BRICK TESTER 579.384-010
BRICK UNLOADER TENDER 579.685-062
BRIQUETTE OPERATOR 579.685-066
burner 573.682-010
BURNER 573.685-038
Burner, Hearth 573.685-038
Burner, Shaft 573.685-038
BURNING SUPERVISOR 573.132-010
CARPENTER, MOLD 860.381-034
castables worker 579.684-026
CASTER 579.684-026
Ceramic Saw, Tender 677.685-034
Ceramic Sprayer 741.684-026
Clay-Dry-Press Helper 575.686-010

Clay-Dry-Press-Mixer Operator 570.382-010
Clay-Dry-Press Operator 575.662-010
CLAY MAKER 570.482-010
CLAY MIXER 570.685-014
clay mixer 570.482-010
clay puddler 570.687-010
CLAY-STAIN MIXER 773.487-010
clay temperer 570.382-010
clay washer 570.482-010
clean-up worker 579.667-010
COLORER 773.684-010
corrugator 779.684-042
Crusher Operator 570.382-010
CUTTER 579.684-030
Cutter Operator, Brick 575.382-010
Cutter Operator, Tile 575.382-010
decorator 773.381-010
DIE TRIPPER 575.665-014
Drain-Tile-Press Operator 575.462-010
drawer 929.687-014
drier operator 573.362-010
Dry-Kiln Burner 573.682-010
DRY-KILN OPERATOR 573.362-010
DRY-KILN OPERATOR HELPER 573.687-014
dry-mill operator 570.665-010
DRY-PAN CHARGER 570.683-010
dry-pan feeder 570.683-010
DRY-PAN OPERATOR 570.665-010
DRY-PRESS OPERATOR 575.662-010
DRY-PRESS-OPERATOR HELPER 575.686-010
FETTLER 779.684-018
Field-Kiln Burner 573.682-010
finisher 779.684-042
fitting maker 862.684-010
Flue-Tile-Press Operator 575.462-010
frit burner 579.685-014
frit maker 570.685-098
FRIT-MIXER-AND-BURNER 579.685-014
GLAZE HANDLER 571.685-014
GLAZE MAKER 570.685-098
GLAZE SUPERVISOR 574.130-010
Glost-Tile Burner 573.382-018
glost-tile shader 574.367-010
glost tile sorter 573.687-038
greaser 575.665-014
green-pipe inspector 575.687-030
HACKER 573.686-022
hand decorator 773.684-010
inspector 573.687-034
JUNCTION MAKER 862.684-010
KILN BURNER 573.682-010
KILN-BURNER HELPER 573.687-026
Kiln Car Unloader 929.687-030
KILN-DOOR BUILDER 573.684-010
KILN DRAWER 929.687-014
Kiln Furniture, Saw Tender 677.685-034
kiln repairer 861.381-014
kiln setter 573.684-014
kiln-setter helper 573.687-030
kiln stacker 573.684-014
LABORER, GENERAL 579.667-010
MILLING SUPERVISOR 570.132-014
MILL OPERATOR 570.382-010
MIXER 579.685-074
Mixer Operator 570.382-010
MODEL-AND-MOLD MAKER 777.381-014
MODELER 777.081-010
MOLDER, HAND 575.684-042
molder, machine 575.662-010
mold-forms builder 860.381-034
MOLD MAKER, TERRA COTTA 575.684-038
OFFBEARER, SEWER PIPE 579.686-026
PASTER 773.684-014
PASTER SUPERVISOR 773.131-010
PASTING INSPECTOR 773.687-010
patternmaker 860.381-034
PIPE FINISHER 779.684-042
Pipe-Fittings Molder 575.684-042
PLASTIC-JOINT MAKER 590.687-014
Pot Maker 575.684-042
PRESS OFFBEARER 579.686-030
PRESS OPERATOR 575.682-018
PRESS-PIPE INSPECTOR 575.687-030
PRESS SUPERVISOR 575.130-010
pugger helper 570.685-074
Pug Mill Operator 575.382-010
PUG-MILL-OPERATOR HELPER 570.685-074
pulverizer 570.685-098
REFRACTORY-GRINDER OPERATOR 677.682-014
REPAIRER, KILN CAR 861.684-022
Retort-Kiln Burner 573.682-010
RETORT-OR-CONDENSER PRESS OPERATOR 575.382-026
Roofing-Tile Burner 573.682-010
Roofing-Tile Sorter 573.687-034
SAMPLE SAWYER 677.685-034
SAW OPERATOR 677.685-054
sealer and stripper 573.684-010
SETTER 573.684-014
SETTER HELPER 573.687-030
Sewer-Pipe-Press Operator 575.462-010
Sewer-Pipe Sorter 573.687-034
shade classifier 574.367-010
Shape-Brick Molder 575.684-042
Silica-Dry-Press Helper 575.686-010
Silica-Dry-Press Operator 575.662-010
Silica-Mixer Operator 570.382-010
slip maker 570.482-010
slip mixer 570.482-010
Soft-Mud Molder 575.684-042
SORTER 573.687-034
SORTING SUPERVISOR 920.137-014
SPRAY-DRIER OPERATOR 573.382-014
sprayer, automatic spray machine 574.682-014
SPRAY-MACHINE LOADER 574.686-010
SPRAY-MACHINE OPERATOR 574.682-014
stacker operator 579.685-058
Strapping-Machine Tender 920.685-106
SUPERVISOR 570.132-022
SUPERVISOR, EPOXY FABRICATION 579.134-014
SUPERVISOR, PIPE JOINTS 590.134-010
SUPERVISOR, REFRACTORY PRODUCTS 579.134-018
TABLE-TOP TILE SETTER 763.684-074
TERRAZZO-TILE MAKER 575.684-046
tile classifier 574.367-010
TILE DECORATOR 773.381-010
tile edger 779.684-018
TILE GRINDER 679.685-022
Tile-Molder, Hand 575.684-042
tile paster 773.684-014
TILE SHADER 574.367-010
TILE SORTER 573.687-038
Tile Sprayer 741.687-018
top-tile decorator 773.684-010
TRANSFER-CAR OPERATOR 921.683-078
TUNNEL-KILN OPERATOR 573.382-018
Tunnel-Kiln Repairer 861.381-014
turner 579.686-026
wet mixer 570.482-010
yard pipe grader 573.687-034
yard worker .....

build. mat., nec—BUILDING MATERIALS INDUSTRY, NOT ELSEWHERE CLASSIFIED: This designation includes occupations concerned with manufacturing building materials not elsewhere classified, such as asphalt and tar paving mixtures, paving blocks made of asphalt creosoted wood, asphalt and other saturated felts in roll or shingle form, roofing cements and coatings, and various compositions of asphalt or tar with other materials. Excluded are occupations concerned with manufacturing material such as aluminum, wood, asbestos, and slate roofing; nails and spikes; plywood, hardboard, plasterboard, and other paneling; dimensional lumber; brick, tile, concrete, stone, and other masonry materials; wallpaper; paint and varnish; flat glass; aluminum and wood siding; and electrical and plumbing supplies. Occupations concerned with the production of mineral wood and fiberglass insulation are includedin the ABRASIVE, ASBESTOS, AND MISCELLANEOUS NONMETALLIC MINERAL PRODUCTS INDUSTRY (nonmet. min.).

blender 570.685-094
Coater, Asphalt 554.682-022
Coater, Slate 554.682-022
dry-talc racker 549.686-014
DUST BOX WORKER 574.667-010
FELT HANGER 549.686-014
INSPECTOR 549.367-010
mixer 550.382-030
MIXER HELPER 550.686-026
mixer helper 550.686-038
REELER 549.685-022
roll winder 549.685-022
ROOF-CEMENT-AND-PAINT MAKER 550.382-030

business ser.

ROOF-CEMENT-AND-PAINT-MAKER HELPER 550.686-038
ROOFING-MACHINE OPERATOR 554.682-022
safety-sealer 550.686-026
SATURATOR TENDER 582.685-118
Shingle-Machine Supervisor 590.130-018
SLATE MIXER 570.685-094
STILL OPERATOR 543.682-026
SUPERVISOR, ROOFING PLANT 590.130-018
winder operator 549.685-022

business ser.—BUSINESS SERVICES: This designation includes occupations concerned with rendering services for other types of business organizations or individuals. Occupations that occur in business service establishments but also occur in other industries are excluded. Typical of the establishments in which business service occupations exist are advertising agencies, termite extermination agencies, private employment agencies, news syndicates, auctioneers' establishments, coin-machine rental agencies, armored car services, detective agencies, and bottle exchanges. Occupations concerned with personal services, including repair of personal effects, are included in PERSONAL SERVICE (personal ser.). Repairer occupations that have no other specific identification are included in ANY INDUSTRY (any industry).

ACCOUNT EXECUTIVE 164.167-010
ADVERTISING CLERK 247.387-010
Advertising-Display Rotator 869.684-054
air deodorizer servicer 389.687-010
AIRLINE-RADIO OPERATOR 193.262-010
AIRLINE-RADIO OPERATOR, CHIEF 193.162-022
Airplane-Patrol Pilot 196.263-014
AIRPLANE PILOT, PHOTOGRAMMETRY 196.263-018
AIR PURIFIER SERVICER 389.687-010
ALARM INVESTIGATOR 376.367-010
Amusement-Game Machine Coin Collector 292.483-010
APPRAISER, AUTOMOBILE DAMAGE 241.267-014
armed guard 376.367-010
ARMORED-CAR GUARD 372.567-010
ARMORED-CAR GUARD AND DRIVER 372.563-010
armored-car messenger 372.567-010
armored-car messenger 372.563-010
audio-visual-equipment-rental clerk 295.367-018
author's agent 191.117-034
automobile-damage appraiser 241.267-014
Automobile-Insurance-Claim Adjuster 241.217-010
Automobile-Insurance-Claim Examiner 241.267-018
bail bonding agent 186.267-010
BILLPOSTER 841.684-010
BONDING AGENT 186.267-010
burglar-alarm installer 822.361-018
burglar-alarm installer and servicer 822.361-022
burglar-alarm-repairer helper 822.684-014
burglar-alarm superintendent 822.131-022
business investor 189.157-010
BUSINESS-OPPORTUNITY-AND-PROPERTY-INVESTMENT BROKER 189.157-010
CALL-OUT OPERATOR 237.367-014
cashier, check-cashing agency 211.462-026
CHECK CASHIER 211.462-026
CHECKER, DUMP GROUNDS 219.367-010
CHIMNEY REPAIRER 899.364-010
CLAIM ADJUSTER 241.217-010
CLAIM EXAMINER 241.267-018
clipping marker 249.387-022
COACH DRIVER 349.677-014
COATER 503.685-010
coin-box collector 292.687-010
COIN COLLECTOR 292.483-010
COIN-MACHINE COLLECTOR 292.687-010
Construction-Machinery-And-Equipment-Rental Clerk 295.467-022
Credit Reporter 241.267-030
CREDIT REPORTING CLERK 203.362-014
crt operator 203.362-014
CUTTER-AND-PASTER, PRESS CLIPPINGS 249.587-014
detective, private eye 376.267-018
DIGITIZER OPERATOR 213.582-010
director of flight operations 184.167-026
director of photography 184.167-026
DIRECTOR, PHOTOGRAMMETRY FLIGHT OPERATIONS 184.167-026
DISPATCHER, SECURITY GUARD 372.167-010
distribution manager 163.267-010
DOCUMENT PREPARER, MICROFILMING 249.587-018
doorshaker 372.667-038
electric-sewer-cleaning-machine operator 899.664-014
estimator, automobile damage 241.267-014
EXTERMINATOR 389.684-010
EXTERMINATOR HELPER, TERMITE 383.687-010
EXTERMINATOR, TERMITE 383.364-010
Farm-Machinery-And-Equipment-Rental Clerk 295.467-022
Fidelity-And-Surety-Bonds-Claim Adjuster 241.217-010
FIELD REPRESENTATIVE 163.267-010
film booker 295.367-018
FILM-RENTAL CLERK 295.367-018
Fire-Insurance-Claim Adjuster 241.217-010
Fire-Insurance-Claim Examiner 241.267-018
FREIGHT-TRAFFIC CONSULTANT 184.267-010
FUMIGATOR 383.361-010
GOODWILL AMBASSADOR 293.357-018
guard 372.667-038
HOSPITAL-TELEVISION-RENTAL CLERK 295.467-018
income-tax-return preparer 219.362-070
installer 822.361-018
insurance adjustor 241.217-010
insurance-claim approver 241.267-018
insurance-claim auditor 241.267-018
insurance-claim representative 241.217-010
insurance investigator 241.217-010
interceptor operator 235.662-026
Inventory Transcriber 216.482-022
investigator 376.267-022
investigator operator 376.367-010
INVESTIGATOR, PRIVATE 376.267-018
Jukebox Coin Collector 292.483-010
Juke-Box Servicer 639.281-014
LAY-OUT FORMER 970.381-018
LEASING AGENT, OUTDOOR ADVERTISING 254.357-010
LITERARY AGENT 191.117-034
MANAGER, ADVERTISING AGENCY 164.117-014
MANAGER, ARMORED TRANSPORT SERVICE 372.167-022
MANAGER, CUSTOMER SERVICES 187.167-082
MANAGER, INTERNAL SECURITY 376.137-010
MANAGER, PROFESSIONAL EQUIPMENT SALES-AND-SERVICE 185.167-042
MANAGER, TEXTILE CONVERSION 185.167-050
MANAGER, TRAVEL AGENCY 187.167-158
MARINE-CARGO SURVEYOR 168.267-094
Marine-Insurance-Claim Adjuster 241.217-010
Marine-Insurance-Claim Examiner 241.267-018
MEDIA CLERK 247.382-010
MERCHANT PATROLLER 372.667-038
MICROFICHE DUPLICATOR 976.381-014
MICROFILM-CAMERA OPERATOR 976.682-022
MICROFILM PROCESSOR 976.385-010
Motor-Vehicle-Escort Driver 906.683-022
Parking-Meter-Coin Collector 292.687-010
pay-station collector 292.687-010
pest control worker 389.684-010
PETROLEUM INSPECTOR 222.367-046
PETROLEUM-INSPECTOR SUPERVISOR 222.137-026
phone-book deliverer 230.667-014
Pinball-Machine Repairer 639.281-014
press reader 249.387-022
press-service reader 249.387-022
PRICER, MESSAGE AND DELIVERY SERVICE 214.467-014
PROCESS SERVER 249.367-062
property investor 189.157-010
PROTECTIVE-SIGNAL INSTALLER 822.361-018
PROTECTIVE-SIGNAL-INSTALLER HELPER 822.664-010
PROTECTIVE-SIGNAL REPAIRER 822.361-022
PROTECTIVE-SIGNAL-REPAIRER HELPER 822.684-014
PROTECTIVE-SIGNAL SUPERINTENDENT 822.131-022
READER 249.387-022
rental clerk, tool-and-equipment 295.357-014
RENTAL MANAGER, PUBLIC EVENTS FACILITIES 186.117-062
Rodent Exterminator 389.684-010
route driver, coin machines 292.483-010
SAFE-AND-VAULT SERVICE MECHANIC 869.381-022
safe repairer 869.381-022
SALES AGENT, BUSINESS SERVICES 251.357-010
sales agent, credit services 250.357-026
sales agent, exterminating service 251.357-018
SALES AGENT, FINANCIAL-REPORT SERVICE 250.357-026
SALES AGENT, PEST CONTROL SERVICE 251.357-018
Sales Agent, Protective Service 251.357-010
SALES AGENT, PSYCHOLOGICAL TESTS AND INDUSTRIAL RELATIONS 251.257-014
Sales Agent, Trading Stamps 251.357-010
SALES REPRESENTATIVE, AUTOMOTIVE-LEASING 273.357-014
SALES REPRESENTATIVE, DATA PROCESSING SERVICES 251.157-014

SALES REPRESENTATIVE, FRANCHISE 251.357-022
SALES REPRESENTATIVE, GRAPHIC ART 254.251-010
SALES REPRESENTATIVE, HERBICIDE SERVICE 251.357-026
SALES REPRESENTATIVE, SECURITY SYSTEMS 259.257-022
SALES REPRESENTATIVE, WEATHER-FORECASTING SERVICE 259.357-030
security agent 376.367-010
SECURITY CONSULTANT 189.167-054
security guard 372.667-038
senior radio operator 193.162-022
service auditor 376.267-022
servicer, coin machines 292.483-010
SEWER-PIPE CLEANER 899.664-014
shopping inspector 376.267-022
SHOPPING INVESTIGATOR 376.267-022
SINGING MESSENGER 230.647-010
spotter 376.267-022
STORAGE-FACILITY RENTAL CLERK 295.367-026
SUPERVISOR, ADVERTISING-MATERIAL DISTRIBUTORS 230.137-010
SUPERVISOR, BILLPOSTING 841.137-010
SUPERVISOR, EXTERMINATION 389.134-010
SUPERVISOR, MICROFILM DUPLICATING UNIT 976.131-018
SUPERVISOR OF SALES 185.157-014
SUPERVISOR, PROTECTIVE-SIGNAL OPERATIONS 379.137-022
SUPERVISOR, SOUND TECHNICIAN 823.131-026
Supervisor, Telephone-Answering-Service 235.137-010
SUPERVISOR, WATER SOFTENER SERVICE 862.134-014
TANK CALIBRATOR 229.387-014
TARIFF PUBLISHING AGENT 184.167-250
tax form preparer 219.362-070
TAX PREPARER 219.362-070
tearer, press clipping 249.587-014
TELEPHONE-ANSWERING-SERVICE OPERATOR 235.662-026
TELEPHONE-DIRECTORY DELIVERER 230.667-014
TELEPHONE-DIRECTORY-DISTRIBUTOR DRIVER 906.683-018
telephone-interceptor operator 235.662-026
termite treater 383.364-010
termite-treater helper 383.687-010
TOBACCO-WAREHOUSE AGENT 259.357-038
TOOL-AND-EQUIPMENT-RENTAL CLERK 295.357-014
TOWEL-CABINET REPAIRER 709.364-014
TRAFFIC CLERK 221.367-078
transportation consultant 184.267-010
TRAVEL AGENT 252.152-010
travel counselor 252.152-010
trimmer, press clippings 249.587-014
undercover agent 376.267-018
undercover operator 376.267-018
VAULT CASHIER 222.137-050
vault mechanic 869.381-022
vault supervisor 222.137-050
VAULT WORKER 222.587-058
Vending-Machine Coin Collector 292.483-010
vermin exterminator 389.684-010
watch supervisor 193.162-022
WATER-SOFTENER SERVICER-AND-INSTALLER 862.684-034
welcome-wagon host/hostess 293.357-018
writer's representative 191.117-034

button & notion—BUTTON AND MISCELLANEOUS NOTIONS INDUSTRY: This designation includes occupations concerned with manufacturing buttons, parts of buttons, button blanks and molds, buckles, parts of buckles, and buckle blanks and molds, regardless of material; artificial trees and flowers; articles made from feathers and plumes; and needles, pins, hooks and eyes, and similar notions.

ACETONE-BUTTON PASTER 734.687-010
ARTIFICIAL-FLOWER MAKER 739.684-014
ASSEMBLER 734.687-018
assembler, slide fastener stringers 734.687-074
automatic-fancy-machine operator 690.685-062
belt back operator 690.685-194
Bottom-Stop Attacher 692.685-206
Box Attacher 692.685-206
Brancher 734.684-010
Bridge Attacher 692.685-206
buckle assembler 734.687-050
buckle coverer 734.687-050
BUCKLE-FRAME SHAPER 692.685-034
buckle gluer 734.687-050
BUCKLE INSPECTOR 734.687-026
BUCKLE SORTER 734.687-030
BUCKLE-WIRE INSERTER 734.687-034
button broacher 690.682-090
button cutter 734.384-010
BUTTON-CUTTING-MACHINE OPERATOR 734.384-010
BUTTON-DECORATING-MACHINE OPERATOR 690.685-062
BUTTON-FACING-MACHINE OPERATOR 690.685-066
BUTTON GRADER 734.687-038
BUTTON SPINDLER 740.687-010
CENTRIFUGAL-CASTING-MACHINE TENDER 556.385-010
chain-machine operator 692.685-270
chop-and-frame operator 692.685-034
classifying-machine operator 692.685-182
CONVEX-GRINDER OPERATOR 673.685-042
COVERED-BUCKLE ASSEMBLER 734.687-050
Curler 734.684-010
Cutter 734.684-010
DEBURRER 603.685-050
DEFINER 599.685-022
DRILLER, HAND 754.684-026
DYER 582.687-014
Feather Boner 734.684-010
FEATHER SHAPER 734.684-010
Feather Trimmer 734.684-010
Felt-Pad Cutter 781.687-030
flower arranger 739.684-014
foliage arranger 739.684-014
FORMING-MACHINE OPERATOR 559.665-022
GRINDER, HAND 734.687-054
GRINDING-MACHINE OPERATOR, AUTOMATIC 690.685-194
HOT-STONE SETTER 734.687-058
INSPECTOR-REPAIRER 734.684-018
INSPECTOR, SLIDE FASTENERS 734.687-062
IRONER 590.685-042
KICK PRESS SETTER 617.380-010
LACQUER-DIPPING-MACHINE OPERATOR 509.685-034
Lacquerer 599.686-014
leaf sticker 734.687-090
MACHINE SETTER 690.380-010
NEEDLE GRINDER 734.584-010
NEEDLE LEADER 502.684-022
NEEDLEMAKER 619.280-010
needle molder 502.684-022
NEEDLE POLISHER 705.684-046
PAINTER 740.381-018
Petal Cutter 781.687-030
Petal Shaper, Hand 739.684-014
Pin Attacher 692.685-206
PINKING-MACHINE OPERATOR 692.685-130
pinmaker 609.482-014
POLISHER 599.685-078
PREFORM-MACHINE OPERATOR 556.380-014
puller 734.687-074
Roping Machine Tender 739.685-058
SAFETY-PIN-ASSEMBLING-MACHINE OPERATOR 616.482-010
scoop-machine operator 692.685-270
SEPARATOR OPERATOR 692.685-166
Sewing-Machine Operator, Plastic Zipper 787.685-034
SEWING-MACHINE OPERATOR, ZIPPER 787.685-034
shaper 734.684-010
SHELL-GRADER 734.687-070
shell sorter 734.687-070
sizer 739.687-178
SLICING-MACHINE OPERATOR 692.685-174
SLIDE-FASTENER-CHAIN ASSEMBLER 734.687-074
SLIDE-FASTENER REPAIRER 734.684-022
SLIDER ASSEMBLER 734.687-078
slider attacher 734.687-078
SORTER 734.687-082
SORTER, MACHINE 692.685-182
spindler 740.687-010
SPLITTER, HAND 734.687-086
STAMPER 734.685-010
STARCHER 739.687-178
STICKER 734.687-090
STOP ATTACHER 692.685-206
STRAIGHT-PIN-MAKING-MACHINE OPERATOR 609.482-014
SUPERVISOR I 692.130-018
SUPERVISOR II 734.131-010
SUPERVISOR III 690.130-010
tool setter 617.380-010
Top-Stop Attacher 692.685-206
TRIMMING-MACHINE OPERATOR 690.682-090
TURNING-AND-BEADING-MACHINE OPERATOR 679.685-026
wire-brushing-machine operator 603.685-050
WIRE COINER 616.685-086
WIRE-FRAME DIPPER 734.684-026

can. & preserv.

WIRE-FRAME MAKER 734.481-010
Wreath And Garland Maker, Hand 739.684-014
WREATH MACHINE TENDER 739.685-058
Wreath Wrapper, Machine 739.685-058
ZIPPER CUTTER 616.685-090
zipper ironer 590.685-042
zipper joiner 734.687-074
ZIPPER-MACHINE OPERATOR 692.685-270
zipper measurer 734.687-094
zipper repairer 734.684-022
zipper-slide attacher 734.687-078
ZIPPER TRIMMER, HAND 734.687-094
ZIPPER TRIMMER, MACHINE 692.685-266

can. & preserv.—CANNING AND PRESERVING INDUSTRY: This designation includes occupations concerned with cleaning, shelling, processing, canning or quick-freezing, and preserving condiments, fruits, jellies, nuts, pickles, preserves, soups, vegetables, frozen dinners, and related products; and processing and preserving seafood, such as clams, crabs, fish, oysters, and shrimp.

crab picker 525.687-126
ALMOND BLANCHER, HAND 521.687-010
ALMOND-BLANCHER OPERATOR 521.685-014
ALMOND-CUTTING-MACHINE TENDER 521.685-018
Almond Grinder 521.685-234
ALMOND HULLER 521.685-010
Almond Roaster 529.685-174
Almond Sorter 521.687-086
Apple Sorter 529.687-186
Apple Washer 529.685-258
Asparagus Sorter 529.687-186
bait packer 529.687-086
Barrel Filler 529.687-022
BASKET FILLER 529.687-010
blanching-machine operator 521.685-246
BLANCHING-MACHINE OPERATOR 523.685-014
blender 520.685-030
blending-kettle tender 520.685-030
BLENDING-TANK TENDER 520.685-030
BLENDING-TANK TENDER HELPER 520.687-066
Blower 525.687-126
BONE PICKER 521.687-022
Box Icer 922.687-046
box turner 522.687-038
BREADING MACHINE TENDER 524.685-010
BRINE MAKER I 522.685-018
BRINE MAKER II 522.685-022
BRINE-MIXER OPERATOR, AUTOMATIC 520.685-034
BRINER 522.687-014
Briner, Machine 529.685-190
BRINE-TANK-SEPARATOR OPERATOR 521.685-038
BULK FILLER 529.687-022
BUTCHER, FISH 525.684-014
Cabbage Salter 529.687-022
CAGER OPERATOR 921.685-018
CAN-FILLING-AND-CLOSING-MACHINE TENDER 529.685-282
CAN INSPECTOR 920.687-050
CANNERY WORKER 529.686-014
CAN PATCHER 920.687-054
CAN RECONDITIONER 920.687-058
cap inspector 920.687-194
Carrot Washer 529.685-258
CHERRY CUTTER 524.687-010
Cherry Sorter 529.687-186
Clam Grader 529.687-098
Clam Shucker 521.687-122
Clam-Shucking-Machine Tender 529.685-214
Clam Steamer 529.685-214
coil cleaner 529.687-054
cook 526.381-026
cooker 526.381-026
cooker 529.685-174
COOKER CLEANER 529.687-054
cooker helper 529.486-010
Cook, Fish Eggs 526.381-026
Cook, Fruit 526.381-026
COOK, FRY, DEEP FAT 526.685-014
COOK HELPER 529.687-050
Cook Helper, Fruit 529.687-050
Cook Helper, Juice 529.687-050
Cook Helper, Meat 529.687-050
Cook Helper, Preserves 529.687-050
Cook, Jelly 526.381-026
Cook, Juice 526.381-026
COOK, KETTLE 526.381-026
Cook, Mayonnaise 526.381-026
Cook, Pickled Meat 526.381-026
Cook, Preserve 526.381-026
cook, pressure 526.381-026
Cook, Sauce 526.381-026
Cook, Seafood 526.381-026
Cook, Spaghetti 526.381-026
Cook, Starch 526.381-026
COOK, VACUUM KETTLE 526.685-018
Cook, Vegetable 526.381-026
COOLING-PAN TENDER 523.685-046
crab backer 525.684-022
CRAB BUTCHER 525.684-022
CRAB MEAT PROCESSOR 525.687-126
Crab Steamer 529.685-214
Crate Icer 922.687-046
CUTTER, FROZEN MEAT 521.685-098
DEBONER, PET FOOD 521.685-378
dehydrator 523.685-058
DEHYDRATOR TENDER 523.685-054
DETHISTLER OPERATOR 521.685-106
Dicer-Machine Operator 521.685-018
dipper, fish 522.687-014
dock worker 922.687-062
dress-gang worker 525.684-030
DRIER ATTENDANT 523.685-058
DRIER OPERATOR 523.685-062
DRIER OPERATOR 523.682-022
DRIER TENDER 523.685-066
Dry Roaster 529.685-174
Dumper 529.686-014
DUMPING-MACHINE OPERATOR 529.685-102
EGG-BREAKING-MACHINE OPERATOR 521.685-114
egg room supervisor 529.137-042
electric-sorting-machine operator 521.685-238
EVAPORATOR OPERATOR 521.382-010
Evaporator Operator, Molasses 521.382-010
extract operator 521.685-262
EXTRACTOR-MACHINE OPERATOR 521.665-014
Fig Sorter 529.687-186
Filling-Machine Feeder 521.686-034
FILTER TENDER, JELLY 529.685-114
FINISHER OPERATOR 521.685-142
FISH-BIN TENDER 529.687-082
Fish-Boning-Machine Feeder 521.686-034
Fish Checker 221.587-030
FISH CHOPPER, GANG KNIFE 521.687-058
FISH CLEANER 525.684-030
FISH CLEANER MACHINE TENDER 529.685-118
fish cutter 525.684-030
Fish-Cutting-Machine Operator 521.686-034
fish dresser 525.684-030
FISH DRIER 523.687-014
FISH-EGG PACKER 529.687-086
Fish Filleter 525.684-030
fish flaker 523.687-014
Fish Flipper 521.686-034
Fish Grader 529.687-098
fish-house worker 920.687-086
Fish Icer 922.687-046
FISH-LIVER SORTER 521.687-062
FISH-MACHINE FEEDER 521.686-034
FISH PACKER 920.687-086
Fish Pickler 522.684-010
fish pitcher 922.687-062
FISH ROE PROCESSOR 522.687-046
FISH ROE TECHNICIAN 522.384-010
Fish-Skinning-Machine Feeder 521.686-034
FISH SMOKER 522.685-066
Fish Straightener 521.686-034
flaker 523.687-014
flaker operator 523.685-062
flaker tender 523.687-014
fluoroscope operator 529.685-274
FREEZER TUNNEL OPERATOR 523.685-082
FREEZING-ROOM WORKER 523.687-022
FROZEN PIE MAKER 529.684-010
FRUIT-BUYING GRADER 529.387-018
FRUIT COORDINATOR 529.167-010
fruit inspector 529.387-018
FRUIT-PRESS OPERATOR 521.685-146
Fruit Sorter 529.687-186
general production worker 529.686-070
Gherkin Pickler 522.684-010

GRADER 529.687-098
grading-machine feeder 521.685-318
Halver-Machine Operator 521.685-018
horseradish grinder 529.685-142
HORSERADISH MAKER 529.685-142
huller operator 521.687-118
hull sorter 521.687-086
INSPECTOR, CANNED FOOD RECONDITIONING 529.687-118
LABORER, SHELLFISH PROCESSING 529.687-230
LABORER, WHARF 922.687-062
lumper 922.687-062
LYE-PEEL OPERATOR 521.685-206
MANAGER, FOOD PROCESSING PLANT 183.167-026
MATURITY CHECKER 529.485-022
MEAT BLENDER 529.685-166
MEAT-GRADING-MACHINE OPERATOR 521.685-218
metal mover 529.167-010
MINCEMEAT MAKER 520.485-018
MIXING-MACHINE OPERATOR 520.685-166
Mushroom Sorter-Grader 529.687-186
NUT CHOPPER 521.686-046
nut-dehydrator operator 523.685-066
NUT GRINDER 521.685-234
nut picker 521.687-086
NUT-PROCESS HELPER 529.486-010
NUT ROASTER 529.685-174
Nut-Roaster Helper 529.486-010
nut sifter 521.687-086
NUT SORTER 521.687-086
NUT-SORTER OPERATOR 521.685-238
NUT STEAMER 521.687-090
Oil Dispenser 529.685-190
OLIVE BRINE TESTER 522.584-010
Orange Washer 529.685-258
oven roaster 529.685-174
Oyster Shucker 521.687-122
Oyster Washer 529.685-214
parboiler 526.382-026
PASTEURIZER 523.685-110
Peach Sorter 529.687-186
PEANUT BLANCHER 521.685-246
PEANUT-BUTTER MAKER 529.685-178
Peanut Roaster 529.685-174
Peanut Sorter 521.687-086
Peeler 529.686-014
Pepper Pickler 522.684-010
picking-belt operator 521.687-086
pickle maker 522.684-010
pickle processor 522.684-010
PICKLER 522.684-010
pickling-solution maker 522.685-018
platform inspector 529.387-018
powder operator 523.682-022
PREPARATION SUPERVISOR 529.137-010
Preparation Supervisor, Canning 529.137-010
Preparation Supervisor, Freezing 529.137-010
PRESERVATIVE FILLER, MACHINE 529.685-190
PRODUCTION HELPER 529.686-070
PULPER TENDER 521.685-262
QUALITY-CONTROL TECHNICIAN 529.387-030
Raspberry Checker 529.687-186
RELISH BLENDER 520.685-194
relish maker 520.685-194
RETORT OPERATOR 526.682-034
roaster 529.685-174
SALVAGE INSPECTOR 529.687-174
Sawyer 525.687-126
Scalder 521.685-206
SCALING MACHINE OPERATOR 521.685-386
Scallop Shucker 521.687-122
seam checker 920.687-050
SEPARATOR OPERATOR, SHELLFISH MEATS 521.685-286
SETTER, JUICE PACKAGING MACHINES 920.380-010
SHELLER I 521.687-118
SHELLER II 521.685-294
Shellfish Checker 529.687-230
Shellfish Packer 529.687-230
SHELLFISH-PROCESSING-MACHINE TENDER 529.685-214
SHELLFISH SHUCKER 521.687-122
Shellfish Sorter 529.687-230
Shellfish Weigher 529.687-230
Shrimp Blancher 529.685-214
SHRIMP-PEELING-MACHINE OPERATOR 521.682-038
Shrimp-Peeling-Machine Tender 529.685-214
shucker 521.687-122
SIEVE-GRADER TENDER 521.665-026
sizing-machine operator 521.685-318
Slicer-Machine Operator 521.685-018
Slimer 525.684-030
Sliver-Machine Operator 521.685-018
smelter 529.687-118
Sorter 529.686-014
SORTER, AGRICULTURAL PRODUCE 529.687-186
sorter, food products 529.687-186
Sorter-Grader 529.687-186
sorting-machine attendant 521.685-318
SORTING-MACHINE OPERATOR 521.685-318
SPICE MIXER 520.687-062
STEAK SAUCE MAKER 529.484-010
steam drier 523.685-058
steamer operator 521.687-090
steamer operator 526.382-026
STEAM-OVEN OPERATOR 526.382-026
STILL OPERATOR 522.685-098
storage brine worker 522.584-010
storage laborer 522.584-010
SUPERINTENDENT 180.167-054
SUPERVISOR, BRINEYARD 522.134-010
SUPERVISOR, CLEANING 699.137-010
SUPERVISOR, COOK ROOM 529.132-038
SUPERVISOR, EGG PROCESSING 529.137-042
SUPERVISOR, FISH PROCESSING 525.134-010
SUPERVISOR, NUT PROCESSING 529.130-026
Supervisor, Roe Processing 529.137-062
SUPERVISOR, SPECIALTY FOOD PRODUCTS 529.137-062
Sweet-Pickled-Fruit Maker 522.684-010
Sweet-Pickle Maker 522.684-010
SWEET-POTATO DISINTEGRATOR 521.685-358
syruper 529.685-190
Syruper, Machine 529.685-190
TESTING & ANALYSIS DEPARTMENT SUPERVISOR 523.131-010
THERMOSCREW OPERATOR 526.685-058
Tomato-Paste Maker 521.382-010
Tomato-Pulper Operator 521.685-262
TRAINING TECHNICIAN 522.264-010
Trimmer 529.686-014
Trimmer-Sorter 529.687-186
Tube-Filling-Machine Operator 920.685-078
TURNER 522.687-038
UNSCRAMBLER 921.685-070
VACUUM DRIER OPERATOR 523.685-122
VACUUM TESTER, CANS 920.687-194
Vegetable Sorter 529.687-186
Walnut-Dehydrator Operator 523.685-066
WASHER, AGRICULTURAL PRODUCE 529.685-258
Wet Roaster 529.685-174
wharf hand 922.687-062
Wrapper, Hand 920.587-018
X-RAY INSPECTOR 529.685-274
Yolk Spray Drier 523.682-022

carpet & rug—CARPET AND RUG INDUSTRY: This designation includes occupations concerned with manufacturing and repairing carpets, rugs, and mats in which wool, cotton, synthetic, or other fibrous yarns are the principal materials used.

Base-Cloth Inspector 689.685-038
braided-rug maker 782.687-042
brusher and shearer 585.685-102
BURLER 689.684-010
CARPET CUTTER I 781.684-010
CARPET CUTTER II 585.687-014
Carpet-Finishing Supervisor 589.130-010
CARPET INSPECTOR, FINISHED 689.564-010
CARPET-LOOM FIXER 683.260-014
CARPET SEWER 787.682-014
CARPET WEAVER 683.682-010
CARPET WEAVER, JACQUARD LOOM 683.682-014
Carpet Winder 689.685-046
carver 781.684-046
CHAIN REPAIRER 683.684-010
changeover operator 683.687-030
chenille-machine operator 687.682-014
chenille-machine operator 687.685-018
clipper 781.684-046
CLOTH FINISHER 589.130-010
cloth inspector 683.684-034
cloth picker 689.684-010
cloth shearer 585.685-102

COATING-MACHINE OPERATOR 584.562-010
color-setting-machine operator 681.682-018
cut order hand 781.684-010
DIAGRAMMER AND SEAMER 789.484-010
finishing supervisor 589.130-010
fringe-binder operator 787.682-014
FRINGER 789.687-062
knot picker, cloth 689.684-010
LATEXER 584.684-010
leno sewer 787.682-014
LOOM CHANGEOVER OPERATOR 683.687-030
loom fixer 628.281-010
loom inspector 683.684-034
MACHINE FIXER 628.281-010
MENDER 782.684-042
NEEDLE-BAR MOLDER 556.684-022
needle-punch operator 687.682-014
overlay operator 687.682-014
RAKER 789.687-138
roll-coating-machine operator 584.562-010
RUG-BACKING STENCILER 781.687-054
RUG BRAIDER, HAND 782.687-042
RUG CLEANER 689.687-066
RUG CLIPPER 781.684-046
RUG CUTTER 686.662-010
rug cutter 781.684-046
rug cutter 781.684-010
RUG-CUTTER HELPER 686.686-014
Rug Designer 142.061-014
RUG-DRYING-MACHINE OPERATOR 581.685-050
RUG-FRAME MOUNTER 687.464-010
RUG HOOKER 687.684-010
Rug Hooker, Hand 687.684-010
RUG-INSPECTOR HELPER 789.687-158
RUG INSPECTOR I 689.667-010
RUG INSPECTOR II 789.587-022
Rug Mender 782.684-042
RUG-SAMPLE BEVELER 781.684-050
rug scratcher 789.687-138
RUG SETTER, AXMINSTER 681.682-018
Rug Setter, Six-Quarter Machine 681.682-018
Rug Setter, Three-Quarter Machine 681.682-018
Rug Setter, Velvet 681.682-018
SAMPLE CHECKER 229.687-010
sample finisher 781.684-050
Sample Maker 687.684-010
Sample Processor 787.682-010
scouring-machine operator 589.662-010
SCOURING-TRAIN OPERATOR 589.662-010
Scouring-Train Operator, Chief 589.662-010
sewing-machine operator, carpet and rugs 787.682-014
SHEARING-MACHINE OPERATOR 585.685-102
shear operator 585.685-102
slub picker 689.684-010
STEAM-DRIER TENDER 581.685-058
Stenciler 741.684-026
STENCIL MAKER 979.381-038
string picker 689.684-010
Supervisor, Broadloom 687.132-010
Supervisor, Finishing 687.132-010
SUPERVISOR, SEWING DEPARTMENT 689.137-010
SUPERVISOR, TUFTING 687.132-010
SUPERVISOR, WEAVING 689.130-030
THREADING-MACHINE TENDER 683.685-030
Tufting-Machine Fixer 689.260-010
TUFTING-MACHINE OPERATOR 687.645-018
TUFTING-MACHINE OPERATOR, SINGLE-NEEDLE 687.685-022
TUFT-MACHINE OPERATOR 687.682-014
Velvet Weaver 683.682-010
WEAVER 683.682-034
WEAVER, AXMINSTER 683.685-038
WEAVER, HAND LOOM 683.684-030
WEAVE-ROOM SUPERVISOR 683.130-018
WEAVING INSPECTOR 683.684-034
Wilton Weaver 683.682-014
WIRE REPAIRER 628.684-038
YARDAGE-CONTROL CLERK 221.587-050
yardage-tufting-machine operator 687.685-018

cement—CEMENT INDUSTRY: This designation includes occupations concerned with manufacturing cement from rock. The principal product is portland cement.

AUXILIARY-EQUIPMENT TENDER 570.685-010
Ball-Mill Operator 570.685-046
bulk cement loader 921.565-010
bulk loader 921.565-010
calciner 573.382-010
Car-Shakeout Operator 921.685-038
CEMENT-BOAT-AND-BARGE LOADER 921.665-010
CEMENT LOADER 921.565-010
cement mixer 570.685-010
Cement-Railroad-Car Loader 921.565-010
cement-storage worker 579.685-050
Cement-Truck Loader 921.565-010
Clay Hoister 850.683-018
drier operator 573.382-010
Finish-Mill Operator 570.685-046
grinder operator 570.685-046
Hammer-Mill Operator 570.685-046
Kiln Feeder 570.685-010
MILLER 570.685-046
Miller, Rod-Mill 570.685-046
Mixer Tender 570.685-010
NODULIZER 579.685-034
pelletizer 579.685-034
Pug-Mill Operator 570.685-046
Raw-Finish-Mill Operator 570.685-046
regrind mill operator 519.685-030
roaster 573.382-010
ROD-MILL TENDER 519.685-030
ROTARY-KILN OPERATOR 573.382-010
Screen Operator 921.662-018
SILO TENDER 579.685-050
slip mixer 570.685-010
slurry blender 570.685-010
slurry-tank tender 570.685-010
SUPERVISOR 579.137-010
Tube-Mill Operator 570.685-046
Vertical-Mill Operator 570.685-046

chemical—CHEMICAL INDUSTRY: This designation includes occupations concerned with producing heavy or fine chemicals. Among the products are purified elements; alkalies and chlorine; industrial gases; inorganic pigments; industrial organic, and inorganic chemicals; gum and wood chemicals; cyclic (coal tar) crudes, and cyclic intermediates, dyes, and organic pigments (lakes and toners); nitrogenous fertilizers; phosphatic fertilizers; mixing fertilizers; pesticides and agricultural chemicals; adhesives and sealants; explosives; printing ink; carbon black; and other chemicals and chemical preparations, not elsewhere clasified.

ABSORPTION OPERATOR 551.382-010
Acetaldehyde-Converter Operator 558.362-010
ACETYLENE-CYLINDER-PACKING MIXER 549.665-010
ACETYLENE-PLANT OPERATOR 549.585-010
acid blower 550.585-030
Acid Loader 914.667-010
ACID-PLANT HELPER 558.565-010
ACID-POLYMERIZATION OPERATOR 558.685-010
Acid Pumper 914.682-010
ACID PURIFIER 559.685-010
ACID SUPERVISOR 559.132-010
acid-wash operator 551.682-010
agitator operator 551.682-010
Alcohol-Still Operator 552.362-022
Alkylation Operator 559.382-018
ALUMINUM-HYDROXIDE-PROCESS OPERATOR 559.685-014
alum mixer 559.362-010
ALUM-PLANT OPERATOR 559.362-010
ammonia operator 558.382-014
Ammonia-Still Operator 552.685-014
Ammonium-Hydroxide Operator 551.382-010
AMMONIUM-NITRATE CRYSTALLIZER 553.685-010
Ammonium-Nitrate Neutralizer 550.585-030
ammonium-sulfate operator 558.362-018
ammunition storekeeper 222.137-018
ammunition supervisor 222.137-018
anode adjuster 558.584-010
ANODE BUILDER 826.684-010
Anthracene Operator 551.685-122
Aqua-Ammonia Operator 551.382-010
atmospheric-drier tender 553.665-026
ATOMIC-FUEL ASSEMBLER 709.381-010
AUTOCLAVE OPERATOR I 553.382-010
AUTOCLAVE OPERATOR II 709.682-010
Bag Printer 920.685-078
BALL-MILL OPERATOR 558.685-014
BATCH-STILL OPERATOR I 552.685-014

Batch-Still Operator II 552.362-022
Batch Weigher 929.687-062
header tender 550.685-058
BEATER OPERATOR 555.685-010
beeswax bleacher 551.685-158
benzene operator 551.682-010
Benzene-Still Utility Operator 559.682-066
BENZENE-WASHER OPERATOR 551.682-010
benzol operator 551.682-010
Biazzi-Nitrator Operator 558.382-046
BILLET ASSEMBLER 614.684-010
Binitrotoluene Operator 558.382-046
biological-plant operator 558.682-018
BLACK-MILL OPERATOR 553.665-014
Bleach Chlorinator 558.382-030
BLEACHER OPERATOR 558.685-018
BLEACH PACKER 558.687-010
blender 550.685-082
blender 555.685-046
BLENDER I 550.685-014
BLENDER II 550.665-010
blender operator 550.665-010
blender operator 550.382-018
BLOCK-BREAKER OPERATOR 555.686-010
block-press operator 559.685-038
BLOCK-PRESS OPERATOR 556.685-014
Blow-Off Worker 549.587-010
BOILING-TUB OPERATOR 551.685-014
BONE-CHAR KILN TENDER 553.685-018
BONE-CHAR OPERATOR 553.686-010
BONE-COOKING OPERATOR 551.685-018
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SUPERVISOR, CELL ROOM 558.134-014
SUPERVISOR, CHANNEL PROCESS 559.137-022
supervisor, chipping 564.132-010
Supervisor, Chlorine-Liquefaction 559.132-106
Supervisor, Color Making 559.132-054
supervisor, color making 559.132-122
SUPERVISOR, COMPOUNDING-AND-FINISHING 550.137-010
SUPERVISOR, COOK HOUSE 559.132-074
SUPERVISOR, DEHYDROGENATION 559.132-078
SUPERVISOR, DRY PASTE 559.132-082
SUPERVISOR, ESTERS-AND-EMULSIFIERS 559.132-086
SUPERVISOR, EVAPORATOR 559.137-026
SUPERVISOR, FERTILIZER 559.132-090
SUPERVISOR, FERTILIZER PROCESSING 559.130-014
SUPERVISOR, FIREWORKS ASSEMBLY 737.131-010
Supervisor, Flushing 559.132-054
SUPERVISOR, FURNACE PROCESS 559.132-094
SUPERVISOR, GELATIN PLANT 559.137-030
SUPERVISOR, GLUE SPECIALTY 559.137-034
SUPERVISOR, HARVESTING 939.137-022
SUPERVISOR, HYDROCHLORIC AREA 558.134-022
SUPERVISOR I 559.132-054
SUPERVISOR II 550.132-010
SUPERVISOR, INSECTICIDE 559.132-102
Supervisor, Intermediates 559.132-054
SUPERVISOR, LIQUEFACTION 559.132-106
SUPERVISOR, MAINTENANCE 382.137-010
SUPERVISOR, PASTE MIXING 550.137-014
SUPERVISOR, PHOSPHATIC FERTILIZER 558.130-010
SUPERVISOR, PHOSPHORIC ACID 558.132-014
SUPERVISOR, PHOSPHORUS PROCESSING 559.132-118
SUPERVISOR, PIGMENT MAKING 559.132-122
SUPERVISOR, POND 939.130-010
SUPERVISOR, POWER-REACTOR 509.130-014
SUPERVISOR, PROCESSING 551.130-010
SUPERVISOR, REACTOR FUELING 929.132-010
SUPERVISOR, REFINING 559.132-126
SUPERVISOR, SHIPPING 550.137-018
SUPERVISOR, SULFURIC-ACID PLANT 558.132-018
SUPERVISOR, TAR DISTILLATION 542.130-014
SUPERVISOR, VAT HOUSE 582.132-022
SWEEPING-COMPOUND BLENDER 550.685-110
SWITCHBOARD OPERATOR 952.362-038
TANK-CAR INSPECTOR 622.684-022
TANK CLEANER 559.687-062
TANK-FARM ATTENDANT 559.665-038
TANNING-SOLUTION MAKER 550.682-014
Tar-Heater Operator 552.462-010
tc operator 559.682-062
Technical Operator, Grain Preparation 590.464-010
terminal supervisor 559.132-138
TESTER, COMPRESSED GASES 549.364-010
Tetryl-Blender Operator 550.665-010
Tetryl-Boiling-Tub Operator 551.685-014
TETRYL-DISSOLVER OPERATOR 550.685-114

Tetryl-Nitrator Operator 558.382-046
TETRYL-SCREEN OPERATOR 551.685-146
tetryl-wringer operator 551.685-162
TNT-LINE SUPERVISOR 559.131-018
Ton-Container Filler 559.565-010
Ton-Container Shipper 549.587-010
Ton-Cylinder Inspector 953.387-010
TOWER HELPER 558.385-014
TOWER OPERATOR I ..... term
Tower Operator II 558.685-062
TOXIC OPERATOR ..... term
TRACER-POWDER BLENDER 550.585-042
transfer and-pumphouse operator 559.665-038
TRANSFER-AND-PUMPHOUSE OPERATOR, CHIEF 559.132-138
TRAY-DRIER OPERATOR 553.665-054
Tube-Filling-Machine Operator 920.685-078
Tube-Trailer Filler 559.565-010
Tub Operator 559.682-018
TUMBLER OPERATOR 550.685-118
tunnel-drier operator 553.582-010
TWITCHELL OPERATOR 558.585-042
ULTRASONIC TESTER 709.687-054
UNIT OPERATOR 542.685-018
unit tender 558.382-026
UTILITY OPERATOR I 559.682-066
UTILITY OPERATOR II 709.684-094
UTILITY OPERATOR III 549.685-042
VACUUM-DRIER TENDER 553.685-106
vacuum-drum-drier operator 553.685-042
vacuum-pan operator 553.382-018
VACUUM-PAN OPERATOR I 551.685-150
VACUUM-PAN OPERATOR II 551.685-154
VACUUM-PAN OPERATOR III 559.585-022
valve inspector-and-assembler 630.381-030
valve inspector 630.381-030
VALVE REPAIRER 630.381-030
Valve Steamer 549.587-010
Vat Tender 582.482-014
vessel ventilation system operator 950.562-010
vibrating-screen operator 551.685-130
WASH HELPER 559.665-042
washing-tub operator 551.685-014
WASH-MILL OPERATOR 559.485-010
WASH OPERATOR 559.662-014
WASH-TANK TENDER 559.685-182
waste-house operator 551.687-018
WASTE-TREATMENT OPERATOR 955.382-014
WATER-TREATMENT-PLANT OPERATOR 551.485-010
WAX BLEACHER 551.685-158
WAX POURER 737.685-018
weed-cooking operator 529.382-030
WEIGHER AND GRADER 559.567-014
WEIGHER AND MIXER 550.685-122
WEIGHER-BULKER 550.582-014
WEIGHER OPERATOR 559.687-070
wet mixer 550.582-010
WET MIXER 550.685-126
WET-MIX OPERATOR 558.382-058
Wheeler 559.687-050
WHEEL-MILL OPERATOR 555.685-066
WOOD-CREW SUPERVISOR 564.132-010
WRINGER OPERATOR 551.685-162

clerical—CLERICAL AND KINDRED OCCUPATIONS: This designation includes the following types of occupations that are common to a number of industries: (1) those occupations whose clerical duties take up a majority of the worker's time; (2) those occupations whose clerical duties take up a minority of the worker's time, but for which the major requirement is the ability to perform the clerical duties; (3) those occupations whose duties, although nonclerical, are dependent on and intimately connected with definite clerical jobs, and for which the promotional sequence usually is to positions of a strictly clerical character; and (4) white collar occupations that are not strictly clerical in character but that are more closely associated with truly clerical workers than with occupations in other occupational groups. Clerical duties in this classification are considered to be: (1) duties related to general office work, such as bookkeeping, taking and transcribing dictation, typing, auditing, and keeping records (often referred to as pencil work or paper work); and (2) duties pertaining to the operation of various office machines, such as adding machines, calculating machines, and duplicating machines. Occupations of a clerical nature that are peculiar to individual industries are not covered by this designation, but are included with the specific industry.

Accident-Report Clerk 209.362-026
Account-Classification Clerk 210.382-030
ACCOUNTING CLERK 216.482-010
Accounts-Payable Bookkeeper 210.382-014
Accounts-Payable Clerk 216.482-010
Accounts-Receivable Bookkeeper 210.382-014
Accounts-Receivable Clerk 216.482-010
ADDRESSER 209.587-010
addressing clerk 209.587-010
ADDRESSING-MACHINE OPERATOR 208.582-010
adjustment clerk 241.367-014
ADMINISTRATIVE CLERK 219.362-010
amortization-schedule clerk 216.362-026
APPOINTMENT CLERK 237.367-010
area coordinator 205.137-014
Asset-Card Clerk 209.687-010
ASSIGNMENT CLERK 249.367-090
Auction Clerk 219.362-010
Audio-Tape Librarian 222.367-026
AUDIT CLERK 210.382-010
AUDIT-MACHINE OPERATOR 216.482-018
authorizer 249.367-022
Automobile Repossessor 241.367-022
award clerk 249.367-066
Benefits Clerk I 209.362-026
BENEFITS CLERK II 205.567-010
bid clerk 249.367-066
Bill Adjuster 241.367-014
bill clerk 214.482-010
bill collector 241.367-010
biller 214.482-010
Billing Checker 209.687-010
billing clerk 214.382-014
billing clerk 214.482-010
BILLING CLERK 214.362-042
BILLING-MACHINE OPERATOR 214.482-010
BILLING TYPIST 214.382-014
Bill-of-Lading Clerk 214.382-014
Bill Sorter 209.687-022
BOOKKEEPER 210.382-014
BUDGET CLERK 216.382-022
budget-record clerk 216.382-022
budget-report clerk 216.382-022
buyer, assistant 249.367-066
CALCULATING-MACHINE OPERATOR 216.482-022
calculator operator 216.482-022
caller 209.667-014
call-out clerk 209.667-014
canceling-and-metering-machine operator 208.685-026
Canceling-Machine Operator 208.685-026
cash-accounting clerk 211.362-010
cash clerk 211.462-010
Cashier, Credit 211.462-010
cashier, general 211.462-010
CASHIER I 211.362-010
CASHIER II 211.462-010
cashier, office 211.462-010
Cashier, Payments Received 211.462-010
cashier, ticket selling 211.467-030
cash-on-delivery clerk 214.382-018
Cash-Sales-Audit Clerk 210.382-010
Casualty-Insurance-Claim Adjuster 241.217-010
Change-of-Address Clerk 206.387-034
charge-account authorizer 249.367-022
CHARGE-ACCOUNT CLERK 205.367-014
Charge-Accounts-Audit Clerk 210.382-010
CHART CHANGER 221.584-010
CHART CLERK 221.382-010
Chart Clerk, Chief 221.132-010
chart collector 221.584-010
check clerk 209.687-010
checker 221.587-030
CHECKER I 222.687-010
CHECKER II 209.687-010
checking clerk 222.687-018
CHIEF CLERK, PRINT SHOP 207.137-010
chief console operator 213.132-010
Claim Clerk 209.362-034
Claims Collector 241.367-010
CLASSIFICATION CLERK 206.387-010
CLASSIFICATION-CONTROL CLERK 210.382-030
CLERK, GENERAL 209.562-010
clerk, general office 219.362-010
clerk-stenographer 202.362-014
clerk, travel reservations 238.362-014
CLERK-TYPIST 203.362-010
C.o.d. Audit Clerk 210.382-010

C.O.D. Biller 214.382-014
C.O.D. CLERK 214.382-018
code clerk 203.582-018
coding file clerk 206.387-010
COIN-MACHINE-COLLECTOR SUPERVISOR 292.137-010
COLLATOR OPERATOR 208.685-010
collection agent 241.367-010
Collection-Card Clerk 203.362-010
COLLECTION CLERK 241.357-010
collect-on-delivery clerk 214.382-018
COLLECTOR 241.367-010
COMPILER 209.387-014
COMPUTER OPERATOR 213.362-010
COMPUTER-PERIPHERAL-EQUIPMENT OPERATOR 213.382-010
COMPUTER PROCESSING SCHEDULER 221.362-030
conference service coordinator 238.367-022
consumer-relations-complaint clerk 241.367-014
control-board operator 235.662-022
CORRESPONDENCE CLERK 209.362-034
CORRESPONDENCE-REVIEW CLERK 209.367-018
cost-accounting clerk 216.382-034
COST CLERK 216.382-034
counter 221.587-030
counter-weigher 221.587-030
Coupon-Manifest Clerk 209.687-010
courier 230.663-010
court reporter 202.362-010
CREDIT ANALYST 241.267-022
CREDIT AUTHORIZER 249.367-022
credit-card interviewer 205.367-014
CREDIT CLERK 205.367-022
Credit-Correspondence Clerk 209.362-034
CRYPTOGRAPHIC-MACHINE OPERATOR 203.582-018
cryptographic technician 203.582-018
CUSTOMER COMPLAINT CLERK 241.367-014
customer-order clerk 249.362-026
Customs-Entry Clerk 214.467-010
data clerk 209.687-010
DATA ENTRY CLERK 203.582-054
data entry operator 203.582-054
DATA-EXAMINATION CLERK 209.387-022
debtor 241.367-026
delinquent-account clerk 241.357-010
Delinquent-Notice-Machine Operator 214.482-010
DELIVERER, OUTSIDE 230.663-010
dictating-machine transcriber 203.582-058
dictating-machine typist 203.582-058
Die-Storage Clerk 222.367-062
DIRECT-MAIL CLERK 209.587-018
Directory Compiler 209.387-014
Disbursement Clerk 211.362-010
dispatcher 239.367-014
dispatcher 222.587-038
dispatcher, maintenance 221.367-066
DISPATCHER, MAINTENANCE SERVICE 239.367-014
DISPATCHER, MOTOR VEHICLE 249.167-014
disposition clerk 209.367-042
DISTRIBUTING CLERK 222.587-018
diversion clerk 209.367-042
Drum-Stock Clerk 222.387-058
DUPLICATING-MACHINE OPERATOR I 207.682-010
DUPLICATING-MACHINE OPERATOR II 207.682-014
embosser operator 208.682-010
EMBOSSING-MACHINE OPERATOR I 208.582-014
EMBOSSING-MACHINE OPERATOR II 208.682-010
EMPLOYMENT CLERK 205.362-014
Entry Examiner 209.687-010
envelope addresser 209.587-010
Envelope-Sealing-Machine Operator 208.685-026
envelope-stamping-machine operator 208.685-026
expediter 221.367-042
EXPEDITER 222.367-018
Expense Clerk 210.382-010
expense clerk 216.382-034
Export Clerk 214.467-010
Field Clerk 219.362-010
field supervisor 205.137-014
File Clerk, Correspondence 206.387-034
FILE CLERK I 206.387-034
FILE CLERK II 206.367-014
FILM-OR-TAPE LIBRARIAN 222.367-026
Finished-Goods Stock Clerk 222.387-058
fiscal clerk 216.382-022
Floor Cashier 211.462-010
floor clerk 221.387-038
folder operator 208.685-014
FOLDING-MACHINE OPERATOR 208.685-014
FOREIGN CLERK 214.467-010
Foreign-Language Stenographer 202.362-014
Freelance Reporter 202.362-010
Freight Clerk 222.387-050
freight-rate clerk 214.362-038
FUEL-OIL CLERK 222.387-018
GENERAL-LEDGER BOOKKEEPER 210.382-046
Hearings Reporter 202.362-010
human resources clerk 209.362-026
IDENTIFICATION CLERK 205.362-022
Import Clerk 214.467-010
INDUSTRIAL-ORDER CLERK 221.367-022
INFORMATION CLERK 237.367-022
INSERTING-MACHINE OPERATOR 208.685-018
Installment-Account Checker 209.687-010
insurance and benefits clerk 205.567-010
INSURANCE CLERK 219.387-014
interviewer 205.367-054
interviewer 205.362-014
Inventory-Audit Clerk 210.382-010
inventory clerk 219.387-030
INVENTORY CLERK 222.387-026
Inventory Clerk, Physical 222.387-026
inventory control clerk 219.387-030
INVESTIGATOR 241.267-030
Invoice-Classification Clerk 210.382-030
invoice clerk 214.382-014
INVOICE-CONTROL CLERK 214.362-026
invoicing-machine operator 214.482-010
job checker 221.387-034
job-order clerk 221.387-046
job spotter 221.387-034
JOB TRACER 221.387-034
Journal-Entry-Audit Clerk 210.382-010
LABORATORY CLERK 222.587-026
LAUNDRY CLERK 221.387-038
law reporter 202.362-010
LEGAL SECRETARY 201.362-010
Legal Stenographer 202.362-014
Legal Transcriber 203.582-058
letter-stamping-machine operator 208.685-026
loading checker 222.687-030
loan clerk 205.367-022
loan closer 219.362-038
LOST-AND-FOUND CLERK 222.367-034
LOST-CHARGE-CARD CLERK 209.367-034
MAGAZINE KEEPER 222.367-038
MAIL CLERK 209.687-026
Mail Clerk, Bills 209.687-026
Mailing-List Compiler 209.387-014
Mail-Order Clerk 249.362-026
mailroom clerk 209.687-026
MAILROOM SUPERVISOR 209.137-010
mail sorter 209.687-026
maintenance clerk 239.367-014
manager, stockroom 222.137-034
marker, delivery 222.587-038
MATERIAL CLERK 222.387-034
material control expediter 221.167-014
MATERIAL COORDINATOR 221.167-014
MATERIAL EXPEDITER 221.367-042
Medical Stenographer 202.362-014
Medical Transcriber 203.582-058
merchandising representative 205.367-054
messenger 230.663-010
Messenger, Office 239.567-010
MICROFILM MOUNTER 208.685-022
Micrographics-Services Supervisor 207.137-010
MORTGAGE-ACCOUNTING CLERK 216.362-026
MORTGAGE-CLOSING CLERK 219.362-038
Motor-Pool Clerk 203.362-010
name-plate-stamping-machine operator 208.582-014
new-account interviewer 205.367-014
NOTEREADER 203.582-078
office clerk, routine 209.562-010
OFFICE HELPER 239.567-010
OFFSET-DUPLICATING-MACHINE OPERATOR 207.682-018
Oil-House Attendant 222.387-058
Operating-Cost Clerk 216.382-034
ORDER CALLER 209.667-014
order checker 222.687-030
order checker 222.687-018
order clerk 214.382-014

ORDER CLERK 249.362-026
order-desk caller 209.667-014
ORDER DETAILER 221.387-046
order filler 249.362-026
order taker 249.362-026
Outlaw-Loan-Record Clerk 209.687-010
outside collector 241.367-010
Over-Short-And-Damaged Clerk 241.367-014
packing-and-shipping clerk 222.587-018
packing checker 222.687-030
PARCEL POST CLERK 222.387-038
Parcel-Post Order-Clerk 222.387-038
parcel post packer 222.387-038
parcel post weigher 222.387-038
PARTS CLERK 222.367-042
Parts Clerk, Automobile Repair 222.367-042
Parts Clerk, Plant Maintenance 222.367-042
PARTS-ORDER-AND-STOCK CLERK 249.367-058
past-due-accounts clerk 241.357-010
Pay Agent 215.362-022
PAYROLL CLERK 215.382-014
payroll clerk, chief 215.137-014
pbx operator 235.662-022
pedigree researcher 249.387-018
PEDIGREE TRACER 249.387-018
PERFORATOR TYPIST 203.582-038
PERSONNEL CLERK 209.362-026
personnel records clerk 209.362-026
PERSONNEL SCHEDULER 215.367-014
PHOTOCOPYING-MACHINE OPERATOR 207.685-014
PHOTOGRAPHIC-MACHINE OPERATOR 207.685-018
plant clerk 221.382-018
plate embosser 208.582-014
plate embosser 208.682-010
pneumatic-tube operator 239.687-014
postage-machine operator 208.685-026
postal clerk 209.687-026
powder monkey 222.367-038
powder nipper 222.367-038
Price Checker 209.687-010
priller 222.367-038
Printed-Forms Proofreader 209.687-010
private-branch-exchange operator 235.662-022
PROCUREMENT CLERK 249.367-066
production checker 221.382-018
PRODUCTION CLERK 221.382-018
production-control clerk 221.382-018
production controller 221.167-018
production control scheduler 221.167-014
PRODUCTION COORDINATOR 221.167-018
production expediter 221.167-018
production-posting clerk 221.382-018
production scheduler 221.167-018
Production-Statistical Clerk 216.382-062
progress clerk 221.387-034
progress clerk 221.167-018
proofreader 209.687-010
Property-Loss-Insurance-Claim Adjuster 241.217-010
publications-distribution clerk 222.587-018
public interviewer 205.367-054
Public Stenographer 202.362-014
purchase-order checker 214.362-026
purchaser, automotive parts 249.367-058
purchase-re[illegible]st editor 249.367-066
purchasing-and-fiscal clerk 249.367-066
purchasing clerk 249.367-066
purchasing-contracting clerk 249.367-066
rate clerk 214.362-038
RATE SUPERVISOR 214.137-018
REAL-ESTATE CLERK 219.362-046
RECEIVING CHECKER 222.687-018
Receiving Clerk 222.387-050
receiving inspector 222.687-018
Receiving Supervisor 222.137-030
Receiving Weigher 222.387-074
reception clerk 237.367-038
reception clerk 237.367-010
reception interviewer 205.362-014
RECEPTIONIST 237.367-038
RECONSIGNMENT CLERK 209.367-042
record clerk 216.382-062
records-section supervisor 206.137-010
referral clerk 205.367-062
REFERRAL CLERK, TEMPROARY-HELP AGENCY 205.367-062
Refrigerator-Room Clerk 222.387-058
REPAIR-ORDER CLERK 221.382-022
repair-service clerk 221.367-070
report checker 209.687-010
report clerk 216.382-062
REPOSSESSOR 241.367-022
REPRODUCTION ORDER PROCESSOR 221.367-058
RESERVATION CLERK 238.362-014
Reshipping Clerk 222.387-050
Returned-Goods Receiving Clerk 222.387-050
returns clerk 209.587-042
RETURN-TO-FACTORY CLERK 209.587-042
revenue-stamp clerk 219.487-010
route clerk 222.687-022
ROUTE-DELIVERY CLERK 222.587-034
ROUTER 222.587-038
router 222.687-022
Route Returner 222.387-050
ROUTING CLERK 222.687-022
routing clerk 222.587-038
Sack Keeper 222.387-058
Sales-Correspondence Clerk 209.362-034
SALES CORRESPONDENT 221.367-062
Sales-Record Clerk 216.382-062
sales-service supervisor 249.137-026
Sales-Slip Sorter 209.687-022
Salvage Clerk 222.387-058
scale clerk 221.587-030
schedule clerk 221.167-018
scheduler 221.167-018
scheduler and planner 215.367-014
SCHEDULER, MAINTENANCE 221.367-066
SEALING-AND-CANCELING-MACHINE OPERATOR 208.685-026
secretarial stenographer 201.362-030
SECRETARY 201.362-030
section chief see SUPERVISOR .....
section head see SUPERVISOR .....
SECURITIES CLERK 210.382-062
security clerk 205.362-022
SERVICE CLERK 221.367-070
Service Correspondent 221.367-062
service-order dispatcher 221.367-070
SHIPPING AND RECEIVING CLERK 222.387-050
SHIPPING-AND-RECEIVING SUPERVISOR 222.137-030
SHIPPING-AND-RECEIVING WEIGHER 222.387-074
SHIPPING CHECKER 222.687-030
Shipping Clerk 222.387-050
SHIPPING-ORDER CLERK 219.367-030
Shipping Supervisor 222.137-030
Shipping Weigher 222.387-074
Shop Clerk 219.362-010
shop clerk 222.367-042
SHORTHAND REPORTER 202.362-010
SKIP TRACER 241.367-026
SLOT-TAG INSERTER 222.567-018
SOCIAL SECRETARY 201.162-010
SORTER 209.687-022
SPACE SCHEDULER 238.367-022
spare-parts clerk 222.367-042
Spares Scheduler 221.167-018
staffing clerk 205.367-062
Stamping-Machine Operator 208.685-026
STATISTICAL CLERK 216.382-062
Statistical Typist 203.582-066
Stencil Cutter 203.582-066
STENOGRAPHER 202.362-014
stenotype-machine operator 202.362-022
STENOTYPE OPERATOR 202.362-022
steno-typist 202.362-022
stock chaser 221.367-042
stock checker 222.387-058
STOCK CLERK 222.387-058
STOCK-CONTROL CLERK 219.387-030
STOCK-CONTROL SUPERVISOR 222.137-038
stock order lister 219.387-030
stock-record clerk 222.387-034
stockroom clerk 222.387-058
stockroom supervisor 222.137-034
STOCK SUPERVISOR 222.137-034
Storage-Receipt Poster 203.362-010
Store Cashier 211.462-010
storekeeper 222.387-058
storeroom clerk 222.387-058
storeroom keeper 222.387-058
storeroom supervisor 222.137-034
stores clerk 222.387-058

SUGGESTION CLERK 209.387-034
SUPERVISOR ..... master
SUPERVISOR, ACCOUNTING CLERKS 216.132-010
SUPERVISOR, ASSEMBLY STOCK 222.137-042
SUPERVISOR, AUDIT CLERKS 210.132-010
SUPERVISOR, COMPUTER OPERATIONS 213.132-010
SUPERVISOR, CREDIT AND LOAN COLLECTIONS 241.137-010
SUPERVISOR, CUSTOMER-COMPLAINT SERVICE 241.137-014
supervisor, data processing 213.132-010
SUPERVISOR, FILES 206.137-010
SUPERVISOR, ORDER TAKERS 249.137-026
SUPERVISOR, PAYROLL 215.137-014
SUPERVISOR, PERSONNEL CLERKS 209.132-010
SUPERVISOR, PRODUCTION CLERKS 221.137-014
SUPERVISOR, PRODUCTION CONTROL 221.137-018
SUPERVISOR, STENO POOL 202.132-010
SUPERVISOR, SURVEY WORKERS 205.137-014
SUPERVISOR, TELEGRAPHIC-TYPEWRITER OPERATORS 203.132-010
SUPERVISOR, TRANSCRIBING OPERATORS 203.132-014
SUPERVISOR, WORD PROCESSING 203.137-010
supply clerk 222.387-058
supply-room clerk 222.387-058
Survey Compiler 209.387-014
SURVEY WORKER 205.367-054
switchboard operator 235.662-022
Tabular Typist 203.582-066
tabulating clerk 216.382-062
TALLIER 221.587-030
TAPE LIBRARIAN 206.367-018
TAX CLERK 219.487-010
Technical Stenographer 202.362-014
TELEGRAPHIC-TYPEWRITER OPERATOR 203.582-050
telegraphic-typewriter operator, chief 203.132-010
telegraph operator, automatic 203.582-050
TELEPHONE OPERATOR 235.662-022
TELEPHONE OPERATOR, CHIEF 235.137-010
Telephone-Order Clerk 249.362-026
Telephone-Order Dispatcher 249.362-026
telephone-switchboard operator 235.662-022
Template-Storage Clerk 222.387-058
test examiner 249.367-078
TEST TECHNICIAN 249.367-078
ticket clerk 211.462-010
ticketer 221.387-046
TICKET SELLER 211.467-030
Time-Analysis Clerk 216.382-062
Time Checker 215.362-022
TIMEKEEPER 215.362-022
timekeeper supervisor 215.137-014
Title Clerk, Automobile 203.582-066
Tobacco Weigher 222.387-074
tool clerk 222.367-062
TOOL-CRIB ATTENDANT 222.367-062
TOOL-CRIB SUPERVISOR 222.137-046
tracer 241.367-026
Tracer Clerk 241.367-014
TRAFFIC CLERK 214.587-014
Traffic Enumerator 216.382-062
TRAFFIC-RATE CLERK 214.362-038
TRANSCRIBING-MACHINE OPERATOR 203.582-058
transcribing operator, head 203.132-014
travel clerk 238.362-014
tube clerk 239.687-014
tube dispatcher 239.687-014
TUBE OPERATOR 239.687-014
tube-station attendant 239.687-014
Typewriter Operator, Automatic 203.582-038
Typing Checker 209.687-010
TYPING SECTION CHIEF 203.137-014
TYPIST 203.582-066
unloading checker 222.687-018
Utility-Bill Collector 241.367-010
VARITYPE OPERATOR 203.382-026
Warehouse Checker 222.687-010
Warehouse-Record Clerk 222.387-034
warehouse supervisor 222.137-034
weigher 221.587-030
Weight Caller 209.667-014
weight clerk 221.587-030
weight recorder 222.387-074
WORD-PROCESSING-MACHINE OPERATOR 203.382-030
Work Checker 215.362-022
work-order clerk 221.382-022
work-order detailer 221.387-046
yield clerk 221.382-010

clock & watch—CLOCKS, WATCHES, AND ALLIED PRODUCTS INDUSTRY: This designation includes occupations concerned with manufacturing and repairing clocks, watches, chronometers, and other horological instruments, regardless of type of driving power; clockwork-operated devices, such as time fuses and time-recording instruments; clock and watch cases; and clock and watch parts. Occupations concerned with casing purchased movements are also included in this industry. Occupations concerned with manufacturing clock and watch crystals are included in the GLASS PRODUCTS INDUSTRY (glass products). Occupations concerned with manufacturing wrist bands are found in the JEWELRY, SILVERWARE, AND PLATED WARE INDUSTRY (jewelry-silver.); LEATHER PRODUCTS INDUSTRY (leather prod.); or other DOT industry depending on the material from which the band is made.

ADJUSTER, ALARM MECHANISM 715.684-010
adjuster and inspector 715.381-050
Arbor Inspector 715.384-022
ASSEMBLER 715.381-010
ASSEMBLER, MOVEMENT 715.684-014
ASSEMBLER, WATCH TRAIN 715.381-014
automatic-screw-machine setter, swiss-type 604.260-010
BALANCE ASSEMBLER 715.384-010
BALANCE-BRIDGE ASSEMBLER 715.684-022
BALANCE RECESSER 604.685-010
Balance-Staff Inspector 715.384-022
Balance-Staff Staker 715.684-182
BALANCE TRUER 715.684-018
Balance-Wheel-Screw-Hole Driller 606.685-030
BAND ATTACHER 715.687-010
BANKING PIN ADJUSTER 715.381-018
BARREL ASSEMBLER 715.381-022
BARREL-BRIDGE ASSEMBLER 715.381-026
BARREL-CAP SETTER 715.687-014
BARREL-ENDSHAKE ADJUSTER 715.381-030
BARREL FINISHER 715.682-010
Barrel Inspector 715.384-022
BENCH HAND 715.684-026
BEVELER 715.684-030
BEVEL POLISHER 603.685-022
Block Cleaner 715.687-126
BLOCKER 715.684-034
BLOCKER AND POLISHER, GOLD WHEEL 715.381-034
blocker, polishing 715.684-034
Boring-Machine Operator 606.685-030
broacher 770.682-010
BRUSH POLISHER 603.685-038
BURNISHER 603.685-042
BURNISHER, BALANCE WHEEL ARM 715.684-038
BURRER 715.684-042
burrer, hand 715.684-042
BURRER, MACHINE 603.685-046
burring-machine operator 603.685-046
CANNON-PINION ADJUSTER 715.684-046
CAP-JEWEL PLATE ASSEMBLER 715.684-050
Carbide-Tool Maker 601.280-042
Case Inspector 715.384-022
CASER 715.684-054
Chamfering-Machine Operator 606.685-030
CHRONOMETER ASSEMBLER AND ADJUSTER 715.381-038
CHRONOMETER-BALANCE-AND-HAIRSPRING ASSEMBLER 715.381-042
CLEARANCE CUTTER 615.685-014
CLOCK ASSEMBLER 715.684-058
clockmaker 715.281-010
clockmaker apprentice 715.281-014
COLLET DRILLER 715.684-062
COLLETER 715.684-066
COLLET GLUER 715.685-010
COLLET MAKER 609.682-014
CONTROL CLERK 221.387-018
CONTROL CLERK, HEAD 221.137-010
Control Clerk, Repairs 221.387-018
Control Clerk, Subassembly 221.387-018
Control Clerk, Training And Mechanism 221.387-018
COUNTERSINKER 715.682-014
Countersinker, Balance Screw Hole 715.682-014
CROWN ATTACHER 715.684-070
CROWN-WHEEL ASSEMBLER 715.684-074
CRYSTAL ATTACHER 715.687-018
CRYSTAL CUTTER 715.684-078
CRYSTALLOGRAPHER 024.061-010
CUTTER, V-GROOVE 715.685-014
DEBURRER, MACHINE 715.685-018

DEBURRER, STRIP 603.482-010
DESTATICIZER FEEDER 715.686-010
DIAL BRUSHER 715.687-022
DIALER 715.684-086
DIAL MAKER 715.381-046
DIAL REFINISHER 715.584-010
DIAL-SCREW ASSEMBLER 715.684-082
DIAMOND SIZER AND SORTER 770.687-014
Diamond-Tool Maker 601.280-042
DIPPER, CLOCK AND WATCH HANDS 715.687-026
DISASSEMBLER 715.684-090
DRILLER AND BROACHER 715.685-022
DRILLING-MACHINE OPERATOR, AUTOMATIC 606.685-030
END POLISHER 715.685-026
ENGRAVER, AUTOMATIC 609.685-014
escapement matcher 715.381-018
FACER 770.582-010
FACING-MACHINE OPERATOR 604.685-014
FINAL INSPECTOR 715.381-050
Final Inspector, Balance Wheel 715.684-094
FINAL INSPECTOR, MOVEMENT ASSEMBLY 715.684-094
FINER 715.684-098
finishing inspector 715.381-050
FINISH OPENER, JEWEL HOLE 673.682-022
flat-grinder operator 770.682-018
FLAT POLISHER 603.685-054
FLAT SURFACER, JEWEL 770.685-010
Foam Molder 754.684-022
FOOT STRAIGHTENER 715.687-030
Gauge Controller 601.281-022
GAUGER 715.687-034
GRINDER I 603.482-030
GRINDER II 715.685-030
GRINDER, LAP 603.685-066
grinder, outside diameter 770.684-010
grinder, watch parts 603.482-030
groove turner 715.685-014
HAIRSPRING ADJUSTER 715.684-102
HAIRSPRING ASSEMBLER 715.381-054
HAIRSPRING CUTTER I 715.687-038
HAIRSPRING CUTTER II 715.687-042
Hairspring Staker 715.684-182
HAIRSPRING TRUER 715.381-058
HAIRSPRING VIBRATOR 715.381-062
HAMMER ADJUSTER 715.687-046
HAND FILER, BALANCE WHEEL 715.684-106
hands-and-dial inspector 715.687-066
HANDS ASSEMBLER 715.684-110
Hands Inspector 715.384-022
HARDENER 504.382-010
HARDENER HELPER 504.686-018
HOOKING-MACHINE OPERATOR 605.685-018
INSPECTOR, BALANCE-BRIDGE 715.687-058
INSPECTOR, BALANCE TRUING 715.687-050
INSPECTOR, BALANCE WHEEL MOTION 715.687-054
INSPECTOR, BARREL ASSEMBLY 715.684-114
INSPECTOR, CASING 715.687-062
INSPECTOR, DIALS 715.687-066
INSPECTOR, HAIRSPRING I 715.381-066
INSPECTOR, HAIRSPRING II 715.684-122
INSPECTOR, HAIRSPRING TRUING 715.684-118
inspector, jewels 770.687-022
INSPECTOR, MECHANISM 715.384-014
INSPECTOR, POISING 715.384-018
INSPECTOR, SOLDERING 715.687-070
INSPECTOR, TIMERS 715.687-074
INSPECTOR, TIMING 715.685-034
INSPECTOR, WATCH ASSEMBLY 715.381-070
INSPECTOR, WATCH PARTS 715.384-022
INSPECTOR, WATCH TRAIN 715.381-074
INSPECTOR, WHEEL AND PINION 715.684-126
Instructor, Hairspring 715.221-010
INSTRUCTOR, WATCH ASSEMBLY 715.221-010
JEWEL-BEARING BROACHER 770.682-010
JEWEL-BEARING DRILLER 770.682-014
JEWEL-BEARING FACER 770.682-018
JEWEL-BEARING GRINDER 770.685-018
JEWEL-BEARING MAKER 770.381-030
JEWEL-BEARING POLISHER 770.685-022
JEWEL-BEARING TURNER 770.682-022
JEWEL BLOCKER AND SAWYER 770.381-026
JEWEL-CORNER-BRUSHING-MACHINE OPERATOR 770.685-026
JEWEL-CUPPING-MACHINE OPERATOR 770.685-030
Jewel-Diameter Gauger 770.687-018
JEWEL GAUGER 770.687-018
JEWEL GRINDER I 770.685-014
JEWEL GRINDER II 770.684-010
JEWEL-HOLE CORNERER 770.684-014
JEWEL-HOLE DRILLER 770.682-026
jewel-hole finish opener 673.682-022
Jewel-Hole Gauger 770.687-018
jewel-hole rough opener 770.684-018
JEWEL INSERTER 715.684-130
JEWEL INSPECTOR 770.687-022
jewel-oliving-machine operator 770.381-034
jewel polisher 770.685-010
jewel sawyer 770.381-026
Jewel Sorter 770.687-014
JEWEL STAKER 715.684-134
JEWEL STRINGER 770.687-026
JEWEL STRIPPER 605.685-022
JEWEL SUPERVISOR 770.131-010
LACQUERER 715.684-138
lap polisher 603.685-054
LEVER MILLER 605.685-026
LOCATION-AND-MEASUREMENT TECHNICIAN 715.381-078
Location-And-Measurement Technician, Tool Room 715.381-078
MACHINE FEEDER 715.686-014
MACHINE SETTER 600.380-022
Machine Setter, Automatic 600.380-022
Machine Setter, Hand 600.380-022
Machine Setter, Semiautomatic 600.380-022
Mainspring-Barrel-Assembly Cleaner 715.687-126
MAINSPRING FORMER, ARBOR END 715.687-078
MAINSPRING FORMER, BRACE END 715.687-082
Mainspring-Reverse Winder 715.685-038
Mainspring-Strip Gauger 715.384-022
Mainspring-Strip Inspector 715.384-022
mainspring-torque tester 715.685-066
MAINSPRING WINDER AND OILER 715.685-038
mainspring-winding-machine operator 715.685-038
MASKER 715.687-086
MECHANICAL TECHNICIAN, LABORATORY 715.261-010
MECHANISM ASSEMBLER 715.684-142
MODEL MAKER 693.380-010
Motor Checker 715.684-094
MOTOR POLARIZER 715.687-090
MOUNTER, CLOCK AND WATCH HANDS 715.687-094
OILER 715.684-146
OLIVING-MACHINE OPERATOR 770.381-034
OVERCOILER 715.684-150
PAINTER, CLOCK AND WATCH HANDS 715.687-098
PALLET ASSEMBLER 715.684-154
PALLET RECTIFIER 715.684-158
PALLET-STONE INSERTER 715.381-082
PALLET-STONE POSITIONER 715.381-086
Parts Counter-Weigher 221.587-030
PARTS REMOVER 715.687-102
PEARLER 715.684-162
Pin Inserter 715.684-182
PIN INSERTER, REGULATOR 715.684-166
Pinion Inspector 715.384-022
PINION POLISHER 715.685-042
Pinion Staker 715.684-182
pinner, jewel bearing 770.682-010
pivot-end polisher 715.685-026
Pivot Polisher 715.685-042
PLANING-MACHINE OPERATOR 605.685-034
Plate Inspector 715.384-022
poiser, balance 715.681-010
POLISHER 715.682-018
POLISHER, BALANCE SCREWHEAD 715.685-046
POLISHER, DIAL 715.684-170
Polisher, Numeral 715.684-170
PRESS OPERATOR, PIERCE AND SHAVE 715.685-050
production-control clerk 221.387-018
PROFILE-GRINDER TECHNICIAN 601.482-010
PROFILER, HAND 715.685-054
PROFILING-MACHINE OPERATOR 605.685-038
PUT-IN-BEAT ADJUSTER 715.684-174
RACKER 715.687-106
Reamer 606.685-030
REAMER, CENTER HOLE 715.687-110
recessing-machine operator 605.685-038
reliability inspector 715.685-034
REPAIRER, AUTO CLOCKS 715.584-014
Repairer, Hairspring 715.281-010
Repairer, Watchcases 715.281-010
RIM-TURNING FINISHER 604.685-030
Roller Staker 715.684-182

comm. equip.

ROTOR ASSEMBLER 715.687-114
ROUGH OPENER, JEWEL HOLE 770.684-018
scraper burrer 715.684-042
scratch brusher 715.687-022
SCREWHEAD POLISHER 715.381-090
screwhead polisher 715.685-046
screwhead stoner and polisher 603.685-082
Screw Inspector 715.384-022
SCREW-MACHINE OPERATOR, SWISS-TYPE 604.682-010
SCREW-MACHINE SET-UP OPERATOR, SWISS-TYPE 604.260-010
SCREWMAKER, AUTOMATIC 609.682-030
SCREW SUPERVISOR 609.130-014
SET-KEY DRIVER 715.687-118
SET-STAFF FITTER 715.684-178
SET-UP WORKER 715.660-010
SIZING-MACHINE TENDER 690.685-366
SNAILER 603.685-078
SOLDERER 715.685-058
SPRING LAYER 715.687-122
SPRING-MANUFACTURING SET-UP TECHNICIAN 619.280-018
SQUARING-MACHINE OPERATOR 605.685-046
STAKER 715.684-182
staking-machine operator 715.684-182
staking-press operator 715.684-182
STONER AND POLISHER, BEVEL FACE 603.685-082
STONER, HAND 715.584-018
STUDDER, HAIRSPRING 715.684-186
SUPERVISOR 715.131-010
SUPERVISOR, AUTOMATIC MACHINES 609.130-022
SUPERVISOR, DIALS 715.131-014
SUPERVISOR, HAIRSPRING FABRICATION 715.131-018
SUPERVISOR, INSPECTION 715.131-022
SUPERVISOR, MAINSPRING FABRICATION 715.131-026
SUPERVISOR, MODEL MAKING 693.130-010
SUPERVISOR, TUMBLING AND ROLLING 715.131-030
SWEEP-PRESS OPERATOR 616.685-082
TAP-AND-DIE-MAKER TECHNICIAN 601.280-034
TAPPER, BALANCE-WHEEL SCREW HOLE 715.682-022
Tapper I 604.685-026
TAPPER II 715.685-062
Tapping-Machine Operator, Automatic 606.685-030
Time-Clock Repairer 715.281-010
timer 715.685-034
TIMING ADJUSTER 715.681-010
timing-machine operator 715.685-034
TOOTH CUTTER 605.685-050
Tooth Cutter, Clutch 605.685-050
Tooth Cutter, Contact Wheel 605.682-026
TOOTH CUTTER, ESCAPE WHEEL 605.682-026
Tooth Cutter, Hobbing Machine 605.685-050
Tooth Cutter, Pinion 605.685-050
Tooth Cutter, Spur 605.685-050
TOOTH POLISHER 715.682-026
TORQUE TESTER 715.685-066
TRANSFERRER 715.684-190
TRUER, PINION AND WHEEL 715.684-194
TUBING-MACHINE TENDER 715.685-070
TUMBLER 599.685-106
TURNER, MACHINE 770.685-034
TURRET-LATHE OPERATOR, TUMBLE TAILSTOCK 604.685-042
WASHER 715.687-126
watch adjuster 715.281-010
WATCH ASSEMBLER 715.381-094
watch-assembly inspector 715.381-050
Watch Balance Assembly Manufacturing Supervisor 609.130-026
watch-dial maker 715.381-046
watch-dial printer 715.684-190
Watch-Dial Stoner 715.684-170
watch-hairspring assembler 715.381-054
Watch Hairspring Manufacturing Supervisor 609.130-026
watch inspector, final movement 715.381-050
watchmaker 715.281-010
watchmaker apprentice 715.281-014
WATCH MANUFACTURING SUPERVISOR 609.130-026
Watch Metal Dial Manufacturing Supervisor 609.130-026
WATCH REPAIRER 715.281-010
WATCH REPAIRER APPRENTICE 715.281-014
WHEEL CUTTER 605.682-030
WINDER 715.687-130
WIRE DRAWER 614.382-014
WIRE THREADER 604.686-010

comm. equip.—RADIO, TELEVISION, AND COMMUNICATION EQUIPMENT INDUSTRY: This designation includes occupations concerned with manufacturing and repairing radio, television, telephone, and telegraph broadcasting and receiving equipment. This equipment also includes home recorders; loudspeakers; phonographs; PBX equipment; all types of telephone sets; teletypewriters; telephone station equipment; electric communication equipment; electronic field detection apparatus; light and heat emission operating devices; high energy particle accelerator systems and accessories; and electron beam metal cutting, forming, and welding machines.

Assembler, Communications Equipment 729.684-026
ASSEMBLY ADJUSTER 720.684-010
automatic component insertion operator 726.685-014
cartridge assembler 720.684-014
component insertion operator 726.685-014
Crossbar-Frame Wirer 729.381-022
Crossbar-Switch Repairer 729.684-038
Crossbar-Unit Wirer 729.381-022
ELECTRICAL-CONTROL ASSEMBLER 729.684-026
ELECTRONIC EQUIPMENT REPAIRER 726.381-014
ELECTRONICS INSPECTOR 726.381-010
ELECTRONICS UTILITY WORKER 726.364-018
flow-solder machine operator 726.362-014
grinder, needle tip 770.382-014
INSERTION MACHINE TENDER, ELECTRONIC COMPONENTS 726.685-014
Jack-Strip Assembler 729.684-026
METALLIZATION EQUIPMENT TENDER, SEMICONDUCTORS 590.685-086
needle grinder 770.382-014
PHONOGRAPH-CARTRIDGE ASSEMBLER 720.684-014
PHONOGRAPH-NEEDLE-TIP MAKER 770.382-014
production repairer 726.381-014
quality control inspector 726.381-010
record-changer adjuster 720.684-010
RECORD-CHANGER ASSEMBLER 720.687-010
RECORD-CHANGER TESTER 720.687-014
REPAIRER, SWITCHGEAR 729.684-038
RETURNED-TELEPHONE-EQUIPMENT APPRAISER 222.387-046
SAPPHIRE-STYLUS GRINDER 770.381-038
setup worker, electronics 726.364-018
single-pointed operator 770.382-014
Speaking-Unit Assembler 729.684-026
SUPERVISOR 619.130-046
SUPERVISOR, ELECTRONICS PRODUCTION 726.130-010
Supervisor, Television-Chassis Repair 726.130-010
Switchboard Assembler 729.381-022
SWITCHBOX ASSEMBLER I 722.687-010
Switchbox Assembler II 729.684-026
systems inspector 726.381-010
Telephone-Diaphragm Assembler 729.684-026
Telephone-Switch Repairer 729.684-038
TEST-DEPARTMENT HELPER 729.664-010
TWISTING-MACHINE OPERATOR 691.686-010
WAVE-SOLDERING MACHINE OPERATOR 726.362-014
WIRER, CABLE 729.381-022

concrete prod.—CONCRETE PRODUCTS INDUSTRY: This designation includes occupations concerned with manufacturing and repairing concrete products, such as brick, building block and tile, cast stone, pipe and conduit, poles and piling, vaults, and miscellaneous articles made of sand and gravel, crushed rock, or cinders bound together with cement. This designation also includes occupations concerned with manufacturing quicklime, hydrated lime, and dead-burned dolomite from limestone, dolomite shells, or other substances, and occupations concerned with manufacturing plaster, plasterboard, and other products composed wholly or chiefly of gypsum. Occupations concerned with concrete construction work on buildings, bridges, and similar structures are included in the CONSTRUCTION INDUSTRY (construction).

Acid Cutter 579.687-042
Bell Tier 579.687-042
Block Breaker 579.687-042
Block Cuber 579.687-042
block maker 575.685-014
BLOCK-MAKING-MACHINE OPERATOR 575.685-014
BOARD-MACHINE SET-UP OPERATOR 579.380-010
Brick Veneer Maker 579.685-042
BUCKET OPERATOR 575.683-010
Burnt-Lime Drawer 921.683-050
CAGE MAKER 709.684-030
CAGE MAKER, MACHINE 616.682-018
CALCINER, GYPSUM 579.382-010
CARPENTER, MOLD 860.381-034
casting supervisor 575.131-010
CEMENT FITTINGS MAKER 779.684-010
Cement-Gun Operator 849.665-010

cement patcher 844.684-010
cement rubber 844.684-010
CEMENT SPRAYER HELPER, NOZZLE 844.687-010
Cement Sprayer, Nozzle 869.664-014
Cement-Tile Maker 579.685-042
CENTRIFUGAL SPINNER 575.664-010
Concrete-Batch-Plant Operator 570.682-014
CONCRETE-FLOAT MAKER 869.687-022
CONCRETE-PIPE MAKER 779.684-014
CONCRETE-PIPE-MAKING-MACHINE OPERATOR 575.665-010
concrete pointer 844.684-010
concrete polisher 844.684-010
CONCRETE RUBBER 844.684-010
CONCRETE SCULPTOR 777.281-010
CONCRETE-STONE FABRICATOR 575.461-010
CONCRETE-STONE FINISHER 844.461-010
CONCRETE-VAULT MAKER 579.684-010
CRUSHER OPERATOR 570.685-018
Crusher Operator 570.682-014
CUBING-MACHINE TENDER 920.685-106
CUPOLA CHARGER, INSULATION 572.686-010
CUPOLA OPERATOR, INSULATION 579.382-014
DISPATCHER, CONCRETE PRODUCTS 579.137-030
Dispatcher, Ready-Mix Plant 579.137-030
Drain-Tile-Machine Operator 575.665-010
feeder operator 575.664-010
Flue-Lining Dipper 579.687-042
Form Stripper 869.687-026
INSPECTOR I 779.387-014
INSPECTOR II 579.664-014
KILN CLEANER 573.687-018
kiln firer 573.462-010
kiln-firer helper 573.685-022
KILN-OPERATOR HELPER 573.685-022
KNIFE OPERATOR 579.382-018
LABORER, CONCRETE PLANT 579.687-042
LABORER, PRESTRESSED CONCRETE 575.687-018
LAUNDRY-TUB MAKER 575.684-034
lime burner 573.462-010
LIME-KILN OPERATOR 573.462-010
lime mixer 570.685-034
lime-plant operator 570.685-034
LIME SLAKER 570.685-034
LINING-MACHINE OPERATOR 575.565-010
MAT INSPECTOR 575.687-022
MAT-MACHINE OPERATOR 579.662-010
MAT PACKER 579.686-014
MAT TESTER 579.387-010
milk-of-lime slaker 570.685-034
MIXER HELPER 530.384-010
MIXER OPERATOR 570.685-058
mixer operator 579.682-010
MIXER TENDER, BOARD 570.685-062
MIXER, WET POUR 579.682-010
MODEL-AND-MOLD MAKER, PLASTER 777.381-018
MODEL MAKER, FIBERGLASS 777.381-010
Model Maker, Plaster 777.381-018
MOLDER 518.361-010
MOLDER APPRENTICE 518.361-014
Molder, Bench 518.361-010
mold-forms builder 860.381-034
MOLD LAMINATOR 806.684-086
Mold Maker, Plaster 777.381-018
Mortar Mixer 869.687-026
Packerhead-Machine Operator 575.665-010
PACKER, INSULATION 579.685-038
PAINT SPRAYER, SANDBLASTER 845.381-018
PAPERHANGER 574.585-010
patternmaker 860.381-034
PIPE STRIPPER 575.687-026
PLANT OPERATOR 570.682-014
PLASTERER, MOLDING 842.361-026
plasterer, ornamental 842.361-026
PLASTER MIXER, MACHINE 570.382-014
plug-and-mold finisher 806.684-086
Portable Grout-Mixer Operator 869.687-026
poured-pipe maker 779.684-014
PRECAST MOLDER 579.685-042
precast worker 579.685-042
puddler 530.384-010
PUMP TENDER, CEMENT BASED MATERIALS 849.665-010
QUALITY CONTROL TECHNICIAN 579.364-010
Rotary-Kiln Operator 573.462-010
Rough Patcher 579.687-042
ROUND-UP-RING HAND 579.587-010
sand molder 518.361-010
sand-molder apprentice 518.361-014
SAND PLANT ATTENDANT 934.685-014
SHAKER TENDER 934.685-018
SHOT-COAT TENDER 575.665-018
spinner, concrete pipe 575.664-010
splitter 677.685-050
STONE SPLITTER 677.685-050
STULL INSTALLER 869.684-062
SUPERVISOR, BOARD MILL 579.130-010
SUPERVISOR, CONCRETE BLOCK PLANT 579.130-014
SUPERVISOR, CONCRETE PIPE PLANT 579.130-018
SUPERVISOR, CONCRETE-STONE FABRICATING 575.131-010
SUPERVISOR, CONCRETE-STONE FINISHING 775.131-010
SUPERVISOR, LIME 579.132-014
SUPERVISOR, MOLD CONSTRUCTION 860.131-026
SUPERVISOR, PRECAST AND PRESTRESSED CONCRETE 575.131-014
SUPERVISOR, WET POUR 575.137-014
SUPPLY CONTROLLER 570.382-018
TENSIONING-MACHINE OPERATOR 616.665-010
TIP-OUT WORKER 575.687-038
Vertical-Kiln Operator 573.462-010
WINDING-MACHINE OPERATOR 619.665-010
Yarder 579.687-042

construction—CONSTRUCTION INDUSTRY: This designation includes occupations concerned with various types of construction projects (new work, additions, alterations, and repairs), such as bridges, viaducts, and piers; buildings; highways, streets, and related functions as site preparation and landscaping; pipelines; railroads; river and harbor projects; and sewers, tunnels, and waterworks; and with wrecking buildings and other structures. Occupations concerned with remodeling, repairing, and unusual maintenance functions, other than those normally carried on by the various industrial establishments, are included in this industry.

Acidizer, Water Well 939.462-010
ACID-TANK LINER 861.381-010
ACOUSTICAL CARPENTER 860.381-010
acoustical-material worker 860.381-010
Aggregate-Conveyor Operator 579.665-014
AIR-CONDITIONING INSTALLER-SERVICER HELPER, WINDOW UNIT 637.687-010
AIR-CONDITIONING INSTALLER-SERVICER, WINDOW UNIT 637.261-010
air-conditioning mechanic 637.261-014
air-conditioning-mechanic apprentice 862.281-026
Air-Hammer Operator 869.687-026
AIR-TOOL OPERATOR ..... term
Alberene-Stone Setter 861.381-038
ALUMINUM-POOL INSTALLER 809.664-010
Aluminum-Shingle Roofer 866.381-010
Aluminum-Siding Installer 863.684-014
artificial-marble worker 861.381-046
Artificial-Stone Setter 861.381-038
ASBESTOS REMOVAL WORKER 869.684-082
Asbestos-Shingle Roofer 866.381-010
Asbestos-Siding Installer 863.684-014
ASPHALT-DISTRIBUTOR TENDER 853.665-010
ASPHALT-HEATER TENDER 853.685-010
ASPHALT-PAVING-MACHINE OPERATOR 853.663-010
Asphalt-Plant Operator 570.682-014
Asphalt-Plant Worker 869.687-026
Asphalt Raker 869.687-026
asphalt-spreader operator 853.663-010
asphalt-surface-heater operator 853.683-014
asphalt-tamping-machine operator 869.683-018
Asphalt, Tar, And Gravel Roofer 866.381-010
Asphalt-Tile-Floor Layer 864.481-010
ASSEMBLER, METAL BUILDING 801.381-010
ASSISTANT CONSTRUCTION SUPERINTENDENT 869.367-010
AUTOMATIC-DOOR MECHANIC 829.281-010
AUXILIARY-EQUIPMENT TENDER 869.665-010
awning erector 869.484-010
AWNING HANGER 869.484-010
AWNING-HANGER HELPER 869.687-010
awning installer 869.484-010
Backer-Up 869.687-026
backfiller, hand see DITCH DIGGER .....
Bag Shaker 579.665-014
BANK BOSS 851.137-010
batch-mixing-truck driver 900.683-010
batch-plant supervisor 570.132-010
Batterboard Setter 869.664-014

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Bell-Hole Digger 869.687-026
BELTER ..... term
Billboard-Erector Helper 869.664-014
bituminous-distributor operator 853.663-018
bituminous-paving-machine operator 853.663-010
blacktop-paver operator 853.663-010
blacktop spreader 853.663-010
blade-grader operator 850.663-022
Block Setter, Gypsum 861.381-018
boring-machine operator 850.662-010
boring-machine-operator helper 850.684-014
Bowling-Alley-Installation Supervisor 860.131-018
bracer 860.381-042
Breast Worker 850.381-010
Brick Cleaner 869.687-026
BRICKLAYER 861.381-018
BRICKLAYER APPRENTICE 861.381-022
BRICKLAYER, FIREBRICK AND REFRACTORY TILE 861.381-026
Bricklayer Helper 869.687-026
BRICKLAYER HELPER, FIREBRICK AND REFRACTORY TILE 861.687-010
Bricklayer, Paving Brick 869.664-014
Bricklayer, Sewer 861.381-018
BRICKLAYER SUPERVISOR 861.131-010
brickmason 861.381-026
brickmason helper 861.687-010
Brick-Paving Checker 869.687-026
Bridge-Maintenance Worker 801.361-014
bridge worker 801.361-014
bridge worker apprentice 801.361-018
BRUSHER ..... term
buggy pusher see WHEELER .....
Building-Construction Inspector 182.267-010
Building-Insulating Carpenter 860.381-022
BUILDING-INSULATION SUPERVISOR 863.134-010
BUILDING SUPERVISOR ..... term
BULL-GANG WORKER ..... term
burner 869.685-010
cable placer 829.684-018
CABLE PULLER 829.684-018
cable rigger 829.684-018
CABLE SPLICER 829.361-010
CABLE-SPLICER APPRENTICE 829.361-014
CABLE-SPLICER HELPER 829.667-010
cable-splicing supervisor 829.131-010
CABLE SUPERVISOR 829.131-010
cable-tower operator 850.683-042
Cage Tender 869.687-026
CAISSON WORKER ..... term
Calciminer 840.381-010
car changer 921.663-014
CARPENTER 860.381-022
CARPENTER APPRENTICE 860.381-026
carpenter, form 860.381-046
Carpenter Helper, Hardwood Flooring 869.687-026
Carpenter Helper, Maintenance 869.664-014
CARPENTER-LABOR SUPERVISOR 860.137-010
CARPENTER, ROUGH 860.381-042
carpenter, wooden-tank erecting 860.381-070
cartridge-actuated-tool operator see STUD-DRIVER OPERATOR .....
CAULKER ..... term
Caulker 869.664-014
Cement-Car Dumper 579.665-014
Cement-Conveyor Operator 579.665-014
cement finisher 844.364-010
cement-finisher apprentice 844.364-014
Cement-Finishing Supervisor 869.131-014
Cement-Gun Operator 849.665-010
Cement Handler 579.665-014
CEMENT MASON 844.364-010
CEMENT-MASON APPRENTICE 844.364-014
Cement-Mason Helper 869.687-026
Cement Mason, Highways And Streets 869.664-014
cement paver 844.364-010
Cement-Sack Breaker 579.665-014
CEMENT SPRAYER HELPER, NOZZLE 844.687-010
Cement Sprayer, Nozzle 869.664-014
Center-Line-Cutter Operator 853.663-014
CHERRY-PICKER OPERATOR 921.663-014
Chimney Builder, Brick 861.381-018
Chimney Builder, Reinforced Concrete 801.361-014
CHIMNEY ERECTOR ..... term
Chimney Repairer 869.381-030
CHIMNEY SUPERVISOR, BRICK 861.131-014
chute worker see WHEELER .....
Cinder-Block Mason 861.381-018
CIRCULAR SAW OPERATOR 869.682-010
Clamper 869.687-026
clean-up supervisor 869.133-010
CLEARING SUPERVISOR 869.133-010
Cofferdam-Construction Supervisor 860.131-018
Cold Patcher 869.687-026
Combination-Window Installer 860.381-022
Composition Roofer 866.381-010
composition-siding worker 863.684-010
COMPOSITION-STONE APPLICATOR 861.361-010
COMPOSITION-WEATHERBOARD APPLIER 863.684-010
Compressed-Air-Pile-Driver Operator 859.682-018
Compressor Operator 869.665-010
CONCRETE-BATCHING AND MIXING-PLANT SUPERVISOR 570.132-010
Concrete-Batch-Plant Operator 570.682-014
Concrete-Block Mason 861.381-018
Concrete-Bucket Hooker 921.667-022
Concrete-Bucket Loader 579.665-014
Concrete Bucket Unloader 579.665-014
CONCRETE CHIPPER ..... term
Concrete-Conveyor Operator 579.665-014
CONCRETE CURER ..... term
CONCRETE-FENCE BUILDER 869.681-010
concrete finisher 844.364-010
concrete-finisher apprentice 844.364-014
Concrete-Finishing-Machine Operator 853.663-014
concrete floater 844.364-010
Concrete-Gun Operator 849.665-010
Concrete-Hopper Operator 579.665-014
Concrete-Mixer Loader, Truck Mounted 579.665-014
concrete-mixer-operator helper 579.665-014
CONCRETE-MIXING-TRUCK DRIVER 900.683-010
Concrete-Panel Installer 863.684-014
concrete-paving-form grader 850.683-022
CONCRETE-PAVING-MACHINE OPERATOR 853.663-014
Concrete-Paving Supervisor 869.131-014
Concrete-Pile-Driver Operator 859.682-018
Concrete-Pouring Supervisor 869.131-014
CONCRETE PUDDLER ..... term
Concrete-Pump Operator 849.665-010
Concrete-Pump-Operator Helper 869.687-026
CONCRETE SCREEDER ..... term
concrete shoveler see CONCRETE PUDDLER .....
concrete spader see CONCRETE PUDDLER .....
concrete spreader see CONCRETE PUDDLER .....
concrete tamper see CONCRETE PUDDLER .....
Concrete-Vibrator Operator 869.687-026
Concrete-Wall-Grinder Operator 869.664-014
CONCRETING SUPERVISOR 869.131-014
CONDUIT MECHANIC 869.361-010
Connector Hand 869.687-026
CONSTRUCTION-EQUIPMENT MECHANIC 620.261-022
CONSTRUCTION-EQUIPMENT-MECHANIC HELPER 620.664-010
CONSTRUCTION INSPECTOR 182.267-010
Construction-Records Clerk 219.362-010
CONSTRUCTION WORKER I 869.664-014
CONSTRUCTION WORKER II 869.687-026
CONTRACTOR 182.167-010
Contractor, General Building 182.167-010
Contractor, General Engineering 182.167-010
Conveyor Tender, Concrete-Mixing Plant 579.665-014
COOLING-PIPE INSPECTOR 862.687-010
CORE-DRILL OPERATOR 869.682-014
CORK INSULATOR, REFRIGERATION PLANT 863.381-010
Cork-Tile-Floor Layer 864.481-010
Corrugated-Sheet-Material Sheeter 869.664-014
Cradle Placer 869.664-014
Crank Hand 869.687-026
Crushed-Stone Grader 869.687-026
Crusher Operator 570.682-014
CURB-MACHINE OPERATOR 853.683-010
Curb Setter 861.381-038
Curb-Setter Helper 869.687-026
Curb Supervisor 869.131-014
Curing-Machine Operator 853.663-014
Dampproofer 869.664-014
decorator 779.381-022
Diesel-Mechanic, Construction 625.281-010
Diesel-Pile-Driver Operator 859.682-018
Diesel-Roller Operator 859.683-030
DISPATCHER 849.137-010
DISPATCHER, CONCRETE PRODUCTS 579.137-030

Dispatcher, Ready-Mix Plant 579.137-030
DITCH DIGGER ..... term
Ditch Inspector 182.267-010
DIVER PUMPER 899.682-010
Dock Builder 860.381-042
Door Hanger 860.381-022
dope firer 869.685-010
dope heater 869.685-010
Dope Pourer 869.687-026
Drain Layer 869.664-014
DREDGE OPERATOR 850.663-010
Dredge Pipe Installer 869.687-026
dredge pumper 850.663-010
drifter 850.662-014
DRILLER HELPER 930.666-010
DRILLER, MACHINE 930.382-010
driller operator 930.382-010
Drop-Hammer-Pile-Driver Operator 859.682-018
DRY-WALL APPLICATOR 842.684-014
DRY-WALL APPLICATOR 842.361-030
dry-wall finisher 842.664-010
dry-wall installations mechanic 842.361-030
dry-wall installer 842.361-030
dry-wall nailer 842.684-014
Duct Installer 869.664-014
duct layer 869.361-010
Duct-Layer Helper 821.667-010
Duct-Layer Supervisor 899.131-010
DUCT MAKER 809.687-010
Dumper, Central-Concrete-Mixing Plant 579.665-014
Dump Grader 869.687-026
earth-auger operator 859.682-010
EARTH-BORING-MACHINE OPERATOR 859.682-010
electric-detector operator 862.687-014
ELECTRIC-DISTRIBUTION CHECKER 824.281-014
ELECTRICIAN 824.261-010
ELECTRICIAN APPRENTICE 824.261-014
electrician, cable-splicing 829.361-010
Electric-Pile-Driver Operator 859.682-018
ELEVATING-GRADER OPERATOR 850.663-014
elevator builder 825.361-010
ELEVATOR CONSTRUCTOR 825.361-010
Elevator Constructor, Electric 825.361-010
ELEVATOR-CONSTRUCTOR HELPER 825.664-010
Elevator Constructor, Hydraulic 825.361-010
ELEVATOR-CONSTRUCTOR SUPERVISOR 825.131-014
elevator erector 825.361-010
elevator-erector helper 825.664-010
elevator installer 825.361-010
elevator mechanic 825.361-010
environmental-control-system installer-servicer 637.261-014
Equipment-Records Supervisor 222.137-038
erector operator 850.682-010
Escalator Constructor 825.361-010
explosive-actuated-tool operator see STUD-DRIVER OPERATOR
extra-gang supervisor 869.134-022
Fabrication Supervisor 899.131-010
Falsework Builder 860.381-042
feeder worker power-unit operator 863.685-010
FENCE ERECTOR 869.684-022
FENCE-ERECTOR SUPERVISOR 869.134-010
Fence-Gate Assembler 869.684-022
Fence Setter 869.684-022
Fence Stretcher 869.684-022
FIELD CASHIER 219.137-010
Filter-Bed Placer 869.687-026
Fine Grader 869.664-014
Finish Carpenter 860.381-022
Finished-Hardware Erector 860.381-022
finisher, wallboard and plasterboard 842.664-010
Firebrick-And-Refractory Tile Repairer 861.381-026
Fitter 869.664-014
fitter helper 862.684-022
FLAGGER 372.667-022
Flagsetter 861.381-038
FLAME CHANNELER 930.684-010
FLOOR AND WALL APPLIER, LIQUID 864.684-010
floor coverer 864.481-010
floor-coverer apprentice 864.481-014
floor-covering-tile layer 864.481-010
Floor Finisher 869.664-014
Floor-Finisher Helper 869.687-026
floor grinder 861.381-046
FLOOR LAYER 864.481-010
FLOOR-LAYER APPRENTICE 864.481-014
Floor-Layer Helper 869.687-026
Floor-Sanding-Machine Operator 869.664-014
FORM BUILDER 860.381-046
Form-Builder Helper 869.664-014
Form-Building Supervisor 860.131-018
FORM CLEANER ..... term
FORM-GRADER OPERATOR 850.683-022
form puller see FORM STRIPPER
form remover see FORM STRIPPER
form scraper see FORM CLEANER
Form-Setter Helper 869.687-026
Form Setter, Metal Road-Forms 869.664-014
Form Setter, Steel Forms 869.664-014
Form Setter, Steel-Pan Forms 869.664-014
Form-Setter Supervisor 869.131-014
Form Stripper 869.687-026
FORM STRIPPER ..... term
form tamper 869.683-010
FORM-TAMPER OPERATOR 869.683-010
form-tamping-machine operator 869.683-010
form wrecker see FORM STRIPPER
FOUNDATION-DRILL OPERATOR 859.682-014
Foundation-Drill-Operator Helper 869.664-014
Furnace Mason 861.381-026
furnace tender 869.685-010
Gang-Vibrator Operator 853.663-014
Garage-Door Hanger 860.381-022
Gas-Roller Operator 859.683-030
Generator Tender, Portable 869.665-010
Gin-Pole Operator 921.663-030
glass setter 865.381-010
glassworker 865.381-010
GLAZIER 865.381-010
GLAZIER APPRENTICE 865.381-014
Glazier Helper 869.664-014
glazier, plate glass 865.381-010
Glazier, Structural Glass 865.381-010
GLAZIER SUPERVISOR 865.131-010
GRADE CHECKER 850.467-010
Grader 869.687-026
Grade Tamper 869.687-026
Granite Setter 861.381-038
GRAVEL INSPECTOR 859.281-010
Ground Wirer 869.664-014
Grouter Helper 869.687-026
Grout-Pump Operator 849.665-010
Grout Supervisor 869.131-014
Gutter-Mouth Cutter 861.381-038
guyline operator 850.683-042
gypsum dry-wall systems installer 842.361-030
Hardwood-Floor Installer 860.381-022
header boss 859.137-018
heater operator 853.683-014
HEATER-PLANER OPERATOR 853.683-014
heater worker 869.685-010
heating-and-air-conditioning mechanic 637.261-014
heating-and-air-conditioning-mechanic helper 637.664-010
HEATING-AND-AIR-CONDITIONING INSTALLER-SERVICER 637.261-014
HEATING-AND-AIR-CONDITIONING INSTALLER-SERVICER HELPER 637.664-010
heating mechanic 637.261-014
heavy-equipment mechanic 620.261-022
heavy-equipment operator 859.683-010
heavy-equipment-operator apprentice 859.683-014
highballer 869.667-014
High Scaler 859.261-010
Highway Inspector 182.267-010
HIGHWAY SUPERVISOR ..... term
Hod Carrier 869.687-026
hoisting engineer, pile driving 859.682-018
Holder, Pile Driving 869.664-014
hole-digger operator 859.682-010
Hole-Digger-Truck Driver 905.663-014
HOLIDAY-DETECTOR OPERATOR 862.687-014
Hollow-Tile-Partition Erector 861.381-018
Hoosier Pole Hand 869.687-026
HORIZONTAL-EARTH-BORING-MACHINE OPERATOR 850.662-010
HORIZONTAL-EARTH-BORING-MACHINE-OPERATOR HELPER 850.684-014
HOUSE BUILDER 869.281-014
House Carpenter 860.381-022
HOUSE MOVER 869.261-010
HOUSE-MOVER HELPER 869.687-034

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HOUSE-MOVER SUPERVISOR 869.131-022
HOUSE REPAIRER 869.381-010
housesmith 801.361-014
housesmith 809.381-022
Hydrant-And-Valve Setter 869.664-014
hydraulic-hammer operator 869.683-018
HYDRAULIC-JACK ADJUSTER 869.361-014
hydraulic-jack operator 910.663-010
hydraulic operator 850.682-010
HYDRAULIC PRESS OPERATOR 616.662-010
Inserter 869.687-026
installation helper 869.687-010
INSTALLATION SUPERINTENDENT, PIN-SETTING MACHINE 829.131-018
Instrument Fitter 862.281-022
Insulation Installer 869.664-014
INSULATION-POWER-UNIT TENDER 863.685-010
insulation supervisor 863.134-010
INSULATION WORKER 863.364-014
INSULATION-WORKER APPRENTICE 863.364-010
insulation worker, interior surface 863.381-010
insulator apprentice 863.364-010
iron-and-steel-work supervisor 809.131-018
iron erector 801.361-014
ironworker 801.361-014
ironworker apprentice 801.361-018
ironworker, wire-fence erector 869.684-022
IRRIGATION SYSTEM INSTALLER 851.383-010
Jack-Tamp Operator 910.683-018
Jalousie Installer 860.381-022
jeeper operator 862.687-014
jet channeler 930.684-010
jet-piercer operator 930.684-010
JOINT-CLEANING-AND-GROOVING-MACHINE OPERATOR 853.683-018
joint-cleaning-machine operator 853.683-018
Joint Filler 869.687-026
Joint-Machine Operator 853.663-014
joint supervisor 843.134-010
Joist Setter, Adjustable Steel 869.664-014
KETTLE TENDER 869.685-010
LABORATORY-EQUIPMENT INSTALLER 869.381-014
LABOR-CREW SUPERVISOR 899.131-010
Laborer, Adjustable Steel Joist 869.664-014
Laborer, Batching Plant 869.687-026
Laborer, Bituminous Paving 869.687-026
Laborer, Carpentry 869.564-014
Laborer, Carpentry, Dock 869.664-014
Laborer, Cement-Gun Placing 869.687-026
LABORER, CONCRETE-MIXING PLANT 579.665-014
Laborer, Concrete Paving 869.687-026
Laborer, Corrugated-Iron-Culvert Placing 869.687-026
Laborer, Electric Power And Transmission Line 869.687-026
laborer, excavation see DITCH DIGGER .....
Laborer, Heading 869.687-026
laborer, mixing plant 579.665-014
Laborer, Pile Driving, Ground Work 869.687-026
Laborer, Pipe-Line 869.687-026
Laborer, Plumbing 869.687-026
Laborer, Road 869.687-026
Laborer, Shaft Sinking 869.687-026
Laborer, Shore Dredging 869.687-026
Laborer, Steel Handling 869.687-026
Laborer, Stone Block Ramming 869.687-026
Laborer, Wrecking And Salvaging 869.687-026
LABOR EXPEDITER 249.167-018
LANDSCAPE CONTRACTOR 182.167-014
LANE-MARKER INSTALLER 859.684-010
LATHER 842.361-010
LATHER APPRENTICE 842.361-014
LAWN-SPRINKLER INSTALLER 869.684-030
Layer-Out, Plate Glass 869.664-014
Lay-Out Carpenter 860.381-022
Leadite Heater 869.685-010
levee superintendent 851.137-010
LIFT-SLAB OPERATOR 869.662-010
Lightning-Rod Erector 869.664-014
LINE ERECTOR 821.361-018
LINE-ERECTOR APPRENTICE 821.361-030
Linoleum-Floor Layer 864.481-010
Linoleum Layer 864.481-010
Linoleum-Tile-Floor Layer 864.481-010
loader see WHEELER .....
LOCK MAINTENANCE SUPERVISOR 899.131-014
Lock Tender I 869.665-010
LOCK TENDER II 850.663-018
Loft Worker, Concrete-Mixing Plant 579.665-014
Loft Worker, Pile Driving 869.687-026
Longitudinal-Float Operator 853.663-014
Lower-in Supervisor 899.131-010
machine helper 579.665-014
Machine Mover 921.260-010
Maintainer, Sewer-And-Waterworks 862.281-022
MAINTENANCE MECHANIC 620.281-046
MAINTENANCE MECHANIC HELPER 620.664-014
MANAGER, CAMP 187.167-066
MARBLE FINISHER 861.664-010
marble helper 861.664-010
marble mason helper 861.664-010
marble mechanic helper 861.664-010
MARBLE SETTER 861.381-030
marble setter helper 861.664-010
Marine Driller 899.261-010
Marsh-Buggy Operator 929.683-014
MASON ..... term
MASON HELPER ..... term
Masonry Inspector 182.267-010
MATERIAL-CREW SUPERVISOR 921.137-014
Material Hauler 869.687-026
MATERIAL LISTER 229.387-010
mechanical-spreader operator 853.663-010
mechanic helper 620.664-014
Metal-Fence Erector 869.684-022
Metal Furrer 842.361-010
Metal Lather 842.361-010
Metal-Sash Setter 809.381-022
metal-tile lather 860.381-010
Metal-Tile Setter 861.381-034
metal-trim erector 809.381-022
MINER 850.381-010
Mineral-Wool-Insulation Supervisor 863.134-010
Miner Helper 869.687-026
MIRROR INSTALLER 865.361-010
Mixer, Hand, Cement Gun 869.687-026
mixer helper 579.665-014
mixer tender 579.665-014
mixing-plant dumper 579.665-014
Mold Maker 869.687-026
MONUMENT SETTER 861.361-014
Mortar Mixer 869.687-026
moto-mix operator 900.683-010
Motor Grader, Fine Grade 850.663-022
MOTOR-GRADER OPERATOR 850.663-022
Motor Grader, Rough Grade 850.663-022
motor-patrol operator 850.663-022
Mucker 869.687-026
Mucker, Cofferdam 869.687-026
mucker operator 850.683-026
MUCKING-MACHINE OPERATOR 850.683-026
Mud-Jack Nozzle Worker 869.687-026
oil-distributor tender 853.665-010
Oil Sprayer 869.687-026
oil sprayer 853.663-018
oil-spreader operator 853.663-018
oil-spreader-truck operator 853.663-018
OPERATING ENGINEER 859.683-010
OPERATING-ENGINEER APPRENTICE 859.683-014
Ornamental-Brick Installer 863.684-014
Ornamental-Bronze Worker 809.381-022
ornamental-iron erector 809.381-022
ORNAMENTAL-IRON WORKER 809.381-022
ORNAMENTAL-IRON-WORKER APPRENTICE 809.381-026
Ornamental-Iron-Worker Helper 869.664-014
ornamental-metal-erector apprentice 809.381-026
Ornamental-Plaster Sticker 842.361-018
Ornamental-Rail Installer 809.381-022
PAINTER 840.381-010
Painter Helper 869.687-026
Painter, Interior Finish 840.381-010
Painter, Rough 869.664-014
Painter, Structural Steel 869.664-014
Paint-Stripping-Machine Operator 869.664-014
PAPERHANGER 841.381-010
Paperhanger, Pipe 869.687-026
Paper Latcher 869.687-026
Paper Spooler 869.687-026
pavement curer see CONCRETE CURER .....
pavement-joint-cleaning-machine operator 853.683-018
Paving-Bed Maker 869.687-026
paving-form mover see FORM STRIPPER .....
paving-machine operator, asphalt or bituminous 853.663-010

Paving Rammer 869.687-026
Permastone Dresser 869.664-014
PILE DRIVER ..... term
PILE-DRIVER OPERATOR 859.682-018
Pile-Driver Operator, Barge Mounted 859.682-018
Pile-Driving Setter 869.664-014
Pipe-And-Test Supervisor 899.131-010
Pipe-Bending-Machine Operator 617.482-010
PIPE BUFFER 705.684-054
Pipe Caulker 869.664-014
PIPE-CLEANING-AND-PRIMING-MACHINE OPERATOR 862.662-010
Pipe-Cleaning-Machine Operator 862.662-010
PIPE CUTTER ..... term
PIPE FITTER 862.281-022
Pipe Fitter, Ammonia 862.281-022
PIPE-FITTER APPRENTICE 862.281-026
Pipe Fitter, Fire-Sprinkler Systems 862.281-022
Pipe Fitter, Gas Pipe 862.281-022
PIPE-FITTER HELPER 862.684-022
Pipe Fitter, Plastic Pipe 862.281-022
Pipe Fitter, Soft Copper 862.281-022
PIPE-FITTER SUPERVISOR 862.131-010
Pipe Fitter, Welding 862.281-022
pipe inspector 862.687-010
PIPE INSTALLER 869.381-018
pipe jeeper 862.687-014
Pipe Layer 869.664-014
Pipe-Layer Helper 869.687-026
Pipe-Laying Supervisor 899.131-010
PIPE-LINE-CONSTRUCTION INSPECTOR 869.367-018
Pipe-Line Inspector 182.267-010
PIPE-LINE SUPERVISOR ..... term
Pipe-Line Worker 869.664-014
Pipe-Machine Operator 869.687-026
PIPE THREADER, HAND ..... term
PIPE-WRAPPING-MACHINE OPERATOR 862.682-014
PLANT OPERATOR 570.682-014
Plaster-Block Layer 861.381-018
PLASTERER 842.361-018
PLASTERER APPRENTICE 842.361-022
Plasterer, Finish 842.361-018
Plasterer Helper 869.687-026
Plasterer, Maintenance 842.361-018
PLASTERER, MOLDING 842.361-026
plasterer, ornamental 842.361-026
Plasterer, Rough 842.361-018
Plasterer, Spray Gun 842.361-018
plasterer, stucco 842.381-014
PLASTER-MACHINE TENDER 842.665-010
Plastic-Panel Installer 863.684-014
Plastic-Tile Layer 861.381-034
Plate-Glass Installer 865.381-010
plow holder 850.663-014
plow shaker 850.663-014
PLUMBER 862.381-030
PLUMBER APPRENTICE 862.381-034
Plumber Helper 869.664-014
plumber, pipe fitting 862.281-022
PLUMBER SUPERVISOR 862.131-018
Plumber Supervisor, Maintenance 862.131-018
PNEUMATIC-HOIST OPERATOR 921.663-046
pneumatic-tool operator see AIR-TOOL OPERATOR
Pneumatic-Tube Fitter 862.281-022
Pointer, Caulker, And Cleaner 869.664-014
Pole-Truck Driver 904.383-010
Porcelain-Enamel Installer 863.684-014
Portable Grout-Mixer Operator 869.687-026
post-hole digger 859.682-010
POURED-CONCRETE-WALL TECHNICIAN 869.261-018
powder-actuated-tool operator see STUD-DRIVER OPERATOR
Powder Guard 372.667-034
power-grader operator 850.663-022
PROGRESS CLERK 221.362-022
Puddler, Pile Driving 869.687-026
Pulvi-Mixer Operator 859.683-026
PUMP ERECTOR 637.281-010
Pump-Erector Helper 869.664-014
pump installation and servicer 637.281-010
Pump Tender 869.665-010
PUMP TENDER, CEMENT BASED MATERIALS 849.665-010
rail gang supervisor 869.134-022
RAILROAD SUPERVISOR ..... term
ready-mix-truck driver 900.683-010
REAMER ..... term
Receiver Setter 869.664-014
refrigeration-mechanic apprentice 862.281-026
Reinforced-Concrete Inspector 182.267-010
reinforcing-bar setter 801.684-026
reinforcing-iron worker 801.684-026
Reinforcing-Iron-Worker Helper 869.687-026
REINFORCING-METAL WORKER 801.684-026
reinforcing-steel erector 801.684-026
REINFORCING-STEEL-MACHINE OPERATOR 859.683-022
reinforcing-steel placer 801.684-026
reinforcing-steel setter 801.684-026
reinforcing-steel worker 801.684-026
Reinforcing-Steel Worker, Wire Mesh 869.687-026
RIGGER 869.683-014
RIGGING SUPERVISOR 921.130-010
right-of-way supervisor 869.133-010
Riprap Placer 869.687-026
RIVER-AND-HARBOR SUPERVISOR ..... term
River-Crossing Supervisor 899.131-010
road grader 850.663-022
road-hogger operator 850.663-022
ROAD-MIXER OPERATOR 859.683-026
road-oil distributor 853.663-018
ROAD-OILING-TRUCK DRIVER 853.663-018
ROAD-ROLLER OPERATOR 859.683-030
Road-Roller Operator, Hot Mix 859.683-030
Rockboard Lather 842.361-010
ROCK-DRILL OPERATOR I 850.683-034
ROCK-DRILL OPERATOR II 850.662-014
Rod Inspector 182.267-010
roller operator 859.683-030
roller, pneumatic 859.683-030
roll operator 859.683-030
ROOFER 866.381-010
ROOFER APPLICATOR 866.684-010
ROOFER APPRENTICE 866.381-014
Roofer, Gypsum 866.381-010
Roofer Helper 869.687-026
Roofer Helper, Vinyl Coating 869.687-026
Roofer, Metal 804.281-010
Roofer, Vinyl Coating 869.664-014
ROOFING SUPERVISOR 866.131-010
Roof-Promenade-Tile Setter 861.381-054
Rotary-Drill Operator 930.382-010
rotary-drill-rig operator 859.362-010
rotary-soil-stabilizer operator 859.683-026
roto-mixer operator 859.683-026
Rubber-Tile-Floor Layer 864.481-010
safety-grooving-machine operator 853.683-018
sales representative 250.157-010
Sand-And-Gravel-Plant Operator 570.682-014
SAND HOG ..... term
Scaffold Builder 860.381-042
Scaffold Builder, Metal 801.361-014
SCRAPER OPERATOR 850.683-038
Screed Operator 853.663-014
Seat Installer 869.664-014
SEPTIC-TANK INSTALLER 851.663-010
Septic-Tank Servicer 869.664-014
service engineer 620.281-046
setter 861.361-014
SEWER-AND-WATERWORKS SUPERVISOR ..... term
Sewer Tapper 869.664-014
Sheather 860.381-042
Sheeting Puller 869.687-026
Sheet-Pile-Driver Operator 859.682-018
Sheet-Pile-Hammer Operator 869.687-026
sheetrock installer 842.684-014
sheetrock taper 842.664-010
shield operator 850.682-010
SHIELD RUNNER 850.682-010
shifter 859.137-018
Shooter, Water Well 859.261-010
shop mechanic 620.281-046
shop-mechanic helper 620.664-014
SHORE HAND, DREDGE OR BARGE 939.667-018
Shorer 869.664-014
shore-working supervisor 862.134-010
Shower-Enclosure Installer 865.381-010
SIDER 863.684-014
siding applicator 863.684-014
SIGNALER 869.667-014
Silo Erector 861.381-018
Single-Pass-Soil-Stabilizer Operator 859.683-026
Skip Tender, Concrete Mixing Or Batch Plant 869.687-026

slab lifting engineer 869.662-010
slab lifting supervisor 869.662-010
slackline operator 850.683-042
Slate Roofer 866.381-010
Slicer 869.687-026
SOFT-TILE SETTER 861.381-034
splicer 829.361-010
splicer apprentice 829.361-014
spreader box operator 853.663-022
Spreader Operator 853.663-014
Sprinkler-And-Irrigation-System Installer 862.281-022
Squeegee Finisher 869.687-026
stabilizer operator 859.683-026
stabilizing-machine operator 859.683-026
Stain Remover 869.687-026
Stair Builder 860.381-022
STEAM-CLEANING-MACHINE OPERATOR 891.685-010
Steam Fitter 862.281-022
steam-fitter apprentice 862.281-026
Steam-Fitter Helper 862.684-022
Steam-Fitter Supervisor 862.131-010
Steam-Pile-Driver Operator 859.682-018
Steel-Door Setter 809.381-022
steel-erecting pusher 809.131-018
steel erector 801.361-014
steel-erector apprentice 801.361-018
steel-floor-pan-placing supervisor 869.131-026
STEEL-PAN-FORM-PLACING SUPERVISOR 869.131-026
Steel-Sash Erector 809.381-022
STEEPLE JACK 869.381-030
Step Finisher 844.364-010
Stone-And-Concrete Washer 869.687-026
STONEMASON 861.381-038
STONEMASON APPRENTICE 861.381-042
Stonemason Helper 869.687-026
STONEMASON SUPERVISOR 861.131-018
Stone Polisher 869.664-014
STONE RENOVATOR ..... term
stone rigger 861.381-042
Stone Setter 861.381-038
stone-setter apprentice 861.381-042
STONE-SPREADER OPERATOR 853.663-022
Stone Unloader 869.687-026
Strike-Off-Machine Operator 853.663-014
STRUCTURAL ENGINEER 005.061-034
structural-iron erector 801.361-014
structural-iron worker 801.361-014
Structural-Steel-Equipment Erector 801.361-014
structural-steel erector 801.361-014
Structural-Steel Inspector 182.267-010
STRUCTURAL-STEEL WORKER 801.361-014
STRUCTURAL-STEEL-WORKER APPRENTICE 801.361-018
Structural-Steel-Worker Helper 869.687-026
STUCCO MASON 842.381-014
stucco worker 842.381-014
STUD-DRIVER OPERATOR ..... term
Subgrade-Roller Operator 859.683-030
Subgrader Operator 850.663-022
Subgrade Tester 869.687-026
suction-dredge-dumping supervisor 862.134-010
SUCTION-DREDGE-PIPE-LINE-PLACING SUPERVISOR . 862.134-010
SUPERINTENDENT, CONCRETE-MIXING PLANT 182.167-022
SUPERINTENDENT, CONSTRUCTION 182.167-026
superintendent, job 182.167-026
SUPERINTENDENT, SALES 250.157-010
SUPERINTENDENT, TRACK 859.137-014
SUPERVISOR, ACOUSTICAL TILE CARPENTERS 860.131-010
SUPERVISOR, ADJUSTABLE-STEEL-JOIST-SETTING 869.134-014
SUPERVISOR, ASBESTOS REMOVAL 869.134-026
SUPERVISOR, ASPHALT PAVING 853.133-010
Supervisor, Backfilling 850.137-014
SUPERVISOR, CARPENTERS 860.131-018
SUPERVISOR, CHIMNEY CONSTRUCTION 801.131-010
SUPERVISOR, CORE DRILLING 850.137-010
Supervisor, Culvert Laying 859.137-010
Supervisor, Ditching 850.137-014
SUPERVISOR, DOPING 842.134-010
SUPERVISOR, DRY-WALL APPLICATION 842.131-010
Supervisor, Dumping 859.137-010
supervisor, excavating 859.137-010
Supervisor, Fine Grading 859.137-010
SUPERVISOR, GRADING 859.137-010
SUPERVISOR, INSULATION 863.134-014
supervisor, ironworking 801.134-010
SUPERVISOR, LABOR GANG 850.137-014
SUPERVISOR, LATHING 842.131-014
supervisor, loading 921.137-014
SUPERVISOR, MARBLE 861.131-022
supervisor, metal placing 801.134-010
SUPERVISOR, MIXING PLACE 853.137-010
SUPERVISOR, ORNAMENTAL IRONWORKING 809.131-014
SUPERVISOR, PAINTING 840.131-010
Supervisor, Patching 853.133-010
SUPERVISOR, PILE DRIVING 859.137-014
SUPERVISOR, PLASTERING 842.131-018
SUPERVISOR, REINFORCED-STEEL-PLACING 801.134-010
SUPERVISOR, RIPRAP PLACING 850.137-018
Supervisor, Riveting 809.131-018
supervisor, rod placing 801.134-010
Supervisor, Rough Grading 859.137-010
SUPERVISOR, STRUCTURAL-STEEL ERECTION 809.131-018
SUPERVISOR, SWIMMING-POOL MAINTENANCE 869.131-038
SUPERVISOR, TAPING 842.134-010
SUPERVISOR, TERRAZZO 861.131-026
SUPERVISOR, TUNNEL HEADING 859.137-018
SUPERVISOR, WATERPROOFING 843.137-010
Surface Carpenter 860.381-042
Sweeper Operator, Highways 919.683-022
SWIMMING POOL INSTALLER-AND-SERVICER 869.463-010
Take-Up Supervisor 899.131-010
tamper operator 869.683-018
TAMPING-MACHINE OPERATOR 869.683-018
tamping-machine operator, road forms 869.683-010
TANKAGE SUPERVISOR 869.131-034
TANK BUILDER AND ERECTOR 860.381-066
tank-builder supervisor 869.131-034
TANK ERECTOR 860.381-070
tank maker, wood 860.381-066
TAPER 842.664-010
taper and bedder 842.664-010
taper and floater 842.664-010
Tapping-Machine Operator 869.664-014
Tar Heater 869.685-010
Terra-Cotta Mason 861.381-018
TERRAZZO FINISHER 861.664-014
terrazzo helper 861.664-014
terrazzo mechanic helper 861.664-014
Terrazzo Polisher 861.381-046
TERRAZZO WORKER 861.381-046
TERRAZZO-WORKER APPRENTICE 861.381-050
terrazzo worker helper 861.664-014
test-boring crew chief 850.137-010
Tile-And-Terra-Cotta Roofer 866.381-010
TILE-CONDUIT LAYER 861.381-062
TILE FINISHER 861.664-018
tile fitter 861.381-054
tile layer 861.381-054
tile mason 861.381-054
tile mechanic helper 861.664-018
TILE SETTER 861.381-054
tile setter 861.381-034
TILE SETTER APPRENTICE 861.381-058
tile setter helper 861.664-018
Tile Setter Supervisor 861.131-010
Tilt-Wall Supervisor 869.131-014
Timbering Supervisor 860.131-018
Timber Setter 860.381-042
tombstone setter 861.361-014
TOWER-CRANE OPERATOR 921.663-054
tower-dragline operator 850.683-042
TOWER ERECTOR 821.361-038
TOWER ERECTOR HELPER 821.684-014
TOWER-EXCAVATOR OPERATOR 850.683-042
Tower Supervisor 809.131-018
TRACER 779.381-022
Track Layer 869.687-026
track layer, head 869.134-022
track-laying-machine operator 910.663-010
TRACK-LAYING SUPERVISOR 869.134-022
track leader 869.134-022
Track-Liner Operator 910.683-018
TRACK-MOVING-MACHINE OPERATOR 910.663-010
Track-Repairer Helper 869.687-026
TRACK-SURFACING-MACHINE OPERATOR 910.683-018
Tractor-Drill Operator 930.382-010
traffic control signaler 372.667-022
transit-mix operator 900.683-010
traveling-plant operator 859.683-026
trench backfiller see DITCH DIGGER .....
trench digger see DITCH DIGGER .....
Trench Trimmer, Fine 869.687-026

Trim Setter 860.381-022
TRUCKLOAD CHECKER 222.367-066
Tuck Pointer 869.664-014
Tunnel-Form-Placing Supervisor 869.131-014
Tunnel-Heading Inspector 182.267-010
tunneling-machine operator 850.662-010
TUNNEL WORKER ..... term
UTILITY-TRACTOR OPERATOR 850.683-046
Varnisher 840.381-010
Vibrating-Screed Operator 853.663-014
Wagon-Drill Operator 930.382-010
Wallpaper Remover, Steam 869.687-026
Wall Washer 869.687-026
WASHING-AND-SCREENING PLANT SUPERVISOR 570.132-018
Waterproofer 869.664-014
Waterproofer Helper 869.687-026
Water-Truck Driver I 904.383-010
WATER-TRUCK DRIVER II 905.683-010
water-well driller 859.362-010
Weather Stripper 860.381-022
Well Digger 869.687-026
WELL-DRILL OPERATOR 859.362-010
Well-Drill Operator, Cable Tool 859.362-010
Well-Drill-Operator Helper, Cable Tool 869.664-014
Well-Drill-Operator Helper, Rotary Drill 869.664-014
Well-Drill Operator, Rotary Drill 859.362-010
WELL-POINT PUMPING SUPERVISOR 862.132-010
WELL-POINT SETTER ..... term
Well-Reactivator Operator 859.362-010
wheelbarrow pusher see WHEELER .....
WHEELER ..... term
White Washer 869.687-026
WIND-GENERATING-ELECTRIC-POWER INSTALLER 821.381-018
wire-fence builder 869.684-022
Wire-Fence Erector 869.684-022
wirer 824.261-010
Wooden-Fence Erector 869.684-022
wood-form builder 860.381-046
Wood Lather 842.361-010
Wood-Pile-Driver Operator 859.682-018
Wood-Sash-And-Frame Carpenter 860.381-022
Wood-Shingle Roofer 866.381-010
Wood-Strip-Block Floor Installer 860.381-022
Wrecker 869.664-014
WRECKING SUPERVISOR 869.137-014
YARD SUPERVISOR 229.137-014

cutlery-hrdwr.—CUTLERY, HANDTOOLS, AND HARDWARE INDUSTRY: This designation includes occupations concerned with manufacturing and repairing various kinds of cutlery and handtools. The principal products include: table and kitchen cutlery; all edge tools such as augers, axes, gimlets, hatchets, knives, meat choppers, planes, razors, scissors, and shears; handtools, except power-driven handtools used by farmers, iron-workers, masons, mechanics, and plumbers; files and rasps including recutting these implements; complete handsaws and saw blades for hand- and power-driven saws. This industry also includes occupations engaged in manufacturing miscellaneous metal products, not elsewhere classified, which are usually termed hardware. These include clamps, door bolts and locks, hinges, pulleys, and vacuum bottles. Occupations concerned with the manufacture of plated stainless steel and silver flatware are included in the JEWELRY, SILVERWARE, AND PLATED WARE INDUSTRY (jewelry-silver.).

ASSEMBLER 701.687-010
Assembler, Knife 701.687-010
BLADE GROOVER 705.582-010
blank driller 709.684-082
CALIBRATOR 701.684-010
capper 779.684-034
COLD-PRESS LOADER 701.687-018
DIAMOND BLENDER 590.685-018
Electric-Razor Assembler 701.687-010
etcher 500.685-010
ETCHER, ELECTROLYTIC 500.685-010
ETCHER, HAND 704.687-014
ETCHER, MACHINE 619.685-042
featherer 701.687-030
FILE CUTTER 605.685-014
Final Inspector 701.687-026
glass bender 573.686-018
glass curvature gauger 701.687-022
glass grinder 673.685-066
glass marker 775.684-046
glass setter 701.684-018
GLASS-VIAL-BENDING-CONVEYOR FEEDER 573.686-018
grinder-and-honer operator, automatic 603.685-058
GRINDER OPERATOR, AUTOMATIC 603.685-058
Hacksaw Inspector 709.587-010
inspector 701.687-026
INSPECTOR 709.587-010
INSPECTOR, OPEN DIE 701.684-014
laborer, cutting tool 701.687-018
LEVEL-GLASS-FORMING-MACHINE OPERATOR 679.665-010
LEVEL-GLASS-VIAL FILLER 692.685-114
LEVEL-VIAL CURVATURE GAUGER 701.687-022
LEVEL-VIAL INSIDE GRINDER 673.685-066
LEVEL-VIAL INSPECTOR-AND-TESTER 701.687-026
LEVEL-VIAL MARKER 775.684-046
LEVEL-VIAL SEALER 779.684-034
LEVEL-VIAL SETTER 701.684-018
LOCK ASSEMBLER 706.684-074
NICKING-MACHINE OPERATOR 609.682-026
nick setter 609.682-026
Notched-Blade Loader 701.687-018
Operator, Coating Furnace 554.685-014
PATTERNMAKER, SAMPLE 693.281-022
pinner 701.687-010
POWER-CHISEL OPERATOR 701.687-030
PRINTING-MACHINE OPERATOR, FOLDING RULES 652.685-074
PRINTING-MACHINE OPERATOR, TAPE RULES 652.662-010
PROTECTOR-PLATE ATTACHER 692.685-138
QUALITY-CONTROL INSPECTOR 701.261-010
REPAIRER, HANDTOOLS 701.381-010
SAW-EDGE FUSER, CIRCULAR 701.684-026
SAW MAKER 601.381-034
saw mechanic 601.381-034
Sawsmith 601.381-034
SCRIBING-MACHINE OPERATOR 605.685-042
Shear Assembler 701.687-010
STAB SETTER AND DRILLER 709.684-082
Steel-Rule Inspector 709.587-010
strike-plate attacher 692.685-138
SUPERVISOR 615.130-014
SUPERVISOR, ASSEMBLY-AND-PACKING 701.137-010
TEMPLATE CUTTER 703.684-018
Tester 701.687-026
TRIM ATTACHER 692.685-230
Vial Gauger 701.687-026
WEDGER, MACHINE 701.687-034

dairy products—DAIRY PRODUCTS INDUSTRY: This designation includes occupations concerned with separating, heating, cooling, mixing, curdling, forming, cutting, grinding, freezing, and drying milk and cream preparations and combining milk, cream, flavoring, syrup, and chemical or organic ingredients to make butter, sherbet, and related products. Included are occupations concerned with the collection of milk and cream from farms.

BATCH FREEZER 523.685-010
BLENDER-CONVEYOR OPERATOR 529.685-022
BLENDING-MACHINE OPERATOR 522.685-010
Brine-Room Laborer 529.686-050
BRINE-TANK TENDER 529.685-030
bulk intake worker 222.485-010
Butter-Chilling Equipment Operator 529.362-010
Butter Churne: 529.362-010
BUTTERMAKER 529.362-010
BUTTERMAKER, CONTINUOUS CHURN 529.382-010
Buttermaker Helper 529.686-026
Buttermilk-Drier Operator 523.682-022
Butter Production Supervisor 529.131-014
Byproducts Maker 529.382-018
can intake worker 222.585-010
CASTING-MACHINE OPERATOR 520.685-058
Cellar Laborer 529.686-050
CENTRIFUGE OPERATOR 521.685-042
CHEESE BLENDER 520.487-010
cheese cooker 529.361-018
CHEESE CUTTER 529.585-010
CHEESE GRADER 529.387-010
CHEESEMAKER 529.361-018
CHEESEMAKER HELPER 529.682-014
Cheese Production Supervisor 529.131-014
Clarifier Operator 529.382-018
cone chocolate dipper 524.686-014
cone racker 524.686-014
cook blender 526.665-010
COOKER, PROCESS CHEESE 526.665-010
Cooler Operator 529.382-018
Cooler Supervisor 929.137-022

domestic ser.

Cooler Worker 922.687-058
COTTAGE-CHEESE MAKER 522.382-010
Cream-Cheese Maker 526.665-010
DAIRY-EQUIPMENT REPAIRER ..... 629.2[illegible]1-018
DAIRY HELPER 529.686-026
DAIRY-PROCESSING-EQUIPMENT OPERATOR 529.382-018
DECORATOR 524.381-014
DRIER OPERATOR 523.682-022
Equipment Sterilizer 599.684-010
EVAPORATOR OPERATOR 521.382-010
FIELD-CONTACT TECHNICIAN 162.117-026
FLAVOR ROOM WORKER 529.685-130
Flavor-Tank Tender 529.685-146
Formula Bottler 520.487-014
Formula Maker 520.487-014
FORMULA-ROOM WORKER 520.487-014
freezer 529.482-010
freezer assistant 529.685-146
FREEZER OPERATOR 529.482-010
GRATED-CHEESE MAKER 521.685-162
grating-machine operator 521.685-162
Homogenizer Operator 529.382-018
ice-cream freezer 529.482-010
ICE CREAM FREEZER ASSISTANT 529.685-146
ICICLE-MACHINE OPERATOR 920.482-010
ingredient mixer 529.684-014
INGREDIENT SCALER 529.684-014
INSTANTIZER OPERATOR 523.685-106
Instant-Powder Supervisor 529.131-014
KOSHER INSPECTOR 529.687-126
LABORER, CHEESEMAKING 529.686-050
Line Cleaner 599.684-010
malted-milk masher 526.485-010
malted-milk mixer 521.685-222
MASH GRINDER 520.685-130
MILK DRIVER 905.483-010
milk hauler 905.483-010
MILK-POWDER GRINDER 521.685-222
MILK RECEIVER 222.585-010
MILK RECEIVER, TANK TRUCK 222.485-010
Mix Maker 529.382-018
Mold Filler 529.685-030
Mold Remover 529.685-030
novelty dipper 529.482-014
NOVELTY MAKER I 529.482-014
NOVELTY MAKER II 529.482-018
NOVELTY WORKER 524.686-014
Pasteurizer Helper 529.686-026
Pasteurizer Operator 529.382-018
Pasteurizing Supervisor 529.131-014
Pipe Washer 599.684-010
powder operator 523.682-022
pusher 529.685-030
putter-in 529.685-030
RAW-CHEESE WORKER 529.686-078
SANDWICH-MACHINE OPERATOR 529.685-210
Separator Operator 529.382-018
SLICING-MACHINE OPERATOR 521.685-306
STERILIZER OPERATOR 523.685-114
sticker 524.686-014
Stick Inserter 529.685-030
SUPERVISOR, CLEANING 699.137-010
SUPERVISOR, DAIRY PROCESSING 529.131-014
Supervisor, Dairy Sanitation 529.137-014
SUPERVISOR, MALTED MILK 529.132-070
SUPERVISOR, WHIPPED TOPPING 529.137-066
TABLET-MACHINE OPERATOR 529.685-238
TRAY-CASTING-MACHINE OPERATOR 520.685-218
Truck Washer 919.687-014
WORT EXTRACTOR 526.485-010

domestic ser.—DOMESTIC SERVICE: This designation includes occupations concerned with rendering services for members of households or their guests in or about private homes. Workers in these occupations are usually employees of the household. Workers who are employed by another establishment, but who perform their work in a private home, are included in other industries.

Baby Sitter 301.677-010
BUTLER 309.137-010
BUTLER, SECOND 309.674-010
CARETAKER 301.687-010
CHAUFFEUR 359.673-010
CHILD MONITOR 301.677-010
CHILDREN'S TUTOR 099.227-010
Children's Tutor, Nursery 099.227-010
COMPANION 309.677-010
COOK 305.281-010
DAY WORKER 301.687-014
driver 359.673-010
Family-Dinner Service Specialist 305.281-010
FOSTER PARENT 309.677-014
Gardener 301.687-018
HOUSEKEEPER, HOME 301.137-010
housekeeper, home 301.474-010
HOUSE SITTER 309.367-010
House Worker 301.687-010
HOUSE WORKER, GENERAL 301.474-010
IRONER 302.687-010
LAUNDRY WORKER, DOMESTIC 302.685-010
manager, household 301.137-010
nurse, children's 301.677-010
Nurse, Infants' 301.677-010
odd-job worker 301.687-010
PERSONAL ATTENDANT 309.674-014
YARD WORKER 301.687-018

education—EDUCATION AND INSTRUCTION: This designation includes occupations concerned with imparting knowledge of the arts, sciences, or other fields of learning or of physical activities; or with teaching, advising, or instructing others in any of these fields or in vocations. Occupations occurring in libraries are included in LIBRARY (library); and those occurring in museums, art galleries, and botanical and zoological gardens are included in MUSEUMS, ART GALLERIES, AND BOTANICAL AND ZOOLOGICAL GARDENS (museums).

Academic Counselor 045.107-010
ACADEMIC DEAN 090.117-010
academic vice president 090.117-010
Acting Professor 090.227-010
administrative analyst 090.167-018
administrative assistant 205.367-010
administrative assistant, special education 094.167-014
ADMISSIONS EVALUATOR 205.367-010
ALUMNI SECRETARY 090.117-014
art instructor 149.021-010
ASSISTANT PRINCIPAL 091.107-010
Assistant Professor 090.227-010
assistant superintendent, special education 094.167-014
Associate Professor 090.227-010
athletic coach 153.227-018
ATHLETIC TRAINER 153.224-010
ATTENDANCE CLERK 219.362-014
ATTENDANCE OFFICER 168.367-010
audiovisual specialist 099.167-018
Ballet Master/Mistress 151.027-014
braille coder 203.582-014
braille coder 209.584-010
braille transcriber 203.582-014
BRAILLE TRANSCRIBER, HAND 209.584-010
BRAILLE TYPIST 203.582-014
bridge expert 159.227-010
BURSAR 160.167-042
BUSINESS MANAGER, COLLEGE OR UNIVERSITY 186.117-010
CAREER-GUIDANCE TECHNICIAN 249.367-014
career-information specialist 249.367-014
Career Placement Services Counselor 045.107-010
career resource technician 249.367-014
CERTIFICATION AND SELECTION SPECIALIST 099.167-010
Chairperson, Scholarship And Loan Committee 090.117-030
chancellor 090.117-034
Clinical Instructor 090.227-010
COMMUNICATIONS TECHNICIAN 962.362-010
CONSULTANT, EDUCATION 099.167-014
coordinator of placement 166.167-014
counselor, dormitory 045.107-038
counselor, orientation and mobility 076.224-014
dean of admissions 090.167-014
dean of chapel 129.107-018
dean of instruction 090.117-010
Dean of Men 090.117-018
dean of student affairs 090.117-018
DEAN OF STUDENTS 090.117-018
Dean of Women 090.117-018
degree clerk 205.367-010
department chairperson, college or university 090.167-010
DEPARTMENT HEAD, COLLEGE OR UNIVERSITY 090.167-010
Department Head, Junior College 090.167-010
director, alumni relations 090.117-014

DIRECTOR, ATHLETIC 090.117-022
Director, Child Development Center 092.167-010
DIRECTOR, DAY CARE CENTER 092.167-010
DIRECTOR, EDUCATIONAL PROGRAM 099.117-010
director, evaluation and research 099.167-022
DIRECTOR, EXTENSION WORK 090.117-026
DIRECTOR, FIELD SERVICES 090.167-034
DIRECTOR, INSTRUCTIONAL MATERIAL 099.167-018
Director, Nursery School 092.167-010
director of admissions 090.167-030
DIRECTOR OF ADMISSIONS 090.167-014
director of career planning and placement 166.167-014
director of career resources 166.167-014
director of financial aid and placements 090.117-030
DIRECTOR OF GUIDANCE IN PUBLIC SCHOOLS 045.117-010
DIRECTOR OF INSTITUTIONAL RESEARCH 090.167-018
director of institutional studies 090.167-018
DIRECTOR OF PLACEMENT 166.167-014
DIRECTOR OF PUPIL PERSONNEL PROGRAM 099.167-034
director of recruitment 090.167-034
DIRECTOR OF RELIGIOUS ACTIVITIES 129.107-018
director of religious life 129.107-018
DIRECTOR OF STUDENT AFFAIRS 090.167-022
director of student aid 090.117-030
director of student services 090.117-018
Director, School For Blind 187.117-018
DIRECTOR, SPECIAL EDUCATION 094.167-014
director, student union 090.167-022
DIRECTOR, SUMMER SESSIONS 090.167-026
DIRECTOR, VOCATIONAL TRAINING 097.167-010
dormitory supervisor 045.107-038
EDUCATIONAL SPECIALIST 099.167-022
EDUCATION SUPERVISOR, CORRECTIONAL INSTITUTION 099.117-014
Education Supervisor, Penal Institution 099.117-014
Education Supervisor, Youth Authority 099.117-014
ENERGY-CONTROL OFFICER 199.167-018
EVALUATOR 094.267-010
Evaluator, Transfer Students 205.367-010
faculty dean 090.117-010
FACULTY MEMBER, COLLEGE OR UNIVERSITY 090.227-010
Faculty Member, Technical Institute 090.227-010
FINANCIAL-AID COUNSELOR 169.267-018
FINANCIAL-AIDS OFFICER 090.117-030
FOREIGN-STUDENT ADVISER 090.107-010
FOUR-H CLUB AGENT 096.127-022
Fraternity Adviser 090.167-022
grade recorder 219.467-010
GRADING CLERK 219.467-010
GRADUATE ASSISTANT 090.227-014
Ground Instructor, Advanced 097.227-010
Ground Instructor, Basic 097.227-010
Ground Instructor, Instrument 097.227-010
Guidance Counselor 045.107-010
head resident, dormitory 045.107-038
high school teacher 091.227-010
Instructor 090.227-010
Instructor, Ballroom Dancing 151.027-014
Instructor, Braille 094.224-018
INSTRUCTOR, BRIDGE 159.227-010
INSTRUCTOR, BUSINESS EDUCATION 090.222-010
INSTRUCTOR, CORRESPONDENCE SCHOOL 099.227-014
INSTRUCTOR, DANCING 151.027-014
instructor, dramatic arts 150.027-014
INSTRUCTOR, DRIVING 099.223-010
INSTRUCTOR, EXTENSION WORK 090.227-018
INSTRUCTOR, FLYING I 196.223-010
INSTRUCTOR, FLYING II 097.227-010
Instructor, Illustration 149.021-010
Instructor, Industrial Design 149.021-010
instructor, kindergarten 092.227-014
INSTRUCTOR, MILITARY SCIENCE 099.227-022
INSTRUCTOR, MODELING 099.227-026
instructor of blind 076.224-014
INSTRUCTOR, PHYSICAL 153.227-014
INSTRUCTOR, PHYSICAL EDUCATION 099.224-010
instructor, private 099.227-034
Instructor, Programmable Controllers 166.221-010
INSTRUCTOR, PSYCHIATRIC AIDE 075.127-010
Instructor, Robotics 166.221-010
instructor, self-improvement 099.227-026
INSTRUCTOR, SPORTS 153.227-018
Instructor, Tap Dancing 151.027-014
INSTRUCTOR, TECHNICAL TRAINING 166.221-010
INSTRUCTOR, VOCATIONAL TRAINING 097.221-010
LABORATORY MANAGER 090.164-010
Lecturer 090.227-010
Loan Counselor 169.267-018
Mainstreaming Facilitator 094.267-010
MANAGER, DANCE STUDIO 187.167-086
MANAGER, EDUCATION AND TRAINING 166.167-026
manager of student placement service 166.167-014
manager, student union 090.167-022
mathematics improvement teacher 099.227-042
music instructor 152.021-010
MUSIC SUPERVISOR 099.167-026
ORIENTATION AND MOBILITY THERAPIST FOR THE BLIND 076.224-014
Orientation And Mobility Instructor 076.224-014
orientation therapist for blind 076.224-014
orientor 076.224-014
PHYSICAL THERAPIST 076.121-014
physiotherapist 076.121-014
President, Business School 090.117-034
President, College Or University 090.117-034
PRESIDENT, EDUCATIONAL INSTITUTION 090.117-034
PRINCIPAL 099.117-018
Professor 090.227-010
professor, dance 151.027-014
provost 090.117-010
reading improvement teacher 099.227-042
REGISTRAR, COLLEGE OR UNIVERSITY 090.167-030
Research Assistant 090.227-010
RESIDENCE COUNSELOR 045.107-038
Sales Representative, Business Courses 259.257-010
Sales Representative, Correspondence Courses 259.257-010
SALES REPRESENTATIVE, DANCING INSTRUCTIONS 259.357-014
SALES REPRESENTATIVE, EDUCATION COURSES 259.257-010
SATELLITE-INSTRUCTION FACILITATOR 249.367-086
satellite-project site monitor 249.367-086
Scholarship Counselor 169.267-018
school examiner 099.167-010
SCHOOL-PLANT CONSULTANT 001.167-010
SCHOOL SECRETARY 201.362-022
SECRETARY, BOARD-OF-EDUCATION 169.267-022
shop teacher 091.221-010
student-activities adviser 090.167-022
student-union consultant 090.167-022
SUPERINTENDENT, SCHOOLS 099.117-022
Supervisor, Adult Education 099.117-026
Supervisor, Agricultural Education 099.117-026
supervisor, counseling and guidance 045.117-010
SUPERVISOR, EDUCATION 099.117-026
Supervisor, Elementary Education 099.117-026
Supervisor, Home Economics 099.117-026
Supervisor, Industrial Arts Education 099.117-026
Supervisor, Maintenance And Custodians 381.137-010
Supervisor, Modern Languages 099.117-026
supervisor of guidance and testing 045.117-010
supervisor of research 045.117-010
SUPERVISOR, SPECIAL EDUCATION 094.167-010
SUPERVISOR, SPECIAL SERVICES 169.267-026
Supervisor, Trade And Industrial Education 099.117-026
TEACHER, ADULT EDUCATION 099.227-030
TEACHER, ADVENTURE EDUCATION 099.224-014
teacher aide, clerical 249.367-074
TEACHER AIDE I 099.327-010
TEACHER AIDE II 249.367-074
TEACHER, ART 149.021-010
teacher assistant 099.327-010
Teacher, Ballet 151.027-014
Teacher, Child Development Center 092.227-018
Teacher, Citizenship 099.227-030
teacher, dancing 151.027-014
Teacher, Day Care Center 092.227-018
TEACHER, DRAMA 150.027-014
teacher, dramatics 150.027-014
teacher, driver education 099.223-010
Teacher, Early Childhood Development 092.227-018
TEACHER, ELEMENTARY SCHOOL 092.227-010
TEACHER, EMOTIONALLY IMPAIRED 094.227-010
TEACHER, HEARING IMPAIRED 094.224-010
TEACHER, HOME ..... term
TEACHER, INDUSTRIAL ARTS 091.221-010
Teacher, Instrumental 152.021-010
Teacher, Junior College 090.227-010
TEACHER, KINDERGARTEN 092.227-014
TEACHER, LEARNING DISABLED 094.227-030
Teacher, Lip Reading 094.224-010
TEACHER, MENTALLY IMPAIRED 094.227-022

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elec. equip.

TEACHER, MUSIC 152.021-010
Teacher, Nursery School 092.227-018
teacher, physical education 099.224-010
TEACHER, PHYSICALLY IMPAIRED 094.224-014
TEACHER, PRESCHOOL 092.227-018
teacher, private 099.227-034
TEACHER, RESOURCE 099.227-042
TEACHER, SECONDARY SCHOOL 091.227-010
teacher selection specialist 099.167-010
teacher, theater arts 150.027-014
TEACHER, VISUALLY IMPAIRED 094.224-018
Teacher, Vocal 152.021-010
teacher, vocational training 097.221-010
TEACHER, VOCATIONAL TRAINING 094.227-026
Teaching Assistant 090.227-010
TECHNICAL TRAINING COORDINATOR 166.167-054
test clerk 219.467-010
therapist for blind 076.224-014
training administrator 166.167-026
training instructor 166.227-010
TRAINING REPRESENTATIVE 166.227-010
training specialist 166.221-010
truant officer 168.367-010
TUTOR 099.227-034
university dean 090.117-010
veterans' coordinator 169.267-026
vice president for institutional research 090.167-018
vice president for instruction 090.117-010
vice president of student affairs 090.117-018
Visiting Professor 090.227-010
visiting-student counselor 090.107-010
Vocational Adviser 045.107-010
Women's-Activities Adviser 090.167-022
WORK-STUDY COORDINATOR, SPECIAL EDUCATION 094.107-010
Youth Agent 096.127-022

elec. equip.—ELECTRICAL EQUIPMENT INDUSTRY: This designation includes occupations concerned with manufacturing and repairing machinery, apparatus, and supplies that are used in the generation, transmission, distribution, storage, and utilization of electrical energy. The principal products include: (1) electric transmission and distribution equipment, such as transformers, ballasts, and voltage regulators; (2) electrical industrial apparatus, such as motors, generators, coils, armatures, controls, electric welding apparatus, and carbon and graphite products; and (3) miscellaneous electrical machinery, equipment, and supplies, such as storage and primary batteries, x-ray apparatus, electrotherapeutic apparatus, alternators, chimes, and electric fireplace logs. Excluded are occupations concerned with the manufacture of lighting fixtures, LIGHTING FIXTURES INDUSTRY (light. fix.); radios, RADIO, TELEVISION, AND COMMUNICATION EQUIPMENT INDUSTRY (comm. equip.); household appliances, HOUSEHOLD APPLIANCES INDUSTRY (house. appl.); phonograph records and prerecorded magnetic tapes, RECORDING INDUSTRY (recording); and electronic components, ELECTRONIC COMPONENTS AND ACCESSORIES INDUSTRY (electron. comp.).

ACID ADJUSTER 727.484-010
acid changer 727.687-010
ACID DUMPER 727.687-010
ACID FILLER 727.687-014
Acid Leveler 727.687-014
ADJUSTER, ELECTRICAL CONTACTS 724.381-010
ALUMINUM-CONTAINER TESTER 727.687-018
armature-and-field-assembly supervisor 724.131-010
armature-and-rotor winder 721.484-010
Armature Balancer 724.384-014
Armature Connector I 721.684-018
ARMATURE CONNECTOR II 724.684-014
Armature Straightener 721.281-018
ARMATURE TESTER I 724.384-010
Armature Tester II 729.684-058
Armature Tester III 724.364-010
Armature Winder 721.484-010
Asphalt Coater 599.685-026
assembler 729.687-010
assembler 721.684-022
ASSEMBLER AND WIRER, INDUSTRIAL EQUIPMENT 826.361-010
ASSEMBLER, CARBON BRUSHES 721.684-014
assembler, caterpillar spider 721.684-026
Assembler, Communications Equipment 729.684-026
assembler dc field ring 721.484-014
assembler dc field yoke 721.484-014
Assembler, Dielectric Heater 826.361-010
ASSEMBLER, DRY CELL AND BATTERY 727.687-022
ASSEMBLER, ELECTRICAL ACCESSORIES I 729.687-010
ASSEMBLER, ELECTRICAL ACCESSORIES II 729.384-010
assembler-erector 820.361-014
assembler, flexible leads 691.685-018
Assembler, Instrument Motors 721.684-022
assembler-insulator 729.684-030
assembly hand 721.684-022
ASSEMBLY-MACHINE-SET-UP MECHANIC 692.360-010
baked-and-graphite inspector 559.364-010
balancer 727.484-010
battery analyst 727.381-022
BATTERY ASSEMBLER 727.684-010
BATTERY ASSEMBLER, DRY CELL 727.664-010
BATTERY ASSEMBLER, PLASTIC 727.684-014
BATTERY CHARGER 727.587-010
BATTERY CHARGER, CONVEYOR LINE 727.687-026
BATTERY-CHARGER TESTER 729.684-010
BATTERY-CONTAINER-FINISHING HAND 727.687-034
battery-container inspector 727.687-066
battery-container tester, aluminum 727.687-018
battery loader 727.687-030
BATTERY-PARTS ASSEMBLER 727.687-038
Battery Plate Remover 727.687-058
BATTERY RECHARGER 727.381-010
BATTERY STACKER 727.687-030
BATTERY TESTER 727.384-010
battery tester and repairer 727.684-018
Battery Tester, Field 727.384-010
Battery-Vent-Plug Inserter 727.687-038
Bead Stringer 691.685-018
bench assembler, battery 727.684-026
Bender, Armature Coil 724.684-026
binder 724.687-010
blade aligner 706.687-018
BOTTOM POLISHER 603.685-034
Brush-Holder Assembler 721.684-022
brush maker 721.684-014
cable-machine operator 616.682-034
cable maker 728.684-010
cabling-machine operator 616.682-034
CAPACITOR ASSEMBLER 729.684-014
CAPACITOR-PACK-PRESS OPERATOR 726.684-010
Capacitor Repairer 729.684-014
CAPPING-MACHINE OPERATOR 692.685-042
CARBON-AND-GRAPHITE-BRUSH-MACHINE OPERATOR 692.482-010
Carbon Brushes Tester 729.684-058
carbon-brush maker 721.684-014
CARBON CUTTER 677.685-018
Carbon-Paste-Mixer Operator, Panelboard 540.585-010
CARBON ROD INSERTER 692.686-026
CARTRIDGE LOADER 779.687-014
Casting Inspector 502.687-018
casting-machine adjuster 502.684-018
CASTING-MACHINE OPERATOR, AUTOMATIC 502.482-014
CASTING-MACHINE-OPERATOR HELPER 502.686-010
cell assembly, booker 727.687-038
cell assembly, pinner 727.687-038
CELL COVERER 727.687-042
CELL REPAIRER 727.684-018
CELL TUBER, HAND 727.687-046
CELL TUBER, MACHINE 692.685-046
Charging-Plug Placer 727.687-026
Circuit Breaker Assembler 729.687-010
CIRCULATING PROCESS INSPECTOR 829.361-018
Clay-Products Glazer 599.685-026
CLEANER AND PREPARER 721.687-010
CLINCHING-MACHINE OPERATOR 616.685-014
coil assembler 721.484-010
COIL CONNECTOR 721.684-018
Coil-Connector Repairer 721.281-018
Coil Finisher 724.684-026
Coil Former, Template 724.684-026
Coil Taper 724.684-026
Coil Tester 729.684-058
COIL WINDER 724.684-026
Coil Winder, Open Slot 724.684-026
Coil Winder, Strap 724.684-026
COMMUTATOR ASSEMBLER 724.684-030
commutator presser 724.684-030
Commutator Tester 729.684-058
Commutator Undercutter 724.684-030
Commutator V-Ring Assembler 724.684-030
Compound Mixer 726.687-022
COMPRESSION-MOLDING-MACHINE OPERATOR 556.682-014
COMPRESSOR 556.682-022
Concaving-Machine Operator 692.482-010

connector 721.684-018
contact assembler 729.687-010
Contact-Finger Assembler 729.687-010
container finisher 727.687-034
Control-Cabinet Assembler 826.361-010
Control Operator, Flow Coat 599.382-010
control-panel assembler 721.381-014
CONTROL-PANEL TESTER 827.381-010
core-assembly supervisor 619.130-042
Core Dropper 727.687-022
CORE EXTRUDER 557.685-010
COREMAKING-MACHINE OPERATOR 692.682-030
Crossbar-Frame Wirer 729.381-022
Crossbar-Switch Adjuster 724.381-010
Crossbar-Switch Repairer 729.684-038
Crossbar-Unit Wirer 729.381-022
DIAL MARKER 729.684-018
die-casting machine operator 502.482-018
dielectric-testing-machine operator 727.687-050
Dipper 726.687-022
Distribution-Transformer Assembler 820.381-014
DRIER-TAKE-OFF TENDER 921.685-034
DRY-CELL-ASSEMBLY-MACHINE TENDER 692.665-018
DRY-CELL TESTER 727.381-018
DRY-CHARGE-PROCESS ATTENDANT 590.685-026
Drying-Equipment Operator 599.682-014
Dynamometer Repairer 729.281-026
ELECTRICAL-CONTROL ASSEMBLER 729.684-026
electrical tester, battery 727.384-010
Electric-Cable Diagrammer 003.281-010
ELECTRIC-CONTAINER TESTER 727.687-050
ELECTRIC-MOTOR-AND-GENERATOR ASSEMBLER 820.361-014
ELECTRIC-MOTOR ASSEMBLER 721.684-022
ELECTRIC-MOTOR-CONTROL ASSEMBLER 721.381-014
ELECTRIC-MOTOR WINDER 721.484-010
Electric-Range Assembler 827.684-010
Electric-Switch Tester 729.684-058
ELECTRODE CLEANER 729.687-014
ELECTRODE-CLEANING-MACHINE OPERATOR 559.685-062
ELECTRODE TURNER-AND-FINISHER 692.682-034
Element Setter 727.687-038
ELEMENT WINDING MACHINE TENDER 724.685-010
Embedder 575.684-042
Embossing-Press Operator 652.682-030
Enamel-Machine Operator 599.685-046
ENCAPSULATOR 726.687-022
EXTRUSION-PRESS ADJUSTER 614.380-010
EXTRUSION-PRESS OPERATOR I 614.482-018
EXTRUSION-PRESS OPERATOR II 614.685-014
Fan Balancer 724.384-014
FAN-BLADE ALIGNER 706.687-018
fan-blade truer 706.687-018
Field-Coil Repairer 721.281-018
Field-Coil Winder 724.684-026
FIELD-RING ASSEMBLER 721.484-014
Filler 726.687-022
final inspector 729.387-018
FINAL INSPECTOR 727.687-054
FINAL TESTER 721.261-014
FINISHING INSPECTOR 729.387-018
FINISHING SUPERVISOR 692.130-014
FIRESETTER 692.360-018
flamer-sealer 727.684-030
Flash-Oven Operator 554.685-014
FOLLOW-UP CLERK 221.367-018
former 691.685-018
forming acid dumper 727.687-010
FORMING-PROCESS-LINE WORKER 727.687-058
FORMING-PROCESS WORKER 590.362-010
Furnace Cooler 543.666-010
Furnace Loader 543.666-010
FURNACE OPERATOR 543.682-018
Furnace Packer 543.666-010
FURNACE-STOCK INSPECTOR 559.364-010
Furnace Unloader 543.666-010
FURNACE WORKER 543.666-010
Galvanometer Assembler 729.384-010
governor assembler 609.682-022
GOVERNOR ASSEMBLER, HYDRAULIC 721.381-018
GREEN INSPECTOR 726.367-010
Grid Caster 502.684-010
grid-casting-machine-operator helper 502.686-010
Grid Inspector 502.687-018
grid-pasting-machine operator 505.482-010
group burner, machine 727.662-010
grouper 729.687-026
harness maker 728.684-010
Heading-Machine Operator 692.482-010
HEATING-ELEMENT WINDER 723.685-010
Helix-Coil Winder 724.684-026
Hypercil-Core-Transformer Assembler 820.381-014
impregnating helper 599.685-050
Impregnation Inspector 726.367-010
IMPREGNATOR AND DRIER 599.682-014
IMPREGNATOR-AND-DRIER HELPER 599.685-050
INSPECTOR 727.687-062
Inspector And Shaper, End Windings 724.364-010
INSPECTOR, CHIEF 729.131-010
INSPECTOR, CONTAINER FINISHING 727.687-066
INSPECTOR, MOTORS AND GENERATORS 721.361-010
inspector, process 829.361-018
INSPECTOR, RECEIVING 222.384-010
INSULATION CUTTER AND FORMER 721.484-018
Insulator 724.684-026
Insulator Cutter And Former 724.684-026
Intercell-Connector Placer 727.687-070
Jack-Strip Assembler 729.684-026
LACER AND TIER 724.687-010
LAMINATION ASSEMBLER 729.684-066
lamination inspector 729.687-018
LAMINATION SPINNER 729.687-018
Lamination Stacker, Hand 729.684-066
Lamination Stacker, Machine 729.684-066
lead assembler 691.685-018
lead bender 691.685-018
LEAD BURNER 727.684-022
LEAD-BURNER HELPER 727.687-070
LEAD BURNER, MACHINE 727.662-010
LEAD CASTER 502.684-010
LEAD-CASTER HELPER 502.687-018
LEAD FORMER 691.685-018
LEAD-OXIDE-MILL TENDER 558.685-042
Lead-Supply Worker 502.687-018
Lead Tinner 691.685-018
Light-Bulb Tester 729.684-058
line-up-machine operator 706.687-018
Lug-Breaker-And-Wire-Puller 727.687-058
Lugger 691.685-018
MACHINE OPERATOR, CENTRIFUGAL-CONTROL SWITCHES 609.682-022
MACHINING-AND-ASSEMBLY SUPERVISOR 619.131-010
MAGNET-VALVE ASSEMBLER 724.684-034
MIX-CRUSHER OPERATOR 544.585-010
MIXER OPERATOR, CARBON PASTE 540.585-010
molded-grid-and-parts inspector 727.687-074
MOLDED-PARTS INSPECTOR 727.687-074
MOLDER, HAND 575.684-042
MOLD OPERATOR 729.684-030
MOLD SETTER 502.684-018
motor-and-generator assembler 820.361-014
motor-and-generator-brush cutter 721.684-014
MOTOR-AND-GENERATOR-BRUSH MAKER 724.684-038
OPERATOR, CAVITY PUMP 729.682-010
OVEN TENDER 543.685-018
pack-press operator 726.684-010
Painter, Battery Brand And Vent Plug 740.687-018
panel assembler and wirer 826.361-010
panelboard assembler 721.381-014
Paper Slitter 699.682-030
parts caster, hand 502.684-010
parts-casting-machine operator 502.482-014
Paste Mixer, Liquid 550.585-034
PASTING-MACHINE OFFBEARER 509.686-014
PASTING-MACHINE OPERATOR 505.482-010
PLANER OPERATOR 675.682-014
Plaster-of-Paris Molder 729.684-030
PLATE ASSEMBLER, SMALL BATTERY 727.684-026
Plate-Drying-Machine Tender 590.685-026
PLATE FORMER 500.684-018
plate grouper, machine 692.382-014
Plate-Put-in Worker 727.687-058
PLATE SLITTER-AND-INSPECTOR 727.685-010
PLATE STACKER, HAND 729.687-026
PLATE STACKER, MACHINE 692.382-014
PLATE-TAKE-OUT WORKER 500.687-010
Plate Washer 727.687-058

electron. comp.

Plug Assembler 729.687-010
PLUG WIRER 726.687-014
polarity tester 727.687-054
Post-Form Remover 727.687-070
power-panel assembler 721.381-014
Power-Transformer Assembler 820.381-014
Press Operator, Carbon Products 556.682-014
Primary Connector, Armature 724.684-014
process attendant 590.362-010
Pull-Socket Assembler 729.687-010
Push-Button-Switch Assembler 729.687-010
quality auditor 727.381-022
Rack Loader 727.687-070
regulator assembler 724.684-030
Relay Adjuster 724.381-010
Relay Assembler 729.684-026
Relay Checker 724.381-010
Relay Repairer 729.684-038
REMELTER 502.685-014
Repairer, Electric Motors 721.684-022
REPAIRER, SWITCHGEAR 729.684-038
Resistor Tester 729.684-058
Resistor Winder 724.684-026
revolving field assembler 721.684-026
Rheostat Assembler 729.684-026
rotating field assembler 721.684-026
Rotor Balancer 724.384-014
ROTOR CASTING-MACHINE OPERATOR 502.482-018
rotor-lamination inspector 729.687-018
Rotor Winder 721.484-010
RUBBER-GOODS TESTER 759.381-010
safety-equipment tester 759.381-010
SAMPLER 549.587-018
SEALER 727.684-030
SEALER, DRY CELL 692.685-158
sealer operator 692.685-158
SEAL-EXTRUSION OPERATOR 692.685-154
SEAL MIXER 540.687-010
seal-mixing operator 540.687-010
Secondary Connector, Armature 724.684-014
Separator Inserter 727.687-038
SET-UP MECHANIC, COIL-WINDING MACHINES 724.360-010
SKEIN WINDER 721.484-022
Sleeve-Machine Tender 692.685-046
Sleever 691.685-018
SLUG-PRESS OPERATOR 556.685-074
sparker and patcher 728.684-018
SPARK-PLUG ASSEMBLER 729.684-046
SPARK TESTER 727.687-078
SPARK TESTER 728.684-018
Speaking-Unit Assembler 729.684-026
Specialty-Transformer Assembler 820.381-014
SPIDER ASSEMBLER 721.684-026
spinner, iron 729.687-018
Sprayer, Light Bulbs 599.686-014
SPUN-PASTE-MACHINE OPERATOR 692.685-190
stacker 729.687-026
stacking assembler 729.684-066
Starter Adjuster 724.381-010
Stator Connector 721.684-018
Stator Tester 724.364-010
Stator Winder 721.484-010
STORAGE BATTERY INSPECTOR AND TESTER 727.381-022
Strand Buncher, Fine Wire 616.682-034
strander operator 616.682-034
STRANDING-MACHINE OPERATOR 616.682-034
strand-machine operator 616.682-034
SUBASSEMBLER 729.684-054
Supervisor, Battery Assembly 727.130-010
SUPERVISOR, BURNING, FORMING, AND ASSEMBLY 727.130-010
SUPERVISOR, CASTING-AND-PASTING 502.130-010
Supervisor, Coil And Armature Inspection 721.131-014
Supervisor, Coil Winding 724.130-010
SUPERVISOR, COIL WINDING 724.131-010
SUPERVISOR, DRY-CELL ASSEMBLY 727.137-010
SUPERVISOR, ELECTRICAL ASSEMBLIES 826.131-014
SUPERVISOR, ELECTRICAL ASSEMBLY 729.130-010
Supervisor, Electric Motor Testing 721.131-014
SUPERVISOR, ELECTRONIC COILS 724.130-010
Supervisor, Filter Assembly 724.130-010
supervisor, floor assembly 619.131-010
Supervisor, Grid-Casting-And-Pasting 502.130-010
SUPERVISOR, INSPECTION AND TESTING 721.131-014
Supervisor, Lead Burning 727.130-010
Supervisor, Plate Forming 727.130-010
Supervisor, Plate Pasting 502.130-010
SUPERVISOR, PUNCH-AND-ASSEMBLY DEPARTMENT 619.130-042
Supervisor, Test And Inspection 724.130-010
swedger 724.684-030
Switch Adjuster 724.381-010
Switchboard Assembler 729.381-022
switchboard contact assembler 729.687-010
Switchbox Assembler II 729.684-026
Synchro-Unit Assembler 721.381-014
Tacker 787.685-042
Tamping-Machine Operator 692.482-010
Tank Cleaner 727.687-058
Telephone-Diaphragm Assembler 729.684-026
Telephone-Switch Repairer 729.684-038
Terminal-Block Assembler 729.687-010
TEST-DEPARTMENT HELPER 729.664-010
tester, armature or fields 724.384-010
TESTER, ELECTRICAL CONTINUITY 729.684-058
TESTER, MOTORS AND CONTROLS 721.281-030
test technician 727.381-022
THIRD DRY-CELL-ASSEMBLING-MACHINE TENDER 692.686-066
Time Clock Repairer 829.261-018
TINNING-EQUIPMENT TENDER 501.685-014
TRANSFORMER ASSEMBLER I 820.381-014
TRANSFORMER ASSEMBLER II 820.684-010
TRANSFORMER ASSEMBLY SUPERVISOR 820.137-010
Transformer-Coil Winder 724.684-026
Transformer-Core Assembler 729.684-066
Transformer Inspector 829.361-018
Transformer Molder 729.684-030
Transformer Tester 721.281-030
Transmitter Assembler 721.381-014
Tubing-Machine Tender 692.685-046
Tumbler-Switch Assembler 729.687-010
TWISTING-MACHINE OPERATOR 691.686-010
Varnishing-Machine Operator 599.685-046
Voltage-Regulator Assembler 721.381-014
wafer-cell-battery assembler 727.687-082
WAFER-LINE WORKER 727.687-082
WAFER-MACHINE OPERATOR 692.662-018
washer-and-capper-machine operator 692.685-042
Washing-Machine Stripper 741.687-022
Waxing-Machine Operator 599.685-046
Welding-Machine Assembler 826.361-010
WELDING-ROD COATER 505.382-014
WELD INSPECTOR 724.685-014
WINDING INSPECTOR AND TESTER 724.364-010
Wire Bender 727.687-022
wire-brush maker 724.684-038
WIRE CHARGER 614.586-010
Wire Cutter 691.685-018
WIRE HARNESS ASSEMBLER 728.684-010
wire-preparation worker 728.684-022
wirer 728.684-010
WIRER, CABLE 729.381-022
Wire-Spring-Relay Adjuster 724.381-010
Wire Stripper 691.685-018
WIREWORKER 728.684-022
Wiring Inspector 829.361-018
Wrapping-Machine Tender 692.685-046

electron. comp.—ELECTRONIC COMPONENTS AND ACCESSORIES INDUSTRY: This designation includes occupations concerned with manufacturing, assembling, and repairing electronic components. Electronic components are parts of electronic equipment that affect the current characteristics within its circuit. Incided as electronic components are resistors, capacitors, coils, chokes, inductors, printed circuit boards, semiconductors, tubes, transistors, diodes, television antennas, headphones, piezoelectric crystals and crystal devices, computer logic modules filters, flipflops, gates, inverters, voltage dividers, delay lines, and wave guides. Occupations concerned with the manufacture of electrical machinery, equipment, and appliances or wire telephone or telegraph equipment are included in the ELECTRICAL EQUIPMENT INDUSTRY (elec. equip.) and occupations concerned with the manufacture of radio and tv receiving and broadcasting equipment and accessories are included in the RADIO, TELEVISION, AND COMMUNICATION EQUIPMENT INDUSTRY (comm. equip.). Occupations concerned with manufacturing blank and prerecorded magnetic tapes and phonograph records are included in the RECORDING INDUSTRY (recording).

abrading machine tender 673.685-102
aligner 976.382-030
Allocations Clerk 221.387-046
Aluminizer 725.684-022
Aperture-Mask Etcher 725.685-010

Armature Coil Winder 724.684-026
ASSEMBLER, ELECTROMECHANICAL 828.381-018
ASSEMBLER, SEMICONDUCTOR 726.684-034
Audio-Coil Winder 724.684-026
automatic component insertion operator 726.685-014
Auto-Test Equipment Operator 726.684-026
Baker, Beads 590.684-014
BEVELER, PRINTED CIRCUIT BOARDS 699.682-034
BLACK OXIDE COATING EQUIPMENT TENDER 501.685-018
black oxide operator 501.685-018
blender 550.685-082
blue print control clerk 206.367-010
Bobbin-Coil Winder 724.684-026
Bonder 726.687-022
BONDER, SEMICONDUCTOR 726.685-066
BREAK-AND-LOAD OPERATOR 726.685-018
Bulb Assembler 725.684-022
cable maker 728.684-010
CALIBRATION LABORATORY TECHNICIAN 019.281-010
Capacitor Inspector 726.684-022
Capacitor Tester 726.684-078
CATHODE RAY TUBE SALVAGE PROCESSOR 725.684-026
CERAMIC CAPACITOR PROCESSOR 590.684-010
CHARGE PREPARATION TECHNICIAN 590.384-010
checker 726.684-022
Check Inspector 726.381-010
CHEMICAL PREPARER 550.685-030
CHEMICAL RECLAMATION EQUIPMENT OPERATOR 558.685-058
circuit board inspector 726.684-062
CLEANING MACHINE TENDER, SEMICONDUCTOR WAFERS 590.685-062
COATING EQUIPMENT OPERATOR, PRINTED CIRCUIT BOARDS 590.685-066
Coil Finisher 724.684-026
Coil Sprayer 741.687-018
COIL WINDER 724.684-026
Coil Winder, Hand 724.684-026
component insertion operator 726.685-014
Component Lead Former 728.684-022
Compound Mixer 726.687-022
COMPUTERIZED ENVIRONMENTAL CONTROL INSTALLER 828.281-026
contact-frame operator 971.382-014
Contact Printer, Dry Film 976.684-030
CONTACT PRINTER, PRINTED CIRCUIT BOARDS 976.684-030
COORDINATE MEASURING EQUIPMENT OPERATOR 726.682-018
Copper Deposition Operator 501.685-022
crystal cutter 677.382-018
crystal evaluator 726.684-054
Crystal Flat Grinder 673.382-026
CRYSTAL GRINDER 673.382-026
CRYSTAL GROWER 590.382-014
crystal growing furnace operator 590.382-014
CRYSTAL GROWING TECHNICIAN 590.262-010
CRYSTAL MACHINING COORDINATOR 679.362-010
CRYSTAL MOUNTER 677.687-014
CRYSTAL SLICER 677.382-018
CUTTER-MACHINE TENDER 615.685-046
Dag Coater 725.684-022
Dag Sprayer 741.687-018
DEBURRER, PRINTED CIRCUIT BOARD PANELS 603.686-014
DEFLASH AND WASH OPERATOR 726.685-022
deposition operator 501.685-022
DESIGN TECHNICIAN, COMPUTER-AIDED 003.362-010
DEVELOPER, PRINTED CIRCUIT BOARD PANELS 976.685-034
Diazo Technician 976.384-010
DIE ATTACHER 726.684-042
DIE ATTACHING MACHINE TENDER 726.685-026
die equipment operator 726.685-062
DIE SET-UP OPERATOR, PRINTED CIRCUIT BOARDS 699.380-010
DIE TESTER 726.685-030
DIFFUSION FURNACE OPERATOR, SEMICONDUCTOR WAFERS 590.685-070
digitizer 003.362-010
Dipper 726.687-022
DISPLAY-SCREEN FABRICATOR 725.685-010
drawing-release clerk 206.367-010
DRILL-BIT SHARPENER 603.682-030
DRILL-PRESS OPERATOR, PRINTED CIRCUIT BOARDS 676.382-010
drill sharpener 603.682-030
Edge-Round Tender 673.685-094
ELECTROLESS PLATER, PRINTED CIRCUIT BOARD PANELS 501.685-022
electron-beam operator 972.382-018
Electron Gun Assembler 725.384-010
Electron Gun Inspector 726.684-022
ELECTRONIC-COMPONENT PROCESSOR 590.684-014
ELECTRONIC EQUIPMENT REPAIRER 726.381-014
ELECTRONIC EQUIPMENT SET-UP OPERATOR 726.380-010
ELECTRONIC-PRODUCTION-LINE-MAINTENANCE MECHANIC 629.261-022
ELECTRONICS ASSEMBLER 726.684-018
ELECTRONICS INSPECTOR 726.381-010
ELECTRONICS INSPECTOR 726.684-022
ELECTRONICS TESTER 726.684-026
ELECTRONICS UTILITY WORKER 726.364-018
ELECTRONICS WORKER 726.687-010
ENCAPSULATOR 726.687-022
ENGINEERING-DOCUMENT-CONTROL CLERK 206.367-010
engineering-release clerk 206.367-010
engraving photographer 971.382-014
EPITAXIAL REACTOR OPERATOR 590.382-018
EPITAXIAL REACTOR TECHNICIAN 590.282-010
ETCHED-CIRCUIT PROCESSOR 590.684-018
ETCHER 590.685-078
Etcher, Printed Circuit Boards 590.685-082
ETCHER-STRIPPER, SEMICONDUCTOR WAFERS 590.684-026
ETCH OPERATOR, SEMICONDUCTOR WAFERS 590.685-074
EXHAUST EQUIPMENT OPERATOR 599.382-014
exhaust operator 599.382-014
exposure machine operator 976.684-030
Filament-Coil Winder 724.684-026
Filler 726.687-022
film inspector 726.384-014
FILM TOUCH-UP INSPECTOR 726.684-050
Filter Inspector 726.684-022
Final Cleaner 599.685-134
finisher 699.682-034
Firer 590.684-014
FIRESETTER 692.360-018
flow-solder machine operator 726.362-014
Foil Cutter 699.682-018
Frit Coater 725.684-022
Funnel Coater 725.684-022
Glass Deposition Tender 590.685-086
GLASS-LATHE OPERATOR 674.382-010
Gold Plater 500.684-026
grinding machine operator 673.382-026
GROUP LEADER, PRINTED CIRCUIT BOARD ASSEMBLY 726.361-014
GROUP LEADER, PRINTED CIRCUIT BOARD QUALITY CONTROL 726.361-018
GROUP LEADER, SEMICONDUCTOR PROCESSING 590.362-018
GROUP LEADER, SEMICONDUCTOR TESTING 726.362-010
group leader, wafer polishing 673.364-010
Gun-Sealing-Machine Operator 725.684-022
harness maker 728.684-010
HEAT TREATER 504.686-022
Helix-Coil Winder 724.684-026
hot roll laminator 554.685-034
Hybrid Tester 726.684-078
imager 976.684-030
IMPREGNATOR AND DRIER 599.682-014
Impregnator, Carbon Products 599.682-014
Impregnator, Electrolytic Capacitors 599.682-014
Inductor Tester 726.684-078
Inner-Layer Scrubber Tender 599.685-134
In-Process Inspector 726.381-010
INSERTION MACHINE TENDER, ELECTRONIC COMPONENTS 726.685-014
INSPECTOR, CIRCUITRY NEGATIVE 726.384-014
inspector, component parts 726.684-022
INSPECTOR, CRYSTAL 726.684-054
INSPECTOR, INTEGRATED CIRCUITS 726.684-058
INSPECTOR, PRINTED CIRCUIT BOARDS 726.684-062
Inspector, Raw Quartz 726.381-010
INSPECTOR, RECEIVING 222.384-010
INSPECTOR, SEMICONDUCTOR WAFER 726.684-066
INSPECTOR, SEMICONDUCTOR WAFER PROCESSING 726.384-018
Inspector, Subassemblies 726.381-010
Inspector, Tubes 726.381-010
INTEGRATED CIRCUIT FABRICATOR 590.684-042
ION IMPLANT MACHINE OPERATOR 590.382-022
JOB SETTER 616.380-014
Lacquer Sprayer 725.684-022
laminating machine tender 554.685-034
LAMINATION ASSEMBLER 729.684-066
LAMINATION ASSEMBLER, PRINTED CIRCUIT BOARDS 726.687-026
Lamination Stacker, Hand 729.684-066

Lamination Stacker, Machine 729.684-066
LAMINATOR, PRINTED CIRCUIT BOARDS 692.685-282
lapper 673.685-094
Lapping Machine Tender 673.685-094
LASER-BEAM-TRIM OPERATOR 726.682-010
LASER TECHNICIAN 019.261-034
LEAD HAND, INSPECTING AND TESTING 726.364-010
LEAD WORKER, WAFER POLISHING 673.364-010
LEAD WORKER, WAFER PRODUCTION 590.364-010
LEAK TESTER, SEMICONDUCTOR PACKAGES 726.685-034
line inspector 726.684-022
LOADER, SEMICONDUCTOR DIES 726.687-030
machine operator technician 679.362-010
marker 652.685-110
MARKER, SEMICONDUCTOR WAFERS 920.587-026
MASKER 726.687-034
Mask Former 725.685-010
mask inspector 726.384-022
MATERIAL PREPARATION WORKER 590.684-030
mechanical inspector 726.682-018
Memory-Unit Test Technician 726.261-018
METALLIZATION EQUIPMENT TENDER, SEMICONDUCTORS 590.685-086
Mica-Parts Sprayer 741.687-018
microelectronics processor 726.684-034
MICROELECTRONICS TECHNICIAN 590.362-022
MIXER OPERATOR 550.685-082
Nickel Plater 500.684-026
NUMERICAL-CONTROL DRILL OPERATOR, PRINTED CIRCUIT BOARDS 606.382-018
NUMERICAL-CONTROL ROUTER OPERATOR 605.382-046
OPERATOR, AUTOMATED PROCESS 590.382-010
OVEN CURING ATTENDANT 590.685-090
Paper-Cone Maker 795.687-014
Parts Counter-Weigher 221.587-030
PARTS LISTER 229.367-014
pattern generator operator 976.382-038
Pellet-Preparation Operator 590.684-014
PERSONNEL QUALITY ASSURANCE AUDITOR 168.367-022
PHOTOGRAPHER, PHOTOENGRAVING 971.382-014
PHOTOGRAPHIC ALIGNER, SEMICONDUCTOR WAFERS 976.382-030
PHOTOGRAPHIC-PLATE MAKER 714.381-018
photographic-process attendant 714.381-018
PHOTOGRAPHIC PROCESSOR, SEMICONDUCTOR WAFERS 976.685-038
PHOTO MASK CLEANER 590.684-034
PHOTO MASK INSPECTOR 726.384-022
PHOTO MASK MAKER, ELECTRON-BEAM 972.382-018
PHOTO MASK PATTERN GENERATOR 976.382-038
PHOTO MASK PROCESSOR 976.384-014
PHOTO MASK TECHNICIAN, ELECTRON-BEAM 972.382-022
photo printer 976.684-030
PHOTORESIST LAMINATOR, PRINTED CIRCUIT BOARD 554.685-034
photoresist printer 976.684-030
PHOTO TECHNICIAN 976.384-010
PINNER, PRINTED CIRCUIT BOARDS 699.685-046
PLASMA ETCHER, PRINTED CIRCUIT BOARDS 590.685-094
PLATEMAKER, SEMICONDUCTOR PACKAGES 972.384-014
PLATER, PRINTED CIRCUIT BOARD PANELS 500.684-026
PLATER, SEMICONDUCTOR WAFERS AND COMPONENTS 500.684-030
Plating-Tank Cleaner 891.687-022
POLISHING MACHINE TENDER 673.685-094
POLYSILICON PREPARATION WORKER 590.684-038
Post-Wave Assembler 726.684-070
Potter 726.687-022
PREASSEMBLER, PRINTED CIRCUIT BOARD 726.687-038
Preforming-Machine Operator 590.684-014
Pre-Wave Assembler 726.684-070
PRINTED CIRCUIT BOARD ASSEMBLER, HAND 726.684-070
PRINTED CIRCUIT BOARD COMPONENT TESTER, CHEMICAL 726.684-074
PRINTED CIRCUIT BOARD COMPONENT TESTER, PRE-ASSEMBLY 726.684-078
PRINTED CIRCUIT BOARD INSPECTOR, PRE-ASSEMBLY 726.684-082
PRINTING SCREEN ASSEMBLER 979.684-042
PROBE TEST EQUIPMENT TECHNICIAN, SEMICONDUCTOR WAFERS 729.360-010
production aide 590.362-018
production aide 726.362-010
PRODUCTION-MACHINE TENDER, GLASS CUTTING-OR-GRINDING 679.685-014
Production Material Coordinator 221.387-046
production repairer 726.381-014
PRODUCTION REPAIRER, PRINTED CIRCUIT BOARD ASSEMBLY 726.684-086
PRODUCTION TECHNICIAN, SEMICONDUCTOR PROCESSING EQUIPMENT 590.384-014
programmer operator, numerical control 609.262-010
PROGRAMMING EQUIPMENT OPERATOR 726.685-062
prom burn-off operator 726.685-062
quality control inspector 726.381-010
RADIO INTERFERENCE INVESTIGATOR 823.261-014
radio-interference trouble shooter 823.261-014
REFLOW OPERATOR 726.685-038
Relay Tester 726.684-078
release and technical records clerk 206.367-010
REPAIRER, PROBE TEST CARD, SEMICONDUCTOR WAFERS 726.361-022
resist coater-developer 976.685-038
Resistor Inspector 726.684-022
Resistor Tester 726.684-078
Resistor Winder 724.684-026
reworker 726.684-090
REWORKER, PRINTED CIRCUIT BOARD 726.684-090
ROD TAPE OPERATOR 726.685-042
Rotary Pump Operator 599.382-014
ROUTER, PRINTED CIRCUIT BOARDS 605.682-034
saw operator 677.382-018
SAW OPERATOR 726.682-026
SAW OPERATOR, SEMICONDUCTOR WAFERS 726.685-046
Screener 725.685-010
Screen Printer, Printed Circuit Boards 979.684-034
Screen-Printing-Machine Tender, Printed Circuit Boards 979.685-010
screen stretcher 979.684-042
scriber 726.685-046
SCRUBBER MACHINE TENDER 599.685-134
SEALER, SEMICONDUCTOR PACKAGES 726.687-042
SEED CORE OPERATOR 679.384-010
SEMICONDUCTOR PROCESSOR 590.684-022
SEQUENCING-MACHINE OPERATOR 726.382-010
setup worker, electronics 726.364-018
shearer, printed circuit boards 615.685-046
Silk-Screen Printer 979.684-034
Socket Assembler 726.684-070
soft tooling technician 609.262-010
SOLDER DEPOSIT OPERATOR 726.684-094
SOLDER-LEVELER, PRINTED CIRCUIT BOARDS 726.685-050
Solid State Tester 726.684-026
stacking assembler 729.684-066
standards laboratory technician 019.281-010
Stem-Lead Former 725.384-010
STEP-AND-REPEAT REDUCTION CAMERA OPERATOR 976.382-034
STRIPPER-ETCHER, PRINTED CIRCUIT BOARDS 590.685-082
Stripper, Printed Circuit Boards 590.685-082
Supervisor, Assembly 726.134-010
Supervisor, Capacitor Processing 590.130-010
Supervisor, Coil Winding 724.130-010
SUPERVISOR, ELECTRONIC COILS 724.130-010
Supervisor, Electronics Assembly 726.130-010
Supervisor, Electronics Inspection 726.130-010
SUPERVISOR, ELECTRONICS PROCESSING 590.130-010
SUPERVISOR, ELECTRONICS PRODUCTION 726.130-010
Supervisor, Electronics Testing 726.130-010
supervisor, electronic testing 726.131-018
Supervisor, Electron-Tube Processing 590.130-010
Supervisor, Filter Assembly 724.130-010
Supervisor, Final 726.134-010
supervisor, functional testing 726.131-018
supervisor, in-circuit testing 726.131-018
SUPERVISOR, INSTRUMENT ASSEMBLY 710.131-038
Supervisor, Integrated Circuit Manufacturing 590.130-010
Supervisor, Post-Wave 726.134-010
Supervisor, Pre-Wave 726.134-010
SUPERVISOR, PRINTED CIRCUIT BOARD ASSEMBLY 726.134-010
Supervisor, Printed Circuit Board Processing 590.130-010
SUPERVISOR, PRINTED CIRCUIT BOARD TESTING 726.131-018
Supervisor, Process Testing 590.130-010
Supervisor, Quality Control 726.134-010
SUPERVISOR, RADIO INTERFERENCE 823.131-022
Supervisor, Semiconductor Wafer Manufacturing 590.130-010
Supervisor, Test And Inspection 724.130-010
Supervisor, Testing 726.134-010
SYMBOL STAMPER, SEMICONDUCTOR PACKAGES 652.685-110
systems inspector 726.381-010
TAPER, PRINTED CIRCUIT LAYOUT 017.684-010
television-picture-tube rebuilder 725.381-010

Television-Receiver Analyzer 726.261-018
Tester, Printed Circuit Boards 726.684-026
TESTER, SEMICONDUCTOR PACKAGES 726.685-054
TESTER, SEMICONDUCTOR WAFERS 726.684-102
TESTER, WAFER SUBSTRATE 726.684-106
TEST FIXTURE ASSEMBLER 726.684-098
TEST FIXTURE DESIGNER 726.364-014
TEST TECHNICIAN, SEMICONDUCTOR PROCESSING EQUIPMENT 590.262-014
TOOL PROGRAMMER, NUMERICAL CONTROL 609.262-010
touch-up inspector, printed circuit boards 726.684-062
TOUCH-UP SCREENER, PRINTED CIRCUIT BOARD ASSEMBLY 726.684-110
Transformer-Coil Winder 724.684-026
Transformer Tester 726.684-078
Transmitter Tester 726.261-018
TRIMMER, PRINTED CIRCUIT BOARD PANELS 699.685-054
TUBE ASSEMBLER, CATHODE RAY 725.684-022
TUBE ASSEMBLER, ELECTRON 725.384-010
Tube-Component Assembler 725.384-010
Tube Fitter 725.384-010
Tube Inspector 726.684-022
TUBE REBUILDER 725.381-010
Tube Tester 726.684-026
Tube-Test Technician 726.261-018
Vacuum-Evaporation Operator 590.684-014
V-Block Saw Operator 677.382-018
WAFER ABRADING MACHINE TENDER 673.685-102
WAFER BREAKER, SEMICONDUCTORS 726.687-046
WAFER CLEANER 590.685-102
wafer etcher 590.685-078
wafer fab operator 590.684-042
WAFER MOUNTER 726.685-058
wafer polisher 673.685-094
wafer slicer 677.382-018
WAVE-SOLDERING MACHINE OPERATOR 726.362-014
WAVE-SOLDER OFFBEARER 726.686-010
Wax Impregnator 599.682-014
Weight-Count Operator 590.684-014
WIRE HARNESS ASSEMBLER 728.684-010
wire-preparation worker 728.684-022
wirer 728.684-010
Wire Saw Operator 677.382-018
WIREWORKER 728.684-022
WIRE-WRAPPING-MACHINE OPERATOR 726.682-014
X-ray Technician, Printed Circuit Boards 726.684-062

electroplating—ELECTROPLATING INDUSTRY: This designation includes occupations concerned with plating metal objects with chromium, gold, nickel, silver, and other metals by means of electrolysis.

barrel-line operator 500.362-014
Brass Plater 500.380-010
Bronze Plater 500.380-010
Cadmium Plater 500.380-010
Chromium Plater 500.380-010
Cleaner 500.686-010
Copper Plater 500.380-010
drum plater 500.362-014
ELECTROFORMER 500.684-010
ELECTROGALVANIZING-MACHINE OPERATOR 500.362-010
electroplater 500.380-010
electroplater apprentice 500.380-014
electroplater, automatic 500.685-014
electroplater helper 500.686-010
Gold Plater 500.380-010
INSPECTOR, PLATING 500.287-010
LABORER, ELECTROPLATING 500.686-010
Nickel Plater 500.380-010
PLATER 500.380-010
PLATER APPRENTICE 500.380-014
PLATER, BARREL 500.362-014
plater helper 500.686-010
plater, machine 500.362-014
plater production 500.685-014
plater supervisor 500.131-010
plating-department helper 500.686-010
PLATING EQUIPMENT TENDER 500.685-014
Plating Stripper 500.380-010
plating-tank-operator apprentice 500.380-014
plating-tank operator 500.380-010
Rack Cleaner 500.686-010
Racker 500.686-010
sample tester 500.287-010
Sawdust Drier 500.686-010
Silver Plater 500.380-010
SUPERVISOR 500.131-010
Supervisor, Anodizing 500.131-010
Tin Plater 500.380-010
tumbler plater 500.362-014
ZINC-PLATING-MACHINE OPERATOR 500.485-010

engine-turbine—ENGINE AND TURBINE INDUSTRY: This designation includes occupations concerned with manufacturing, repairing, and assembling parts for steam engines (other than locomotives), internal combustion engines, diesel or semidiesel oil engines, water wheels, and all types of steam or hydraulic engines and turbines. Occupations concerned with the manufacture of automobile engines are included in the AUTOMOBILE MANUFACTURING INDUSTRY (auto. mfg.). Occupations concerned with the manufacture of aircraft engines are included in the AIRCRAFT-AEROSPACE MANUFACTURING INDUSTRY (aircraft mfg.).

ASSEMBLER HELPER, INTERNAL COMBUSTION ENGINE 801.687-010
ASSEMBLER, INTERNAL COMBUSTION ENGINE 806.481-014
Assembler, Show Motor 806.481-014
ASSEMBLER, STEAM-AND-GAS TURBINE 600.261-010
bench assembler 706.481-010
boat mechanic 623.281-038
Carburetor Assembler 706.481-010
Cylinder-Head Assembler 706.481-010
Diesel-Engine Assembler 806.481-014
DIESEL-ENGINE ERECTOR 625.361-010
diesel-engine fitter 625.361-010
Diesel-Engine Inspector 806.261-010
DIESEL-ENGINE TESTER 625.261-010
Electrical Repairer, Internal Combustion Engines 825.281-022
engine assembler 806.481-014
Engine-Generator Assembler 820.361-014
ENGINE REPAIRER, PRODUCTION 625.381-010
ENGINE REPAIRER, SERVICE 625.281-018
ENGINE-TESTING SUPERVISOR 625.131-010
erector 638.261-014
EXPERIMENTAL MECHANIC, OUTBOARD MOTORS 623.261-010
Gasoline-Engine Assembler 806.481-014
Gasoline-Engine Inspector 806.261-010
Gearcase Assembler 706.481-010
Governor Assembler 706.481-010
group assembler 706.481-010
heavy-machinery assembler 638.261-014
INJECTOR ASSEMBLER 706.684-062
inspector 806.261-010
inspector and tester 806.261-010
INTERNAL-COMBUSTION-ENGINE INSPECTOR 806.261-010
INTERNAL-COMBUSTION-ENGINE SUBASSEMBLER 706.481-010
leadman, turbine assembly 600.261-010
Life Tester, Outboard Motors 623.261-014
MACHINERY ERECTOR 638.261-014
MOTORBOAT MECHANIC 623.281-038
MOTORBOAT-MECHANIC HELPER 623.684-010
Motorcycle-Engine Assembler 806.481-014
Outboard-Motor Assembler 806.481-014
OUTBOARD-MOTOR INSPECTOR 806.687-042
OUTBOARD-MOTOR MECHANIC 623.281-042
OUTBOARD-MOTOR TESTER 623.261-014
PIPE FITTER, DIESEL ENGINE I 862.361-018
PIPE FITTER, DIESEL ENGINE II 862.381-022
piper 862.361-018
Remote-Control Assembler 706.481-010
river tester 623.261-010
ROTARY-ENGINE ASSEMBLER 801.261-018
SUPERVISOR, ELECTRONIC CONTROLS REPAIRER 828.131-010
SUPERVISOR, ENGINE ASSEMBLY 806.130-010
SUPERVISOR, ENGINE-REPAIR 625.131-014
TURBINE-BLADE ASSEMBLER 600.380-026
Turbine Inspector 609.361-010
TURBINE SUBASSEMBLER 706.381-042
Water-Pump Assembler 706.481-010

engraving—ENGRAVING, CHASING, AND ETCHING INDUSTRY: This designation includes occupations concerned with engraving, chasing, and etching on jewelry and silverware, notarial seals, nameplates, metal novelties, and other metal products for purposes other than printing. Occupations concerned with the engraving and etching of plates for printing are included in the PRINTING AND PUBLISHING INDUSTRY (print. & pub.).

carver 704.381-030
CLEANER 704.687-010

decorator 704.381-030
Die-Engraving Supervisor 704.131-010
ENGRAVER APPRENTICE, DECORATIVE 704.381-022
Engraver, Flatware 704.381-030
ENGRAVER, HAND, HARD METALS 704.381-026
ENGRAVER, HAND, SOFT METALS 704.381-030
Engraver, Jewelry 704.381-030
Engraver, Lettering 704.381-030
ENGRAVER, MACHINE I 704.682-010
ENGRAVER, MACHINE II 704.582-010
Engraver, Optical Frames 704.381-030
Engraver, Ornamental Design 704.381-030
ENGRAVER, PANTOGRAPH I 704.382-010
ENGRAVER, PANTOGRAPH II 704.682-014
ENGRAVING SUPERVISOR 704.131-010
ETCHER 704.684-010
etcher, hand 704.684-014
Jewelry-Engraving Supervisor 704.131-010
PATTERNMAKER 751.381-010
prototype-machine operator 704.382-010
SILK-SCREEN ETCHER 704.684-014
Stencil Maker 704.381-026
white-work cleaner 704.687-010

fabrication, nec—MISCELLANEOUS FABRICATED PRODUCTS, NOT ELSEWHERE CLASSIFIED: This designation includes occupations concerned with manufacturing and repairing miscellaneous items not included under another specific designation. These include brooms and brushes of all types; signs and advertising displays; burial caskets and related materials, except those made from concrete; floor coverings, not elsewhere classified; fuel briquettes; candles; articles, such as wigs, from human, animal, and artificial hair; matches; models, patterns, mannequins, and wax figures; smoking pipes; and umbrellas and canes.

AIR-HOLE DRILLER 692.685-018
arranger-assembler 739.687-010
ARTIFICIAL-CANDY MAKER 739.684-010
ARTIFICIAL-LOG-MACHINE OPERATOR 569.685-010
ARTIST, MANNEQUIN COLORING 741.684-010
ASSEMBLER-ARRANGER 739.687-010
ASSEMBLER, CORNCOB PIPES 739.687-014
ASSEMBLER, GARMENT FORM 739.687-022
ATOMIZER ASSEMBLER 706.684-030
Awning-Frame Maker 809.381-010
BACKING-IN-MACHINE TENDER 590.685-010
balancer 739.684-118
BAND-SAWING-MACHINE OPERATOR 690.485-010
Barbecue-Briquette-Machine Operator 549.662-010
base-and-wick assembler 739.687-202
BEADING SAWYER 667.685-018
BEADWORKER 789.381-010
beeswax blender 550.585-046
Bight Maker 590.662-022
BIT BENDER 752.684-018
Bit Sander 761.684-030
bit setter 739.687-014
BIT SHAVER 754.684-018
Bit Tripoler 739.684-026
blending-machine operator 680.685-066
block chopper, hand 569.687-026
blocker and sewer 739.384-014
BLOCK FEEDER 663.686-010
block hacker 569.687-026
BLOCK INSPECTOR 739.687-038
Body Coverer 780.684-026
Body Maker 739.684-190
borer, stem 739.687-014
BORING-AND-FILLING-MACHINE OPERATOR 692.682-018
Bottom Sander 761.684-030
Bowl Sander 662.685-038
Bowl Topper 761.684-030
BOWL TURNER 664.684-010
BOX MAKER 762.684-026
BRIAR CUTTER 664.685-010
BRIAR-WOOD SORTER 769.687-058
BRIQUETTE-MACHINE OPERATOR 549.662-010
BRIQUETTE-MACHINE-OPERATOR HELPER 549.686-010
briquette molder 549.662-010
BROOM BUNDLER 692.685-030
BROOMCORN GRADER 739.687-042
broomcorn scraper 692.686-018
BROOMCORN SEEDER 692.686-018
broomcorn sorter 739.687-042
Broom-Handle Dipper 599.685-026
broom-machine operator 692.682-066
BROOMMAKER 739.684-018
BROOM STITCHER 692.682-022
Brush-Fabricating-Machine Setter 692.360-014
BRUSH-FABRICATION SUPERVISOR 692.130-010
BRUSH FILLER, HAND 739.687-046
BRUSH-HEAD MAKER 739.685-018
BRUSH LOADER AND HANDLE ATTACHER 739.687-206
BRUSH-MACHINE SETTER 692.360-014
brush maker 733.684-010
BRUSH MAKER, MACHINE 739.685-014
BRUSH MATERIAL PREPARER 739.684-022
Brush-Trimming-Machine Setter 692.360-014
BUFFER 739.684-026
CALENDER OPERATOR 590.682-010
CANDLE CUTTER 739.687-050
CANDLE-EXTRUSION-MACHINE OPERATOR 692.682-026
CANDLEMAKER 739.664-010
CANDLE MOLDER, HAND 739.687-054
CANDLE MOLDER, MACHINE 692.685-038
candle pourer 739.687-158
Candle Wrapper 920.587-018
CANDLE WRAPPING-MACHINE OPERATOR 920.685-030
Cap Coverer 780.684-026
Cap Maker 739.684-190
Carriage Feeder 590.662-022
Carrier Guider 590.686-014
CASKET ASSEMBLER 739.684-190
CASKET ASSEMBLER, METAL 809.684-014
CASKET COVERER 780.684-026
CASKET INSPECTOR 739.387-010
CASKET LINER 780.684-030
casket trimmer 780.684-026
casket upholsterer 780.684-030
Charcoal-Briquette-Machine Operator 549.662-010
CLEANER 739.687-058
CLEANER, SIGNS 739.687-062
CLIPPER 739.685-022
Coal-Briquette-Machine Operator 549.662-010
coater 590.685-014
COATER, SMOKING PIPE 562.685-022
COATING-MACHINE OPERATOR 590.685-014
COATING-MACHINE-OPERATOR HELPER 590.686-010
Coating-Machine Operator, Metal Tags And Signs 554.685-014
Cob Borer 669.685-094
COB SAWYER 667.685-030
color-depositing-machine tender 652.665-014
Color Receiver 555.685-050
COLOR WEIGHER 590.487-010
COMB-MACHINE OPERATOR 640.685-022
COMPOSITION MIXER 550.665-014
CONTROLS OPERATOR, MOLDED GOODS 590.662-010
CRUSHER 780.684-042
CRUSHER TENDER 555.685-022
cutter 690.485-010
CUTTER I 690.685-118
CUTTER II 692.686-030
decorator 741.684-010
DECORATOR, MANNEQUIN 970.381-014
DESIGN ASSEMBLER 692.686-034
DIGGER 739.687-070
Diorama Model-Maker 739.361-010
Dip Guider, Stoves 590.686-014
DIPPER 590.685-022
DISPLAY FABRICATOR 860.684-022
DISPLAY MAKER 739.361-010
doll-wig maker, rooted hair 731.685-010
draw hand 739.687-046
drier attendant 543.685-014
DRIER TENDER 543.685-014
dry-felt splicer 692.687-010
DYER 599.685-034
ELECTRIC-SIGN ASSEMBLER 729.684-022
EMBOSSING-PRESS OPERATOR, MOLDED GOODS 690.682-034
END FRAZER 665.685-014
EXAMINER 739.687-082
experimental-display builder 739.361-010
ferruler 739.687-014
FILLER 739.687-090
FILLING-AND-STAPLING-MACHINE OPERATOR 692.682-038
Fine Patcher 739.687-146
Fine Sander 761.684-030
FINISHER 731.687-014
FINISHER, BRUSH 739.684-062
First Front Ventilator 739.384-022

fitter 739.684-190
Flusher 761.684-030
FORM COVERER 739.684-070
FOUNDATION MAKER 739.384-014
frame-and-scrap crusher 555.685-022
frame crusher 555.685-022
framer 739.684-162
FRAZER 664.685-022
FRICTION-PAINT-MACHINE TENDER 534.685-014
GARLAND-MACHINE OPERATOR 692.685-090
GAUGE OPERATOR 692.682-042
gauger 590.685-022
GLASS BENDER 772.381-010
glass blower 772.381-010
glass-tube bender 772.381-010
GUIDER 590.686-014
hackler 739.684-086
hair blender 739.387-014
hair blender 739.384-018
Hair-Brush-Boring-And-Filling-Machine Operator 692.682-018
hairdresser 332.361-010
hair mixer 739.387-014
Hairpiece Stylist 332.271-018
HAIR PREPARER 739.384-018
hair-rooting-machine operator 731.685-010
HAIR-SAMPLE MATCHER 739.387-014
HAIR WORKER 739.684-086
hand sander 761.684-030
hand turner 664.684-010
head facer 754.684-018
hurl shaker 692.686-062
INSET CUTTER 739.381-038
INSPECTION CLERK 739.587-010
inspector 739.687-146
INSPECTOR I 739.687-106
INSPECTOR II 590.367-010
INSPECTOR, WREATH 739.687-118
LABORER 590.687-010
Lacquer Polisher 739.684-026
LAMP-SHADE ASSEMBLER 739.684-094
LAMP-SHADE JOINER 692.685-110
LAMP-SHADE SEWER 787.381-010
LEGEND MAKER 979.684-018
loop tender 590.686-010
LOWERATOR OPERATOR 922.686-014
MANNEQUIN-MOLD MAKER 739.381-046
MANNEQUIN MOUNTER 739.684-118
MANNEQUIN SANDER AND FINISHER 739.684-122
MANNEQUIN WIG MAKER 739.381-042
MANUGRAPHER 970.681-022
marbleizing-machine tender 559.665-034
MATCHBOOK ASSEMBLER 649.685-074
material cutter 690.485-010
MECHANICAL OXIDIZER 590.662-014
mixer operator 550.665-014
MIXING-MACHINE OPERATOR 680.685-066
MIXING-ROLL OPERATOR 590.662-018
model maker 739.361-010
Molding Fitter 739.684-190
molding-machine operator 549.662-010
mold maker 739.381-046
mottle line operator 559.665-034
MOTTLER-MACHINE FEEDER 550.686-034
MOTTLER OPERATOR 550.665-022
mounter 739.684-170
MOUNTER, SMOKING PIPE 739.684-130
NAIL-POLISH-BRUSH-MACHINE FEEDER, AUTOMATIC 692.686-054
NEON-SIGN SERVICER 824.281-018
NEON-TUBE PUMPER 824.684-010
NIGHT-PATROL INSPECTOR 824.683-010
novelty-candy maker 739.684-010
OFFBEARER, PIPE SMOKING MACHINE 563.686-018
ORNAMENT MAKER, HAND 739.687-130
OVEN OPERATOR 590.665-010
PAINT-BRUSH MAKER 733.684-010
Painter, Mannequin 740.684-022
PAINT POURER 652.687-022
PAINT-ROLLER ASSEMBLER 739.687-134
PAINT-ROLLER-COVER-MACHINE SETTER 692.682-046
PAINT-ROLLER COVERMAKER 739.684-142
PAINT-ROLLER WINDER 739.685-030
PAINT TRIMMER, PIPE BOWLS 749.684-050
Panel Coverer 780.684-026
Panel Fitter 739.684-190
Panel Maker 762.687-034
paper finisher 739.684-122
paper layer 794.684-026
PAPIER MACHE MOLDER 794.684-026
Part Maker 739.384-022
paster 692.685-110
PATCH DRILLER 739.687-142
PATCHER 739.687-146
PATTERNMAKER 772.381-014
pigment weigher 590.487-010
PIPE RACKER 749.687-034
PIPE-SMOKER-MACHINE OPERATOR 739.687-150
pipe smoking machine operator 563.686-018
PIPE STEM ALIGNER 739.687-210
PIPE STEM REPAIRER 739.684-186
PLASTIC MOLDER 779.684-050
polisher 739.684-026
POURER 739.687-158
POWER-DRIVEN-BRUSH MAKER 692.682-050
PRESS-MACHINE OPERATOR 590.665-014
PRINTER, FLOOR COVERING 652.685-066
PRINTER, FLOOR COVERING, ASSISTANT 652.687-038
PULL-OUT OPERATOR 739.687-162
PUNCH-PRESS OPERATOR 692.665-014
Putty Remover 761.684-030
QUALITY-CONTROL TESTER 543.684-010
RACK LOADER 590.687-018
reamer 739.687-014
repairer 739.687-146
Roll Guider, Mold Goods 590.686-014
ROLL-UP-GUIDER OPERATOR 590.685-050
roll-up helper 739.587-010
roll-up operator 590.665-018
ROOTER OPERATOR 731.685-010
Rough Patcher 739.687-146
Rough Sander 761.684-030
RUBBER MOLDER 556.684-026
RUG CUTTER 590.687-022
Rug Inspector 590.367-010
SALES REPRESENTATIVE, SIGNS 254.357-022
SALES REPRESENTATIVE, SIGNS AND DISPLAYS 254.257-010
SANDER 761.684-030
SATURATION-EQUIPMENT OPERATOR 582.665-022
scrap crusher 555.685-022
SCRATCHER TENDER 555.685-050
SELECTOR 739.687-166
Shank Sander 761.684-030
SHANK THREADER 739.685-034
shank turner 664.685-022
Shellac Polisher 739.684-026
Side Guider 590.686-014
SIGN ERECTOR-AND-REPAIRER 869.361-018
SIGN ERECTOR I 869.381-026
SIGN ERECTOR II 869.684-054
sign hanger 869.381-026
Sign Maker 869.381-026
SLIDE-MACHINE TENDER 641.685-078
smocker 780.684-042
SMOKING-PIPE DRILLER AND THREADER 669.685-078
SMOKING-PIPE LINER 739.687-170
SMOKING-PIPE MAKER 761.381-030
spiral winder 739.685-030
SPLASH-LINE OPERATOR 559.665-034
SPLICER 692.687-010
spot picker 739.667-010
SPOT PICKER, MOLDED GOODS 739.667-010
spotter 739.687-182
spudder 569.687-026
STAINER 739.687-174
stem assembler 739.687-014
stem frazer 665.685-014
STEMHOLE BORER 666.685-010
Stemhole-Borer-And-Topper 666.685-010
STEM-PROCESSING-MACHINE OPERATOR 739.685-042
stem setter 739.687-014
STEM SIZER 692.686-062
STOVE-BOTTOM WORKER 590.667-010
STOVE-CARRIAGE OPERATOR 590.662-022
STRICKLER ATTENDANT 652.665-014
Strip-Machine Tender 590.685-022
stummel selector 739.687-166
SUPERVISOR, ASSEMBLY ROOM 739.134-010
SUPERVISOR, BIT AND SHANK DEPARTMENT 739.130-010
SUPERVISOR, BRIAR SHOP 761.130-010
SUPERVISOR, BROOMMAKING 692.130-026

SUPERVISOR, CANDLE MAKING 590.132-010
SUPERVISOR, CORNCOB PIPE MANUFACTURING 739.132-010
SUPERVISOR, COVERING AND LINING 780.134-010
SUPERVISOR, DISPLAY FABRICATION 739.134-014
Supervisor, Dyeing And Finishing Department 739.137-018
SUPERVISOR, FINISHING 749.134-010
SUPERVISOR I 739.131-010
SUPERVISOR II 739.131-014
SUPERVISOR III 549.132-014
SUPERVISOR, LAMP SHADES 739.137-014
SUPERVISOR, PAINT ROLLER COVERS 692.130-030
Supervisor, Patching Department 739.137-018
SUPERVISOR, PIPE MANUFACTURE 739.137-018
Supervisor, Sanding Department 739.137-018
SUPERVISOR, SEWING ROOM 787.132-014
SUPERVISOR, SHOP 692.130-042
SUPERVISOR, SIGN SHOP 970.137-010
SUPERVISOR, TILE-AND-MOTTLE 559.130-022
SWEEPER-BRUSH MAKER, MACHINE 692.682-066
TABLE WORKER 739.687-182
tacker 739.684-162
tank operator 582.665-022
TAPER, MACHINE 692.685-214
TAPPER, BIT 739.685-046
TAPPER, SHANK 739.685-050
Tile Inspector 590.367-010
TILE-POWER-SHEAR OPERATOR 692.685-222
TINSEL-MACHINE OPERATOR 692.685-226
Tipping-Machine Operator 787.685-010
tire assembler 739.684-158
TIRE MOUNTER 739.684-158
Tooth-Brush-Boring-And-Filling-Machine Operator 692.682-018
Top Coverer 780.684-026
Top-Frame Coverer 780.684-026
Top-Frame Fitter 739.684-190
Top-Frame Maker 739.684-190
topper 761.684-030
TOUCH-UP CARVER 761.684-054
TRADE MARKER 690.685-510
trimmer 664.685-022
TRIMMING MACHINE SET-UP OPERATOR 664.382-018
tripoler 739.684-026
TURNER 669.685-094
TURNING MACHINE SET-UP OPERATOR 669.382-026
TWISTING-MACHINE OPERATOR 692.682-070
UMBRELLA FINISHER 739.687-190
UMBRELLA TIPPER, HAND 739.684-162
UMBRELLA TIPPER, MACHINE 739.685-054
VACUUM-APPLICATOR OPERATOR 692.685-238
VARNISHER 569.685-070
Varnisher-Plasticoater 534.682-018
VENTILATOR 739.384-022
WAX BLENDER 550.585-046
WEAVER 739.684-170
weft maker 739.684-170
Weigher-And-Charger 929.687-062
WICK-AND-BASE ASSEMBLER 739.687-202
wick cutter 739.687-050
WICKER, MOLDED CANDLES 692.685-242
wick tender 692.685-242
Wide-Piece-Goods Inspector 590.367-010
WIG DRESSER 332.361-010
WIG MAKER 739.381-058
winder 739.684-018
WINDER OPERATOR 590.665-018
wiper 739.687-058
Wire-Brush-Boring-And-Filling-Machine Operator 692.682-018
WIRE BRUSH OPERATOR 761.684-058
WIRE-FRAME-LAMP-SHADE MAKER 709.684-098
wood barker 569.687-026
WOOD-FUEL PELLETIZER 569.685-078
WOOD HACKER 569.687-026
WREATH AND GARLAND MAKER 739.684-182
Wreath-Machine Operator 692.685-090

financial—FINANCIAL INSTITUTIONS: This designation includes occupations occurring in financial organizations, including commercial and savings banks, trust companies, mortgage companies, savings and loan associations, credit unions, personal credit institutions, foreign exchange establishments, security and commodity-contract dealerships, brokerages, exchanges, and holding and other investment offices.

account executive 250.257-018
ASSISTANT BRANCH MANAGER, FINANCIAL INSTITUTION 186.167-070
AUDITOR, DATA PROCESSING 160.162-030
auditor, information systems 160.162-030
Bank-Credit-Card-Collection Clerk 241.357-010
branch manager 186.117-034
broker 162.167-038
broker 250.257-018
broker 162.167-034
BROKERAGE CLERK I 219.482-010
BROKERAGE CLERK II 219.362-018
BROKER-AND-MARKET OPERATOR, GRAIN 162.157-010
CANCELING-AND-CUTTING CONTROL CLERK 219.367-042
card processing clerk 249.367-026
cashier 186.117-070
clearing-distribution clerk 216.382-026
CLEARING-HOUSE CLERK 216.382-026
CODE AND TEST CLERK 209.667-018
COIN-COUNTER-AND-WRAPPER 217.585-010
coin-machine operator 217.585-010
coin teller 217.585-010
collateral placement officer 186.167-054
COLLECTION CLERK 216.362-014
Commercial Account Officer 186.267-018
COMMERCIAL LOAN COLLECTION OFFICER 186.167-078
Coupon-And-Bond-Collection Clerk 216.362-014
COUPON CLERK 219.462-010
Coupon-Collection Clerk 216.362-014
CREDIT ANALYST 160.267-022
CREDIT CARD CONTROL CLERK 249.367-026
CREDIT REFERENCE CLERK 209.362-018
CURRENCY COUNTER 217.485-010
currency-machine operator 217.485-010
CUSTOMER SERVICE REPRESENTATIVE 205.362-026
CUSTOMS BROKER 186.117-018
customs-house broker 186.117-018
DISBURSEMENT CLERK 219.367-046
DIVIDEND CLERK 216.482-034
ELECTRONIC FUNDS TRANSFER COORDINATOR 216.362-038
Escrow Clerk 249.362-014
FACTOR 186.167-082
FLOOR BROKER 162.167-034
floor plan adjuster 241.367-038
floor representative 162.167-034
floor trader 162.167-034
Foreclosure Clerk 249.362-014
FOREIGN BANKNOTE TELLER-TRADER 211.362-014
Foreign-Collection Clerk 216.362-014
FOREIGN-EXCHANGE DEALER 186.117-082
FOREIGN EXCHANGE-POSITION CLERK 210.367-014
foreign-exchange trader 186.117-082
funds transfer clerk 203.562-010
general teller 211.362-018
grain trader 162.157-010
information clerk, brokerage 237.367-046
Insurance Clerk 249.362-014
INSURANCE CLERK 219.367-014
International Banking Officer 186.267-018
INVESTIGATOR, DEALER ACCOUNTS 241.367-038
INVESTMENT ANALYST 160.267-026
investment executive 250.257-018
LETTER-OF-CREDIT CLERK 219.367-050
LETTER-OF-CREDIT DOCUMENT EXAMINER 169.267-042
Loan-Application Clerk 205.367-022
LOAN INTERVIEWER, MORTGAGE 241.367-018
loan officer 241.367-018
LOAN OFFICER 186.267-018
LOAN REVIEW ANALYST 186.267-022
loan-servicing officer 186.167-078
Local-Collection Clerk 216.362-014
Manager, Branch Bank 186.167-086
MANAGER, BROKERAGE OFFICE 186.117-034
Manager, Commmercial Bank 186.167-086
Manager, Commodity Exchange Floor 186.117-086
Manager, Credit Union 186.167-086
MANAGER, EXCHANGE FLOOR 186.117-086
Manager, Finance Company 186.167-086
MANAGER, FINANCIAL INSTITUTION 186.167-086
manager, floor operations 186.117-086
manager, floor services 186.117-086
Manager, Mortgage Company 186.167-086
Manager, Options Exchange Floor 186.117-086
Manager, Savings Bank 186.167-086
Manager, Stock Exchange Floor 186.117-085
Manager, Trust Company 186.167-086
MARGIN CLERK I 216.362-042
MARGIN CLERK II 216.382-046

money position officer 186.167-054
MORTGAGE CLERK 249.362-014
MORTGAGE LOAN CLOSER 249.362-018
Mortgage-Loan Officer 186.267-018
Mortgage Loan Originator 186.267-018
MORTGAGE LOAN PROCESSOR 249.362-022
office manager 186.117-034
operations clerk 216.362-046
operations clerk 216.482-034
OPERATIONS OFFICER 186.137-014
Operations Officer, Branch Office 186.137-014
Operations Officer, Trust Department 186.137-014
Out-Of-Town Collection Clerk 216.362-014
Personal Trust Officer 186.117-074
portfolio administrator 186.167-054
position clerk 210.367-014
President, Commercial Bank 186.117-054
President, Credit Union 186.117-054
President, Finance Company 186.117-054
PRESIDENT, FINANCIAL INSTITUTION 186.117-054
President, Mortgage Company 186.117-054
President, Savings Bank 186.117-054
President, Trust Company 186.117-054
proof clerk 217.382-010
PROOF-MACHINE OPERATOR 217.382-010
PROOF-MACHINE-OPERATOR SUPERVISOR 217.132-010
quote clerk 237.367-046
REGISTERED REPRESENTATIVE 250.257-018
rejected-items clerk 216.382-058
RESERVE OFFICER 186.167-054
RESERVES CLERK 216.362-034
RETURNED-ITEM CLERK 216.382-058
Runner 239.567-010
SAFE-DEPOSIT-BOX RENTAL CLERK 295.367-022
safe deposit manager 295.137-010
SALES REPRESENTATIVE, FINANCIAL SERVICES 250.257-022
securities analyst 160.267-026
securities auditor 216.367-014
securities broker 250.257-018
SECURITIES CLERK 219.362-054
securities-research analyst 160.267-026
Securities Supervisor 219.132-014
SECURITIES TRADER 162.167-038
Specialist 162.167-034
special loan officer 186.167-078
STATEMENT CLERK 214.362-046
stock-broker 250.257-018
stock-transfer clerk 216.362-046
STOCK-TRANSFER CLERK, HEAD 216.137-014
stock-transfer technician 216.362-046
SUPERVISOR, LENDING ACTIVITIES 249.137-034
SUPERVISOR, SAFETY DEPOSIT 295.137-010
SUPERVISOR, SECURITIES VAULT 216.132-014
SUPERVISOR, STATEMENT CLERKS 214.137-014
SUPERVISOR, TRUST ACCOUNTS 219.132-014
Tax Clerk 249.362-014
telephone-information clerk 237.367-046
TELEPHONE-QUOTATION CLERK 237.367-046
TELLER 211.362-018
TELLER, HEAD 211.132-010
TELLER, VAULT 211.382-010
trader 162.167-034
trader 162.167-038
TRANSFER CLERK 216.362-046
transit clerk 217.382-010
TREASURER, FINANCIAL INSTITUTION 186.117-070
Treasurer, Savings Bank 186.117-070
trust administrator 186.117-074
TRUST OFFICER 186.117-074
TRUST OPERATIONS ASSISTANT 219.362-074
TRUST-VAULT CLERK 216.367-014
Underwriter, Direct Endorsement 186.267-026
UNDERWRITER, MORTGAGE LOAN 186.267-026
vault custodian 216.367-014
Vice President, Commercial Bank 186.117-078
VICE PRESIDENT, FINANCIAL INSTITUTION 186.117-078
Vice President, Lending 186.117-078
WIRE-TRANSFER CLERK 203.562-010

fishing & hunt.—FISHING, HUNTING, AND TRAPPING: This designation includes occupations concerned with the following types of activity: (1) catching and harvesting of fin fish, shell fish, and aquatic plant and animal life; (2) breeding, seeding, propagating, raising, caring for, and harvesting aquatic plant and animal life; (3) managing aquatic plant and animal life resources; (4) performing functions as services related to the above; (5) hunting and trapping; and (6) operating game preserves. Occupations related to this industry but of a professional and scientific nature are included under PROFESSIONAL AND KINDRED OCCUPATIONS (profess. & kin.). Occupations concerned with canning and preserving aquatic life are included in the CANNING AND PRESERVING INDUSTRY (can. & preserv.).

Abalone Diver 443.664-010
Beaver Trapper 461.684-014
bed worker 446.684-014
BOATSWAIN, OTTER TRAWLER 441.132-010
bounty hunter 461.661-010
Buy-Boat Operator 197.133-010
Captain, Cannery Tender 197.133-010
CAPTAIN, FISHING VESSEL 197.133-010
Clam-Bed Laborer 446.687-014
Clam-Bed Worker 446.684-014
Clam Digger 446.684-014
Clam Dredge Operator 446.663-010
Clam Grower 446.161-014
CLAM SORTER 446.687-010
Clam Tonger 446.684-014
Clam Treader 446.684-014
COOK 315.381-010
cook, fishing vessel 315.381-010
Cougar Hunter 461.661-010
Coyote Hunter 461.661-010
Deck Guard 372.667-034
Deckhand, Clam Dredge 449.667-010
Deckhand, Crab Boat 449.667-010
DECKHAND, FISHING VESSEL 449.667-010
Deckhand, Oyster Dredge 449.667-010
Deckhand, Shrimp Boat 449.667-010
Deckhand, Sponge Boat 449.667-010
Deckhand, Tuna Boat 449.667-010
DIVER PUMPER 899.682-010
dress-gang worker 525.684-030
DULSER 447.687-010
EXPEDITION SUPERVISOR 461.134-010
FISH BAILER 914.685-010
FISH CLEANER 525.684-030
fish culturist 180.167-030
fish cutter 525.684-030
fish dresser 525.684-030
FISHER ..... term
fisher 442.684-010
Fisher, Clam 446.684-014
Fisher, Crab 441.684-014
Fisher, Dip Net 441.684-010
Fisher, Diver Net 441.684-010
FISHER, DIVING 443.664-010
Fisher, Eel 441.684-014
Fisher, Eel Spear 443.684-010
Fisher, Gill Net 441.684-010
Fisher, Hand Line 442.684-010
Fisher, Haul, Drag, Or Beach Seine 441.684-010
Fisher, Hoop Net 441.684-010
Fisher, Lampara Net 441.684-010
FISHER, LINE 442.684-010
Fisher, Lobster 441.684-014
Fisher, Mussel 446.684-014
FISHER, NET 441.684-010
Fisher, Oyster 446.684-014
FISHER, POT 441.684-014
Fisher, Pound Net Or Trap 441.684-010
Fisher, Purse Seine 441.684-010
Fisher, Quahog 446.684-014
Fisher, Reef Net 441.684-010
Fisher, Scallop 446.684-014
fisher, seal 461.684-010
FISHER, SPEAR 443.684-010
FISHER, SPONGE ..... term
fisher, sponge hooking 447.684-010
Fisher, Swordfish 443.684-010
FISHER, TERRAPIN 441.684-018
Fisher, Trammel Net 441.684-010
fisher, trap 441.684-022
Fisher, Trawl Line 442.684-010
Fisher, Trawl Net 441.684-010
Fisher, Troll Line 442.684-010
Fisher, Trot Line 442.684-010
FISHER, WEIR 441.684-022
FISH FARMER 446.161-010
Fish Filleter 525.684-030

fish hatchery assistant 446.684-010
fish hatchery attendant 446.684-010
Fish Hatchery Laborer 446.687-014
FISH HATCHERY WORKER 446.684-010
fishing captain 197.133-018
FISH-LIVER SORTER 521.687-062
forestry hunter 461.661-010
fur trapper 461.684-014
Gaffer 443.684-010
Geoduck Diver 443.664-010
Harpooner 443.684-010
harpooner, fish 443.684-010
hooker 447.684-010
hunter, skin diver 461.664-010
Hydraulic Dredge Operator 446.663-010
IRISH-MOSS BLEACHER 447.687-014
IRISH-MOSS GATHERER 447.687-018
KELP CUTTER 447.687-022
LABORER, AQUATIC LIFE 446.687-014
MANAGER, FISH HATCHERY 180.167-030
Manager, Marine Life Hatchery 180.167-030
Manager, Shellfish Hatchery 180.167-030
MATE, FISHING VESSEL 197.133-018
Muskrat Trapper 461.684-014
NET REPAIRER 449.664-010
Oyster-Bed Laborer 446.687-014
Oyster-Bed Worker 446.684-014
oyster culturist 446.161-014
Oyster Dredge Operator 446.663-010
Oyster Dredger 446.684-014
OYSTER FLOATER 449.687-010
Oyster Grower 446.161-014
Oyster Picker 446.684-014
Oyster Tonger 446.684-014
Oyster Unloader 446.684-014
Oyster Worker 446.684-014
Pearl Diver 443.664-010
PREDATORY-ANIMAL HUNTER 461.661-010
rigger 449.664-010
Scallop Dredger 446.684-014
Scallop Raker 446.684-014
Seal Driver 461.684-010
SEALER 461.684-010
Seal Killer 461.684-010
Seal Skinner 461.684-010
Self-Propelled Dredge Operator 446.663-010
SHELLFISH-BED WORKER 446.684-014
SHELLFISH DREDGE OPERATOR 446.663-010
SHELLFISH GROWER 446.161-014
shellfish harvester 446.663-010
Shrimp Pond Laborer 446.687-014
SKIFF OPERATOR 441.683-010
skipper 197.133-010
Slimer 525.684-030
SOFT CRAB SHEDDER 446.684-018
spearer 443.684-010
SPONGE CLIPPER 447.687-026
Sponge Diver 443.664-010
SPONGE HOOKER 447.684-010
superintendent, fish hatchery 180.167-030
Supervisor, Clam-Bed 446.133-010
Supervisor, Commercial Fish Hatchery 446.134-010
SUPERVISOR, FISH HATCHERY 446.134-010
Supervisor, Oyster Farm 446.133-010
SUPERVISOR, SHELLFISH FARMING 446.133-010
Supervisor, Shrimp Pond 446.133-010
TRAPPER, ANIMAL 461.684-014
TRAPPER, BIRD 461.684-018
Trout Farmer 446.161-010
UNDERWATER HUNTER-TRAPPER 461.664-010
web worker 449.664-010
Wolf Hunter 461.661-010

food prep., nec—FOOD PREPARATIONS AND FOOD SPECIALTIES INDUSTRY, NOT ELSEWHERE CLASSIFIED: This designation includes occupations concerned with manufacturing and processing food preparations and miscellaneous food specialties, not elsewhere classified. Included are occupations concerned with (1) blending, roasting, and grinding coffee and tea, and blending and grinding spices; (2) preparing powdered and granular products and prepared foods, such as gelatin desserts, potato chips, peanut butter, coleslaw, shredded coconut, and strained honey; (3) producing baking powder, yeast, and other leavening compounds; (4) producing vinegar and cider; (5) manufacturing ice for sale; and (6) manufacturing macaroni, spaghetti, vermicelli, noodles, and related products. Occupations concerned with cooking, canning, freezing, or preparing fresh fish and other seafoods are included in the CANNING AND PRESERVING INDUSTRY (can. & preserv.).

Apricot Washer 521.685-110
Baking-Powder Mixer 520.685-162
batch mixer 520.685-014
BATTER MIXER 520.685-014
BLINTZE ROLLER 520.687-014
bulk-system operator 921.382-010
Burrito Maker 520.687-046
CAN-CONVEYOR FEEDER 529.685-046
Can Filler 523.685-102
car ice-bunker filler 910.687-018
CAR ICER 910.687-018
cheese-pancake roller 520.687-014
Chili-Pepper Grinder 521.685-326
Cinnamon Grinder 521.685-326
coffee blender 520.585-110
COFFEE GRINDER 521.685-078
COFFEE ROASTER 523.682-014
COFFEE ROASTER, CONTINUOUS PROCESS 523.685-026
COFFEE-ROASTER HELPER 523.687-010
Coffee Taster 529.281-010
COFFEE WEIGHER 529.687-046
comb capper 521.687-070
CONVEYOR OPERATOR, PNEUMATIC SYSTEM 921.382-010
Cook, Chili 526.134-010
Cook, Enchilada 526.134-010
cooker, chip 526.685-046
COOK, MEXICAN FOOD 526.134-010
COOK, SOYBEAN SPECIALTIES 529.685-290
Cook, Taco 526.134-010
Cook, Tamale 526.134-010
Cook, Tortilla 526.134-010
Corn-Chip Maker 529.685-078
CORN COOKER 522.685-034
CORN GRINDER 521.685-082
CORN-PRESS OPERATOR 529.685-078
Cube Cutter 529.685-150
CUTTER 529.685-082
DIE CLEANER 529.687-062
DRIED FRUIT WASHER 521.685-110
DRIER, BELT CONVEYOR 529.485-018
DRIER, LONG GOODS 523.585-022
DRIER OPERATOR 523.362-014
DRIER OPERATOR, DRUM 529.685-098
DRIER, SHORT GOODS 523.587-010
Dumper 523.685-102
Egg-And-Spice Mixer 520.685-154
Enchilada Maker 520.687-046
fermenter helper 522.686-014
Fig Washer 521.685-110
FILLING-MACHINE SET-UP MECHANIC 920.680-010
FISH-CAKE MAKER 529.685-122
flour distributor 921.382-010
GENERAL HELPER 522.686-014
general production worker 529.686-070
granulizing-machine operator 521.685-078
GREEN-COFFEE BLENDER 520.685-110
HONEYCOMB DECAPPER 521.687-070
HONEY EXTRACTOR 521.685-174
HONEY GRADER-AND-BLENDER 520.361-010
honey liquefier 520.361-010
HONEY PROCESSOR 522.685-070
ICE CUTTER 529.685-150
ICE MAKER 523.685-102
ice platform supervisor 299.137-022
Ice Puller 523.685-102
icer, air conditioning 910.687-018
ice seller 299.377-010
long-goods drier 523.585-022
LONG-GOODS HELPER, MACHINE 529.686-062
LUMPIA WRAPPER MAKER 526.684-014
Maple-Products Maker 523.382-014
MAPLE-SYRUP MAKER 523.382-014
mash-floor operator 522.685-078
Mayonnaise Mixer 520.685-154
MEXICAN-FOOD-MACHINE TENDER 524.685-038
MEXICAN FOOD MAKER, HAND 520.687-046
MIXER 520.685-138
MIXER-AND-BLENDER 520.685-154
MIXER, CHILI POWDER 520.685-158
MIXER, DRY-FOOD PRODUCTS 520.685-162
MIXER OPERATOR, SNACK FOODS 520.685-230

MIXER, WHIPPED TOPPING 520.385-010
MIXING-MACHINE OPERATOR 520.665-014
MOLASSES PREPARER 522.685-078
Mustard Mixer 520.685-154
NOODLE MAKER 529.385-010
NOODLE-PRESS OPERATOR 520.662-010
NUT CHOPPER 521.686-046
pasteurizer 522.685-070
PEANUT-BUTTER MAKER 529.685-178
PEELED-POTATO INSPECTOR 521.687-094
PLATFORM ATTENDANT 299.377-010
pneumatic-systems operator 921.382-010
potato-chip cooker machine 526.685-046
POTATO-CHIP FRIER 526.685-046
POTATO-CHIP-PROCESSING SUPERVISOR 526.137-010
POTATO-CHIP SORTER 526.687-010
POTATO-PANCAKE FRIER 526.685-050
POTATO-PEELING-MACHINE OPERATOR 521.685-250
potato spotter 521.687-094
PRESS TENDER 520.685-186
Press Tender, Long Goods 520.685-186
Press Tender, Short Goods 520.685-186
PROCESSOR, INSTANT POTATO 523.382-022
PRODUCTION HELPER 529.686-070
production helper 921.685-050
PRODUCTION-SUPPLY-EQUIPMENT TENDER 921.685-050
Prune Washer 521.685-110
pure-culture operator 522.685-090
QUALITY-CONTROL TECHNICIAN 529.387-030
Raisin Washer 521.685-110
refrigerator-car icer 910.687-018
sawyer 521.685-342
SCRAP SEPARATOR 529.587-018
SEED-YEAST OPERATOR 522.685-090
Soyfreeze Operator 529.685-290
spaghetti press helper 529.686-062
spice blender 520.585-026
SPICE CLEANER 521.685-322
SPICE FUMIGATOR 529.685-218
spice grinder 521.685-326
spice-grinding-mill operator 521.685-326
SPICE MILLER 521.685-326
Spice Miller, Hammer Mill 521.685-326
Spice Miller, Rolling Mill 521.685-326
SPICE MIXER 520.585-026
STRIPPER-CUTTER, MACHINE 521.685-342
SUPERVISOR 529.132-110
SUPERVISOR, CLEANING 699.137-010
SUPERVISOR, COFFEE 529.130-018
SUPERVISOR, COMPRESSED YEAST 520.132-014
SUPERVISOR, DRIED YEAST 529.132-042
SUPERVISOR, ICE HOUSE 523.137-010
SUPERVISOR, ICE STORAGE, SALE, AND DELIVERY 299.137-022
SUPERVISOR, INSTANT POTATO PROCESSING 529.137-078
SUPERVISOR, LIQUID YEAST 529.132-066
Supervisor, Long Goods 529.132-110
SUPERVISOR, MAPLE PRODUCTS 529.137-050
SUPERVISOR, NUTRITIONAL YEAST 529.132-078
SUPERVISOR, READY-MIXED FOOD PREPARATION 529.137-054
Supervisor, Short Goods 529.132-110
SUPERVISOR, TEA AND SPICE 529.132-102
Taco Maker 520.687-046
TAMALE-MACHINE FEEDER 520.686-038
Tamale Maker 520.687-046
TASTER 529.281-010
Tea-Bag-Machine Tender 920.685-078
Tea Blender 520.585-026
Tea Taster 529.281-010
Tempeh Maker 529.685-290
Tofu Maker 529.685-290
Tortilla Maker 529.685-078
TUMBLER TENDER 520.685-222
VINEGAR MAKER 522.382-038
yeast-cake cutter 529.665-022
yeast-culture operator 522.685-090
YEAST-CUTTING-AND-WRAPPING-MACHINE OPERATOR 529.665-022
Yeast-Drier Operator, Drum 529.685-098
YEAST-FERMENTATION ATTENDANT 522.685-110
yeast stacker 522.686-014
YEAST WASHER 529.685-278

forestry—FORESTRY INDUSTRY: This designation includes occupations concerned with propagating, protecting, and managing forest tracts; gathering plants, barks, greens, saps, gums, and related products from the forest; operating forest nurseries; and growing, harvesting, and preparing Christmas trees for shipment. Occupations concerned with timber harvesting are included in the LOGGING INDUSTRY (logging); occupations concerned with growing ornamental trees are included in AGRICULTURE AND AGRICULTURAL SERVICE (agriculture).

Baler 920.687-046
Buncher 920.687-046
BUNDLER, SEASONAL GREENERY 920.687-046
Cascara-Bark Cutter 453.687-010
Chief Cruiser 459.387-010
CHRISTMAS-TREE FARM WORKER 451.687-010
CHRISTMAS-TREE GRADER 451.687-014
crew boss 451.137-014
CRUISER 459.387-010
Decorative Greens Cutter 453.687-010
fire crew worker 452.687-014
FIRE LOOKOUT 452.367-010
FIRE RANGER 452.367-014
FIRE WARDEN 452.167-010
FOREST ENGINEER 005.167-018
FORESTER AIDE 452.364-010
FOREST-FIRE FIGHTER 452.687-014
FOREST NURSERY SUPERVISOR 451.137-010
FOREST-PRODUCTS GATHERER 453.687-010
forest technician 452.364-010
FOREST WORKER 452.687-010
LABORER, TREE TAPPING 453.687-014
LOGGING-OPERATIONS INSPECTOR 168.267-070
LOGGING-TRACTOR OPERATOR 929.663-010
MANAGER, CHRISTMAS-TREE FARM 180.117-010
Seed-Cone Picker 453.687-010
SEEDLING PULLER 451.687-018
SEEDLING SORTER 451.687-022
Skidder Operator 929.663-010
smoke eater 452.687-014
SMOKE JUMPER 452.364-014
SMOKE JUMPER SUPERVISOR 452.134-010
SUPERVISOR, CHRISTMAS-TREE FARM 451.137-014
Suppression-Crew Leader 452.687-014
Tagger 920.687-046
timber cruiser 459.387-010
TREE PLANTER 452.687-018
tree puller 451.687-018
tree sorter 451.687-022
Trimmer 920.687-046
watcher, lookout tower 452.367-010
YARD SUPERVISOR 922.137-030

forging—FORGING: This designation includes occupations concerned with forging or metal stamping processes, whether performed on a job-lot or production basis. The primary processes include shaping metal by heating and hammering or pressing, or by cold hammering or pressing. Forging is carried on in establishments that specialize in that type of work, and also as part of the manufacturing processes of various industries. This designation includes all occupations concerned with forging, wherever they occur.

anvil smith 610.381-010
AUTOMATIC CASTING-FORGING MACHINE OPERATOR 611.682-014
BLACKSMITH 610.381-010
BLACKSMITH APPRENTICE 610.381-014
blacksmith, hammer operator 610.362-010
BLACKSMITH HELPER 610.684-010
blacksmith supervisor 612.131-010
Board Drophammer Operator 610.362-010
Chain-Forming-Machine Operator 612.462-010
CHAIN-TESTING-MACHINE OPERATOR 616.685-010
charging manipulator 612.683-010
Coining-Press Operator 611.685-010
Cold-Header Operator 612.462-010
die-machine operator 611.482-010
DIE SETTER 612.360-010
DROPHAMMER OPERATOR 610.362-010
Drop-Hammer-Operator Helper 619.686-034
Drophammer Setter-Up 612.360-010
EXTRUDER OPERATOR 614.482-014
Extruder-Operator Helper 619.686-034
extrusion-press operator 614.482-014
extrusion press supervisor 614.132-014
FORGE HELPER 619.686-034
FORGE-SHOP-MACHINE REPAIRER 626.261-010
FORGE-SHOP SUPERVISOR 612.131-010

forging-machine operator 611.482-010
Forging-Press Lever Tender 612.685-010
FORGING-PRESS OPERATOR I 611.482-010
FORGING-PRESS OPERATOR II 611.685-010
Forging Press Setter-Up 612.360-010
FORGING-ROLL OPERATOR 612.682-014
furnace operator 619.682-022
furnace tender 619.682-022
Hammer Driver 612.685-010
hammer heater 619.682-022
hammer repairer 626.261-010
Hammer-Shop Supervisor 612.131-010
Hammersmith 612.361-010
Hammersmith Helper 612.687-014
HEATER 619.682-022
heater, furnace 619.682-022
Heater Helper, Forge 619.686-034
HEAT READER 612.687-010
HEAVY FORGER 612.361-010
HEAVY-FORGER HELPER 612.687-014
Hot-Header Operator 612.462-010
Impact Hammer Operator 610.362-010
Inspection Supervisor 612.131-010
INSPECTOR 612.261-010
Inspector, Hot Forgings 612.261-010
LEVER TENDER 612.685-010
Load-Chain Welding-Machine Repairer 626.261-010
Machine Rebuilder 626.261-010
MANIPULATOR OPERATOR 612.683-010
metal extrusion supervisor 614.132-014
power hammer repairer 626.261-010
press hand 611.685-010
press helper 619.686-034
press operator 611.685-010
Press Smith 612.361-010
Press-Smith Helper 612.687-014
Restrike Hammer Operator 610.362-010
roll forger 612.682-014
rolling-machine operator 612.682-014
Rotary-Swaging-Machine Operator 612.682-014
Scale Shooter 619.686-034
slug-furnace operator 619.682-022
Steam-Clean-Machine Operator 915.687-026
Steam Hammer Operator 610.362-010
striker 610.684-010
SUPERVISOR, EXTRUSION 614.132-014
Tool-Dresser 610.381-010
Trimming-Press Operator 615.685-030
trim-setter helper 619.686-034
Twisting-Press Operator 611.685-010
UPSETTER 611.662-010
Upsetter Helper 619.686-034
Upsetter Setter-Up 612.360-010
UTILITY WORKER, FORGE 612.684-010

foundry—FOUNDRY: This designation includes occupations occurring in foundries engaged in manufacturing metal castings on a job-lot or production basis. All foundry occupations are included under this designation, whether they occur in independently operated foundries or in foundries operated in conjunction with establishments in various industries.

air-furnace operator 512.362-018
BOILER RELINER, PLASTIC BLOCK 849.484-010
BONDACTOR-MACHINE OPERATOR 899.664-010
bonder 518.685-030
bonding-machine operator 518.685-030
caster, investment casting 512.362-018
Casting Carrier 519.687-022
casting finisher 705.684-074
CASTING INSPECTOR 514.687-010
Casting-Machine-Control-Board Operator 514.562-010
Casting Sorter 519.687-022
Casting Supervisor 519.131-010
casting tester 514.687-010
Casting Trucker 921.683-050
cast-shell grinder 705.684-074
CENTRIFUGAL-CASTING-MACHINE OPERATOR I 514.685-010
CENTRIFUGAL-CASTING-MACHINE OPERATOR II 514.685-014
CENTRIFUGAL-CASTING-MACHINE OPERATOR III 514.562-010
Centrifugal-Wax Molder 549.685-038
Charging-Crane Operator I 921.663-010
Charging-Crane Operator II 921.663-042
Cinder-Crane Operator I 921.663-010
Cinder-Crane Operator II 921.663-042
core-blower operator 518.685-022
CORE CHECKER 518.687-010
core fitter 518.687-014
core inspector 518.687-010
COREMAKER 518.381-014
COREMAKER APPRENTICE 518.381-018
Coremaker, Bench 518.381-014
coremaker, experimental 518.381-014
Coremaker, Floor 518.381-014
coremaker helper 518.687-014
COREMAKER, MACHINE I 518.685-014
COREMAKER, MACHINE II 518.685-018
COREMAKER, MACHINE III 518.685-022
COREMAKER, PIPE 518.684-014
Coremaking-Supervisor 519.131-010
core mounter 518.684-018
CORE-OVEN TENDER 518.685-010
core paster 518.687-014
CORE SETTER 518.684-010
core setter 518.684-018
core stripper 518.685-014
CUPOLA CHARGER 512.686-010
CUPOLA HOIST OPERATOR 921.683-030
cupola liner 861.684-010
Cupola-Melting Supervisor 519.131-010
CUPOLA PATCHER 861.684-010
cupola stocker 512.686-010
CUPOLA TAPPER 514.664-010
CUPOLA TENDER 512.662-010
Cupola-Tender Helper 519.687-022
Die-Casting-Machine Maintainer 514.360-010
DIE-CASTING-MACHINE OPERATOR I 514.382-010
DIE-CASTING-MACHINE OPERATOR II 514.685-018
DIE-CASTING-MACHINE SETTER 514.360-010
Die-Cast Patternmaker 661.281-022
Die-Lay-Out Worker 661.281-022
dipper 518.687-022
Dumper, Mold Cleaner 514.685-014
Electric-Arc-Furnace Operator 512.362-018
filer, metal patterns 693.281-018
final inspector 514.687-010
Finishing Supervisor 519.131-010
finish molder 518.684-018
fire regulator 512.667-010
Flask Carrier 519.687-022
flask fitter 518.684-018
floor molder, sweep method 518.361-018
FOUNDRY LABORER, CORE ROOM 518.687-014
FOUNDRY METALLURGIST 011.061-010
FOUNDRY SUPERVISOR 519.131-010
foundry technician 011.061-010
FOUNDRY WORKER, GENERAL 519.687-022
FURNACE OPERATOR 512.362-018
Furnace Operator, Oil Or Gas 512.362-018
FURNACE TENDER 512.685-010
furnace tender 512.662-010
Hot-Metal Crane Operator I 921.663-010
Hot-Metal-Crane Operator II 921.663-042
Induction-Furnace Operator 512.362-018
Injection-Wax Molder 549.685-038
inspector 518.684-026
INSPECTOR, CHIEF 514.131-010
Jacket Changer 519.687-022
ladle cleaner 519.684-010
ladle handler 514.684-022
LADLE LINER 519.684-010
Ladle-Liner Helper 519.687-022
ladle patcher 519.684-010
Ladle Pusher 519.687-022
MACHINE-CASTINGS PLASTERER 519.687-030
machine line molder 518.682-010
MACHINE MOLDER 518.682-010
Machine Molder, Roll-Over 518.682-010
Machine Molder, Squeeze 518.682-010
melter 553.685-110
MELTER CLERK 221.387-042
METAL CONTROL WORKER 512.487-010
Mold Checker 518.687-010
Mold Clamper 519.687-022
MOLD CLOSER 518.684-018
Mold-Closer Helper 519.687-022
MOLDER 518.361-010
MOLDER APPRENTICE 518.361-014
Molder, Bench 518.361-010
Molder, Fitting 518.682-010

Molder, Floor 518.361-010
Molder Helper 519.687-022
Molder Helper, Machine 519.687-022
MOLDER, PATTERN 693.381-022
MOLDER, SWEEP 518.361-018
mold finisher 518.684-018
Mold-Making Supervisor 519.131-010
Mold Stacker 519.687-022
Pattern Carrier 519.687-022
Pattern Cleaner 519.687-022
PATTERN GATER 801.684-014
PATTERNMAKER, ALL-AROUND 693.280-014
PATTERNMAKER APPRENTICE, METAL 600.280-046
PATTERNMAKER APPRENTICE, WOOD 661.281-018
patternmaker, bench 693.281-018
patternmaker, hand 693.281-018
PATTERNMAKER, METAL 600.280-050
PATTERNMAKER, METAL, BENCH 693.281-018
patternmaker, pressure cast 777.381-034
PATTERNMAKER, WOOD 661.281-022
Pattern-Room Attendant 222.387-058
pattern setter 518.380-010
Pattern Setter 661.281-022
PATTERN-SHOP SUPERVISOR 693.131-010
PERMANENT-MOLD SUPERVISOR 514.130-010
pit-furnace melter 512.362-018
PLASTER MOLDER I 777.381-034
PLASTER MOLDER II 518.484-010
plastic installer 849.484-010
Pourer, Buggy Ladle 514.684-022
Pourer, Bull Ladle 514.684-022
Pourer, Crane Ladle 514.684-022
Pourer, Crucible 514.684-022
POURER, METAL 514.684-022
Puller 514.685-014
remelt operator 512.685-010
rotary-furnace operator 512.362-018
sand conditioner, machine 570.682-018
SAND-CUTTER OPERATOR 570.683-014
sand-cutting-machine operator 570.683-014
sand mill operator 570.682-018
Sand Mill Operator, Core-Sand 570.682-018
Sand Mill Operator, Facing-Sand 570.682-018
Sand Mill Operator, Molding-Sand 570.682-018
SAND MIXER, MACHINE 570.682-018
sand-mixer operator 570.683-014
sand molder 518.361-010
sand-molder apprentice 518.361-014
Sand-Screener Operator 519.687-022
Sand Shoveler 519.687-022
SAND-SLINGER OPERATOR 518.683-010
sand-system operator 570.682-018
sand technologist 777.381-046
SAND TESTER 777.381-046
Sand Wheeler 519.687-022
scratcher, metal patterns 693.281-018
SETTER, MOLDING-AND-COREMAKING MACHINES 518.380-010
Shake-Out Worker 519.687-022
Shell-Core-And-Molding Supervisor 519.131-010
Shell Coremaker 518.685-026
shell mold bonder 518.685-030
SHELL-MOLD-BONDING-MACHINE OPERATOR 518.685-030
SHELL MOLDER 518.685-026
SHOTBLAST-EQUIPMENT OPERATOR 503.362-014
Skimmer 519.687-022
Slag Worker 519.687-022
snagger 705.684-074
SNAG GRINDER 705.684-074
soft-iron inspector 514.687-010
Sprayer 514.685-014
Sprue-Cutting-Press Operator 615.685-030
Sprue Knocker 519.687-022
Stand Grinder 705.684-074
SUPERVISOR, DIE CASTING 514.130-014
swing-frame-grinder operator 705.684-074
swing grinder 705.684-074
TEMPERATURE REGULATOR, PYROMETER 512.667-010
TEST WORKER 519.687-042
Tilting-Furnace Operator, Oil Or Gas 512.362-018
TUBE-CLEANING OPERATOR 514.685-026
tube coremaker 518.685-018
VACUUM CASTER 514.582-010
Wall-Crane Operator 921.663-010
WAX MOLDER 549.685-038
WAX-PATTERN ASSEMBLER 518.684-022
WAX-PATTERN COATER 518.687-022
WAX-PATTERN REPAIRER 518.684-026
WAX-POT TENDER 553.685-110
Wax-Room Supervisor 519.131-010
weight-and-test-bar clerk 221.387-042

fur goods—FUR GOODS INDUSTRY: This designation includes occupations concerned with manufacturing, restyling, and repairing fur and fur-lined goods, such as coats, neckpieces, hats, stoles, and capes, wherever such work is performed, whether in factories, stores, or repair shops. Occupations concerned with preparing furs are included in the LEATHER MANUFACTURING INDUSTRY (leather mfg.). Occupations concerned with manufacturing sheepskin-lined clothing are included in the GARMENT INDUSTRY (garment).

fur beater 369.685-014
FUR CLEANER, MACHINE 369.685-014
FUR CUTTER 783.781-010
FUR DESIGNER 142.081-014
fur drummer 369.685-014
fur dry-cleaner 369.685-014
FUR FINISHER 783.381-014
Fur Finisher, Head 783.131-010
FUR GLAZER 369.684-010
fur glosser 369.684-010
fur grader 783.384-010
fur joiner 783.682-010
Fur Liner 783.381-014
FUR-MACHINE OPERATOR 783.682-010
fur matcher 783.384-010
FUR NAILER 783.684-014
fur operator 783.682-010
fur repairer 783.261-010
FURRIER 783.261-010
fur sewer 783.682-010
fur sewer 783.381-014
FUR SORTER 783.384-010
fur tailor 783.261-010
fur tailor 783.381-014
FUR TRIMMER 783.687-014
saw-dust machine operator 369.685-014
SUPERVISOR, FURRIER SHOP 783.131-010

furniture—FURNITURE AND FIXTURES INDUSTRY: This designation includes occupations concerned with manufacturing and repairing household furniture and fixtures, including kitchen cabinets and furniture and fixtures for barber and beauty parlors, hospitals, laboratories, offices and stores, professional offices, and public buildings from wood, metal, and other materials, such as reed and rattan. Included here are occupations concerned with manufacturing and repairing related products, such as mattresses and bedsprings; curtain and drapery rods, poles, venetian blinds, and other window blinds and shades, regardless of the materials used.

ADJUSTER 709.684-010
Antiquer 763.381-010
Arm Maker 780.684-134
Art Metal-Chair Assembler 709.684-014
ASSEMBLER, METAL FURNITURE 709.684-014
ASSEMBLY INSPECTOR 763.684-010
ASSEMBLY-LINE INSPECTOR 709.684-018
AUTOMATIC BANDSAW TENDER 667.685-070
automatic-coil-machine operator 616.685-018
AWNING MAKER-AND-INSTALLER 869.481-010
Back Maker 780.684-134
BACK PADDER 780.684-010
Back-Panel Padder 780.684-082
Backrest Assembler 709.684-014
BACK TUFTER 780.687-062
bander 619.685-014
BANDING-MACHINE OPERATOR 619.685-014
band-top assembler 780.684-014
BAND-TOP MAKER 780.684-014
BAR AND FILLER ASSEMBLER 706.684-034
BEADER 739.687-034
Bedspring Assembler 780.684-098
bed washer 709.687-014
BENCH HAND 706.381-014
BENCH-SHEAR OPERATOR 703.684-010
BLOW-OFF WORKER 763.687-010
border-machine operator 787.685-022
BORDER MEASURER AND CUTTER 780.687-010
border measurer 780.687-010
BORING-MACHINE OPERATOR 666.685-014
Boxing-Machine Operator 780.682-018
Box-Spring-Frame Builder 762.684-066

BOX-SPRING MAKER I 780.684-018
BOX-SPRING MAKER II 780.684-022
BRUSHER ..... term
Brush Shade-Hand 742.684-010
Brush Stainer 742.684-014
bundler 780.587-010
bunk assembler 709.667-010
burnisher 742.684-010
button tufter 687.684-014
button tufter 780.687-050
button-tufting-machine operator 687.685-014
CABINET ASSEMBLER 763.684-014
cabinet finisher 703.684-014
CANE CUTTER 763.687-030
CANER I 763.684-018
CANER II 763.684-022
CASE FITTER 763.684-026
Chair Inspector 763.687-026
CHAIR INSPECTOR AND LEVELER 763.687-014
chair-post-machine operator 669.682-022
Chair-Spring Assembler 780.684-098
chair trimmer 780.684-034
CHAIR UPHOLSTERER 780.684-034
checker 739.687-110
CHUCKING-AND-BORING-MACHINE OPERATOR 669.682-022
CLEANER, FURNITURE 709.687-014
CLIPPER AND TURNER 780.687-014
COIL ASSEMBLER, MACHINE 616.685-018
Coil-Machine Supervisor 616.130-022
coil placer 780.684-098
coil-spring assembler 780.684-098
coil tier 616.685-018
COLOR MIXER 589.464-010
corner-block cutter 669.682-030
CORNER-BRACE-BLOCK-MACHINE OPERATOR 669.682-030
cot assembler 709.667-010
COTTON DISPATCHER 780.684-038
Cotton Picker 680.685-078
cover assembler 780.684-114
Cover Assembler 780.682-010
Cover Cutter, Machine 781.684-014
COVER INSPECTOR 789.687-038
Cover Maker 780.682-018
Cradle-Slide Maker 616.685-058
CRATE LINER 920.687-078
CRATE OPENER 929.685-010
Crib-Pad Maker 780.685-010
CUPBOARD BUILDER 703.684-014
CURTAIN-ROLLER ASSEMBLER 739.684-042
cushion assembler 780.684-054
CUSHION BUILDER 780.684-046
Cushion Closer 780.682-018
Cushion-Cover Inspector 789.687-038
cushion filler 780.684-054
CUSHION MAKER I 780.684-054
Cushion Maker II 780.682-018
cushion-mat maker 780.684-054
Cushion-Spring Assembler 780.684-098
cushion stuffer 780.684-054
DECORATOR 749.684-014
Dental-Chair Assembler 706.684-058
DISTRESSER 763.687-018
Door Fitter 763.684-026
DOUBLE-END-TRIMMER-AND-BORING-MACHINE OPERATOR 669.682-038
Drawer Fitter 763.684-026
drawer-hardware worker 706.684-050
DRAWER LINER 763.684-030
DRAWER UPFITTER 706.684-050
DRAWER WAXER 763.687-022
Duller 742.684-010
EDGE BANDER, HAND 762.684-038
EDGE BANDER, MACHINE 762.685-010
EDGE-BANDING-MACHINE OFFBEARER 762.686-010
EDGE ROLLER 780.684-058
Examining-Chair Assembler 706.381-026
Excelsior Picker 680.685-078
EXPEDITER, SERVICE ORDER 222.367-070
EYELET-PUNCH OPERATOR 699.685-022
fabric assembler 709.667-010
FABRIC-MACHINE OPERATOR I 616.362-010
FABRIC-MACHINE OPERATOR II 616.685-022
FABRIC STRETCHER 709.667-010
felter 680.685-054
felting-machine operator 680.685-054
Fiber Picker 680.685-078
file-drawer finisher 706.684-050
FILLER-BLOCK INSERTER-REMOVER 652.687-018
Filler Wiper 742.687-010
final inspector 763.687-026
finish cleaner 763.684-034
FINISHED-STOCK INSPECTOR 763.687-026
finisher 742.684-010
finisher 616.685-018
finisher, hand 780.684-070
Finish Inspector 763.687-026
FINISH PATCHER 763.684-034
finish remover 749.687-030
finish repairer 763.684-034
Fixture Designer 142.061-022
flat-spring assembler 709.667-010
Foot-Piece Assembler 706.684-082
FRAME REPAIRER 763.681-010
FUMIGATOR AND STERILIZER 582.685-074
FURNITURE ASSEMBLER 763.684-038
furniture cleaner 709.687-014
FURNITURE DESIGNER 142.061-022
FURNITURE REPRODUCER 149.281-010
GARNETTER 680.685-054
gimp tacker 780.684-126
gin feeder 680.685-078
Glaze Wiper 742.687-010
GLAZIER, METAL FURNITURE 865.684-018
GLUE-SIZE-MACHINE OPERATOR 562.685-010
Glue Spreader 795.687-014
Hair-Picking-Machine Operator 680.685-082
HANDLE-AND-VENT-MACHINE OPERATOR 686.685-034
hand-tier 780.684-106
hardboard panel printer 652.662-018
HARDWARE ASSEMBLER 763.684-042
Head-Piece Assembler 706.684-082
HEMMING-AND-TACKING-MACHINE OPERATOR 787.685-022
High-Lighter 742.684-010
HYDRAULIC-CHAIR ASSEMBLER 706.684-058
Inside-Panel Padder 780.684-082
inspector 763.684-010
inspector and patch worker 763.684-070
INSPECTOR, ASSEMBLY 669.364-010
INSPECTOR, FURNITURE DECALS 979.687-030
INSPECTOR I 780.687-066
INSPECTOR II 780.687-022
INSPECTOR III 739.687-110
KERFER-MACHINE OPERATOR 667.685-042
LAG SCREWER 763.684-046
LAMINATED-PLASTIC-TABLETOP-MOLDING WRAPPER 692.686-046
LAMINATING-MACHINE OPERATOR 692.685-106
LAMINATOR, HAND 763.684-050
LEATHER TOOLER 763.684-054
link-fabric-machine operator 616.685-022
link-wire-fabric-machine operator 616.362-010
link-wire-fabric-machine tender 616.685-022
LOADER-DEMOLDER 556.684-030
LOCK ASSEMBLER 706.684-070
LOCK INSTALLER 706.684-078
loom operator 692.685-262
machine riveter 616.685-058
machine stuffer, automatic 780.684-054
MARQUETRY WORKER 761.281-018
MATERIAL ASSEMBLER 781.684-066
MAT-MAKING MACHINE TENDER 692.685-122
MATTRESS-FILLING-MACHINE TENDER 780.685-010
MATTRESS FINISHER 780.684-070
MATTRESS MAKER 780.684-074
Mattress Packer 920.587-018
MATTRESS-SPRING ENCASER 780.687-030
MATTRESS STRIPPER 780.687-026
METAL-BED ASSEMBLER 706.684-082
metal cleaner 709.687-014
METAL-FINISH INSPECTOR 703.687-018
metal-furniture assembler 709.684-014
METAL SANDER AND FINISHER 705.687-018
MODEL BUILDER 709.381-014
mounter 763.684-042
MULTI-PURPOSE MACHINE OPERATOR 669.382-022
Office-Chair Assembler 709.684-014
OPERATING-TABLE ASSEMBLER 706.381-026
padded-box sewer 787.685-022
PADDER, CUSHION 780.684-078
PADDING GLUER 780.687-034

pad maker 780.685-014
pad tufter 780.687-050
pad tufter 687.684-014
paint and table edger 740.687-022
PAINTER, PANEL EDGE 740.687-022
Painter, Spring 599.685-026
panel assembler 706.684-082
panel coverer 780.684-086
PANEL COVERER, METAL FURNITURE 780.684-082
PANEL CUTTER 761.684-050
PANEL MAKER 780.684-086
parts assembler 763.684-038
parts inspector 763.684-070
PATTERNMAKER 709.381-034
PATTERNMAKER 781.361-014
PATTERNMAKER 661.280-010
PICKER-MACHINE OPERATOR 680.685-078
pin-machine operator 763.684-046
PLASTERER 749.687-026
plasterer, spot 749.687-026
PLASTIC-TOP ASSEMBLER 763.684-062
Plastic-Top Installer 763.684-050
POCKETED-SPRING ASSEMBLER 780.684-090
pocketed-spring-machine operator 616.685-050
POCKET-MACHINE OPERATOR 616.685-050
prefitter 763.684-026
PRINT-LINE FEEDER 652.686-026
PRINT-LINE INSPECTOR 652.687-034
PRINT-LINE OPERATOR 652.662-018
print-line supervisor 652.662-018
PRINT-LINE TAILER 652.686-030
putty-and-patch worker 763.684-070
QUALITY CONTROL INSPECTOR 569.687-030
racker 780.684-090
Radio-And-Television-Cabinet Inspector 763.687-026
Rattan Worker 763.684-078
Reed Worker 763.684-078
refinisher 763.684-034
REPAIRER 709.684-062
REPAIRER, VENEER SHEET 769.684-058
Repairer, Wood Furniture 769.684-038
retoucher 763.684-034
RIP-AND-GROOVE-MACHINE OPERATOR 667.682-062
RIPPER 617.685-030
rivet-hammer-machine operator 616.685-058
RIVETING-MACHINE OPERATOR 616.685-058
RODDING MACHINE TENDER 665.685-038
Roll-Edge Stitcher, Hand 780.684-070
ROLL-OR-TAPE-EDGE-MACHINE OPERATOR 787.682-038
ROUTER TENDER 665.685-042
rubber 742.687-010
RUBBER 742.684-010
salvage worker 709.684-062
SAMPLE CLERK 221.382-026
SAMPLE CUTTER 781.684-070
Satin Finisher 742.684-010
SCOOPING-MACHINE TENDER 665.685-026
scraper, hand 761.684-038
scraper tender 665.685-026
Seat Assembler 709.684-014
Seat Maker 780.684-134
seat padder 780.684-078
seat scooper, machine 665.685-026
SEWING-MACHINE OPERATOR 780.682-010
SEWING-MACHINE OPERATOR, SPECIAL EQUIPMENT 689.685-118
SHADE-CLOTH FINISHER 585.687-026
SHAPER, HAND 761.684-038
SHAPING MACHINE TENDER 665.685-046
Side-Panel Padder 780.684-082
side-piece coverer 780.684-082
Side-Stitcher 780.684-070
sisal operator 780.687-042
Sisal Picker 680.685-078
Sizing Sprayer 741.687-018
Skin Carver 761.281-010
skirt clipper 780.687-070
SKIRT PANEL ASSEMBLER 780.687-070
SLAT TWISTER 616.685-066
SLICING-MACHINE TENDER 663.685-034
SLIP-SEAT COVERER 780.684-094
SLOT ROUTER 763.684-066
Sofa-Cover Inspector 789.687-038
Sofa Inspector 763.687-026
SORTER, UPHOLSTERY PARTS 780.587-010
SPRING ASSEMBLER 780.684-098
Spring-Assembler Supervisor 616.130-022
SPRING CLIPPER 780.684-102
SPRING COVERER 780.687-038
Spring Crater 920.685-078
spring encaser 780.687-030
SPRINGER 780.684-106
spring setter 780.684-106
spring tacker 780.684-106
spring tier 780.684-106
spring upholsterer 780.684-106
Stacker 569.685-066
Stain Dipper 599.685-026
STAINER 742.684-014
Stain Wiper 742.687-010
Stapler, Coil Unit 780.687-042
STAPLER, HAND 780.687-042
STAPLER, MACHINE 692.685-198
Steam Cleaner 780.687-058
Stenciler 749.684-014
sterilizer operator 582.685-074
stitcher, hand 780.684-070
STOCK-PARTS INSPECTOR 763.684-070
Striper 749.684-014
STRIPPER 749.687-030
Studio-Couch-Frame Builder 762.684-066
STUFFING-MACHINE OPERATOR 780.685-014
SUPERVISOR, ASSEMBLY ROOM 669.130-010
Supervisor, Border Department 780.137-010
SUPERVISOR, CUTTING-AND-SEWING DEPARTMENT 780.131-010
Supervisor, Cutting-And-Sewing Room 780.137-010
Supervisor, Cutting Department 780.131-010
SUPERVISOR, DIMENSION WAREHOUSE 769.134-010
supervisor, engraving 652.132-010
Supervisor, Finish-End 669.130-022
SUPERVISOR, FINISHING 742.134-010
Supervisor, Finishing Department 780.137-010
SUPERVISOR, FRAME SAMPLE AND PATTERN 661.137-010
SUPERVISOR, FURNITURE ASSEMBLY 763.134-014
Supervisor, Inspect, Clean-Up, And Wrap 920.137-026
SUPERVISOR, MATTRESS AND BOXSPRINGS 780.137-010
SUPERVISOR, METAL FURNITURE ASSEMBLY 709.134-010
Supervisor, Metal Furniture Fabrication 619.130-030
SUPERVISOR, PRINT LINE 652.132-010
SUPERVISOR, QUALITY CONTROL 763.134-010
Supervisor, Rough-End 669.130-022
SUPERVISOR, SAWING AND ASSEMBLY 669.132-010
Supervisor, Sewing Department 780.131-010
SUPERVISOR, SPRING-UP 780.134-014
SUPERVISOR, STEEL DIVISION 616.130-022
Table-And-Desk Finisher 709.687-014
Table Assembler, Metal 709.684-014
TESTER, CONVERTIBLE SOFA BEDSPRING 780.684-110
TICKET-CHOPPER ASSEMBLER 739.684-154
tick sewer 780.682-010
topper 780.685-018
Tow Picker 680.685-078
Tow-Picker Operator 680.685-082
TRAVERSE-ROD ASSEMBLER 739.687-186
TRIMMING ASSEMBLER 780.684-114
TUFTER 687.684-014
TUFTER, HAND 780.687-050
tufter operator 687.684-014
TUFTING-MACHINE OPERATOR 687.685-014
TURNING LATHE TENDER 664.685-034
upfitter 763.684-042
upholsterer 780.684-046
UPHOLSTERER, ASSEMBLY LINE 780.684-134
upholsterer helper 780.684-010
UPHOLSTERER, INSIDE 780.381-038
UPHOLSTERER, OUTSIDE 780.684-118
upholstery bundler 780.587-010
UPHOLSTERY CLEANER 780.687-058
Upholstery Cutter, Machine 781.684-014
upholstery handler 780.587-010
UPHOLSTERY REPAIRER 780.684-122
UPHOLSTERY TRIMMER 780.684-126
Vacuum-Spindle Sander 761.682-010
Varnish Dipper 599.685-026
veneer-edge bander 762.684-038
Veneer Matcher 769.687-046
VENETIAN-BLIND ASSEMBLER 739.684-166
VENETIAN-BLIND INSTALLER 869.484-018
Venetian-Blind-Tape Cutter 781.687-026
Vertical-Shade Assembler 739.684-166
Washcoat Wiper 742.687-010

weaver 763.684-018
weaver 692.685-262
WEBBING TACKER 780.684-130
Welt Sewer 780.682-018
WICKER WORKER 763.684-078
Willow Worker 763.684-078
Window-Shade-Cloth Sewer 787.682-026
WINDOW-SHADE CUTTER AND MOUNTER 692.685-250
window-shade-ring coverer 692.685-254
WINDOW-SHADE-RING SEWER 692.685-254
WIPER 742.687-010
wiper-blender 742.687-010
WIRE BENDER 709.687-058
WIRE-BORDER ASSEMBLER 780.685-018
wire stitcher, hand 780.687-042
wire-stitcher, machine 692.685-198
WOODEN-FRAME BUILDER 762.684-066
WOODEN SHADE HARDWARE INSTALLER 739.684-174
WOOD-WEB-WEAVING-MACHINE OPERATOR 692.685-262
wooling-machine operator 680.685-078
Woven-Blind-Loom Tender 692.685-262
WOVEN-WOOD SHADE ASSEMBLER 739.684-178

galvanizing—GALVANIZING AND OTHER COATING INDUSTRY: This designation includes occupations concerned with galvanizing or coating steel and iron sheets or formed products with zinc; coating steel and iron sheets or formed products with aluminum and lead; or retinning cans and utensils.

BRANNER-MACHINE TENDER 509.685-014
COATING-MACHINE OPERATOR 501.362-010
Galvanizer, Zinc 501.685-010
galvanizing dipper 501.685-010
Lead Coater 501.485-010
PLATER, HOT DIP 501.685-010
pot runner 501.685-010
strand galvanizer 501.485-010
SUPERVISOR, HOT-DIP PLATING 501.137-010
Tin Dipper 501.685-010
Tinner, Automatic 501.362-010
WIRE-COATING OPERATOR, METAL 501.485-010
wire galvanizer 501.485-010
Wire Tinner 501.485-010

garment—GARMENT INDUSTRY: This designation includes occupations concerned with manufacturing and repairing various types of garments from purchased fabrics (including simulated fur) and leather (including simulated leather), the principal products being men's and boys' outer garments and furnishings, such as overcoats, suits, jackets, trousers, raincoats, shirts, pajamas, underwear, and belts, except leather belts which are included in the LEATHER PRODUCTS INDUSTRY (leather prod.); women's and girls' outer garments and furnishings, such as suits, dresses, blouses, skirts, lingerie, and aprons; men's and women's handkerchiefs; work clothing, such as overalls, jackets, trousers, and shirts; blanket-lined and sheepskin-lined clothing; vestments and regalia for academic, ceremonial, clerical, fraternal, and similar purposes; brassieres, corsets, and allied garments, except surgical and orthopedic garments which are included in the PERSONAL PROTECTIVE AND MEDICAL DEVICES AND SUPPLIES INDUSTRY (protective dev.); and garments of rubberized material, except those of vulcanized rubber which are included in the RUBBER GOODS INDUSTRY (rubber goods). Occupations concerned with the manufacture of fur garments are included in the FUR GOODS INDUSTRY (fur goods); occupations concerned with the manufacture of gloves and mittens are included in the GLOVE AND MITTEN INDUSTRY (glove & mit.); those concerned with the manufacture of hats and caps are included in the HAT AND CAP INDUSTRY (hat & cap); and those concerned with the manufacture of hosiery and fully knitted garments are included in the KNITTING INDUSTRY (knitting).

ALTERATION TAILOR 785.261-010
alterer 785.261-010
alterer apprentice 785.261-018
APPLIQUER, ZIGZAG 786.682-010
Armhole-And-Shoulder Off-Presser 363.682-018
Armhole Baster, Hand 782.684-058
ARMHOLE BASTER, JUMPBASTING 786.682-014
ARMHOLE FELLER, HANDSTITCHING MACHINE 786.682-018
Armhole Raiser, Lockstitch 786.682-238
ARMHOLE-SEW-AND-TRIM OPERATOR, LOCKSTITCH 786.682-022
ASSEMBLER 781.687-010
ASSISTANT DESIGNER 781.361-010
assorter 781.687-010
BACK MAKER, LOCKSTITCH 786.682-026
BAGGER 920.687-018
Band Cutter 699.685-014
Band-Cutting-Machine Operator 686.685-066
bander 920.687-190
Band Presser 363.682-018
Baster, Hand 782.684-058
BASTING-MACHINE OPERATOR 786.682-030
basting marker 782.687-058
BASTING PULLER 782.687-010
Belt Cutter 699.685-014
Belt-Loop Cutter 699.685-014
Belt-Loop Maker 787.685-014
Belt Turner 789.687-182
BINDER, CHAINSTITCH 786.682-034
BINDER, COVERSTITCH 786.682-038
BINDER, LOCKSTITCH 786.682-042
Binding Cutter 686.685-066
BLINDSTITCH-MACHINE OPERATOR 786.682-046
BONER 789.687-018
Bookseamer, Blindstitch 786.682-126
Bow Attacher 782.684-058
BOW MAKER 784.684-010
BOXING INSPECTOR 789.587-010
box marker 652.685-018
box stamper, machine 652.685-018
Brassiere-Cup-Mold Cutter 781.682-010
BRASSIERE-SLIDE-MAKING-MACHINE TENDER, AUTOMATIC 692.685-026
bundler 920.687-190
bundler 781.687-010
bundle tier 781.687-010
busheler 785.261-010
BUTTON-ATTACHING-MACHINE OPERATOR 699.685-010
button oradder 699.685-010
Button-Buttonhole Marker 781.687-042
button clamper 699.685-010
BUTTONER 782.687-014
BUTTONHOLE-AND-BUTTON-SEWING-MACHINE OPERATOR 786.685-042
BUTTONHOLE-MACHINE OPERATOR 786.685-014
Buttonhole Maker, Hand 782.684-058
Buttonhole Tacker 782.684-058
button riveter 699.685-010
Button Sewer, Hand 782.684-058
BUTTON-SEWING-MACHINE OPERATOR 786.685-010
button tacker 699.685-010
CANVAS BASTER, JUMPBASTING 786.682-050
CARTON MARKER, MACHINE 652.685-018
carton stamper 652.685-018
CHAINSTITCH SEWING MACHINE OPERATOR 786.682-054
CLOTHING MAKER ..... term
clothing operator see CLOTHING MAKER .....
CLOTHING-PATTERN PREPARER 781.287-010
CLOTH MEASURER, MACHINE 589.685-022
CLOTH SHADER 582.685-026
CLOTH TEARER 781.687-018
CLOTH TESTER 029.381-010
Coat Baster 785.361-022
Coat Draper 781.684-026
Coat Fitter 785.261-014
Coat Ironer, Hand 363.684-018
COAT JOINER, LOCKSTITCH 786.682-058
Coat Padder 785.361-022
Coat Tailor 785.261-014
Collar-Band Creaser 583.685-042
COLLAR BASTER, JUMPBASTING 786.682-062
Collar Closer, Lockstitch 786.682-070
Collar Feller 782.684-058
COLLAR FELLER, HANDSTITCHING MACHINE 786.682-066
collar-folder operator 580.685-018
Collar Fuser 363.682-018
Collar Padder, Blindstitch 786.682-150
collar pointer 583.685-102
Collar Setter 785.361-022
COLLAR SETTER, LOCKSTITCH 786.682-070
COLLAR SETTER, OVERLOCK 786.682-074
collar-shaper operator 580.685-018
Collar-Stay-Fuser Tender 583.685-046
Collar Tacker 782.684-058
collar-top turner 583.685-102
Collar Trimmer 699.685-014
Collar Trimmer 781.682-010
Collar Turner 789.687-182
COLLAR-TURNER OPERATOR 580.685-018
contour stitcher 786.685-026
COPYIST 142.281-010
Corder 787.682-022
Corset Repairer 782.684-038

Cotton Presser 363.684-018
COVERSTITCH-MACHINE OPERATOR 786.682-078
creaser 583.685-042
creasing-machine operator 583.685-042
crimper 583.685-042
Cuff Creaser 583.685-042
Cuff Setter, Lockstitch 786.682-070
Cuff Setter, Overlock 786.682-074
cuff-turner-machine operator 583.685-102
CUP SETTER, LOCKSTITCH 786.682-082
Curtain Feller, Blindstitch 786.682-046
CUSTOM TAILOR 785.261-014
Cutting Inspector 789.687-070
damage cutter 782.684-038
dopster 781.287-010
Double-Needle Operator, Lockstitch 786.682-170
DRAPER 781.684-026
Dress Draper 781.684-026
Dressmaker 782.684-058
Dress Marker 781.384-014
DRIER 581.685-014
DRIER ATTENDANT 581.686-018
Duplicate Maker 785.361-018
Edge Baster 786.682-030
Edge Maker 782.684-058
Edge Stitcher, Lockstitch 786.682-238
ELASTIC ATTACHER, CHAINSTITCH 786.682-086
ELASTIC ATTACHER, COVERSTITCH 786.682-090
ELASTIC ATTACHER, OVERLOCK 786.682-094
ELASTIC ATTACHER, ZIGZAG 786.682-098
Elastic Cutter 699.685-014
ELASTIC-TAPE INSERTER 782.687-022
Emblem-Fuser Tender 583.685-046
EMBROIDERY-MACHINE OPERATOR 786.685-018
FABRIC-AND-ACCESSORIES ESTIMATOR 221.482-010
FACING BASTER, JUMPBASTING 786.682-102
Facing-Cutting Machine Operator 686.685-066
Facing-Slitter 699.682-030
Fagoting-Machine Operator 786.682-278
fashion model 297.667-014
fastener-sewing-machine operator 786.685-010
feed-cup-sewing-machine operator 786.682-122
feeder 781.687-010
FELLED-SEAM OPERATOR, CHAINSTITCH 786.682-106
feller 786.682-126
Feller, Hand 782.684-058
felling-machine operator 786.682-106
FINAL ASSEMBLER 789.687-046
Finished-Garment Inspector 789.687-070
Finisher, Hand 782.684-058
finisher-tailor apprentice 785.361-026
finishing tunnel operator 582.685-150
fitter, factory 781.687-010
FLATLOCK-SEWING-MACHINE OPERATOR 786.682-110
Fly Raiser, Lockstitch 786.682-238
Fly Setter 786.682-286
folder 781.687-010
folder 583.685-042
FOLDING-MACHINE OPERATOR 583.685-042
FRONT-EDGE-TAPE SEWER, LOCKSTITCH 786.682-118
FRONT MAKER, LOCKSTITCH 786.682-114
FUR-MACHINE OPERATOR 786.682-122
FUSING-MACHINE FEEDER 583.686-014
FUSING-MACHINE TENDER 583.685-046
GARMENT FOLDER 789.687-066
garment maker see CLOTHING MAKER
Garment-Parts Cutter, Hand 781.684-074
Garment-Parts Cutter, Machine 781.684-014
Garment Ripper, Alterations 782.687-038
GARMENT SORTER 222.687-014
GARMENT TURNER 789.687-074
Gimp-Buttonhole-Machine Operator 786.685-014
GRADER MARKER 781.381-034
HANDKERCHIEF FOLDER 920.687-098
Hem Marker 781.687-042
HEMMER, BLINDSTITCH 786.682-126
HEMMER, CHAINSTITCH 786.682-130
HEMMER, LOCKSTITCH 786.682-134
HEMMER, OVERLOCK 786.682-138
HEMSTITCHING-MACHINE OPERATOR 786.682-142
Hook-And-Eye Attacher 782.684-058
Hook-And-Eye Attacher, Machine 699.685-018
Hose-Suspender Cutter 699.685-014
house model 297.667-014
Initial Maker 782.684-018
JUMPBASTING-MACHINE OPERATOR 786.682-146
Jump-Iron-Machine Presser 363.682-018
Label Cutter 699.685-014
Label Cutter 699.682-022
Label-Fuser Tender 583.685-046
Lace Pinner 782.687-026
Lapel Baster 782.684-058
Lapel Padder 785.361-022
Lapel Padder 782.684-058
LAPEL PADDER, BLINDSTITCH 786.682-150
LEATHER ETCHER 583.685-066
Letterer 787.682-022
LINING BASTER, JUMPBASTING 786.682-154
LINING FELLER, BLINDSTITCH 786.682-158
Lining Finisher 782.684-058
LINING MAKER, LOCKSTITCH 786.682-162
Lining Presser 363.684-018
LINING SETTER, LOCKSTITCH 786.682-166
LOCKSTITCH-MACHINE OPERATOR 786.682-170
LOCKSTITCH-SEWING-MACHINE OPERATOR, COMPLETE GARMENT 786.682-174
longseam-machine operator 786.685-026
made-to-measure tailor 785.261-014
made-to-measure-tailor apprentice 785.261-022
MARKER 781.687-042
MARKING STITCHER 781.687-046
master-tailor apprentice 785.261-022
Matcher 781.687-042
matcher 781.687-010
MATCH-UP WORKER 782.684-038
measurer, machine 589.685-022
measuring percher-and-inspector 589.685-022
MENDER, KNIT GOODS 782.684-046
MODEL 297.667-014
MOLDER, SHOULDER PAD 789.684-026
MULTINEEDLE-CHAINSTITCH-MACHINE OPERATOR 786.682-178
multineedle shirrer 786.682-178
nailhead puncher 789.685-010
Nailhead Setter 789.685-010
Neck Feller 782.684-058
NECKTIE-CENTRALIZING-MACHINE OPERATOR I 786.682-186
NECKTIE-CENTRALIZING-MACHINE OPERATOR II 786.682-190
NECKTIE OPERATOR, POCKETS AND PIECES 786.682-182
necktie stitcher 786.682-186
Necktie Turner 789.687-182
NEEDLE-TRADE WORKER ..... term
ORNAMENT SETTER 789.685-010
outsewer 786.682-166
OVERLOCK-MACHINE OPERATOR, COMPLETE GARMENT 786.682-198
OVERLOCK SEWING MACHINE OPERATOR 786.682-194
pants closer 786.682-202
PANTS OUTSEAMER, CHAINSTITCH 786.682-202
patent-button machine operator, automatic 699.685-010
PATTERN GRADER-CUTTER 781.381-022
PATTERNMAKER 781.361-014
PICKED-EDGE SEWING-MACHINE OPERATOR 786.682-206
Piece Presser 363.684-018
piecer-up 781.687-010
pinker 686.685-042
PINKING-MACHINE OPERATOR 686.685-042
PINNER 782.687-026
Piped-Buttonhole-Machine Operator 786.685-022
PIPED-POCKET-MACHINE OPERATOR 786.685-022
pipe steamer 789.687-166
Piping-Cutting-Machine Operator 686.685-066
PLEAT PATTERNMAKER 781.484-010
Pocket Creaser 583.685-042
Pocket-Flap-Creasing-Machine Operator 583.685-042
pocket maker 786.682-210
Pocket Marker 781.687-042
Pocket Presser 363.684-018
POCKET SETTER, LOCKSTITCH 786.682-210
Production-Control Pegboard Clerk 221.382-018
PROFILE-STITCHING-MACHINE OPERATOR 786.685-026
QUALITY-CONTROL CHECKER 789.387-010
REPAIR OPERATOR 786.682-214
reserve operator 786.682-262
Rhinestone Setter 789.685-010
Ribbon Cutter 699.685-014
RIPPER 782.687-038
RIVETER, HAND 789.687-154
rivet-hole-machine operator 686.685-054
RIVET-HOLE PUNCHER 686.685-054
runstitching-machine operator 786.685-026

glass mfg.

Safety-Stitch-Machine Operator 786.682-194
SAMPLE CLERK, HANDKERCHIEF 920.587-022
Sample Cutter 699.685-014
sample maker 785.361-018
sample maker, original 785.361-018
sample sewer 785.361-018
SAMPLE STITCHER 785.361-018
sample tailor 785.361-018
Seam Presser 363.684-018
SEAM STEAMER 789.687-166
SEAT JOINER, CHAINSTITCH 786.682-218
Second Facing Baster 786.682-102
Seconds Inspector 789.687-070
SEWING-MACHINE OPERATOR, SEMIAUTOMATIC 786.685-030
sew-out operator 786.682-166
SHAPER AND PRESSER 583.685-102
Shell Maker, Lockstitch 786.682-174
Shirt Creaser 583.685-042
Shirt Finisher 363.682-018
Shirt Folder 789.687-066
SHIRT-FOLDING-MACHINE OPERATOR 369.685-030
Shirt Marker 781.384-014
Shirt Sorter 222.687-014
Shirt Turner 789.687-074
SHOP TAILOR 785.361-022
SHOP TAILOR APPRENTICE 785.361-026
SHOULDER JOINER, LOCKSTITCH 786.682-222
Silk Presser I 363.684-018
Silk Presser II 363.682-018
single-needle operator 786.682-170
Sleeve Baster 782.684-058
Sleeve-Bottom Feller 782.684-058
SLEEVE MAKER, LOCKSTITCH 786.682-226
SLEEVE SETTER, LOCKSTITCH 786.682-230
SLEEVE SETTER, OVERLOCK 786.682-234
Sleeve Setter, Safety-Stitch 786.682-234
Sleeve Tailor 785.361-022
Sleeve Turner 789.687-074
SLIDER ASSEMBLER 734.687-078
slider attacher 734.687-078
slipstitch-machine operator 786.682-190
small-piece cutter 781.684-062
Smocking-Machine Operator 786.682-178
SPOT CLEANER 582.684-014
stayer 789.687-018
STEAMING-CABINET TENDER 582.685-150
STENCILER 781.687-066
STRAP BUCKLER, MACHINE 689.665-010
Strap Cutter 699.685-014
Strap-Machine Operator, Automatic 787.685-014
stripper 789.687-018
stud setter 789.685-010
Suit Finisher 785.361-022
Supervisor, Finishing Department 786.132-010
SUPERVISOR, GARMENT MANUFACTURING 786.132-010
Supervisor, Inspection Department 786.132-010
SUPERVISOR, PATTERN MARKING 781.131-010
SUPERVISOR, PRESSING DEPARTMENT 583.132-010
Supervisor, Sewing Room 786.132-010
Suspender Cutter 686.685-066
SWATCH CLERK 222.587-050
table draper 782.687-026
Tacker 782.684-058
TACKING-MACHINE OPERATOR 786.685-034
tailor 785.261-014
TAILOR APPRENTICE, ALTERATION 785.261-018
TAILOR APPRENTICE, CUSTOM 785.261-022
Tape Cutter 699.682-030
Tape Cutter 699.685-014
Tape-Cutting-Machine Operator 686.685-066
TAPE STRINGER 782.687-054
tearer 781.687-018
thread cutter 782.684-038
THREAD MARKER 782.687-058
THREAD-PULLING-MACHINE ATTENDANT 689.686-046
TICKET PRINTER AND TAGGER 652.685-094
TIE BINDER 920.687-190
tier 781.687-010
top-bottom-attaching-machine operator 699.685-010
Top-Collar Baster 782.684-058
Top-Collar Maker 785.361-022
TOPSTITCHER, LOCKSTITCH 786.682-238
TOPSTITCHER, ZIGZAG 786.682-242
TRIMMER, MACHINE 781.682-010
Trimming Cutter 699.682-022
Trimming Finisher 782.684-058
TRIMMING-MACHINE OPERATOR 583.685-122
TRIMMING SEWER, AUTOMATIC 787.685-050
Try-on Baster 785.261-014
TUNNEL-ELASTIC OPERATOR, CHAINSTITCH 786.682-246
TUNNEL-ELASTIC OPERATOR, LOCKSTITCH 786.682-250
TUNNEL-ELASTIC OPERATOR, ZIGZAG 786.682-254
ULTRASONIC-SEAMING-MACHINE OPERATOR 786.682-258
ULTRASONIC-SEAMING-MACHINE OPERATOR, SEMIAUTOMATIC 786.685-038
Underbaster 786.682-102
Undercollar Baster 785.361-022
Undercollar Maker 785.361-022
Underpresser, Hand 363.684-018
UTILITY OPERATOR 786.682-262
Vest-Front Presser 363.682-018
Vest Presser 363.684-018
Vest Tailor 785.361-022
WAISTBAND SETTER, LOCKSTITCH 786.682-266
WAISTLINE JOINER, LOCKSTITCH 786.682-270
WAISTLINE JOINER, OVERLOCK 786.682-274
Waist Presser 363.684-018
washer 582.684-014
WASTE SALVAGER 781.684-062
welt-pocket-machine operator 786.685-022
winder 583.685-122
YARDAGE ESTIMATOR 221.484-010
ZIGZAG-MACHINE OPERATOR 786.682-278
ZIPPER SETTER, CHAINSTITCH 786.682-282
ZIPPER SETTER, LOCKSTITCH 786.682-286
zipper-slide attacher 734.687-078

glass mfg.—GLASS MANUFACTURING INDUSTRY: This designation includes occupations concerned with manufacturing and repairing glass and glass products from raw materials of which the principal kinds are window and plate glass; pressed ware, such as plates, cups, and tumblers; blown ware, such as bottles; glass fibers; fiber optics strands; glass blocks; and pressed or blown scientific, technical, and industrial glassware. Excluded are occupations concerned with producing glass products from purchased glass, such as cut-glass tableware and leaded, stained, and art-glass windows, which are included in the GLASS PRODUCTS INDUSTRY (glass products). Certain occupations concerned with manufacturing fiberglass insulation are included in the ABRASIVE, ASBESTOS, AND MISCELLANEOUS NONMETALLIC MINERAL PRODUCTS INDUSTRY (nonmet. min.). Occupations concerned with the manufacture of insulated fiber optic cable are included in the NONFERROUS METAL ALLOYS AND PRIMARY PRODUCTS INDUSTRY (nonfer. metal).

automatic forming machine operator 575.382-014
automatic lehr operator 573.685-026
BALCONY WORKER 575.687-010
ball maker 575.684-026
Bander, Hand 740.681-010
BATCH-AND-FURNACE OPERATOR 572.382-010
batch mixer 570.685-054
batch-plant operator 570.685-054
Batch Unloader 570.685-026
BEVELER 775.684-010
beveler 673.682-014
beveler 573.685-018
BEVELING-AND-EDGING-MACHINE OPERATOR 673.682-014
BEVELING-AND-EDGING-MACHINE-OPERATOR HELPER 673.686-010
beveling-machine operator 673.682-014
Beveling-Machine-Operator Helper 673.686-010
BINDER TECHNICIAN 550.585-010
BLANKMAKER 579.382-022
BLOCKER 673.685-026
BLOCKER, AUTOMATIC 673.685-030
blower 772.381-022
BOBBIN DISKER 734.687-022
bobbin salvager 922.687-018
BOBBIN SORTER 922.687-018
BOBBIN-WINDER TENDER 619.685-022
bonded-strand operator 574.665-010
Bottle Blower 772.381-022
bottle-blowing-machine tender 575.685-038
Bottle Inspector 579.384-018
Bottle-Machine Operator 575.382-014
Caser, Rolled Glass 920.587-018
clay-house worker 579.664-010
CLAY-STRUCTURE BUILDER AND SERVICER 579.664-010
cleaning-machine operator 673.685-030
combustion analyst 572.360-010
cone inspector 681.687-030

creel selector 689.687-038
CROSSCUTTER, ROLLED GLASS 575.684-022
crusher operator 570.685-026
CULLET CRUSHER-AND-WASHER 570.685-026
cut-off-machine helper 677.665-010
cut-off-machine unloader 677.665-010
cut-off tender, glass 677.685-030
CUTTING-MACHINE TENDER, DECORATIVE 775.685-010
DECORATING-EQUIPMENT SETTER 652.380-010
DECORATING INSPECTOR 579.687-014
Decorating-Machine Tender 979.685-010
DECORATOR 740.381-010
DEFECT REPAIRER, GLASSWARE 772.684-010
disk setter 734.687-022
DRAWING-KILN OPERATOR 575.362-010
DRAWING-KILN SUPERVISOR 575.137-010
drawing-machine operator 575.362-010
EDGER, HAND 775.684-014
EDGING-MACHINE FEEDER 673.686-022
END FINDER, ROVING DEPARTMENT 689.687-038
FIBERGLASS-BONDING-MACHINE TENDER 574.665-010
FIBER-MACHINE TENDER 575.685-030
filling inspector 681.687-030
finished-yarn examiner 681.687-030
finisher 573.685-018
finishing-machine operator, automatic 677.562-010
FLOOR ATTENDANT 579.687-018
Floor Inspector 579.384-018
flow floor attendant 579.687-018
flow machine operator 575.382-014
Foot Caster 772.381-018
forming fixer 629.281-026
FORMING-MACHINE ADJUSTER 629.281-026
FORMING-MACHINE OPERATOR 575.382-014
FORMING-MACHINE TENDER 575.685-038
FORMING-MACHINE UPKEEP MECHANIC 575.380-010
FORMING-MACHINE UPKEEP-MECHANIC HELPER 575.687-014
forming operator 575.685-030
frickertron checker 575.685-082
furnace attendant 572.382-010
FURNACE-COMBUSTION ANALYST 572.360-010
furnace operator 573.685-026
gaffer 772.381-022
GATHERER 575.684-026
glass artist 740.381-010
glass bender 575.685-054
GLASS BLOWER 772.381-022
glass blower, machine forming 575.382-014
glass breaker 779.684-054
glass buffer 775.684-038
GLASS-BULB-MACHINE ADJUSTER 575.360-010
GLASS-BULB-MACHINE FORMER, TUBULAR STOCK 575.382-018
glass crusher 570.685-026
GLASS-CUT-OFF SUPERVISOR 677.131-010
GLASS CUT-OFF TENDER 677.685-030
glass cutter, hand 779.684-054
GLASS CUTTER, OVAL OR CIRCULAR 779.684-022
GLASS-CUTTING-MACHINE OPERATOR, AUTOMATIC 677.562-010
GLASS DECORATOR 775.381-014
GLASS DRILLER 775.687-014
Glass Etcher 775.381-014
GLASS GRINDER 775.684-034
Glass-Loading-Equipment Tender 677.665-010
Glass-Mold Repairer 519.684-018
GLASS POLISHER 775.684-038
glass-products inspector 579.687-030
glass pulverizer equipment operator 570.685-026
GLASS-RIBBON-MACHINE OPERATOR 575.362-014
GLASS-RIBBON-MACHINE-OPERATOR ASSISTANT 575.365-010
GLASS-ROLLING-MACHINE OPERATOR 575.382-022
glass sagger 575.685-054
glass smoother 775.684-038
glass technologist 772.687-010
GLASS-UNLOADING-EQUIPMENT TENDER 677.665-010
glassware finisher 772.381-018
GLASS-WORKER, PRESSED OR BLOWN 772.687-010
GLAZING-MACHINE OPERATOR 573.685-018
groove-machine operator 673.682-026
hand blocker 673.685-026
hand decorator 740.381-014
heat treat worker 573.685-026
inspector, machine-cut glass 579.687-030
inspector-packer, glass container 579.687-030
JOINER 673.687-010
kiln operator 575.362-010
laboratory technician 579.384-014
LAYER 673.686-026
lehr attendant 573.685-026
Lehr Cutter 779.684-054
lehr operator 573.685-026
lehr stripper 573.685-026
LEHR TENDER 573.685-026
lens molder 575.685-054
LENS-MOLDING-EQUIPMENT OPERATOR 575.685-054
Lip-And-Gate Builder 861.381-026
load blocker 673.685-030
LUSTER APPLICATOR 740.381-014
MARBLE-MACHINE TENDER 575.685-058
MARKER MACHINE ATTENDANT 579.685-070
MARK-UP DESIGNER 775.684-050
mat selector 689.687-038
MITER GRINDER OPERATOR 673.682-026
MIXER 570.685-054
mix-house operator 570.685-054
mold changer 575.687-014
mold cleaner 579.685-030
MOLD POLISHER 579.685-030
Mold-Press Operator 575.382-014
multicut-line operator 677.562-010
OVEN TENDER 573.585-010
PAPER INSERTER 920.687-138
platform worker 575.687-010
POLISHER 775.684-058
press-and-blow-machine tender 575.685-038
PRESSER 575.685-074
PRODUCTION-MACHINE TENDER, GLASS CUTTING-OR-GRINDING 679.685-014
punch press operator 575.685-054
pyroglazer 740.381-010
QUALITY-CONTROL INSPECTOR 579.367-010
QUALITY-CONTROL TECHNICIAN 579.367-014
QUALITY TECHNICIAN, FIBERGLASS 579.384-014
quill inspector 681.687-030
refractory specialist 579.664-010
roving selector 689.687-038
Sandblaster, Glass 775.381-014
scrubber 673.685-026
SECOND CUTTER 779.684-054
SELECTOR 579.687-030
shift supervisor, melting 579.137-026
sliver former 575.685-030
sliver handler 575.685-030
spool salvager 922.687-018
SPOTTER 772.687-014
Squeegee-Machine Tender 979.685-010
Staple-Fiber-Machine Tender 575.685-030
Stenciling-Machine Tender 979.685-010
Stopper Grinder 775.684-034
Straightedge-Machine-Operator Helper 673.686-010
straight edger 673.685-078
STRAIGHT-LINE EDGER 673.685-078
STRIPPER 673.666-014
supervisor, automatic cutting machines 677.131-010
Supervisor, Bottle Machines 575.130-018
Supervisor, Crack-Off 775.130-010
SUPERVISOR, DECORATING 652.130-010
SUPERVISOR, FINISHING 775.130-010
SUPERVISOR, FORMING DEPARTMENT I 575.130-018
SUPERVISOR, FORMING DEPARTMENT II 579.130-022
supervisor, furnace 579.137-026
supervisor, furnace room 579.137-026
Supervisor, Grinding 775.130-010
SUPERVISOR, INSPECTION 579.134-010
SUPERVISOR, MOLD CLEANING AND STORAGE 579.137-018
SUPERVISOR, MOLD MAKING 609.131-014
SUPERVISOR, MOLD SHOP 609.131-018
Supervisor, Polishing 775.130-010
SUPERVISOR, RECEIVING AND PROCESSING 579.137-026
tank-and-batch operator 572.382-010
Tank-Furnace Operator 572.382-010
technician 579.367-014
Television-Tube Inspector 579.384-018
TEST-SKEIN WINDER 575.685-082
tube closing machine operator 573.685-018
tube finishing machine operator 573.685-018
turn-out worker 579.687-018
TWISTER TENDER 681.685-130
upkeep mechanic 575.380-010
WARE FINISHER 772.381-018
Warehouse Cutter 779.684-054

glass products

WARE SERVER 652.686-046
WARE TESTER 579.384-018
WARM-IN WORKER 772.684-018
window-glass cutter off 677.685-030
WIRE SETTER 579.665-018
YARDAGE-CONTROL OPERATOR, FORMING 575.662-014
YARN EXAMINER 681.687-030
yarn inspector 681.687-030

glass products—GLASS PRODUCTS INDUSTRY: This designation includes occupations concerned with producing and repairing glass products from purchased glass, such as cut-glass tableware; leaded, stained, and art-glass windows; scientific glass apparatus; mosaic glass; ground glass; glass watch crystals; framed and unframed mirrors; and glass novelties, such as glass fruit, trees, or flowers.

ANNEALER 573.685-010
ASSEMBLER, FILTERS 739.687-018
AUTOMATIC PATTERN EDGER 673.682-010
Bander, Hand 740.681-010
belt seamer 775.684-042
BEVELER 775.684-010
beveler 673.682-014
BEVELER 673.685-018
BEVELING-AND-EDGING-MACHINE OPERATOR 673.682-014
BEVELING-AND-EDGING-MACHINE-OPERATOR HELPER 673.686-010
beveling-machine operator 673.682-014
Beveling-Machine-Operator Helper 673.686-010
BLOCKER 673.685-026
BLOCKER, AUTOMATIC 673.685-030
BREAKER 779.687-010
CIRCLE BEVELER 673.685-034
CIRCLE EDGER 673.685-038
cleaning-machine operator 673.685-030
CLIP-AND-HANGER ATTACHER 739.684-038
colored-liquid-plastic applier 840.684-010
conveyor loader 579.686-022
CUTTING SUPERVISOR 775.134-010
DECORATING-EQUIPMENT SETTER 652.380-010
DECORATING-MACHINE OPERATOR 652.685-026
DECORATOR 740.381-010
Diamond-Wheel Edger 775.684-014
DRILLER, MACHINE 676.685-014
driller, multiple spindle 676.682-010
DRILL OPERATOR, AUTOMATIC 676.682-010
edge grinder, machine 775.684-062
Edge Polisher 775.684-058
EDGER, HAND 775.684-014
EDGER, TOUCH-UP 775.684-018
EDGING-MACHINE SETTER 673.380-010
ENGRAVER 775.381-010
engraver 775.584-010
ENGRAVER TENDER 673.685-050
Engravings Polisher 775.684-058
EYE-DROPPER ASSEMBLER 739.687-086
face cleaner 779.687-022
FIBERGLASS-CONTAINER-WINDING OPERATOR 579.584-010
FIBERGLASS-MACHINE OPERATOR 574.682-010
FINAL INSPECTOR 779.387-010
FINGER-GRIP-MACHINE OPERATOR 673.685-054
firer 573.685-010
flower cutter 775.381-010
FRAMER 739.684-078
FRAME REPAIRER 739.684-074
glass artist 740.381-010
GLASS BLOWER, LABORATORY APPARATUS 772.281-010
GLASS-BLOWING-LATHE OPERATOR 772.482-010
glass breaker 779.687-010
GLASS-BULB SILVERER 779.687-018
GLASS CALIBRATOR 775.584-010
GLASS-CLEANING-MACHINE TENDER 579.685-018
GLASS-CUTTING-MACHINE FEEDER 677.686-014
GLASS DECORATOR 775.381-014
Glass Etcher 775.381-014
glass-etcher helper 779.687-038
GLASS FINISHER 775.684-026
GLASS GRINDER 775.684-030
GLASS GRINDER, LABORATORY APPARATUS 775.382-010
glass inspector 779.687-022
Glass-Novelty Maker 770.381-010
GLASS SANDER, BELT 775.684-042
glass technician 006.261-010
glass technologist 772.281-010
glass technologist 006.261-010
GLASS TINTER 840.684-010
glassware engraver 775.381-010
GLASS-WOOL-BLANKET-MACHINE FEEDER 579.685-022
glazier artist 779.381-010
GLAZIER, STAINED GLASS 779.381-010
groove-machine operator 673.682-026
hand blocker 673.685-026
hand decorator 740.381-014
HOT-WIRE GLASS-TUBE CUTTER 772.684-014
INSPECTOR, GLASS OR MIRROR 779.687-022
Joiner 779.381-010
load blocker 673.685-030
LUSTER APPLICATOR 740.381-014
mirror inspector 779.687-022
MIRROR-MACHINE FEEDER 579.686-022
mirror silverer 574.684-014
MIRROR SPECIALIST 779.684-038
miter cutter 775.381-010
MITER GRINDER OPERATOR 673.682-026
MOSAIC WORKER 779.381-014
notcher 673.685-070
NOTCH GRINDER 673.685-070
PAINTER, MIRROR 741.684-022
paint sprayer 741.684-022
PAINT-SPRAY TENDER 574.685-014
PATTERNMAKER 779.584-010
POLISHER 775.684-058
PRINTER 979.681-014
pyroglazer 740.381-010
RADIUS CORNER MACHINE OPERATOR 673.685-098
Rougher 775.684-010
Sandblaster, Glass 775.381-014
sander 775.684-042
SCIENTIFIC GLASS BLOWER 006.261-010
Scratch Polisher 775.684-058
scrubber 673.685-026
SILVERER 574.684-014
SILVERING APPLICATOR 574.582-010
SILVER STRIPPER, MACHINE 579.685-054
Smoother 775.684-010
statler operator 677.686-014
Steel-Wheel Engraver 775.381-010
Stenciling-Machine Tender 979.685-010
STOCK SHEETS CLEANER-INSPECTOR 779.687-034
Straightedge-Machine-Operator Helper 673.686-010
straight edger 673.685-078
STRAIGHT-LINE EDGER 673.685-078
SUPERVISOR, EDGING 673.130-010
SUPERVISOR, HAND SILVERING 574.134-010
SUPERVISOR, MIRROR FABRICATION 679.137-014
SUPERVISOR, MIRROR MANUFACTURING DEPARTMENT 579.131-010
Supervisor, Packing 920.137-026
SUPERVISOR, SILVERING DEPARTMENT 574.132-014
SUPERVISOR, WALL MIRROR DEPARTMENT 739.137-022
VACUUM-BOTTLE ASSEMBLER 739.687-194
WATCH-CRYSTAL EDGE GRINDER 775.684-062
WATCH-CRYSTAL MOLDER 772.684-022
WAXER 779.687-038
wheel engraver 775.381-010

glove & mit.—GLOVE AND MITTEN INDUSTRY: This designation includes occupations concerned with producing cloth, cloth-and-leather, leather, or coated-fabric gloves and mittens for dress, work, sport, or novelty wear. Occupations concerned with manufacturing knitted gloves are found in the KNITTING INDUSTRY (knitting).

ASSEMBLER 781.687-010
ASSEMBLER 781.667-010
assorter 781.687-010
BAND-AND-CUFF CUTTER 784.685-010
bundler 781.687-010
bundle tier 781.687-010
CLICKING-MACHINE OPERATOR 789.382-010
Closer 784.682-010
CUFF CUTTER 686.685-018
Cuff Slitter 699.682-030
CUTTER 699.682-014
EXAMINER 789.687-042
feeder 781.687-010
Fingerer 784.682-010
fitter, factory 781.687-010
folder 781.687-010

Fourchette Sewer 784.682-010
gauntlet pairer 784.687-034
Glove Cutter 781.687-030
glove finisher 363.687-010
GLOVE FORMER 363.687-010
GLOVE PAIRER 784.687-034
Glove-Parts Cutter 699.682-022
GLOVE-PARTS INSPECTOR 781.687-034
glove presser 363.687-010
GLOVE PRINTER 652.685-034
GLOVE SEWER 784.682-010
Glove Tagger 652.685-094
GLOVE TURNER 784.687-038
Glove Turner-And-Former 784.687-038
glove turner and former 363.687-010
GLOVE TURNER AND FORMER, AUTOMATIC 583.686-018
inspector trimmer 789.687-042
[illegible]er 363.687-010
knit-wrist cutter 686.685-018
Knuckle-Strap Sewer 784.682-010
layer-off 363.687-010
Leather Cutter 789.382-010
LEATHER GRADER 784.387-014
leather-piece inspector 781.687-034
leather sorter 784.387-014
LINER 784.687-046
matcher 781.687-010
Mender 784.682-010
Mitten Stitcher 784.682-010
Palm-And-Back Forger 784.682-010
piecer-up 781.687-010
PULLER-THROUGH 782.687-030
QUILTING-MACHINE OPERATOR 689.685-106
stitcher 689.685-106
Strapper 784.682-010
SUPERVISOR 784.132-010
Thumb Sewer 784.682-010
tier 781.687-010
Tipper 784.682-010
Tip Sewer 787.685-042
turner and former, automatic 583.686-018
Wrist Closer 784.682-010
Wrister 784.682-010
Wrist Hemmer 787.682-026
Wrist Liner 784.682-010

govern. ent ser.—GOVERNMENT SERVICES: This designation includes occupations concerned with local, state, federal, and international government activities that are confined to government and are not covered by other designations. Typical of the activities included are police and fire protection, judicial services, food and drug inspection, street maintenance, and tax collection. Excluded are such occupations as those occurring in municipal transit operation, the military services, primary construction of highways and related structures, public education services, and public utilities services. Certain administrative specialization and technical occupations occurring in government as well as other industries are found under PROFESSIONAL AND KINDRED OCCUPATIONS (profess. & kin.).

ACCIDENT-PREVENTION-SQUAD POLICE OFFICER 375.263-010
ADJUDICATOR 119.167-010
ADMEASURER 169.284-010
Administrative Officer 188.117-106
Administrator, Pesticide 188.117-134
Administrator, Structural Pest Control 188.117-134
AERIAL-PHOTOGRAPH INTERPRETER 029.167-010
Agri-Business Agent 096.127-010
agricultural agent 096.127-010
AGRICULTURAL-CHEMICALS INSPECTOR 168.267-082
Agricultural Commodity Grading Supervisor 188.117-134
Agricultural-Extension Specialist 096.127-014
Air-Carrier Electronics Inspector 168.264-010
Air-Carrier Maintenance Inspector 168.264-010
air-carrier operations inspector 196.163-010
AIRCRAFT-ARMAMENT MECHANIC 632.261-010
aircraft armorer 632.261-010
airport-control operator 193.162-018
Airport Safety And Security Duty Officer 375.133-010
Airport Safety And Security Officer 375.263-014
Air-Traffic-Control Specialist, Center 193.162-018
AIR-TRAFFIC-CONTROL SPECIALIST, STATION 193.162-014
AIR-TRAFFIC-CONTROL SPECIALIST, TOWER 193.162-018
air-traffic-control supervisor 193.167-010
AIR-TRAFFIC COORDINATOR 193.162-010
ALARM OPERATOR 379.162-010
ALCOHOL-AND-DRUG-ABUSE-ASSISTANCE PROGRAM ADMINISTRATOR 195.167-042
Ambulance Driver 375.263-014
appeals board referee 119.107-010
APPEALS REFEREE 119.267-014
APPEALS REVIEWER, VETERAN 119.117-010
Appellate Conferee 160.167-050
Appellate-Court Judge 111.107-010
appointment clerk 205.362-010
APPRAISER 188.167-010
Appraiser, Aircraft 188.167-010
Appraiser, Auditor 188.167-010
Appraiser, Boats And Marine 188.167-010
Appraiser, Buildings 188.167-010
appraiser, irrigation tax 188.167-014
Appraiser, Land 188.167-010
Appraiser, Oil And Water 188.167-010
Appraiser, Personal Property 188.167-010
Appraiser, Real Estate 188.167-010
Appraiser, Timber 188.167-010
APPRENTICESHIP CONSULTANT 188.117-010
area representative 188.117-010
area specialist 188.117-014
Armorer 632.261-018
ARTIST, SUSPECT 970.361-018
ASSESSOR-COLLECTOR, IRRIGATION TAX 188.167-014
assignment officer 188.167-026
AUDITOR, COUNTY OR CITY 160.167-030
automobile inspector 168.267-058
AUTOMOBILE TESTER 379.364-010
AUTOMOTIVE TECHNICIAN, EXHAUST EMISSIONS 620.281-014
aviation-safety officer 168.264-010
Baggage Inspector 168.267-022
BAILIFF 377.667-010
BALLISTICS EXPERT, FORENSIC 199.267-010
Bank Examiner 160.167-054
BANK-NOTE DESIGNER 142.061-010
BATTALION CHIEF 373.167-010
Bomb-Disposal Specialist 632.261-018
Bombsight Specialist 632.261-010
BORDER GUARD 375.363-010
Border Inspector 168.267-022
border patrol agent 375.363-010
BRAND RECORDER 206.587-010
BUDGET ANALYST 161.267-030
BUSINESS-ENTERPRISE OFFICER 188.117-014
Business Regulation Investigator 168.167-090
business-service officer 188.117-122
Campground Caretaker 406.687-010
captain 375.167-034
CAPTAIN, FIRE-PREVENTION BUREAU 373.167-014
Cargo Inspector 168.267-022
CASEWORKER 169.262-010
Census Clerk 216.382-062
Census Enumerator 205.367-054
CHEMICAL-RADIATION TECHNICIAN 015.261-010
Chief, Airport Safety And Security 375.167-034
CHIEF BANK EXAMINER 160.167-046
chief clerk 375.137-022
CHIEF CONTROLLER 193.167-010
Chief Controller, Center 193.167-010
Chief Controller, Station 193.167-010
Chief Controller, Tower 193.167-010
chief engineer 373.117-010
CHIEF, FISHERY DIVISION 188.117-018
Chief of Field Operations 373.117-010
chief of vital statistics 188.167-022
CHIEF WARDEN 188.167-018
Child Day Care Program Supervisor 168.167-090
CHILD SUPPORT OFFICER 195.267-022
cipher expert 199.267-014
City Auditor 160.167-030
city carrier 230.367-010
Civil Preparedness Coordinator 188.117-022
CIVIL PREPAREDNESS OFFICER 188.117-022
Civil Preparedness Operations Officer 188.117-022
Civil Preparedness Public Information Officer 169.127-010
Civil Preparedness Radiological Officer 188.117-022
Civil Preparedness Supply Specialist 188.117-022
CIVIL PREPAREDNESS TRAINING OFFICER 169.127-010
CIVIL-SERVICE CLERK 205.362-010
CLAIMS ADJUDICATOR 169.267-010
CODE INSPECTOR 168.367-018
COMMANDER, IDENTIFICATION AND RECORDS 375.137-010
COMMANDER, INTERNAL AFFAIRS 375.167-050

government ser.

COMMANDER, POLICE RESERVES 375.137-030
Commanding Officer, Automobile Section 375.167-022
commanding officer, detectives 375.167-022
commanding officer, garage 375.167-018
commanding officer, highway district 375.163-010
COMMANDING OFFICER, HOMICIDE SQUAD 375.167-010
COMMANDING OFFICER, INVESTIGATION DIVISION 375.167-014
COMMANDING OFFICER, MOTOR EQUIPMENT 375.167-018
COMMANDING OFFICER, MOTORIZED SQUAD 375.163-010
commanding officer, motor transport division 375.167-018
COMMANDING OFFICER, POLICE 375.137-034
commanding officer, precinct 375.167-034
commanding officer, radio division communications officer 193.167-018
Commanding Officer, Traffic Division 375.163-010
commanding officer, vehicle maintenance unit 375.167-018
commanding officer, vice squad 375.167-014
Commercial Officer 188.117-106
COMMISSIONER, CONSERVATION OF RESOURCES 188.117-026
Commissioner, Iron Range Resources And Rehabilitation 188.117-026
COMMISSIONER OF CONCILIATION 188.217-010
commissioner of relocation services 188.167-070
COMMISSIONER, PUBLIC WORKS 188.117-030
COMMUNITY SERVICE OFFICER, PATROL 372.367-010
COMMUNITY-SERVICES-AND-HEALTH-EDUCATION OFFICER 079.167-010
COMMUNITY WORKER 195.367-018
COMPLAINT EVALUATION OFFICER 375.367-014
COMPLAINT EVALUATION SUPERVISOR 375.137-038
Conciliation-Court Judge 111.107-010
CONGRESSIONAL-DISTRICT AIDE 209.362-030
conservation officer 379.167-010
Consular Officer 188.117-106
CONSULTANT, EDUCATIONAL, STATE BOARD OF NURSING 075.117-010
CONTACT REPRESENTATIVE 169.167-018
control-tower-radio operator 193.162-018
cooperative extension advisor specialist 096.127-014
COORDINATOR, SKILL-TRAINING PROGRAM 169.167-062
CORONER 168.161-010
Corporate Trust Officer 186.117-074
correctional officer 188.167-026
CORRECTION OFFICER 372.667-018
correction officer 372.677-010
correction officer 375.367-010
Correction Officer, City Or County Jail 372.667-018
CORRECTION OFFICER, HEAD 372.137-010
Correction Officer, Penitentiary 372.667-018
Correction Officer, Reformatory 372.667-018
counselor, vocational rehabilitation 045.107-042
county adviser 096.127-010
county agent 096.127-010
COUNTY-AGRICULTURAL AGENT 096.127-010
County Auditor 160.167-030
County Director, Welfare 188.117-126
COUNTY HOME-DEMONSTRATION AGENT 096.121-010
COURT ADMINISTRATOR 188.117-130
COURT CLERK 243.362-010
court officer 377.667-010
crash-squad accident investigator 375.263-010
CREEL CLERK 205.367-026
Criminal-Court Judge 111.107-010
criminal investigator 375.167-042
criminal investigator, customs 188.167-090
CRYPTANALYST 199.267-014
cryptographer 199.267-014
Cultural Affairs Officer 188.117-106
customs examiner 168.267-018
CUSTOMS IMPORT SPECIALIST 168.267-018
CUSTOMS INSPECTOR 168.267-022
CUSTOMS PATROL OFFICER 168.167-010
Dance-Hall Inspector 375.263-014
deputy assessor 188.167-010
deputy assessor 191.367-010
deputy, building guard 377.667-014
DEPUTY, COURT 377.137-018
deputy, grand jury 377.363-010
DEPUTY INSURANCE COMMISSIONER 186.117-022
DEPUTY SHERIFF, BUILDING GUARD 377.667-014
DEPUTY SHERIFF, CHIEF 377.167-010
DEPUTY SHERIFF, CIVIL DIVISION 377.667-018
DEPUTY SHERIFF, COMMANDER, CIVIL DIVISION 377.137-010
DEPUTY SHERIFF, COMMANDER, CRIMINAL AND PATROL DIVISION 377.137-014
DEPUTY SHERIFF, GRAND JURY 377.363-010
DEPUTY UNITED STATES MARSHALL 377.267-010
Desk Captain 375.137-014
Desk Lieutenant 375.137-014
DESK OFFICER 375.137-014
Desk Sergeant 375.137-014
detail sergeant 375.133-010
DETECTIVE 375.267-010
Detective, Automobile Section 375.267-010
detective-bureau chief 375.167-022
Detective Captain 375.167-022
DETECTIVE CHIEF 375.167-022
detective, criminal investigation 375.267-010
Detective, Homicide Squad 375.267-010
Detective Lieutenant 375.167-022
DETECTIVE, NARCOTICS AND VICE 375.267-014
Detective, Precinct 375.267-010
Detective Sergeant I 375.167-022
Detective Sergeant II 375.267-010
Detective, Youth Bureau 375.267-010
Diplomatic Officer 188.117-106
DIRECTOR, AERONAUTICS COMMISSION 188.117-034
DIRECTOR, AGRICULTURAL SERVICES 188.117-038
DIRECTOR, ARTS-AND-HUMANITIES COUNCIL 188.117-042
Director, Civil Preparedness 188.117-022
Director, Civil Preparedness Warden 188.117-022
DIRECTOR, CLASSIFICATION AND TREATMENT 188.167-026
DIRECTOR, COMMISSION FOR THE BLIND 094.117-010
DIRECTOR, COMPLIANCE 188.117-046
DIRECTOR, CONSUMER AFFAIRS 188.117-050
DIRECTOR, CORRECTIONAL AGENCY 188.117-054
DIRECTOR, COUNCIL ON AGING 188.117-058
director, educational board of nurse examiners 075.117-010
DIRECTOR, EMPLOYMENT RESEARCH AND PLANNING 050.117-010
DIRECTOR, EMPLOYMENT SERVICES 188.117-078
DIRECTOR, FIELD REPRESENTATIVES 188.167-062
DIRECTOR, FINANCIAL RESPONSIBILITY DIVISION 188.167-030
DIRECTOR, LABOR STANDARDS 188.117-066
DIRECTOR, LAW ENFORCEMENT 188.117-070
director, recreation 187.117-054
DIRECTOR, LICENSING AND REGISTRATION 188.117-074
DIRECTOR, MEDICAL FACILITIES SECTION 188.117-082
DIRECTOR, MERIT SYSTEM 188.117-086
director of social services 188.117-126
DIRECTOR OF VITAL STATISTICS 188.167-022
Director, Reactor Projects 188.117-134
DIRECTOR, REGULATORY AGENCY 188.117-134
DIRECTOR, REVENUE 188.117-090
DIRECTOR, SAFETY COUNCIL 188.167-034
director, sanitation bureau 188.167-098
DIRECTOR, SECURITIES AND REAL ESTATE 188.167-038
DIRECTOR, STATE-ASSESSED PROPERTIES 188.167-042
director, traffic and planning 005.167-022
Director, Transportation Utilities Regulation 188.117-134
DIRECTOR, UNEMPLOYMENT INSURANCE 188.117-094
DIRECTOR, UTILITY ACCOUNTS 160.267-014
Director, Weights And Measures 188.117-134
Director, Youth Correctional Facility 187.117-018
Disability-Insurance-Hearing Officer 119.107-010
dispatcher 379.362-018
dispatcher 379.362-010
DISPATCHER 193.262-014
DISPATCHER, RADIO 379.362-010
DISPATCHER, STREET DEPARTMENT 239.367-030
distribution clerk 209.687-014
Distribution Clerk, Railway Or Highway Post Office 209.687-014
District Agricultural Agent 096.167-010
DISTRICT ATTORNEY 110.117-010
district captain 375.167-034
District-Court Judge 111.107-010
DISTRICT CUSTOMS DIRECTOR 188.117-098
DISTRICT CUSTOMS DIRECTOR, DEPUTY 188.167-046
DISTRICT EXTENSION SERVICE AGENT 096.167-010
District Fire Chief 373.117-010
District Home Economics Agent 096.167-010
District Lieutenant 375.167-014
District Manager, Postal Service 188.167-086
division commander 375.267-026
division sergeant 375.133-010
DOG CATCHER 379.673-010
Dog-Pound Attendant 410.674-010
dog warden 379.673-010
DRIVER'S LICENSE EXAMINER 168.267-034
ECONOMIC DEVELOPMENT COORDINATOR 188.117-102
Economic Officer 188.117-106
ELECTION ASSISTANT 188.167-050

ELECTION CLERK 205.367-030
election supervisor 188.167-050
ELIGIBILITY-AND-OCCUPANCY INTERVIEWER 168.267-038
ELIGIBILITY WORKER 195.267-010
Emergency-Detail Driver 375.263-014
EMPLOYMENT-AND-CLAIMS AIDE 169.367-010
Employment Counselor 045.107-010
engineering technician, parking 199.261-014
entrance guard 205.367-038
ENVIRONMENTAL ANALYST 199.167-022
ENVIRONMENTAL EPIDEMIOLOGIST 041.167-010
EQUAL-OPPORTUNITY REPRESENTATIVE 168.167-014
equipment processer, storage 929.367-010
EXAMINATION PROCTOR 199.267-018
EXAMINER 169.267-014
EXAMINER, QUESTIONED DOCUMENTS 199.267-022
EXECUTIVE SECRETARY, STATE BOARD OF NURSING 169.117-010
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prosecutor 110.117-010
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State-Surplus-Commodity-And-Property Representative 188.117-122
state trooper 375.263-018
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grain-feed mills—GRAIN AND FEED MILLING INDUSTRY: This designation includes occupations concerned with manufacturing flour and meal from wheat, corn, rice, and other grains; prepared feeds for animals and fowls from grain and other ingredients, such as ground oyster shells, alfalfa, and bonemeal; cleaned and polished rice; cereal breakfast foods; and cornstarch, syrup, oil, sugar, and byproducts.

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mill operator 521.130-010
mill operator 521.682-026
MILL OPERATOR 521.685-226
mixer-and-scaler 520.485-010
mixer-machine feeder 520.686-018
mixer operator 520.485-010
MOLASSES AND CARAMEL OPERATOR 526.382-022
Molasses-Feed Mixer 520.685-098
MONITOR-AND-STORAGE-BIN TENDER 521.685-230
NEUTRALIZER 522.685-082
Oil-Expeller 529.685-106
OVEN OPERATOR 526.585-010
PELLET-MILL OPERATOR 520.685-178
Pellet Operator 520.682-018
PERCOLATOR OPERATOR 523.682-034
PLANT SUPERVISOR 529.132-014
Poultry-Feed-Mixer Operator 520.685-098
Poultry Feed Supervisor 529.132-054
Premix Operator, Concentrate 523.685-022
PRESS PULLER 529.687-170
Press Tender, Head, Feed House 521.665-018
PROCESSOR, GRAIN 521.685-254
PROCESSOR HELPER 521.686-050
Purifier 521.685-030
REFINERY OPERATOR 521.362-018
REFINERY OPERATOR, ASSISTANT 521.462-010
RICE CLEANING MACHINE TENDER 521.665-022
Rice-Drier Operator 523.685-090
ROASTER, GRAIN 523.585-034
Rolled-Oats-Mill Operator 521.685-122
roller-mill operator 521.682-026
roller tender 521.685-210
roll operator 520.685-102
roll operator 529.685-106
ROUGH-RICE GRADER 529.367-026
ROUGH-RICE TENDER 521.685-274
ROUTING-EQUIPMENT TENDER 521.685-278
SACK-DEPARTMENT SUPERVISOR 229.137-010
Self-Rising-Flour Mixer 520.485-010
SEPARATOR OPERATOR 521.382-014
Separator Tender I 521.685-254
SEPARATOR TENDER II 521.685-290
SHAKER REPAIRER 769.664-010
SHAKER WASHER 521.687-114
shooter 523.382-010
SIEVE MAKER 529.684-018
Sieve Repairer 529.684-018
sifter operator 521.685-030
smutter 521.685-254
STARCHMAKER 520.485-030
Starch Presser 521.687-038
STARCH-TREATING ASSISTANT 520.665-018
steam drier 523.685-058
STEEP TENDER 522.465-010
stonecutter 629.261-014

stonecutter, assistant 629.684-014
storage-bin adjuster 521.685-230
SUGAR-CHIPPER-MACHINE OPERATOR 521.685-354
SUGAR DRIER 523.665-010
sugar grinder 521.685-354
SUGAR PRESSER 521.685-350
Sugar Trucker 929.687-030
SUPERINTENDENT, GRAIN ELEVATOR 529.137-022
SUPERVISOR, CEREAL 529.132-030
SUPERVISOR, DRY-STARCH 529.132-046
SUPERVISOR, FEED HOUSE 529.132-050
SUPERVISOR, FEED MILL 529.132-054
SUPERVISOR, MILL HOUSE 529.132-074
SUPERVISOR, RICE MILLING 521.131-010
SUPERVISOR, SUGAR HOUSE 529.132-090
SUPERVISOR, SUGAR REFINERY 529.132-094
SYRUP-MIXER ASSISTANT 520.687-058
SYRUP MIXER 529.462-010
TIPPLE TENDER 521.685-365
Top Steep Tender 522.465-010
TRACK SUPERVISOR 921.132-010
WASHER 529.687-210
WHEAT CLEANER 529.685-262
YIELD-LOSS INSPECTOR 529.367-030

hat & cap—HAT AND CAP INDUSTRY: This designation includes occupations concerned with converting materials, such as textiles, fur, straw braid, paper, and leather, into men's and women's hats, helmets, and caps. Occupations concerned with the production of hatter's fur for making fur-felt hats are included in this designation.

Band-Lining Bander 787.682-010
Band-Plating-Machine Operator 580.685-038
BEAD-MACHINE OPERATOR 583.686-010
BEVELING-MACHINE OPERATOR 690.686-010
Binding Cutter 699.682-030
blender 680.685-062
BLOCKER, HAND I 580.684-010
BLOCKER, HAND II 580.684-014
blocker, heated metal-forms 580.684-010
blocking-machine operator 580.685-026
Blocking-Machine Operator, Second 580.685-038
blower 680.685-046
body finisher 589.685-062
BOW MAKER 784.684-010
Bow Tacker I 782.684-058
Bow Tacker II 787.685-042
Braided-Band Assembler 784.684-022
breaker-up 589.685-014
BREAKER-UP-MACHINE OPERATOR 589.685-014
BRIM-AND-CROWN PRESSER 583.685-022
Brim Buffer 585.685-014
brim buster 583.685-018
brim buster 583.685-022
BRIM CURLER 583.685-014
brim cutter 585.685-086
Brim Cutter 699.682-022
brim-edge trimmer 686.685-074
brim flanger 784.684-026
brim flexer 585.685-066
Brim-Greaser Operator 582.685-082
BRIM IRONER, HAND 784.684-014
brimmer 583.685-018
BRIMMER ..... term
brimmer blocker 580.685-010
brimming-machine operator 580.685-010
brim molder 580.685-042
brim plater 583.685-018
brim pouncer 585.685-010
BRIM-POUNCING-MACHINE OPERATOR 585.685-010
BRIM PRESSER I 583.685-018
Brim Presser II 580.685-038
BRIM RAISER 784.687-010
brim rounder 784.684-050
brim setter 784.684-014
brim setter 583.685-022
brim shaper 784.684-026
Brim Slotter 686.685-038
Brim Stiffener 589.687-038
BRIM STITCHER I 784.685-014
Brim Stitcher II 784.682-014
brim stretcher 580.685-010
BRIM-STRETCHING-MACHINE OPERATOR 580.685-010
Brim-Welt-Sewing-Machine Operator 784.682-014
brusher 784.387-010
brusher, hand 784.687-014
BRUSHER, MACHINE 587.685-014
Buckle-Attaching-Machine Operator 699.685-018
Buckram Cutter 699.682-022
BUFFER 585.685-014
buffing-machine operator 585.685-014
bumper-machine operator 586.685-034
burring-machine operator 583.686-010
BUTTON-ATTACHING-MACHINE OPERATOR 699.685-010
button bradder 699.685-010
button clamper 699.685-010
button riveter 699.685-010
button tacker 699.685-010
cap blocker 580.684-014
cap-machine operator 784.684-018
CAP MAKER 784.684-018
cap operator 784.684-018
Cap-Parts Cutter 699.682-022
Cap Sizer 784.682-014
CARROTER 784.687-014
CARROTING-MACHINE OFFBEARER 586.686-010
CARROTING-MACHINE OPERATOR 586.685-010
caster 784.361-010
CHIN-STRAP CUTTER 686.685-010
Chin-Strap Maker 699.685-018
Chin-Strap Sewer 784.682-014
chopper 585.685-046
clicker-machine operator 686.685-038
clipper 585.685-046
cloth-covered-helmet puller 689.685-074
cloth coverer 689.685-074
COLORING-MACHINE OPERATOR 582.685-034
combiner 584.685-026
cone former 586.685-030
cone-machine feeder 586.686-018
coner 586.685-030
Conical Mixer 680.685-062
crimping machine operator 689.685-074
Crown Buffer 585.685-014
Crown Finisher 589.685-062
crown-finishing-machine operator 585.685-058
Crown-Greaser Operator 582.685-082
crown ironer 583.685-022
crown-perforator operator 686.685-038
crown pouncer 585.685-058
crown pouncer 585.685-074
CROWN POUNCER, HAND 784.687-018
Crown Presser 580.685-038
cutter 585.685-046
cutting-machine operator 585.685-086
Cylindrical Mixer 680.685-062
DECORATOR 784.684-022
devil tender 680.685-062
dipper 589.687-038
Dress-Cap Maker 784.684-018
DRUMMER 589.685-034
dryer feeder 581.686-022
DRYING-OVEN ATTENDANT 581.686-022
DRYING-ROOM ATTENDANT 581.687-014
DUSTER 587.685-026
dyer 582.685-034
DYER HELPER 589.685-042
Ear-Flap Binder 787.682-010
EAR-MUFF ASSEMBLER 784.687-022
Eight-Section Blower 680.685-046
ENDBAND CUTTER, HAND 784.687-026
endbander 784.687-026
endband sizer 784.687-026
end-lathe operator 585.685-074
extractor 581.685-070
eyelet cutter 686.685-038
fast-brim pouncer 585.685-010
feeder 586.686-018
Felt-Hat-Flanging Operator 784.684-026
Felt-Hat Inspector And Packer 784.687-042
Felt-Hat-Mellowing-Machine Operator 585.685-066
felt-hat-pouncing operator, hand 784.687-018
FELT-HAT STEAMER 582.687-018
felt puller 580.684-010
flange cutter 585.685-086
FLANGER 784.684-026
flanging-machine operator 690.686-058
flanging operator 784.684-026
Flap-Lining Binder 787.682-010

FLOORWORKER-DISTRIBUTOR 784.687-030
FOLDING-MACHINE OPERATOR 690.686-034
forming-machine operator 586.685-030
FOUNDATION MAKER 784.684-030
fur blower 680.685-046
FUR-BLOWER OPERATOR 680.685-046
fur-blowing-machine attendant 680.685-046
fur-blowing-machine operator 680.685-046
FUR-CUTTING-MACHINE OPERATOR 585.685-046
fur feeder 586.686-018
fur mixer 680.685-046
fur-mixer operator 680.685-062
fur-trimming machine operator 585.685-046
fur weigher 586.686-018
GREASER OPERATOR 582.685-082
Half-Section Ironer 583.685-098
hand hardener 784.684-034
hand pouncer 784.687-018
hand trimmer 784.684-050
hardener 586.685-026
HARDENER 784.684-034
HARDENING-MACHINE OPERATOR 586.685-026
Hat-And-Cap-Parts Cutter, Hand 781.684-074
HAT-AND-CAP SEWER 784.682-014
hat-band attacher 784.684-078
hat blocker 580.684-010
HAT-BLOCKING-MACHINE OPERATOR I 580.685-026
HAT-BLOCKING-MACHINE OPERATOR II 580.685-030
hat-blocking operator 580.684-014
Hat-Body Inspector 784.387-010
HAT-BODY SORTER 784.587-010
HAT BRAIDER 784.684-038
hat-brim-and-crown-laminating operator 584.685-026
hat-brim curler 784.684-014
hat-brim curler 784.684-026
Hat Brusher, Machine 587.685-026
Hat Buffer, Automatic 585.685-014
HAT CONDITIONER 784.687-086
Hat-Cone Inspector 784.387-010
Hat Designer 142.061-018
Hat-Designer Helper 784.684-042
HAT FINISHER 589.685-062
HAT-FINISHING-MATERIALS PREPARER 559.684-030
HAT-FORMING-MACHINE FEEDER 586.686-018
HAT-FORMING-MACHINE OPERATOR 586.685-030
Hat Lacer 784.684-022
HAT-LINING BLOCKER 583.685-050
HAT MAKER 784.684-042
Hat Marker 781.384-014
hat measurer 784.387-010
Hat-Parts Cutter, Machine 781.684-014
Hat Sprayer 741.684-026
HAT-STOCK-LAMINATING-MACHINE OPERATOR 584.685-026
HATTER ..... term
hat trimmer 784.684-022
Helmet Binder 787.682-010
Helmet-Brim Coverer 689.685-074
HELMET COVERER 689.685-074
Helmet-Crown Coverer 689.685-074
Helmet-Hat-Brim Cutter 699.682-022
Helmet-Hat Puncher 686.685-038
Helmet-Hat-Sweatband Puncher 686.685-038
HYDRAULIC BLOCKER 580.685-038
Hydraulic-Brim-Flanging-Machine Operator 580.685-038
hydraulic-press operator 580.685-038
Hydraulic Press Operator, First Pressing 580.685-038
INSPECTOR 784.387-010
INSPECTOR-PACKER 784.687-042
ironer 584.685-026
ironer 583.685-022
Jigger-Brim-Pouncing-Machine Operator 585.685-010
JIGGER-CROWN-POUNCING-MACHINE OPERATOR 585.685-058
Label Sewer 784.682-014
Lacquer Sizer 589.687-038
Ladies'-Hat Trimmer 784.684-022
Leather Fitter 784.682-014
Leather Flanger 690.686-058
LINING CEMENTER 795.687-022
Lining Maker 784.682-014
lining printer 651.682-022
lurer 784.684-062
machine sizer 589.687-038
manual hardener 784.684-034
MATERIAL ASSEMBLER 784.687-050
MELLOWING-MACHINE OPERATOR 585.685-066
MENDER 784.684-046
MIXER 680.685-062
mixing-machine operator 680.685-062
MOLDER 580.685-042
mold maker 784.361-010
muller 784.687-086
OPENER I 784.687-054
OPENER II 589.686-030
Panama-Hat Blocker 580.684-014
Panama-Hat Flanger 784.684-026
Panama-Hat-Hydraulic-Press Operator 580.685-038
Panama-Hat Smearer 589.687-038
passer 784.387-010
PASTER, HAT LINING 692.686-070
patent-button machine operator, automatic 699.685-010
PATTERNMAKER 784.361-010
pelt shearer 585.685-046
PERFORATING-MACHINE OPERATOR 686.685-038
perforator 686.685-038
perforator operator 686.685-038
plaster whittler 784.361-010
pouncer 784.687-018
pouncer 585.685-074
pouncer, machine 585.685-074
POUNCING-LATHE OPERATOR 585.685-074
pouncing-machine operator 585.685-074
pouncing-machine operator 585.685-058
POWDERER 784.687-058
presser 580.685-038
presser 584.685-026
Presser, First 583.685-110
Presser, Second 583.685-110
PRINTER, MACHINE 652.685-070
pugg maker 690.686-034
punching-machine operator 686.685-038
Quarter-Section Ironer 583.685-098
racker 784.387-010
Reeding-Machine Operator 784.682-014
repairer 784.387-010
Retouching Operator 589.687-038
Ribbon Cutter 784.687-050
Ribbon-Sweatband Operator 784.682-014
ROLLER OPERATOR 580.685-046
roper 580.684-010
round-cutter operator 585.685-086
rounder 585.685-086
ROUNDER, HAND 784.684-050
Rounding-Machine Operator 699.682-022
ROUNDING-MACHINE OPERATOR 585.685-086
sander 585.685-014
scratcher 585.685-014
Screen-Vent Binder 787.682-010
SEAM PRESSER 583.685-098
selector 784.387-010
Set-Off Blocker 580.684-014
Set-Off-Press Operator 583.685-018
SHAKER 589.685-094
shaver 585.685-046
shearer 585.685-046
SHRINKING-MACHINE OPERATOR 586.685-034
Silk-Lining Cutter, Machine 699.682-022
silk-top-hat-body maker 784.684-074
SINGER 784.687-062
Single-Beam Clicker 699.682-022
Six-Section Blower 680.685-046
size cutter 585.685-122
sizer 784.684-054
sizer 586.685-034
sizer 589.687-038
SIZER, HAND 784.684-054
SIZER, MACHINE 784.684-058
sizing brusher 589.687-038
sizing end-bander 784.687-026
sizing sponger 589.687-038
skin-drying-room attendant 581.686-022
skiver-machine operator 690.686-010
SLICKER 784.684-062
smearer 589.687-038
SMOKE-ROOM OPERATOR 784.687-066
SMOOTHER 784.684-066
softener 589.685-034
Soft-Hat Binder 787.682-010
specialty trimmer 784.684-078
spray-gun sizer 589.687-038
SPREADER 581.687-022

stamper 580.685-042
stamper blocker 580.685-026
starter 784.684-058
starter 586.685-034
steam blocker 580.685-026
Steamer 784.687-078
STEAMER-BLOCKER 784.684-070
steam finisher 784.687-010
STICKER 784.687-070
sticker-on 784.687-070
STIFFENER 589.687-038
stiff-straw-hat washer 784.687-078
Strawhat Blocker 580.684-014
strawhat-blocking operator 580.684-014
Straw-Hat-Brim-Cutter Operator 585.685-086
straw-hat-brim-raiser operator 784.687-010
STRAW-HAT BRUSHER 784.687-074
straw-hat finishing operator 784.687-010
Straw-Hat-Hydraulic-Press Operator 580.685-038
Strawhat Inspector And Packer 784.687-042
Straw-Hat-Machine Operator 784.682-014
STRAW-HAT-PLUNGER OPERATOR 583.685-114
straw-hat presser 583.685-114
STRAW HAT PRESSER, MACHINE 583.685-110
Strawhat Sizer 589.687-038
STRAW-HAT-WASHER OPERATOR 784.687-078
STRETCHER 580.685-054
stretcher and drier 581.687-022
stumper 784.684-058
stumper 586.685-034
Supervisor, Back Shop 784.130-010
Supervisor, Body Department 784.130-010
Supervisor, Braid Department 784.130-010
SUPERVISOR, CAP-AND-HAT PRODUCTION 784.130-010
Supervisor, Finishing Department 784.130-010
Supervisor, Harvest-Hat Department 784.130-010
Supervisor, Sewing Department 784.130-010
SWEATBAND-CUTTING-MACHINE OPERATOR 690.686-062
Sweatband-Decorating-Machine Operator 583.685-030
sweatband drummer 583.686-010
SWEATBAND FLANGER 690.686-058
Sweatband Maker 699.685-018
sweatband perforator 686.685-038
Sweatband Printer 652.682-030
SWEATBAND SEPARATOR 585.685-122
SWEATBAND SHAPER 784.687-090
Tip Maker 784.682-014
tipper 580.685-062
tipper 580.685-026
tipping-machine operator 580.685-062
TIP PRINTER 651.682-022
TIP STRETCHER 580.685-062
top-bottom-attaching-machine operator 699.685-010
TOP-HAT-BODY MAKER 784.684-074
Top Stitcher 784.682-014
TRIMMER 784.684-078
trimmer 784.387-010
Trimming-Department Blocker 580.684-014
Trimming Inspector 784.387-010
trim preparer 784.687-050
tube roller 690.686-034
turning-machine operator 690.686-034
turn-machine operator 585.685-074
Twin-Beam Clicker 699.682-022
Uniform-Cap Operator 784.684-018
Varnisher 589.687-038
waxer 582.685-082
welt cutter 686.685-074
welt-edge rounder 784.684-050
WELT-TRIMMING-MACHINE OPERATOR 686.685-074
western-felt-hat blocker 580.685-026
wet-crown-blocking operator 580.685-026
whittling-room operator 784.361-010
WHIZZER 581.685-070
whizzer operator 581.685-070
wired-sweatband cutter 585.685-122
WIRE INSERTER 784.687-082
Wire-Machine Operator 784.682-014
Wire-Shape Maker 784.684-030
Wool-Hat Blocker 580.685-026
Wool-Hat Finisher 589.685-062
Wool-Hat Flanger 784.684-026
Wool-Hat-Forming-Machine Tender 586.685-030
Wool-Hat Hydraulicker 580.685-038
wool-hat-sanding-machine operator 585.685-014
Woven-Paper-Hat-Hydraulic-Press Operator Finisher 580.685-038
Woven-Paper-Hat Mender 784.684-046

heat treating—HEAT TREATING: This designation includes occupations concerned with heattreating metals in the solid state to remove strains and stresses, alter hardness, tensile strength, ductility, grain structure, and electrical and magnetic properties; and improve machinability, cutting properties, and wear resistant characteristics. Such occupations involve heating and quenching (cooling) the metal to alter its physical and chemical properties, during which temperatures, time cycles, and surrounding media are essential factors. The various heat-treating processes include: annealing, baking (heating to remove gases absorbed during pickling), carburizing, cyaniding, hardening, nitriding, normalizing, patenting, siliconizing, spheroidizing, and tempering. Excluded from this designation are those occupations concerned with smelting ores, refining metals, or merely heating metals to working temperatures (for rolling, extrusion, and like operations) in forges, foundries, steel mills, and other plants.

ANNEALER 504.682-010
bluing-oven tender 504.685-018
carbonizer 504.685-026
carbonizer 504.682-014
carburizer 504.682-014
case hardener 504.685-026
CASE HARDENER 504.682-014
Continuous-Annealing Furnace Operator 504.682-010
Cyanide Furnace Operator 504.682-014
Die Case Hardener 504.682-014
draw-furnace tender 504.685-018
dulite-machine bluer 504.682-022
electronic induction hardener 504.685-022
Flame-Annealing-Machine Operator 504.685-014
FLAME-ANNEALING-MACHINE SETTER 504.360-010
FLAME-HARDENING-MACHINE OPERATOR 504.685-014
FLAME-HARDENING-MACHINE SETTER 504.380-010
furnace feeder 504.685-018
FURNACE HELPER 504.686-014
furnace loader 504.685-018
gas-anneal feeder 504.685-014
HARDNESS INSPECTOR 504.387-010
HEAT-TREATER APPRENTICE 504.382-018
heat treater, head 504.131-010
HEAT-TREATER HELPER 504.685-018
HEAT TREATER I 504.382-014
HEAT TREATER II 504.682-018
HEAT-TREATING BLUER 504.682-022
HEAT-TREAT INSPECTOR 504.281-010
heat-treat puller 504.685-018
HEAT-TREAT SUPERVISOR 504.131-010
INDUCTION-MACHINE OPERATOR 504.685-022
INDUCTION-MACHINE SETTER 504.380-014
normalizer 504.682-010
Pot Annealer 504.682-010
PRODUCTION HARDENER 504.685-026
RIVET HEATER 504.485-010
Rivet Heater, Electric 504.485-010
Rivet Heater, Gas 504.485-010
supervisor, hardening 504.131-010
supervisor, heat treating 504.131-010
TEMPERER 504.682-026
tempering-kiln tender 504.685-018

hotel & rest.—HOTEL AND RESTAURANT INDUSTRY: This designation includes occupations concerned with providing and maintaining lodging, dining, and beverage services. Occupations are typically found in establishments such as commercial, residential, tourist, and club hotels; motels; apartment houses; trailer courts, tourist camps, and homes; rooming houses; restaurants, cafeterias, and lunch counters; industrial, institutional, and private catering services; taverns, cocktail lounges, night clubs, and tea rooms; boarding houses; and fraternity and sorority houses. Occupations concerned with preparing foods for relatively immediate consumption on the premises or for take-out are included here, while occupations concerned with preparing and preserving foods for consumption at a later time are included in the CANNING AND PRESERVING INDUSTRY (can. & preserv.). Occupations concerned with the entertainment of patrons in such establishments are included under AMUSEMENT AND RECREATION (amuse. & rec.).

ANALYST, FOOD AND BEVERAGE 310.267-010
Appetizer Packer 319.484-010
ATTENDANT, LODGING FACILITIES 329.467-010
auto-camp attendant 329.467-010
BAGGAGE PORTER, HEAD 324.137-010
BAKER 313.381-010
baker apprentice, pastry 313.381-018
Baker, Biscuit 313.381-010

baker, bread, chief 313.131-010
baker, bread 313.381-010
baker, cake 313.381-026
baker chef 313.131-010
BAKER, HEAD 313.131-010
BAKER HELPER 313.684-010
baker, pastry 313.381-026
baker, pie 313.361-038
BAKER, PIZZA 313.381-014
BAKER, SECOND 313.361-010
bakeshop cleaner 313.687-010
Banquet Captain 311.137-018
Banquet Chef 313.131-014
bar attendant 312.474-010
BAR ATTENDANT 312.477-010
barkeeper 312.474-010
bar porter 312.687-010
bar runner 312.687-010
BARTENDER 312.474-010
BARTENDER HELPER 312.687-010
BELL CAPTAIN 324.137-014
BELLHOP 324.677-010
bread maker 313.381-010
bus person 311.677-018
butcher 316.681-010
BUTCHER, CHICKEN AND FISH 316.684-010
Butcher, Head 316.681-010
BUTCHER, MEAT 316.681-010
CAFETERIA ATTENDANT 311.677-010
Cafeteria Cashier 211.462-010
cake maker 313.381-026
captain 311.137-018
Captain, Room Service 311.137-022
caretaker, resort 329.467-010
CAR HOP 311.477-010
CARVER 316.661-010
cashier, fast foods restaurant 311.472-010
Cashier, Front Office 211.362-010
Casserole Preparer 319.484-010
catering-truck operator 292.463-010
CHEF 313.131-014
chef assistant 313.131-026
Chef, Broiler Or Fry 313.131-014
chef de cuisine 187.161-010
CHEF DE FROID 313.281-010
chef, department see SPECIALTY CHEF .....
Chef, French 313.131-014
Chef, German 313.131-014
chef, head 187.161-010
Chef, Italian 313.131-014
Chef, Saucier 313.131-014
chef, station see SPECIALTY CHEF .....
chef, under 313.131-026
chicken-and-fish cleaner 316.684-010
chief steward/stewardess 310.137-018
CIGARETTE VENDOR 291.457-010
Clean-Up Helper, Banquet 311.677-018
COFFEE MAKER 317.684-010
Coffee Server, Cafeteria Or Restaurant 311.677-010
coffee-urn attendant 317.684-010
Cold Food Packer 319.484-010
cold-meat chef 313.361-034
control clerk, food-and-beverage 216.362-022
COOK 313.361-014
COOK APPRENTICE 313.361-018
COOK APPRENTICE, PASTRY 313.381-018
COOK, BARBECUE 313.381-022
COOK, BREAKFAST ..... term
Cook, Broiler 313.361-014
cook, chief 313.131-014
Cook, Chinese-Style Food 313.361-030
cook, cold meat 313.361-034
Cook, Dessert 313.361-014
Cook, Dinner 313.361-014
cooked foods supervisor 319.137-022
cookee 318.687-010
COOK, FAST FOOD 313.374-010
Cook, Fish And Chips 313.361-026
cook, frozen dessert 313.381-034
Cook, Fry 313.361-014
COOK, FRY, DEEP FAT 526.685-014
COOK, HEAD, SCHOOL CAFETERIA 313.131-018
cook helper 318.687-010
COOK HELPER 317.687-010
Cook Helper, Broiler Or Fry 317.687-010
Cook Helper, Dessert 317.687-010
COOK HELPER, PASTRY 313.687-010
Cook Helper, Vegetable 317.687-010
cook, ice cream 313.381-034
Cook, Italian-Style Food 313.361-030
Cook, Kosher-Style Food 313.361-030
Cook, Morning 313.361-014
Cook, Night 313.361-014
COOK, PASTRY 313.381-026
cook, pastry 313.361-038
cook, pie 313.361-038
Cook, Relief 313.361-014
cook, restaurant 313.361-014
Cook, Roast 313.361-014
Cook, Roast Pig 313.381-022
Cook, Sauce 313.361-014
COOK, SCHOOL CAFETERIA 313.381-030
COOK, SECOND ..... term
COOK, SHORT ORDER 313.374-014
Cook, Soup 313.361-014
Cook, Spanish-Style Food 313.361-030
Cook, Special Diet 313.361-014
COOK, SPECIALTY 313.361-026
COOK, SPECIALTY, FOREIGN FOOD 313.361-030
Cook, Vegetable 313.361-014
counselor 352.667-014
COUNTER ATTENDANT, CAFETERIA 311.677-014
COUNTER ATTENDANT, LUNCHROOM OR COFFEE SHOP 311.477-014
Counter Dish Carrier 311.677-018
COUNTER SUPERVISOR 311.137-010
COUNTER-SUPPLY WORKER 319.687-010
CREDIT-CARD CLERK 210.382-038
Curtain Cleaner 323.687-018
delivery-room clerk 324.577-010
dietary assistant 319.137-030
DIETARY MANAGER 187.167-206
DINING ROOM ATTENDANT 311.677-018
dining-room attendant, cafeteria 311.677-010
Dining-Room Cashier 211.462-010
dining-room manager 310.137-010
dining-service supervisor 319.137-018
dining-service worker 319.484-010
DIRECTOR, FOOD SERVICES 187.167-026
director, recreation 352.167-010
director, sales 163.117-018
DIRECTOR, SOCIAL 352.167-010
Dish Carrier 311.677-018
display carver 316.661-010
drive-in waiter/waitress 311.477-010
Dumbwaiter Operator 311.677-018
EXECUTIVE CHEF 187.161-010
executive-chef assistant 313.131-026
executive steward/stewardess 310.137-018
exhibition carver 316.661-010
FAST-FOODS WORKER 311.472-010
Fish Housekeeper 525.684-030
Floor Clerk 238.367-038
floor housekeeper 321.137-010
floor steward/stewardess 318.137-010
Floor Supervisor 321.137-014
FOOD-AND-BEVERAGE CHECKER 211.482-018
FOOD-AND-BEVERAGE CONTROLLER 216.362-022
food assembler, commissary kitchen 319.484-010
FOOD ASSEMBLER, KITCHEN 319.484-010
FOOD CHECKER 211.482-014
FOOD ORDER EXPEDITER 319.467-010
food-service agent 906.683-010
food service coordinator 313.131-018
FOOD-SERVICE DRIVER 906.683-010
FOOD-SERVICE SUPERVISOR 319.137-010
Food-Service Worker 313.361-014
Food-Storeroom Clerk 222.387-058
food-tray assembler 319.484-010
fountain dispenser 319.474-010
FOUNTAIN SERVER 319.474-010
Front Desk Clerk 238.367-038
Front-Elevator Operator 388.663-010
GARDE MANGER 313.361-034
Glass Washer And Carrier 311.677-018
Guest-History Clerk 203.362-010
Hall Cleaner 381.687-014
hall cleaner 323.687-018
head cook, school 313.131-018
HOST/HOSTESS, RESTAURANT 310.137-010

Hot-Bread Baker 313.381-010
HOTEL CLERK 238.367-038
Hot-Food Packer 319.484-010
HOUSECLEANER 323.687-018
Housecleaner, Floor 323.687-018
house detective 376.367-018
HOUSEKEEPER 321.137-010
HOUSE OFFICER 376.367-018
house steward/stewardess 310.137-018
ICE-CREAM CHEF 313.381-034
ice cream dispenser 319.474-010
inside steward/stewardess 318.137-010
INSPECTOR 321.137-014
Key Clerk 238.367-038
kitchen chef 313.131-014
KITCHEN CLERK 222.587-022
kitchen hand 318.687-010
KITCHEN HELPER 318.687-010
kitchen porter 318.687-010
kitchen runner 318.687-010
KITCHEN STEWARD/STEWARDESS 318.137-010
KITCHEN SUPERVISOR 319.137-030
linen checker 222.387-030
linen clerk 222.387-030
linen-exchange attendant 222.387-030
LINEN-ROOM ATTENDANT 222.387-030
linen-room houseperson 222.387-030
Linen-Room Worker 323.687-018
LUNCH-TRUCK DRIVER 292.463-010
lunch-truck operator 292.463-010
Lunch-Wagon Operator 292.463-010
Manager, Apartment House 320.137-014
Manager, Banquet 187.167-106
MANAGER, BAR ..... term
Manager, Beer Parlor 187.167-126
MANAGER, BOARDING HOUSE 320.137-010
MANAGER, BRANCH OPERATION EVALUATION 187.167-062
manager, business promotion 163.117-018
Manager, Cafeteria Or Lunchroom 187.167-106
Manager, Catering 187.167-106
manager, club 187.167-126
Manager, Cocktail Lounge 187.167-126
MANAGER, CONVENTION 187.167-078
MANAGER, FLIGHT KITCHEN 319.137-014
Manager, Food And Beverage 187.167-106
MANAGER, FOOD CONCESSION 185.167-022
manager, food production 187.161-010
MANAGER, FOOD SERVICE 187.167-106
MANAGER, FRONT OFFICE 187.137-018
manager, general 187.117-038
manager, guest house 320.137-010
Manager, Hotel 320.137-014
MANAGER, HOTEL OR MOTEL 187.117-038
MANAGER, INDUSTRIAL CAFETERIA 319.137-018
manager, kitchen 319.137-030
MANAGER, LIQUOR ESTABLISHMENT 187.167-126
MANAGER, LODGING FACILITIES 320.137-014
Manager, Marina 320.137-014
Manager, Motel 320.137-014
manager, motor hotel 187.117-038
manager, motor inn 187.117-038
Manager, Night Club 187.167-126
MANAGER, PROMOTION 163.117-018
MANAGER, RESERVATIONS 238.137-010
manager, resident 187.117-038
Manager, Restaurant Or Coffee Shop 187.167-106
Manager, Rooming House 320.137-010
manager, sales 163.117-018
manager, school lunch program 187.167-026
manager, service 329.137-010
Manager, Tavern 187.167-126
Manager, Tourist Camp 320.137-014
Manager, Trailer Park 320.137-014
meat carver 316.661-010
meat cutter 316.681-010
moshgiach 319.137-026
Motel Cleaner 323.687-014
motel clerk 238.367-038
motor-lodge clerk 238.367-038
mover 323.687-018
NIGHT AUDITOR 210.382-054
Night Baker 313.381-010
night cleaner 323.687-018
night-clerk auditor 210.382-054
ORDER CLERK, FOOD AND BEVERAGE 209.567-014
oven tender 313.381-010
overseer, kosher kitchen 319.137-026
Oyster Preparer 311.674-014
package clerk 324.577-010
Page 324.677-010
page 352.677-018
PANTRY GOODS MAKER 317.684-014
Pantry Goods Maker Helper 317.687-010
Pantry Steward/Stewardess 318.137-010
PARLOR CHAPERONE 352.667-014
PASTRY CHEF 313.131-022
pastry helper 313.687-010
pie chef 313.361-038
PIE MAKER 313.361-038
PORTER, BAGGAGE 324.477-010
Porter, Lobby 323.687-018
porter, luggage 324.477-010
poultry-and-fish butcher 316.684-010
preparation center coordinator 313.131-018
RAW SHELLFISH PREPARER 311.674-014
receiving-room clerk 324.577-010
Record Clerk 203.582-066
research worker, kitchen 310.267-010
Reservation Clerk 238.367-038
Rolls Baker 313.381-010
Room Clerk 238.367-038
Room Service Assistant 311.677-018
ROOM-SERVICE CLERK 324.577-010
Runner 311.677-018
runner 324.577-010
Salad Counter Attendant 311.677-014
Salad Maker 317.684-014
SALES REPRESENTATIVE, HOTEL SERVICES 259.157-014
sandwich-counter attendant 317.664-010
SANDWICH MAKER 317.664-010
security officer 376.367-018
server 311.477-026
server 311.477-030
server 311.677-014
service attendant, cafeteria 311.677-010
Service-Bar Cashier 211.462-010
Service Bartender 312.474-010
service supervisor 329.137-010
Sewer, Linen Room 787.682-030
SILVER WRAPPER 318.687-018
Sleeping Room Cleaner 323.687-014
soda clerk 319.474-010
soda dispenser 319.474-010
soda jerker 319.474-010
sommelier 310.357-010
SOUS CHEF 313.131-026
special officer 376.367-018
Special Officer, Automat 376.667-014
SPECIALTY CHEF ..... term
steamtable attendant 311.677-014
Steamtable Worker 311.677-018
STEWARD/STEWARDESS 310.137-018
STEWARD/STEWARDESS, BANQUET 310.137-022
storeroom food-checker 222.587-022
superintendent, house 329.137-010
SUPERINTENDENT, SERVICE 329.137-010
Supervising Chef 313.131-026
supervising-chef assistant 313.131-026
SUPERVISOR, CASHIERS 211.137-010
SUPERVISOR, COMMISSARY PRODUCTION 319.137-022
SUPERVISOR, FOOD CHECKERS AND CASHIERS 211.137-014
SUPERVISOR, HOUSECLEANER 323.137-010
supervisor, kashruth 319.137-026
SUPERVISOF, KOSHER DIETARY SERVICE 319.137-026
supply service worker 319.484-010
table attendant, cafeteria 311.677-010
Table Setter 311.677-018
Telephone-Order Clerk, Drive-in 209.567-014
Telephone-Order Clerk, Room Service 209.567-014
tourist-camp attendant 329.467-010
transportation clerk 238.367-030
TRAVEL CLERK 238.367-030
tray setter 319.484-010
uniform attendant 222.387-030
Vacuum Worker 323.687-018
Valet Manager 369.137-010
VENDING-MACHINE ATTENDANT 319.464-014
WAITER/WAITRESS, BANQUET, HEAD 311.137-014
Waiter/Waitress, Banquet 311.477-026
WAITER/WAITRESS, BAR 311.477-018

WAITER/WAITRESS, BUFFET 311.674-018
waiter/waitress, cafeteria 311.677-010
WAITER/WAITRESS, CAPTAIN 311.137-018
WAITER/WAITRESS, CLUB 352.677-018
waiter/waitress, cocktail lounge 311.477-018
waiter/waitress, counter 311.477-014
WAITER/WAITRESS, FORMAL 311.477-026
WAITER/WAITRESS, HEAD 311.137-022
waiter/waitress, head 310.137-010
WAITER/WAITRESS, INFORMAL 311.477-030
WAITER/WAITRESS, ROOM SERVICE 311.477-034
WAITER/WAITRESS, TAKE OUT 311.477-038
Waiter/Waitress, Tavern 311.477-018
Water Server 311.677-018
Wine-Cellar Stock Clerk 222.387-058
WINE STEWARD/STEWARDESS 310.357-010

house. appl.—HOUSEHOLD APPLIANCES INDUSTRY: This designation includes occupations concerned with manufacturing and repairing household appliances, such as cooking equipment, refrigerators, freezers, laundry equipment, electric housewares, fans, vacuum cleaners, sewing machines, dishwashers, and trash compactors.

APPLIANCE ASSEMBLER, LINE 827.684-010
Appliance Inspector 729.387-022
APPLIANCE REPAIRER 723.584-010
Appliance Tester 729.387-022
ASSEMBLER 723.684-010
assembler, latches and springs 706.687-030
Brush-Holder Inspector 729.384-022
Clothes-Drier Assembler 827.684-010
Commutator Inspector 729.384-022
Deep-Fryer Assembler 723.684-010
DUST-BRUSH ASSEMBLER 739.687-074
Electric-Fan Assembler 723.684-010
Electric-Frying-Pan Repairer 723.584-010
Electric-Heater Assembler 723.684-010
Food-Mixer Assembler 723.684-010
Food-Mixer Repairer 723.584-010
Heating-Element Repairer 723.584-010
HEATING-ELEMENT WINDER 723.685-010
INSPECTOR 729.387-022
model maker 600.280-054
PATCHER 723.687-010
Power-Tool Assembler 723.684-010
PUSH-CONNECTOR ASSEMBLER 706.687-030
repairer 723.584-010
SAMPLE MAKER, APPLIANCES 600.280-054
Shaft Inspector 729.384-022
Steam-Iron Assembler 723.684-010
supervisor, assembly line 723.131-010
SUPERVISOR, MAJOR APPLIANCE ASSEMBLY 827.131-014
SUPERVISOR, SMALL APPLIANCE ASSEMBLY 723.131-010
TESTER, ELECTRICAL CONTINUITY 729.684-058
TESTER, WASTE DISPOSAL LEAKAGE 723.687-018
Toaster-Element Repairer 723.584-010
Vacuum-Cleaner Repairer 723.584-010
Washing-Machine Assembler 827.684-010
WINDING INSPECTOR 729.384-022
WIRE COILER ..... 724.362-010&Q10

inst. & app.—INSTRUMENTS AND APPARATUS INDUSTRY: This designation includes occupations concerned with manufacturing and repairing instruments and apparatus for professional, scientific, commercial, and industrial purposes. The following classes of products are typical of those produced in the industry: surgical, dental, and veterinary instruments; physicians' diagnostic apparatus; surveying, nautical, aeronautical, automotive, and similar precision and measuring instruments; sighting and fire-control equipment, such as bomb sights, gun data computers, percentage correctors, wind correctors, directors, and sound locators; indicating and recording instruments; hypodermic syringes; speedometers; barometers and thermometers; compasses; micrometers; and spectroscopes. Occupations concerned with the manufacture of lenses, prisms, field glasses, microscopes, telescopes, and other optical goods are found in the OPTICAL GOODS INDUSTRY (optical goods).

ASSEMBLER, ELECTROMECHANICAL 828.381-018
ASSEMBLER, PLASTIC HOSPITAL PRODUCTS 712.687-010
ASSEMBLY LOADER 711.684-010
BELLOWS ASSEMBLER 710.684-042
BELLOWS FILLER 710.684-014
BELLOWS TESTER 710.687-014
calibration technician 710.381-034
CALIBRATOR 710.381-034
CALIBRATOR, BAROMETERS 710.381-042
CONTACT PRINTER, PHOTORESIST 976.684-034
Development Technician 710.281-018
die setter 556.380-010
electroformer 500.684-034
electromechanical instrument mechanic 710.381-054
ELECTROMECHANICAL TECHNICIAN 710.281-018
ELECTRONICS INSPECTOR 726.381-010
ELEMENT WINDING MACHINE TENDER 724.685-010
ENGINEERING MODEL MAKER 693.260-018
field return repairer 710.381-050
FIRESETTER 692.360-018
FLANGER 712.684-018
Flowmeter Test And Certification Technician 710.281-022
flow-solder machine operator 726.362-014
GLASS BLOWER, LABORATORY APPARATUS 772.281-010
glass-cylinder flanger 712.684-018
GLASS GRINDER, LABORATORY APPARATUS 775.382-010
glass technologist 772.281-010
GLAZIER 712.684-026
HEARING-AID REPAIRER 719.281-014
HYDROMETER CALIBRATOR 710.381-030
hydrometer finisher 710.381-030
INSPECTOR, ELECTROMECHANICAL 729.361-010
INSPECTOR, SURGICAL INSTRUMENTS 712.684-050
INSTRUMENT ASSEMBLER 710.684-046
instrument calibrator 710.381-042
INSTRUMENT INSPECTOR 710.684-050
INSTRUMENT MECHANIC, WEAPONS SYSTEM 711.281-014
LASER TECHNICIAN 019.261-034
MECHANICAL-TEST TECHNICIAN 869.261-014
Medical-Apparatus Model Maker 693.260-018
METALLIZATION EQUIPMENT TENDER, SEMICONDUCTORS 590.685-086
MOLD SETTER 556.380-010
PLATER 500.684-034
production repairer 710.381-050
quality control inspector 726.381-010
Receiving Inspector 729.361-010
Regulator Assembler 710.684-046
REPAIRER, GYROSCOPE 710.381-054
reticle printer 976.684-034
setter, plastics-molding machine 556.380-010
Supervisor, Assembly Line 710.131-042
Supervisor, Calibration 710.131-042
Supervisor, Inspection 710.131-042
SUPERVISOR, INSTRUMENT ASSEMBLY 710.131-038
SUPERVISOR, OPTICAL INSTRUMENTS 711.137-010
SUPERVISOR, PLASTICS PRODUCTION 556.130-010
Supervisor, Rework 710.131-042
SUPERVISOR, THERMOSTATIC CONTROLS 710.131-042
SURGICAL-FORCEPS FABRICATOR 712.684-054
systems inspector 726.381-010
THERMOMETER MAKER 710.681-026
THERMOMETER PRODUCTION WORKER 710.685-014
THERMOMETER TESTER 710.384-030
Thermostat Assembler 710.684-046
THERMOSTAT-ASSEMBLY-MACHINE TENDER, AUTOMATIC 692.685-218
THERMOSTAT REPAIRER 710.381-050
TRACK LAMINATING MACHINE TENDER 692.685-290
Valve Assembler 710.684-046
WAVE-SOLDERING MACHINE OPERATOR 726.362-014
WIRE DRAWING MACHINE OPERATOR 614.382-018

insurance—INSURANCE INDUSTRY: This designation includes occupations concerned with operating insurance carriers, including both home and branch offices. The primary functions covered include the sale and preparation of insurance contracts, the administration of insurance organizations, and keeping necessary records. The principal types of insurance written are accident and health, casualty, fidelity and surety bonding, fire, liability, life, marine, and theft.

Abstract Checker 219.482-014
Accident-And-Health-Insurance-Claim Examiner 241.267-018
Actuarial Clerk 216.382-062
Address-Change Clerk 203.582-066
Agency Cashier 211.362-010
Agency Clerk 219.362-010
AGENT-CONTRACT CLERK 241.267-010
AGENT-LICENSING CLERK 209.367-010
agents'-records clerk 209.367-010
Application-Register Clerk 203.582-066
APPRAISER, AUTOMOBILE DAMAGE 241.267-014

automobile-damage appraiser 241.267-014
Automobile-Insurance-Claim Adjuster 241.217-010
Automobile-Insurance-Claim Examiner 241.267-018
Brokerage Manager 166.167-046
BUILDING INSPECTOR 168.267-010
Calculation Clerk 216.382-050
Calculation Reviewer 216.382-050
CANCELLATION CLERK 203.382-014
Cash-Surrender Calculator 216.382-050
CLAIM ADJUSTER 241.217-010
claim attorney 110.117-014
CLAIM EXAMINER 241.267-018
CLAIM EXAMINER 168.267-014
claims administrator 241.137-018
CLAIMS CLERK I 241.362-010
CLAIMS CLERK II 205.367-018
collateral placement officer 186.167-054
Commission Auditor 210.382-010
contract administrator 241.267-010
CONTROL CLERK, AUDITING 209.362-014
correspondent 249.262-010
customer-service clerk 249.262-010
Death-Claim Clerk 219.362-010
Death-Claim Examiner 241.267-018
Disability-Insurance-Claim Examiner 241.267-018
district agent 186.167-034
District Branch Manager 186.167-034
District Claims Manager 186.167-034
District Sales Manager 186.167-034
dividend-deposit-entry clerk 216.482-026
DIVIDEND-DEPOSIT-VOUCHER CLERK 216.482-026
Endorsement Clerk 203.582-066
ESTATE PLANNER 186.167-010
estimator, automobile damage 241.267-014
examiner-rating clerk 214.482-018
Extended-Insurance Clerk 216.382-050
Federal-Housing-Administration-Loan Auditor 210.382-010
Fidelity-And-Surety-Bonds-Claim Adjuster 241.217-010
Filing Writer 203.582-066
final-application reviewer 209.687-018
Fire-Insurance-Claim Adjuster 241.217-010
Fire-Insurance-Claim Examiner 241.267-018
General Agent 250.257-010
Group-Contract Analyst 169.267-034
HOSPITAL-INSURANCE REPRESENTATIVE 166.267-014
insurance adjustor 241.217-010
insurance agent 250.257-010
Insurance Application Investigator 241.267-030
INSURANCE ATTORNEY 110.117-014
Insurance Broker 250.257-010
INSURANCE CHECKER 219.482-014
insurance-claim approver 241.267-018
insurance-claim auditor 241.267-018
insurance-claim representative 241.217-010
INSURANCE CLERK 219.367-014
Insurance Collector 241.367-010
insurance counsel 110.117-014
insurance investigator 241.217-010
INVESTMENT ANALYST 160.267-026
LOAN OFFICER 186.267-018
loss-claim clerk 205.367-018
loss-control technician 168.167-078
Manager, Farm Underwriters 186.167-034
Manager, Field Underwriters 186.167-034
Manager, Insurance Agency 186.167-034
MANAGER, INSURANCE OFFICE 186.167-034
MAP CLERK 209.587-030
Marine-Insurance-Claim Adjuster 241.217-010
Marine-Insurance-Claim Examiner 241.267-018
Master-Sheet Clerk 203.582-066
medical-fee clerk 214.482-018
MEDICAL-VOUCHER CLERK 214.482-018
memorandum-statement clerk 203.382-014
money position officer 186.167-054
MORTGAGE-LOAN-COMPUTATION CLERK 210.382-050
Mortgage-Loan Officer 186.267-018
Mortgage-Papers-Assignment-And-Assembly Clerk 203.582-066
new-business clerk 209.687-018
Payroll Auditor 160.167-054
Pensionholder-Information Clerk 249.262-010
PLACER 239.267-010
policy-cancellation clerk 203.382-014
POLICY-CHANGE CLERK 219.362-042
Policy Checker 219.482-014
POLICYHOLDER-INFORMATION CLERK 249.262-010
Policy-Issue Clerk 203.362-010
policy-issue supervisor 219.132-022
Policy-Loan Calculator 216.382-050
policy rater 214.482-022
POLICY-VALUE CALCULATOR 216.382-050
Policy Writer 203.582-066
portfolio administrator 186.167-054
premium-cancellation clerk 203.382-014
premium-card-cancellation clerk 203.382-014
Premium-Note Interest-Calculator Clerk 216.482-022
rate inserter 214.482-022
RATER 214.482-022
rating clerk 214.482-022
reinstatement clerk 219.362-050
REINSURANCE CLERK 219.482-018
Remittance-On-Farm-Rental-And-Soil-Conservation Auditor 210.382-010
Rent And Miscellaneous Remittance Clerk 216.482-010
RESEARCH ANALYST 169.267-034
RESERVE OFFICER 186.167-054
REVIEWER 209.687-018
REVIVAL CLERK 219.362-050
safety engineer 168.167-078
SAFETY INSPECTOR 168.167-078
Sales Agent, Casualty Insurance 250.257-010
Sales Agent, Fire Insurance 250.257-010
SALES AGENT, INSURANCE 250.257-010
Sales Agent, Life Insurance 250.257-010
Sales Agent, Marine Insurance 250.257-010
sales representative 166.167-046
sales-review clerk 209.687-018
securities analyst 160.267-026
securities-research analyst 160.267-026
settlement technician 209.382-014
SPECIAL AGENT 166.167-046
SPECIAL AGENT, GROUP INSURANCE 169.167-050
SPECIAL-CERTIFICATE DICTATOR 209.382-014
SUPERVISOR, AGENCY APPOINTMENTS 209.137-018
SUPERVISOR, CLAIMS 241.137-018
SUPERVISOR, CORRESPONDENCE SECTION 249.137-018
SUPERVISOR, POLICY-CHANGE CLERKS 219.132-010
supervisor, records change 219.132-010
SUPERVISOR, UNDERWRITING CLERKS 219.132-022
termination clerk 203.382-014
UNDERWRITER 169.267-046
underwriting analyst 219.367-038
UNDERWRITING CLERK 219.367-038

jewelry-silver.—JEWELRY, SILVERWARE, AND PLATED WARE INDUSTRY: This designation includes occupations concerned with making and repairing precious metal and costume jewelry and jewelry cases; cutting, grinding, and setting precious stones; and flatware, hollow ware, toilet ware, ecclesiastical ware, and related products made of pewter, stainless steel, nickel silver, sterling silver, metal-plated silver, gold, or other metal. Occupations concerned with the manufacture of clocks and watches are included in the CLOCKS, WATCHES, AND ALLIED PRODUCTS INDUSTRY (clock & watch). Occupations concerned with the manufacture of leather jewelry cases are included in the LEATHER PRODUCTS INDUSTRY (leather prod.).

ANNEALER 504.687-010
ARBORER 700.684-010
ARTIFICIAL-PEARL MAKER 770.687-010
ASSEMBLER 700.684-014
baker 590.685-034
BEAD MAKER 770.381-010
BEAD STRINGER 735.684-010
bench hand 700.687-026
bench hand 700.687-062
BENCH HAND 735.381-010
BENCH-MOLDER APPRENTICE 518.381-010
bench worker 735.381-010
bench-worker apprentice 700.281-014
BENCH WORKER, HOLLOW HANDLE 700.687-010
bench worker 700.281-010
bender 700.684-010
Bezel Cutter 770.261-010
Blocker 770.261-010
BOILER-OUT 700.687-014
BRACELET AND BROOCH MAKER 735.681-010
Bracelet-Form Coverer 739.687-138
Bracelet Former 739.687-138
Bracelet Maker, Novelty 700.684-014
Breaker-Off 700.687-062
BRIGHT CUTTER 700.684-018
BRILLIANDEER-LOPPER 770.261-010

brooch-and-bracelet maker 735.681-010
Brooch Maker, Novelty 700.684-014
buffing-machine operator, semiautomatic 603.682-022
BUFFING-MACHINE OPERATOR, SILVERWARE 603.682-010
caster 502.682-018
CASTER 502.381-010
CASTER HELPER 700.687-022
CENTRIFUGAL-CASTING-MACHINE OPERATOR 502.682-018
Centrifugal-Wax Molder 549.685-038
CHAIN MAKER, HAND 700.381-010
CHAIN MAKER, MACHINE 700.684-022
Chain Mender 735.687-014
CHARGER I 740.684-010
CHARGER II 700.687-026
CHASER 704.381-010
chaser 700.381-034
chaser apprentice 700.381-038
chaser helper 700.687-050
cleaver 770.381-014
COLORING CHECKER 735.587-010
COMPACT ASSEMBLER 739.687-066
cracker 770.687-030
crafter 700.381-046
craft worker 700.381-014
Cushion Maker, Hand 739.687-138
cutter 770.281-014
cutter and edge trimmer 700.687-066
diamond assorter 770.281-010
DIAMOND CLEAVER 770.381-014
DIAMOND CUTTER ..... term
DIAMOND EXPERT 770.267-010
diamond grader 770.281-010
DIAMOND SELECTOR 770.281-010
Diamond Setter 700.381-054
DIAMOND SIZER AND SORTER 770.687-014
die cutter 601.381-014
die-cutter apprentice 601.381-022
DIE MAKER 601.381-014
DIE-MAKER APPRENTICE 601.381-022
DIPPER 735.687-010
DRILLER 700.684-026
drill-press operator 700.684-026
EARRING MAKER 700.684-030
Ecclesiastical-Art-Metal Worker 619.260-014
enamel cracker 770.687-030
ENAMELER 740.684-018
enamel pulverizer 770.687-030
ENGINE TURNER 704.381-018
ESTIMATOR, JEWELRY 221.387-022
etcher, enameling 735.687-010
facer 705.682-014
FANCY-WIRE DRAWER 700.381-014
FILER 700.684-034
finding fastener 735.687-022
Finisher 705.684-022
FIRER 590.685-034
fitter 700.684-034
flat hammerer 700.381-022
FLATWARE MAKER 700.682-010
Forcer Maker 601.381-014
GEM CUTTER 770.281-014
gem expert 199.281-010
GEMOLOGIST 199.281-010
GIRDLER 770.261-014
glass-bead maker 770.381-010
glass blower 770.381-010
Goldsmith 700.281-010
Grainer 700.687-058
GREASE BUFFER 705.684-022
HAMMERSMITH 700.381-022
heat treater 504.687-010
HOLLOW-HANDLE-KNIFE ASSEMBLER 700.684-042
hub cutter 601.381-014
hub-cutter apprentice 601.381-022
Industrial-Diamond Polisher 770.281-014
Injection-Wax Molder 549.685-038
INK PRINTER 652.685-038
INSPECTOR 700.687-034
JEWELER 700.281-010
JEWELER APPRENTICE 700.281-014
jewelry-casting-model maker 709.381-018
jewelry-casting-model-maker apprentice 709.381-022
JEWELRY COATER 590.685-046
jewelry jobber 700.281-010
jewelry repairer 700.281-010
jewelry-repairer apprentice 700.281-014
jewelry setter 700.381-054
JIGGER 705.687-010
jigsaw operator 700.684-046
JIGSAWYER 700.684-046
kiln operator 590.685-034
Knife Glazer 603.685-062
LACQUERER 749.684-034
lapidary 770.281-014
Lapper 700.687-058
LATHE HAND 700.682-014
LATHE OPERATOR 770.382-010
LAY-OUT WORKER 700.381-026
Lining Maker, Hand 739.687-138
Link Assembler 735.687-014
LINKER 735.687-014
linker-up 735.687-014
LOCKET MAKER 700.381-030
MELTER 700.687-042
MESH CUTTER 700.684-050
MIRROR-FINISHING-MACHINE OPERATOR 603.682-022
MODEL-MAKER APPRENTICE 709.381-022
MODEL MAKER I 700.281-018
MODEL MAKER II 709.381-018
molder 502.381-010
MOLDER, BENCH 518.381-022
mold maker 559.684-018
MOLD-MAKER APPRENTICE 700.381-038
MOLD-MAKER HELPER 700.687-050
MOLD MAKER I 700.381-034
MOLD MAKER II 777.381-022
NECKER 692.686-058
Novelty-Chain Maker 700.684-022
OXIDIZER 700.684-054
Pad Assembler 739.687-138
PAINTER 735.687-018
PART MAKER 739.687-138
Pavilion Cutter 770.261-010
pearl dipper 770.687-010
Pearl Hand 735.687-034
pearl maker 770.687-010
pearl peeler 735.381-014
PEARL RESTORER 735.381-014
Pearl Stringer 735.684-010
PEWTER CASTER 502.384-010
PEWTERER 700.261-010
PEWTER FINISHER 700.281-026
PIN-OR-CLIP FASTENER 735.687-022
PLANISHER 700.687-054
Platinumsmith 700.281-010
plier worker 735.687-014
POLISHER 700.687-058
POLISHER, SAND 705.684-070
polishing-machine operator, semiautomatic 603.682-022
power-press supervisor 615.130-010
PREPARER 700.687-062
PREPARER, MAKING DEPARTMENT 700.684-058
PREPARER, SAMPLES AND REPAIRS 700.684-062
PRESS-HAND SUPERVISOR 615.130-010
PROFILE-SAW OPERATOR 700.682-018
PROFILE TRIMMER 607.682-014
Pronger 735.687-034
PULVERIZER 770.687-030
RACKER 735.687-026
Rhinestone Setter 735.687-034
ring maker 700.684-010
RING MAKER 700.381-042
RING STAMPER 700.684-066
ring striker 700.684-066
Rolled-Gold Plater 813.482-010
ROLLER 613.682-018
roller 735.687-042
RUBBER-MOLD MAKER 559.684-018
rubber-off 700.687-058
SAMPLE MAKER I 700.381-046
SAMPLE MAKER II 735.381-018
sand caster 518.381-022
sand-caster apprentice 518.381-010
sawyer 770.382-010
sawyer 700.682-014
SCRAPER 700.687-066
Scratch Brusher 700.687-058
set-up and charger 700.687-026
shaper 700.684-034
Silversmith I 700.281-010

SILVERSMITH II 700.281-022
SILVERWARE ASSEMBLER 700.684-070
sizer 700.684-010
slush caster 502.381-010
SOLDERER 700.381-050
SORTER 735.687-030
SPINNER 700.684-074
splitter 770.381-014
stonecutter 770.281-014
Stone Gluer 735.687-034
STONER 735.684-014
STONE SETTER 735.687-034
STONE SETTER 700.381-054
STONE-SETTER APPRENTICE 700.381-058
straight edger 705.682-014
STRETCHER 700.684-078
STRINGER 509.687-018
Stringer-Up, Soldering Machine 509.687-018
SUPERVISOR 700.130-010
SUPERVISOR 700.131-010
SUPERVISOR, DIAMOND FINISHING 770.131-014
Supervisor, Hand Workers 700.131-010
SUPERVISOR, JEWELRY DEPARTMENT 700.131-018
Supervisor, Machine Workers 700.131-010
SUPERVISOR, PRINTING AND STAMPING 652.130-014
SWEDGER 735.687-038
SYNTHETIC-GEM-PRESS OPERATOR 575.685-078
tipper 705.682-014
tool setter 615.130-010
TRIMMER 705.682-014
TROPHY ASSEMBLER 735.684-018
TUBBER 599.685-098
washer-off 735.687-010
WATCH-BAND ASSEMBLER 700.684-082
WAX MOLDER 549.685-038
WIRE DRAWER 735.687-042
WIRE DRAWING MACHINE OPERATOR 614.382-018

knitting—KNITTING INDUSTRY: This designation includes occupations concerned with knitting tubular or flat fabrics and shaped garments, including hosiery. Occupations concerned with preparing knitting yarns and the finishing of knitted fabrics are found in the TEXTILE INDUSTRY (textile). Occupations concerned with manufacturing garments cut and sewn from knitted fabrics are found in the GARMENT INDUSTRY (garment). Occupations concerned with the weaving of lace are found in the TEXTILE PRODUCTS INDUSTRY, NOT ELSEWHERE CLASSIFIED (tex. prod., nec).

assembler 685.687-010
AUTOCLAVE OPERATOR 587.585-010
automatic clipper and stripper 684.686-010
BAGGER 582.687-010
Band Cutter 781.687-026
Band-Cutting-Machine Operator 686.685-066
batcher tender 689.685-114
beam warper 681.685-018
BEAM-WARPER TENDER, AUTOMATIC 681.685-018
boarder 589.685-010
boarder 589.686-042
boarder 583.687-010
boarder, hand 589.686-042
boarder, machine 589.685-010
boarder, steam 589.686-042
boarder tender 589.686-042
BOARDING-MACHINE OPERATOR 589.685-010
BOXING-AND-PRESSING SUPERVISOR 789.137-010
BUTTONER 782.687-014
BUTTON RECLAIMER 734.687-042
calenderer 580.485-010
CALENDERING-MACHINE OPERATOR 580.485-010
CARDBOARD INSERTER 920.687-062
Circular Knitter 685.665-014
Circular-Knitter Helper 685.686-014
clipper, automatic 684.686-010
CLIPPER, MACHINE 684.686-010
CLOTH DRIER 580.685-014
CLOTH INSPECTOR 685.687-010
cloth spreader 580.685-014
Cloth Weigher 222.387-074
Collarette Separator 789.687-030
Collar Knitter 685.665-014
Collar Separator 789.687-030
Collar Trimmer 781.682-010
COLLECTOR 684.687-022
COLOR MATCHER 582.261-010
combining-machine operator 584.682-014
crocheter 685.682-010
CROCHETER, HAND 782.684-014
CROCHET-MACHINE OPERATOR 685.682-010
CUFF FOLDER 685.687-014
Cuff Knitter 685.665-014
Cuff Presser 583.685-070
Cuff Separator 789.687-030
Cuff Turner 789.687-182
cuff turner 685.687-014
darner 782.684-030
DETACKER 589.685-030
DIPPER 589.687-018
DRAPER 781.684-026
DRIER 581.686-014
drier tender 580.685-014
drum-dyeing-machine operator 582.685-170
DRY CLEANER 589.685-038
dry folder, cloth 589.685-058
Drying-Machine Back-Tender 589.686-010
drying-machine operator 580.685-014
drying-machine operator 581.686-038
drying-machine tender 581.686-014
Dye-Boarding-Machine Operator 589.685-010
dye-house supervisor 582.131-014
DYEING-MACHINE OPERATOR ..... term
DYE-LAB TECHNICIAN 582.384-010
dyer 582.685-170
dyer assistant 582.261-010
DYER, SUPERVISOR 582.131-014
DYE-TUB OPERATOR 582.685-170
Emblem-Fuser Tender 583.685-046
examiner 684.687-010
extractor 589.485-010
Facing-End Trimmer 781.687-070
Facing-Slitter 699.682-030
Finished-Garment Inspector 789.687-070
finisher 580.485-010
Finish Mender 782.684-030
FIXER, BOARDING ROOM 580.380-010
Flat Knitter 685.665-014
Flat-Knitter Helper 685.686-014
fleecer 585.665-010
folder operator 589.685-058
FOLDING-MACHINE OPERATOR 589.685-058
folding-machine operator 580.485-010
FRINGING-MACHINE OPERATOR 685.686-010
FUSING-MACHINE TENDER 583.685-046
GARMENT FOLDER 789.687-066
Garment Looper 689.682-010
GARMENT STEAMER 582.685-078
GARMENT TURNER 789.687-074
Garment Weigher 222.387-074
Greige-Goods Inspector 789.687-070
Greige Mender 782.684-030
grey inspector 684.684-010
Hose Turner 789.687-182
Hosiery Looper 689.682-010
HOSIERY MENDER 782.684-030
HYDRAULIC-PRESS OPERATOR 583.685-054
inspector and clipper 684.684-010
ironer 583.685-070
JACQUARD-PLATE MAKER 685.381-010
Jersey Knitter 685.665-014
Knit-Goods Cutter, Hand 781.684-074
KNIT-GOODS WASHER 582.685-094
Knitted-Cloth Examiner 689.685-038
knitter 685.665-014
knitter 685.665-018
knitter 684.685-010
KNITTER, FULL-FASHIONED GARMENT 685.665-010
knitter helper 685.686-014
knitter, machine 685.665-014
knitter, machine 685.380-010
KNITTER MECHANIC 685.360-010
Knitting Inspector 684.684-010
KNITTING-MACHINE FIXER 689.260-026
KNITTING-MACHINE FIXER, HEAD 689.130-018
KNITTING-MACHINE OPERATOR 685.665-014
knitting-machine operator, automatic 685.380-010
knitting-machine operator, automatic 684.685-010
KNITTING-MACHINE OPERATOR, FULL-FASHIONED HOSIERY, AUTOMATIC 684.682-010
KNITTING-MACHINE OPERATOR HELPER 685.686-014
knitting-machine operator, seamless hosiery 684.685-010

knitting-order distributor 221.667-010
Label Cutter 699.685-014
Lace Inspector 689.685-038
LAMINATING-MACHINE OPERATOR 584.682-014
layer-up 589.685-058
length control tester 684.684-014
LINK-AND-LINK-KNITTING-MACHINE OPERATOR 685.380-010
LOOPER 689.682-010
Looping Inspector 684.684-010
LOOSE-END FINDER, BOBBIN 681.687-014
mangle operator, garments 583.685-070
MANGLER 583.685-070
mangle tender, cloth 580.485-010
MARKING-MACHINE OPERATOR 652.685-050
mender, hand 782.684-030
MENDER, KNIT GOODS 782.684-046
mender, machine 782.684-030
Milanese-Knitting-Machine Operator 685.665-018
muffler fringer 685.686-010
NAPPER TENDER 585.665-010
NEEDLE STRAIGHTENER 628.684-018
ODD-PIECE CHECKER 221.587-018
Paddle-Dyeing-Machine Operator 582.685-170
PAD-EXTRACTOR TENDER 589.485-010
PAIRER 684.687-010
pairer-inspector 684.687-010
Pairer, Odds 684.687-010
Pairer, Substandard 684.687-010
Pantyhose-Crotch-Closing-Machine Operator 787.682-074
PATROLLER 685.687-022
pattern-and-chain maker 685.360-010
PATTERN ASSEMBLER 685.685-014
Pattern-Drum Maker 685.684-010
patternmaker 685.381-010
pattern puncher 685.684-010
PATTERN WHEEL MAKER 685.684-010
Pile-Fabric Knitter 685.665-014
pleating-machine operator 589.685-086
Pocket Creaser 583.685-042
POMPOM MAKER 789.687-126
Preboarder 589.685-010
PRESS FEEDER 583.686-030
PRESS HAND 583.687-010
pressing machine operator 583.685-070
processor 589.485-010
QUALITY-CONTROL TESTER 684.384-010
Raschel-Knitting-Machine Operator 685.665-018
RAVELER 782.687-034
RECORDER 221.587-026
REDYE HAND 789.687-142
reexaminer 684.687-014
REINSPECTOR 684.687-014
Rib-Cloth Knitter 685.665-014
Rib-Trim Separator 789.687-030
roller-presser operator 583.686-030
ROLLING-DOWN-MACHINE OPERATOR 589.685-086
ROLLING-MACHINE TENDER 689.685-114
rolling-up-machine operator 580.485-010
ROLL TURNER 689.685-110
Rotary-Drum Dyer 582.685-170
SAMPLE DISPLAY PREPARER 222.687-026
Seamer 787.682-074
Seamer, Elastic Band 787.682-074
Seamer, Pantyhose 787.682-074
Seaming Inspector 684.684-010
SEAMLESS-HOSIERY KNITTER 684.685-010
seamless sizer 684.684-014
SECONDS HANDLER 782.687-050
Seconds Inspector 789.687-070
section beamer 681.685-018
section warper 681.685-018
SEWER AND INSPECTOR 684.682-014
SEWING-MACHINE OPERATOR 787.682-074
SEWING-MACHINE OPERATOR 787.682-050
SHAKER 589.687-058
Shirt Folder 789.687-066
Shirt Turner 789.687-074
shortage worker 221.587-018
SIZER 684.684-014
size tester 684.684-014
Sleeve Separator 789.687-030
Sleeve Turner 789.687-074
SLITTER 781.684-054
SOCK BOARDER 589.686-042
Sock Examiner 684.684-010
Sock Knitter 684.685-010
sock-knitting-machine operator 684.685-010
SPOT CLEANER 582.684-014
STEAMER-BLOCKER 784.684-070
steam hand 582.685-078
steaming-machine operator 580.685-014
STOCKING INSPECTOR 684.684-010
straightener 628.684-018
STRIPE MATCHER 689.662-014
superintendent, dyeing 582.131-014
SUPERVISOR 684.137-010
Supervisor, Boarding 684.137-010
Supervisor, Inspecting 685.130-010
Supervisor, Knitting I 684.137-010
SUPERVISOR, KNITTING II 685.130-010
Supervisor, Looping I 684.137-010
Supervisor, Looping II 685.130-010
Supervisor, Mending I 684.137-010
Supervisor, Mending II 685.130-010
Supervisor, Pairing And Inspecting 684.137-010
Supervisor, Seaming 684.137-010
Supervisor, Transferring And Boxing 684.137-010
swing-folding-machine operator 589.685-086
Tacker, Elastic Band 787.682-074
Tape Cutter 699.682-030
TAPE STRINGER 782.687-054
THREADER 685.680-010
Tie-Knitter Helper 685.686-014
TIE PRESSER 789.687-178
Tissue Inserter 920.687-062
TOE-CLOSING-MACHINE TENDER 787.685-046
TOE PUNCHER 689.685-162
Toe Sewer 787.682-074
TOPPER 685.687-026
transfer-iron operator 659.685-022
transfer knitter 685.665-010
TRANSFER-MACHINE OPERATOR 659.685-022
TRAY DRIER 581.686-038
Tricot-Knitting-Machine Operator 685.665-018
tricot-warper tender 681.685-018
TRIMMER, MACHINE 781.682-010
TRIMMING-MACHINE OPERATOR 583.685-122
tube turner 689.685-110
TUBULAR-SPLITTING-MACHINE TENDER 686.685-070
tumbler-dyeing-machine operator 582.685-170
TUMBLER TENDER 581.685-062
turner 689.685-110
turning-machine operator 689.685-110
warper tender 681.685-018
Warp-Knitter Helper 685.686-014
WARP-KNITTING-MACHINE OPERATOR 685.665-018
washer 582.684-014
wheel blocker 685.684-010
winder 583.685-122
WORK-TICKET DISTRIBUTOR 221.667-010

laundry & rel.—LAUNDRY, CLEANING, DYEING, AND PRESSING INDUSTRY: This designation includes occupations concerned with washing, dyeing, cleaning, drying, ironing, blocking, and mending of wearing apparel and of household articles, such as blankets, curtains, and rugs, as carried on in commercial laundries and in other establishments and institutions, such as hospitals and hotels. Occupations found in establishments such as rug and upholstery cleaners which work on the customers' premises are classified in this industry. Occupations concerned with laundering wearing apparel and houshold articles in private homes are included in DOMESTIC SERVICE (domestic ser.).

ASSEMBLER 369.687-010
ASSEMBLER, WET WASH 361.687-010
assorter, laundry 361.687-014
attendant, coin-operated laundry 369.677-010
attendant, laundry-and-dry-cleaning service 369.677-010
BAGGER 920.687-018
baller 363.687-018
BLOCKER 363.684-010
Body Presser 363.685-026
Bosom Presser 363.685-026
boucle finisher 363.684-010
Brim Blocker 363.684-014
brusher-down 362.687-014
bundle clerk 361.687-018
Bundle Weigher 361.687-018
carder, blankets 363.687-022
carpet cleaner 369.384-014
CHECKER 369.687-014

Chute Worker 361.687-018
CLASSIFIER 361.687-014
cleaner assistant 362.686-010
cleaner helper 362.686-010
Clipper 361.687-018
clothes marker 369.687-026
combination presser 363.682-014
CONDITIONER-TUMBLER OPERATOR 361.685-010
CONTINUOUS-TOWEL ROLLER 361.685-014
counter attendant 369.477-014
Crown Blocker 363.684-014
Crown-Ironer Operator 363.684-014
CURB ATTENDANT 369.477-010
curtain drier 363.687-022
curtain framer 363.687-022
curtain stretcher 363.687-022
distributor 369.687-010
drier operator 369.685-034
DRY CLEANER 362.382-014
DRY-CLEANER APPRENTICE 362.382-010
dry cleaner, furniture, hand 362.684-022
DRY CLEANER, HAND 362.684-010
DRY-CLEANER HELPER 362.686-010
dry-cleaning-machine operator 362.382-014
dry-cleaning-machine-operator apprentice 362.382-010
dry-cleaning-machine-operator helper 362.686-010
drying-machine operator 369.685-034
drying-tumbler operator 369.685-034
DYER 364.361-010
dyer assistant 364.687-010
DYER HELPER 364.687-010
dye-room helper 364.687-010
entry clerk 369.687-026
FEATHER RENOVATOR 362.685-010
Finisher, Hand 363.681-010
Flatwork Assembler 369.687-010
Flatwork Catcher 363.686-010
Flatwork Feeder 363.686-010
FLATWORK FINISHER 363.686-010
Flatwork Finisher, Hand 363.684-018
Flatwork Folder 363.686-010
Flatwork Supervisor 361.137-010
FLATWORK TIER 361.587-010
Flatwork Washer 361.665-010
FOLDER 369.687-018
FOLDING-MACHINE OPERATOR 369.686-010
Form-Finishing-Machine Operator 363.681-010
Form-Press Operator 363.682-018
fur beater 369.685-014
FUR CLEANER 362.684-014
FUR CLEANER, HAND 362.684-018
FUR CLEANER, MACHINE 369.685-014
fur drummer 369.685-014
fur dry-cleaner 369.685-014
fur dry-cleaner 362.684-014
fur dry-cleaner, hand 362.684-018
FUR-GLAZING-&-POLISHING-MACHINE OPERATOR 369.685-022
fur ironer 369.685-022
FUR IRONER 369.685-018
FURNITURE CLEANER 362.684-022
furniture shampooer 362.684-022
Fur-Polishing-Machine Operator 369.685-022
furrier 362.684-014
garment examiner 369.687-022
garment marker 369.687-026
GLOVE CLEANER, HAND 362.687-010
glove finisher 363.687-010
GLOVE FORMER 363.687-010
glove presser 363.687-010
glove turner and former 363.687-010
handkerchief ironer 363.685-022
HAT BLOCKER 363.684-014
hat finisher 363.684-014
HATTER 369.384-010
HAT TRIMMER 782.381-010
Hot-Head-Machine Operator 363.681-010
INSPECTOR 369.687-022
ironer 363.687-010
IRONER, SOCK 363.687-014
Isolation-Washer 361.665-010
knitted-garment finisher 363.684-010
knitted-goods shaper 363.684-010
LAUNDERER, HAND 361.684-010
LAUNDRY HAND ..... term
LAUNDRY LABORER 361.687-018
LAUNDRY-MACHINE MECHANIC 629.261-010
Laundry-Marker Supervisor 361.137-010
LAUNDRY OPERATOR 369.684-014
Laundry Operator, Finishing 369.684-014
Laundry Operator, Wash Room 369.684-014
LAUNDRY PRICING CLERK 216.482-030
layer-off 363.687-010
LEATHER CLEANER 362.684-026
LEATHER FINISHER 363.682-010
Legger-Press Operator 363.682-018
LINEN CONTROLLER 299.357-010
LINEN GRADER 361.687-022
LINEN-ROOM SUPERVISOR 222.137-014
LINEN-SUPPLY LOAD-BUILDER 920.687-118
Linen-Supply-Room Worker 361.687-018
lining brusher 362.687-014
lining cleaner 362.687-014
Lining Finisher 783.381-014
Lining Presser 363.684-018
Lining Presser 363.682-018
LINING SCRUBBER 362.687-014
MANAGER, BRANCH STORE 369.467-010
MANAGER, LAUNDROMAT 369.167-010
MANAGER, SALES 187.167-138
MARKER 369.687-026
matcher 369.687-010
Mushroom-Press Operator 363.682-018
net checker-hanger 361.687-010
Net Sorter 361.687-018
Overall Washer 361.665-010
PAINTER, RUG TOUCH-UP 364.381-010
Pants Presser, Automatic 363.685-014
PATCHING-MACHINE OPERATOR 361.685-022
pillow cleaner 362.685-010
Pin Sorter And Bagger 361.687-018
Pin Worker 361.687-018
Pleat Presser 363.681-010
PRESSER, ALL-AROUND 363.682-014
presser-and-blocker, knitted goods 363.684-010
presser-and-shaper, knitted goods 363.684-010
PRESSER, AUTOMATIC 363.685-014
PRESSER, HANDKERCHIEF 363.685-022
presser, leather garments 363.682-010
PRESS OPERATOR 363.685-010
press operator, automatic 363.685-014
pricer 216.482-030
puffer 363.687-018
PUFF IRONER 363.687-018
Puff-Iron Operator I 363.681-010
Puff-Iron Operator II 363.682-018
Puller 361.686-010
Rag Baler 920.685-010
Rag Washer 361.665-010
receiving checker 369.687-026
Receiving, Marking, And Washing Supervisor 361.137-010
Return Checker 369.687-014
RUG CLEANER, HAND 369.384-014
RUG-CLEANER HELPER 362.686-014
RUG CLEANER, MACHINE 361.682-010
RUG-DRY-ROOM ATTENDANT 369.685-026
RUG-DYER HELPER 364.687-014
RUG DYER I 364.361-014
RUG DYER II 364.684-010
RUG INSPECTOR 369.687-030
RUG MEASURER 369.367-014
rug-receiving clerk 369.367-014
rug renovator 369.384-014
RUG REPAIRER 782.381-018
rug scrubber 369.384-014
rug shampooer 369.384-014
rug washer 369.384-014
sample dyer 364.361-010
saw-dust machine operator 369.685-014
sawdust-machine operator 362.684-014
SELF-SERVICE-LAUNDRY-AND-DRY-CLEANING ATTENDANT 369.677-010
separator 361.687-014
SERVICE-ESTABLISHMENT ATTENDANT 369.477-014
Sewing Inspector 369.687-022
Shaker, Flatwork 363.686-010
SHAKER, WEARING APPAREL 361.687-026
SHAVER 362.687-018
Shirt-Collar-And-Cuff Presser 363.685-026
Shirt Folder I 369.687-018
Shirt Folder II 363.685-026

leather mfg.

SHIRT-FOLDING-MACHINE OPERATOR 369.685-030
Shirt-Ironer Supervisor 361.137-010
SHIRT PRESSER 363.685-026
Shirt Presser, Automatic 363.685-014
SILK FINISHER 363.681-010
Silk Spotter 362.381-010
sock-and-stocking ironer 363.687-014
sock drier 363.687-014
sock folder 363.687-014
soiled linen distributor 361.687-014
sorter, laundry articles 361.687-014
Sorting-And-Folding Supervisor 361.137-010
SPOTTER I 361.684-018
SPOTTER II 362.381-010
spray dyer 364.684-018
SPRAYER, LEATHER 364.684-018
steam cleaner, machine 361.665-010
STRETCHER-DRIER OPERATOR 363.687-022
stretcher operator 363.687-022
subsorter 369.687-010
SUPERINTENDENT, LAUNDRY 187.167-194
SUPERVISOR, DRY CLEANING 369.137-010
supervisor, industrial garment 222.137-014
SUPERVISOR, LAUNDRY 361.137-010
SUPERVISOR, RUG CLEANING 369.137-014
tagger 369.687-026
Tie Presser 363.681-010
Topper-Press Operator 363.682-018
Topper-Press Operator, Automatic 363.682-018
towel-rolling-machine operator 361.685-014
tumbler-drier operator 369.685-034
TUMBLER OPERATOR 369.685-034
tumbler operator 361.685-010
VAULT CUSTODIAN 369.587-010
Velvet Steamer 363.681-010
washateria attendant 369.677-010
Wash-Clothes Presser 363.682-018
Washer, Blanket 361.665-010
WASHER, HAND 361.687-030
Washer Helper, Machine 361.686-010
WASHER, MACHINE 361.665-010
WASHING-MACHINE LOADER-AND-PULLER 361.686-010
Washing-Machine Loader I 361.686-010
Washing-Machine Loader II 361.687-018
Washroom Supervisor 361.137-010
Wearing-Apparel Assembler 369.687-010
Wearing-Apparel Finisher, Hand 363.684-018
Wearing-Apparel Folder 369.687-018
wearing-apparel presser 363.685-010
wet cleaner, machine 361.665-010
wet washer, machine 361.665-010
Wool Presser 363.682-018
Wool Spotter 362.381-010
Yoke Presser 363.685-026

leather mfg.—LEATHER MANUFACTURING INDUSTRY: This designation includes occupations concerned with cleaning, tanning, currying, finishing, and dressing hides, skins, furs, and pelts to convert them into leather for subsequent use in manufacturing products, such as belts, boots, shoes, gloves, saddles, and dyed furs.

assorter 589.387-010
Back Roller 583.685-094
Bark Tanner 582.482-018
beam-house inspector 585.687-010
BEAMING INSPECTOR 585.687-010
Beating-Machine Operator 585.686-022
Belly Roller 583.685-094
Belly Wringer 589.685-098
bend sorter 589.387-010
bend trimmer 585.684-010
blackener 599.685-094
blacking-machine operator 599.685-094
Blacking-Wheel Tender 582.685-050
Black-Leather Buffer 585.685-018
Black-Leather Trimmer 585.684-010
Bleaching Supervisor 582.131-010
block trimmer 585.684-010
Blue-Leather Setter 589.685-098
Blue-Leather Sorter 589.387-010
blue-line hanger 589.686-026
blue-line trimmer 585.684-010
Blue-Split Trimmer 585.684-010
breaker-wheel operator 582.685-050
BUFFER, MACHINE 585.685-018
buffing-wheel operator 585.685-018
burnisher 585.685-018
buzzle buffer 585.685-018
cellar hand 589.686-026
cementer 585.687-022
Chestnut Tanner 582.482-018
Chrome-Tanning-Drum Operator 582.482-018
Colored-Leather Setter 589.685-098
COLORER, HIDES AND SKINS 582.482-010
colorer, machine 582.482-010
COLOR MATCHER 550.381-010
color mixer 550.381-010
Comber 589.686-022
counter-pocket trimmer 585.684-010
Crop Roller 583.685-094
Crop-Setting-Out-Machine Operator 589.685-098
Cutter 589.686-022
Degreasing-Wheel Operator 582.685-050
Delimer 582.482-014
department helper 589.686-026
doper 584.687-010
Dope Sprayer 584.687-014
DRUM ATTENDANT 582.685-050
Drummer 589.686-022
drum tender 582.482-018
Dry-Mill Worker 582.685-050
Dry Roller 583.685-094
DYE-HOUSE SUPERVISOR 582.131-010
DYE-HOUSE WORKER 582.686-010
Dyeing Supervisor 582.131-010
dye mixer 582.482-010
dyer and washer 582.482-010
dye weigher 582.482-010
edge trimmer 585.684-010
EMBOSSER 690.682-030
embossing-machine operator 690.682-030
embossing-press operator 690.682-030
enameler 584.687-010
extractor operator 589.685-098
extract wringer 589.685-098
Final-Coat Sprayer 584.687-014
finished-leather presser 690.682-030
fitter-up 629.280-010
FLESHER 585.681-010
Fleshing-Machine Operator 585.685-094
floorworker 589.686-022
Frame Maker 860.281-010
FUR BLENDER 783.681-010
Fur Clipper 589.686-022
FUR DRESSER 589.361-010
fur dyer 783.681-010
FUR-FLOOR WORKER 589.686-022
FUR PLUCKER 585.681-014
Fur Puller 589.686-022
fur scraper 585.681-010
Fur Stretcher 589.686-022
fur tinter 783.681-010
Glazing-Machine Operator 583.685-094
grader 585.684-010
grader 589.387-010
Graining-Machine Operator 583.685-094
Greaser 589.686-022
Gum Sprayer 584.687-014
Hair Baler 920.685-010
HAIR-BOILER OPERATOR 582.685-086
HAIR CLIPPER, POWER 789.684-022
HAIR-SPINNING-MACHINE OPERATOR 689.686-030
hand finisher 584.687-010
hefter 589.387-010
hide cleaner 585.681-010
hide examiner 783.687-018
HIDE INSPECTOR 783.687-018
hide-measuring-machine operator 589.685-070
hide sorter 589.387-010
HIDE SPLITTER 690.580-010
HIDE STRETCHER, HAND 580.687-014
INSPECTOR AND SORTER 589.387-010
japanner 584.687-010
Laborer, Beam House 589.686-026
Laborer, Drying Department 589.686-026
laborer, drying department 580.687-014
LABORER, GENERAL 589.686-026
Laborer, Hide House 589.686-026
Laborer, Tan House 589.686-026

Lambskin Trimmer 585.684-010
Leather Baler 920.685-010
LEATHER COATER 584.687-010
leather colorer 582.482-010
leather dresser 584.687-010
leather leveler 690.686-054
leather patcher 585.687-022
leather polisher 583.685-094
leather pourer 584.687-014
leather repairer 585.687-022
leather sander 585.685-018
Leather Softener, Drum 582.482-010
leather sorter 589.387-010
leather sprayer 584.687-014
lime hide inspector 585.687-010
Limer 582.482-014
Lime Trimmer 585.684-010
load mixer 584.687-010
MAINTENANCE MECHANIC 629.280-010
measurer 589.685-070
MEASURING-MACHINE OPERATOR 589.685-070
mill attendant 582.685-050
mixer, pigment 550.381-010
Oak Tanner 582.482-018
Offal Baler 920.685-010
Oiling-Machine Operator 582.685-050
Oil Sprayer 584.687-014
passer 589.387-010
PATCHER 585.687-022
Patent-Leather Sorter 589.387-010
pelt scraper 585.681-010
Pickler 582.482-014
pit tanner 582.482-018
plating-press operator 690.682-030
pourer 584.687-010
pourer 584.687-014
preparer 585.684-010
printer 690.682-030
PULLER, MACHINE 589.685-078
putter-out, machine 589.685-098
Quebracho Tanner 582.482-018
Rabbit Flesher 585.681-010
Raw-Hide Trimmer 585.684-010
Retanned-Leather Roller 583.685-094
retanner 582.482-018
ripper 585.684-010
ROLLER-MACHINE OPERATOR 583.685-094
Roll Filler 629.280-010
roll-press operator 589.685-098
roustabout 589.686-026
Russet-Leather Sorter 589.387-010
scudding inspector 585.687-010
seasoner, hand 584.687-010
Seasoning Sprayer 584.687-014
setter, machine 589.685-098
SHAVING-MACHINE OPERATOR 585.685-094
shearer 585.685-098
shearer 585.685-126
SHEARING-MACHINE FEEDER 585.685-098
Shearing-Machine Operator 585.685-094
smooth plater 690.682-030
snipper 585.684-010
softener 582.685-050
split-leather mosser 584.687-010
SPLITTING-MACHINE FEEDER 690.686-054
Sponger 589.685-098
SPRAYER, HAND 584.687-014
SPRAYER, MACHINE 599.685-094
spray-machine operator 599.685-094
STAKER, MACHINE 580.685-050
stencil sprayer 584.687-014
streaker-off, hand 584.687-010
Stretching-Machine Tender, Frame 580.685-050
striker-out, machine 589.685-098
stuffer, machine 582.685-050
Sueding-Wheel Operator 585.685-018
Sumac Tanner 582.482-018
SUPERVISOR, BEAM DEPARTMENT 589.134-010
Supervisor, Buffing-And-Pasting 589.130-030
Supervisor, Drying-And-Softening 589.130-030
SUPERVISOR, FINISHING ROOM 589.130-018
Supervisor, Fleshing 589.130-022
SUPERVISOR, FUR DRESSING 589.130-022
Supervisor, Fur-Floor Worker 589.130-022
Supervisor, Hanging-And-Trimming 589.130-030
SUPERVISOR, HIDE HOUSE 922.137-014
SUPERVISOR, PACKING ROOM 589.137-010
Supervisor, Shaving-And-Splitting 589.130-030
Supervisor, Shearing 589.130-022
SUPERVISOR, SPLIT AND DRUM ROOM 589.132-014
SUPERVISOR, SPLIT LEATHER DEPARTMENT 589.130-030
SUPERVISOR, TAN ROOM 582.132-018
SUPERVISOR, VAT HOUSE 582.132-022
swabber 584.687-010
tanner 582.482-018
tanner 589.361-010
TANNER, ROTARY DRUM, CONTINUOUS PROCESS 582.482-014
tannery gummer 584.687-010
TANNING-DRUM OPERATOR 582.482-018
Tanning Supervisor 582.131-010
Tanning-Wheel Filler 582.685-050
tawer 582.482-018
temperer 582.685-050
toggler 589.686-026
trimmer and sorter 585.684-010
TRIMMER, HAND 585.684-010
TRIMMER, MACHINE 585.685-126
unbundler 585.684-010
unhairing inspector 585.687-010
Unhairing-Machine Operator 585.685-094
Washing-Machine Operator 582.685-050
wet-milling-wheel operator 582.685-050
Wet Roller 583.685-094
Wet Trimmer 585.684-010
White-Kid Buffer 585.685-018
WOOL PULLER 589.687-050
wringer and setter 589.685-098
WRINGER-MACHINE OPERATOR 589.685-098

leather prod.—LEATHER PRODUCTS INDUSTRY: This designation includes occupations concerned with producing and repairing leather articles, such as belts, harnesses, pocketbooks, power belting, purses, saddles, wallets, jewelry cases, instrument cases, and suitcases and related cases and luggage made of leather and other materials. Occupations concerned with manufacturing boots and shoes are included in the BOOT AND SHOE INDUSTRY (boot & shoe); occupations concerned with the manufacture and repair of garments are included in the GARMENT INDUSTRY (garment); occupations concerned with producing gloves and mittens are included in the GLOVE AND MITTEN INDUSTRY (glove. & mit.).

applier 589.687-034
Applique Sewer 783.682-014
Assembler, Handbags 783.684-010
ASSEMBLER, LEATHER GOODS I 783.684-010
ASSEMBLER, LEATHER GOODS II 783.687-010
Assembly-Department Supervisor 783.132-010
Belting Cutter 585.685-038
belt puncher 690.685-266
belt roller 920.685-070
Boot-Lace Cutter, Machine 585.685-038
Briefcase Sewer 783.682-014
Buckram Cutter 699.682-022
bundler 222.587-046
cartridge belt puncher 690.685-266
case assembler 739.684-034
CASE FINISHER 739.684-034
Case Repairer 739.684-034
cementer, machine 690.686-022
CLICKING-MACHINE OPERATOR 789.382-010
Cloth-And-Leather-Department Supervisor 783.132-010
COATING-MACHINE FEEDER 690.686-022
Coin-Purse Assembler 783.684-010
Coin-Purse Framer 739.684-090
color finisher 589.687-034
Color Sprayer 584.687-014
COVERING-MACHINE TENDER 783.685-010
CREASER 783.685-014
CUSTOM-LEATHER-PRODUCTS MAKER 783.361-010
CUT-LACE-MACHINE OPERATOR 585.685-038
cutter, machine 585.685-038
Cutting-Department Supervisor 783.132-010
DECORATOR 739.684-046
decorator 781.381-018
DISK-AND-TAPE-MACHINE TENDER 783.685-018
EDGE STAINER I 589.685-046
EDGE STAINER II 749.684-022
EMBOSSER 690.682-030
embossing-machine operator 690.682-030
embossing-press operator 690.682-030

Fancy Sewer 783.682-014
Filler And Trimmer 783.687-010
finished-leather presser 690.682-030
FOLDING-MACHINE OPERATOR 690.685-178
Frame Coverer 783.687-010
frame opener 222.687-042
framer 739.684-090
Glove Cutter 781.687-030
glue-machine feeder 690.686-022
GLUE-SPREADING-MACHINE OPERATOR 584.665-014
gusset folder 690.685-178
Handbag Designer 142.061-018
Handbag Finisher 783.682-014
HANDBAG FRAMER 739.684-090
Handbag-Parts Cutter 699.682-022
Handle Attacher 783.687-010
Handle Maker 783.687-010
Handle Sewer 783.682-014
hardware assembler 739.684-046
HARNESS MAKER 783.381-018
Harness Repairer 783.381-018
Hat-Parts Cutter 699.682-022
Holster Maker 783.684-026
INK PRINTER 652.685-038
INSPECTOR, HANDBAG FRAMES 222.687-042
INSPECTOR-REPAIRER 783.684-018
instrument-case finisher 739.684-034
Inverter-And-Clipper 789.687-182
Keycase Assembler 783.684-010
LACE-ROLLER OPERATOR 920.685-070
LAMINATOR I 690.685-258
LAMINATOR II 783.685-022
Leather-Belt-Loop Cutter 690.685-266
LEATHER-BELT MAKER 690.685-266
Leather-Belt Puncher 690.685-266
Leather-Belt Shaper 690.685-266
Leather-Cartridge-Belt Maker 690.685-266
leather-case finisher 739.684-034
Leather Crafter 142.061-018
Leather Cutter 789.382-010
LEATHER CUTTER 783.684-022
Leather-Novelty-Parts Cutter 699.682-022
LEATHER STAMPER 781.381-018
leather-stripping-machine operator 585.685-038
leather tooler 781.381-018
LEATHER WORKER 783.684-026
Lining-Parts Sewer 783.682-014
LUGGAGE MAKER 783.381-022
MARKING-MACHINE TENDER 783.685-026
MATCHER, LEATHER PARTS 783.687-022
Men's Leather-Dress-Belt Maker 690.685-266
MOLDER, FIBERGLASS LUGGAGE 575.685-066
OIL-SEAL ASSEMBLER 739.684-138
pad cutter and assembler 780.381-030
PAD HAND 780.381-030
PASTER, HAND OR MACHINE 783.687-026
plating-press operator 690.682-030
Pocketbook Framer 739.684-090
Pocket-Secretary Assembler 783.684-010
printer 690.682-030
puncher 690.685-266
Purse Framer 739.684-090
RAWHIDE BONE ROLLER 789.684-042
Rifle-Case Repairer 783.684-026
Roller Stainer 749.684-022
SADDLE MAKER 783.381-026
Saddler 783.381-026
Sewing-Department Supervisor 783.132-010
SEWING MACHINE OPERATOR 783.682-014
shaver 585.685-114
Silk-Lining Cutter, Machine 699.682-022
Single-Beam Clicker 699.682-022
SKIVER 690.685-374
Skiver, Hand 690.685-374
smearer 589.687-034
smooth placer 690.682-030
Sole-Stock Cutter 585.685-038
Spanisher 781.381-018
splitter 585.685-114
SPLITTER, MACHINE 585.685-114
Spray Cementer 741.687-018
Spray Stainer 749.684-022
STACKER 222.587-046
STAINER 589.687-034
stripper 585.685-114
SUPERVISOR 783.132-010
SUPERVISOR, PRINTING AND STAMPING 652.130-014
TABLE WORKER 783.687-030
tanned-hide-cutter, machine 585.685-038
tooler 781.381-018
Twin-Beam Clicker 699.682-022
UTILITY BAG ASSEMBLER 783.684-030
Wallet Assembler 783.684-010
Western-Saddle Maker 783.381-026
width stripper 585.685-038
Women's Leather-Belt Maker 690.685-266
zipper-lining folder 690.685-178

library—LIBRARY: This designation includes occupations in all types of libraries, such as circulating, lending (fee), and public libraries, and the libraries of institutions and other organizations, such as universities and schools.

ACQUISITIONS LIBRARIAN 100.267-010
Art Librarian 100.167-026
AUDIOVISUAL LIBRARIAN 100.167-010
book-loan clerk 249.367-046
Bookmobile Clerk 249.367-046
BOOKMOBILE DRIVER 249.363-010
BOOKMOBILE LIBRARIAN 100.167-014
BRAILLE-AND-TALKING BOOKS CLERK 222.587-014
Branch-Library Clerk 249.367-046
Business Librarian 100.167-026
cataloger 100.387-010
CATALOG LIBRARIAN 100.387-010
Chief Librarian, Branch 100.127-010
CHIEF LIBRARIAN, BRANCH OR DEPARTMENT 100.127-010
Chief Librarian, Circulation Department 100.127-010
Chief Librarian, Extension Department 100.127-010
Chief Librarian, General Reference Department 100.127-010
Chief Librarian, Music Department 100.127-010
Chief Librarian, Periodical Reading Room 100.127-010
Chief Librarian, Readers' Advisory Service 100.127-010
Chief Librarian, Work With Blind 100.127-010
CHILDREN'S LIBRARIAN 100.167-018
circulation clerk 249.367-046
Circulation Librarian 100.127-014
City-Library Director 100.117-010
CLASSIFIER 100.367-014
County-Library Director 100.117-010
descriptive catalog librarian 100.387-010
desk attendant 249.367-046
Engineering Librarian 100.167-026
film librarian 100.167-010
hospital librarian 100.167-022
INSTITUTION LIBRARIAN 100.167-022
Law Librarian 100.167-026
LIBRARIAN 100.127-014
librarian, head 100.117-010
librarian, school 100.167-030
LIBRARIAN, SPECIAL COLLECTIONS 100.267-014
LIBRARIAN, SPECIAL LIBRARY 100.167-026
LIBRARY ASSISTANT 249.367-046
library assistant 100.367-018
library attendant 249.367-046
library clerk 249.367-046
Library Clerk, Art Department 249.367-046
LIBRARY CLERK, TALKING BOOKS 209.387-026
LIBRARY CONSULTANT 100.117-014
LIBRARY DIRECTOR 100.117-010
library helper 249.367-046
LIBRARY TECHNICAL ASSISTANT 100.367-018
library technician 100.367-018
Map Librarian 100.167-026
media center director, school 100.167-030
MEDIA SPECIALIST, SCHOOL LIBRARY 100.167-030
Medical Librarian 100.167-026
news information resource manager 100.167-038
NEWS LIBRARIAN 100.167-038
news library director 100.167-038
newspaper library manager 100.167-038
Outreach Librarian 100.127-014
PAGE 249.687-014
patient's librarian 100.167-022
Photo-Graphics Librarian 100.167-038
principal librarian 100.127-010
prison librarian 100.167-022
Readers'-Advisory-Service Librarian 100.127-014
recordings librarian 100.167-010
Reference Librarian 100.127-014

REGISTRATION CLERK	249.365-010
RESTORER, PAPER-AND-PRINTS	109.361-010
runner	249.687-014
senior librarian	100.127-010
shelver	249.687-014
shelving clerk	249.687-014
SHELVING SUPERVISOR	109.137-010
stack clerk	249.687-014
supervising librarian	100.127-010
YOUNG-ADULT LIBRARIAN	100.167-034

light, fix.—LIGHTING FIXTURES INDUSTRY: This designation includes occupations concerned with manufacturing and repairing electric, gas, gasoline, carbide, and kerosene lighting equipment and related products. The principal products of the industry are chandeliers, lighting fixtures, motor vehicle lamps, shades, reflectors, and incandescent electric bulbs. The designation does not include occupations concerned with the production of glass products from raw materials, which are included in the GLASS MANUFACTURING INDUSTRY (glass mfg.).

assembler	729.687-010
ASSEMBLER, ELECTRICAL ACCESSORIES I	729.687-010
Assembler, Fluorescent Lights	723.684-014
ASSEMBLER I	723.684-014
ASSEMBLER II	723.684-018
Assembler, Incandescent Lights	723.684-014
Automobile-Headlight Assembler	729.684-034
automobile-light assembler	729.684-034
Automobile-Taillight Assembler	729.684-034
BASE REMOVER	692.686-014
Baser	692.685-118
BEAD INSPECTOR	725.687-010
BULB FILLER	692.686-022
cable-machine operator	616.682-034
cabling-machine operator	616.682-034
Chandelier Maker	600.380-010
COILED-COIL INSPECTOR	725.684-010
COILER	725.687-014
contact assembler	729.687-010
DECORATOR, LIGHTING FIXTURES	749.684-018
DRILLER AND DEBURRER, REFLECTOR	676.686-014
FIXTURE MAKER	600.380-010
FLASHER ADJUSTER	723.684-022
FOCUSER	725.687-018
GETTERER	725.687-022
getterer	509.685-026
GETTERING-FILAMENT-MACHINE OPERATOR	509.685-026
getter operator	509.685-026
impregnating helper	599.685-050
IMPREGNATOR-AND-DRIER HELPER	599.685-050
lamp decorator	749.684-018
lamp wirer	723.684-014
LIGHT-BULB ASSEMBLER	692.685-118
Light-Bulb Tester	729.684-058
model maker	600.280-054
MODEL MAKER, FLUORESCENT LIGHTING	723.361-010
MOTOR-VEHICLE-LIGHT ASSEMBLER	729.684-034
MOUNTER, HAND	725.684-014
MOUNTER I	692.686-050
MOUNTER II	692.685-126
Neck Cutter	692.685-118
Pull-Socket Assembler	729.687-010
QUALITY-CONTROL INSPECTOR	725.687-026
RIVETER	616.685-054
SAMPLE MAKER, APPLIANCES	600.280-054
Sealer	692.685-118
SEALING-MACHINE OPERATOR	692.685-162
Sprayer, Light Bulbs	599.686-014
Starter Adjuster	724.381-010
STEM MOUNTER	725.684-018
stem-mounting-machine operator	692.686-050
Strand Buncher, Fine Wire	616.682-034
strander operator	616.682-034
STRANDING-MACHINE OPERATOR	616.682-034
SUPERVISOR, FABRICATION DEPARTMENT	723.132-010
switchboard contact assembler	729.687-010
TESTER AND INSPECTOR, LAMPS	723.687-014
TESTER, ELECTRICAL CONTINUITY	729.684-058
Truck-Headlight Assembler	729.684-034
WIPER	723.687-022

logging—LOGGING INDUSTRY: This designation includes occupations concerned with felling trees and cutting trees into logs or products, such as cordwood, shakes, and posts in the forest; yarding and trucking logs from the forest; and grading, sorting, rafting, and reloading logs for transportation to processing plants or shipping terminals. Occupations concerned with the harvesting of Christmas trees and gathering of tree bark, sap, boughs, and seed cones in the forest are included in the FORESTRY INDUSTRY (forestry). Occupations concerned with the transporting of logs by rail are included in the RAILROAD TRANSPORTATION INDUSTRY (r.r. trans.).

Boat Tender	911.663-010
Boomboat Operator	911.663-010
Boom Supervisor	455.134-010
BUCKER	454.684-010
Busheler	454.384-010
Cat Chaser	921.667-014
Cat Hooker	921.687-014
CHAIN SAW OPERATOR	454.687-010
CHASER	921.667-014
chipper	564.662-010
CHOKE SETTER	921.687-014
chopper	454.384-010
CRUISER	459.387-010
cutting supervisor	183.167-038
FALLER I	454.384-010
FALLER II	454.684-014
Feller-Buncher Operator	454.683-010
feller operator	454.683-010
Fire Patroller	372.667-034
Firewood Cutter	454.684-026
FOREST ENGINEER	005.167-018
grapple operator	921.683-058
Grapple Operator Helper	921.687-022
Grapple-Yarder Operator	921.663-066
Head Rigger	921.664-014
heel-boom operator	921.683-058
High-Lead Yarder	921.663-066
hooker	921.131-010
HOOK TENDER	921.131-010
JAMMER OPERATOR	921.683-054
Jammer Operator Helper	921.687-022
LABORER, TANBARK	454.687-014
Landing Scaler	455.487-010
Limber	454.687-010
Loader Helper, Sorting Yard	921.687-022
LOG-CHIPPER OPERATOR	564.662-010
LOGGER	term
LOGGER, ALL-ROUND	454.684-018
Logging-Arch Operator	929.663-010
Logging Contractor	183.167-038
LOGGING-EQUIPMENT MECHANIC	620.281-042
LOGGING-OPERATIONS INSPECTOR	168.267-070
LOGGING-TRACTOR OPERATOR	929.663-010
Logging-Tractor Operator, Swamp	929.663-010
LOG GRADER	455.367-010
log hauler	904.683-010
LOG LOADER	921.683-058
LOG LOADER HELPER	921.687-022
LOG MARKER	455.687-010
LOG MARKER	454.687-018
LOG SCALER	455.487-010
LOG SORTER	455.684-010
Log-Stacker Operator	929.663-010
LOG-TRUCK DRIVER	904.683-010
MANAGER, CAMP	187.167-066
marker	455.687-010
powersaw supervisor	454.134-010
Pullboat Engineer	921.663-066
PULP PILER	922.687-082
pulp roller	922.687-082
Pulpwood Cutter	454.684-026
RAFTER	455.664-010
Rail-Car Operator	919.663-014
Rail Splitter	454.684-022
RIGGER	921.664-014
RIGGER, THIRD	921.687-030
RIGGING SLINGER	921.364-010
RIVER	454.684-022
saw boss	454.134-010
second loader	921.687-022
second rigger	921.664-014
Shake Splitter	454.684-022
Shingle-Bolt Cutter	454.684-022
Shovel-Loader Operator	921.683-058
Side Boss	459.133-010
Skidder Operator	929.663-010
Skid-Grapple Operator	929.663-010

machinery mfg.

Sky-Line Yarder 921.663-066
Slack-Line Yarder 921.663-066
Snaker 919.664-010
SORTING-GRAPPLE OPERATOR 921.683-066
Stave-Block Splitter 454.684-022
Steel-Spar Operator 921.663-066
stiff-neck loader 921.683-054
stumper-feller 454.684-014
SUPERINTENDENT, LOGGING 183.167-038
SUPERVISOR, FELLING-BUCKING 454.134-010
SUPERVISOR, LOGGING 459.133-010
SUPERVISOR, LOG SORTING 455.134-010
tanbark peeler 454.687-014
timber cruiser 459.387-010
timber supervisor 454.134-010
Trailer Steerer 904.683-010
Transfer Engineer 921.663-030
TREE CUTTER 454.684-026
TREE-SHEAR OPERATOR 454.683-010
Triple Drum Operator 921.663-066
Truck Driver, Flatbed 905.663-014
Water Chaser 921.667-014
Water Hauler 905.663-014
WOODS BOSS 459.137-010
woods overseer 459.137-010
yarder operator 921.663-066
YARDING ENGINEER 921.663-066
yarding supervisor 459.133-010
yarding supervisor 183.167-038

machinery mfg.—MACHINERY MANUFACTURING INDUSTRY: This designation includes occupations concerned with manufacturing and repairing all types of machinery not elsewhere classified. Typical of the products of the industry are construction, mining, and related machinery; oil-field machinery and tools; food-products machinery; textile machinery; woodworking machinery; paper mill, pulp mill, and paper-products machinery; printing-trades machinery; smelting and refining equipment; foundry machinery and equipment; and household and service-industry machines; elevators, escalators, conveyors, and hoists; industrial trucks; pumps and pumping equipment; ball and roller bearings; air and gas compressors; blowers, exhaust, and ventilation fans; speed changers, gears, and industrial high speed drives; industrial process furnaces and ovens; mechanical power transmission equipment, not elsewhere classified, general industrial machinery and equipment, not elsewhere classified; non-electrical machinery, not elsewhere classified; and metal type printers' leads and slugs. Occupations concerned with the manufacture of metalworking machinery and accessories are included in the MACHINE TOOLS AND ACCESSORIES INDUSTRY (machine tools).

ASSEMBLER 706.361-010
ASSEMBLER AND WIRER, INDUSTRIAL EQUIPMENT 826.361-010
assembler, hydraulic backhoe 801.261-010
ASSEMBLER, MINING MACHINERY 801.261-010
assembler, portable oil-well drilling rig 801.261-010
assembler, special machine 600.281-022
AUTOMATED EQUIPMENT ENGINEER-TECHNICIAN 638.261-010
BALL SORTER 609.685-010
bearing inspector 706.382-014
BEARING-RING ASSEMBLER 706.684-038
bench hand 600.281-022
BLOWER AND COMPRESSOR ASSEMBLER 801.361-010
CALENDER-ROLL PRESS OPERATOR 692.462-010
caster operator 654.382-010
CASTING-MACHINE OPERATOR 654.382-010
composing-machine operator 650.582-014
Compressor Assembler 801.361-010
Crusher Assembler 706.361-010
engineer, automated equipment 638.261-010
erector 638.261-014
FABRICATOR, INDUSTRIAL FURNACE 826.381-010
field engineer 638.261-018
field servicer 638.261-018
FIELD SERVICE TECHNICIAN 638.261-026
fitter 600.281-022
Fixture Builder 600.281-022
Gasket Attacher 795.687-014
heavy-machinery assembler 638.261-014
HEDDLE-MACHINE OPERATOR 616.685-026
hydraulic and mechanical assembler 801.261-010
JIG FITTER 801.684-010
LETTERER 979.681-010
liner 759.684-050
MACHINE ASSEMBLER 638.361-010
MACHINE-ASSEMBLER SUPERVISOR 638.131-014
MACHINE BUILDER 600.281-022
Machinery Crater 920.684-010
MACHINERY ERECTOR 638.261-014
MACHINE TESTER 629.382-010
machinist, bench 600.281-022
MANUFACTURER'S SERVICE REPRESENTATIVE 638.261-018
MATRIX INSPECTOR 654.687-010
monotype caster 654.382-010
MONOTYPE-KEYBOARD OPERATOR 650.582-014
monotype operator 650.582-014
PAGER 654.687-014
panel assembler and wirer 826.361-010
Pump Assembler 801.361-010
raiser 979.681-010
REED MAKER 709.381-038
REMELTER 502.685-014
robot technician 638.261-026
roller-bearing assembler 706.687-034
ROLLER-BEARING INSPECTOR 706.687-034
rubber insulator 759.684-050
RUBBER LINER 759.684-050
SALVAGE ENGINEER 600.131-014
service engineer 638.261-018
service representative 638.261-018
SEWING-MACHINE ASSEMBLER 706.381-034
Sewing-Machine Attachment Tester 709.382-010
SEWING-MACHINE TESTER 709.382-010
sketcher 979.681-010
SUBASSEMBLER 706.381-038
SUPERVISOR, ELECTRICAL ASSEMBLIES 826.131-014
SUPERVISOR, TYPE-DISK QUALITY CONTROL 979.137-026
SUPERVISOR, TYPE PHOTOGRAPHY 976.131-026
Tank Insulator, Rubber 759.684-050
technician, automated equipment 638.261-010
TESTER, SOUND 706.382-014
tester, vibrator equipment 825.361-014
type caster 654.382-010
TYPE-COPY EXAMINER 979.687-026
TYPE COPYIST 970.381-042
TYPE-PROOF REPRODUCER 652.685-106
unit assembler 706.684-038
Valve Liner, Rubber 759.684-050
Vibrator Assembler 706.361-010
VIBRATOR-EQUIPMENT TESTER 825.361-014
vise hand 600.281-022
WELDER-ASSEMBLER 819.381-010

machine shop—MACHINE SHOP: This designation includes occupations occurring in job, repair, and production machine shops except those that are peculiar to individual industries and those occurring in mass production industries in which the work is highly repetitive and of limited scope, not requiring more than superficial knowledge of immediate processes involved. Aside from these exceptions, the classification covers all machine shop occupations, whether they occur in independently operated machine shops or in machine shops that are operated in conjunction with establishments in various industries.

all-around-gear-machine operator 602.380-010
assembler 706.684-018
ASSEMBLER, PRODUCT 706.684-018
automatic-lathe tender 604.685-026
automatic-screw-machine operator 604.380-022
automatic-screw-machine operator 604.280-014
automatic-screw-machine operator 604.280-018
AUTOMATIC-WHEEL-LINE OPERATOR 609.682-010
BABBITTER 709.684-022
band-saw operator 607.682-010
bar-machine operator, multiple spindle 604.280-014
bar-machine operator, multiple spindle 604.382-010
bar-machine operator, production 604.685-034
bar-machine operator, single spindle 604.280-018
bar-machine operator, single spindle 604.382-014
bench die maker 601.281-010
bench-lathe operator 604.380-018
bevel-gear-generator operator 602.382-018
body-die maker 601.280-010
Bolt-Threading-Machine Operator 604.682-014
BORING-MACHINE OPERATOR 606.382-022
BORING-MACHINE OPERATOR, PRODUCTION 606.685-010
BORING-MACHINE SET-UP OPERATOR, JIG 606.280-010
BORING-MILL SET-UP OPERATOR, HORIZONTAL 606.280-014
Boring-Mill Set-Up Operator, Vertical 606.280-014
Brass Reclaimer 609.684-014
Broach Grinder 603.280-038
BROACHING-MACHINE OPERATOR, PRODUCTION 605.682-014
BROACHING-MACHINE SET-UP OPERATOR 605.382-010

broach operator 605.682-014
Burrer 705.687-014
Burrer-Marker, Axle 705.687-014
cam-milling-machine operator 605.382-026
cam-milling-machine operator 605.280-014
Carbide-Die Maker 601.280-018
carbide grinder 601.380-010
CARBIDE OPERATOR 601.380-010
CARBIDE-POWDER PROCESSOR 510.465-010
Centerless-Grinder Tender 603.685-062
centerless-grinding-machine operator 603.382-014
chucking-lathe operator 604.380-010
Chucking-Machine Setter, Multiple Spindle, Vertical 604.380-014
CHUCKING-MACHINE SET-UP OPERATOR 604.380-010
CHUCKING-MACHINE SET-UP OPERATOR, MULTIPLE SPINDLE, VERTICAL 604.380-014
Chucking-Machine Set-Up Operator, Tool 604.280-022
circular-saw operator 607.682-010
CONTOUR-BAND-SAW OPERATOR, VERTICAL 607.382-010
Contour-Path Tape-Mill Operator 605.380-010
curved-tooth-gear-generator operator 602.382-014
CUT-OFF-SAW OPERATOR, METAL 607.682-010
CUT-OFF SAW TENDER, METAL 607.685-010
cutter grinder 603.280-038
cutter-grinder operator 603.280-038
cutter-head sharpener 603.382-038
cylinder honer 603.482-034
cylindrical grinder, tool 603.280-010
design leader 007.161-010
Diamond-Die Maker 601.280-018
DIE BARBER 705.381-010
die-cast-die maker 601.280-030
die design drafter 007.161-010
DIE DESIGNER 007.161-010
DIE-DESIGNER APPRENTICE 007.161-014
die developer 007.161-010
die-finisher, forging 705.484-014
DIE FINISHER 601.381-010
die fitter 601.381-010
die maker 601.281-010
DIE MAKER, BENCH, STAMPING 601.281-010
DIE MAKER, ELECTRONIC 601.381-042
DIE MAKER, STAMPING 601.280-010
DIE MAKER, TRIM 601.280-014
DIE MAKER, WIRE DRAWING 601.280-018
Die Repairer, Forging 601.280-022
Die Repairer, Stamping 601.280-010
Die Repairer, Trimmer Dies 601.280-014
DIE SINKER 601.280-022
die-sinking-machine operator 605.280-014
die-sinking-machine operator 605.382-026
DIE-TRY-OUT WORKER, STAMPING 601.281-014
Disassembler, Product 706.684-018
DRILL-PRESS OPERATOR 606.682-014
DRILL-PRESS OPERATOR, NUMERICAL CONTROL 606.362-010
DRILL-PRESS SET-UP OPERATOR, MULTIPLE SPINDLE 606.380-010
DRILL-PRESS SET-UP OPERATOR, RADIAL 606.380-014
DRILL-PRESS SET-UP OPERATOR, RADIAL, TOOL 606.380-018
DRILL-PRESS SET-UP OPERATOR, SINGLE SPINDLE 606.682-018
DRILL PRESS TENDER 606.685-026
Drill Sharpener 603.280-038
duplicating-machine operator 605.280-018
Edger Machine Setter 601.280-022
ELECTRICAL-DISCHARGE-MACHINE OPERATOR, PRODUCTION 609.482-010
ELECTRICAL-DISCHARGE-MACHINE SET-UP OPERATOR 609.380-010
Electrician, Machine Shop 829.261-018
Engine Lathe Operator, Numerical Control 604.362-010
ENGINE-LATHE SET-UP OPERATOR 604.380-018
ENGINE-LATHE SET-UP OPERATOR, TOOL 604.280-010
engine-lathe tender 604.685-026
ENGRAVER, TIRE MOLD 605.382-014
erector 706.684-018
external-cylindrical-grinder operator 603.280-010
External-Grinder Tender 603.685-062
external grinder, tool 603.280-010
FILER, HAND, TOOL 705.484-010
FINAL FINISHER, FORGING DIES 705.484-014
FITTER 801.381-014
Flexible Machining System Machinist 600.280-022
forging-die finisher 705.484-014
forging-die sinker 601.280-022
gang-drill-press operator 606.380-010
gauge checker 601.281-018
Gage Maker 601.281-026
gear-and-spline grinder 602.360-010
Gear Burnisher 602.482-010
Gear Cleaner 609.684-014
gear-coding machine operator 602.362-014
gear cutter 602.380-010
gear cutter 602.280-010
GEAR-CUTTING-MACHINE OPERATOR, PRODUCTION 602.685-010
GEAR-CUTTING-MACHINE SET-UP OPERATOR 602.380-010
GEAR-CUTTING-MACHINE SET-UP OPERATOR, TOOL 602.280-010
gear finisher 602.482-010
GEAR-GENERATOR SET-UP OPERATOR, SPIRAL BEVEL 602.382-014
GEAR-GENERATOR SET-UP OPERATOR, STRAIGHT BEVEL 602.382-018
gear-grinding-machine operator 602.382-034
GEAR HOBBER SET-UP OPERATOR 602.382-010
GEAR INSPECTOR 602.362-010
GEAR-LAPPING-MACHINE OPERATOR 602.482-010
gear-machine operator, general 602.380-010
GEAR-MILLING-MACHINE SET-UP OPERATOR 602.382-022
gear nicker 602.482-010
Gear Roller 602.362-014
gear shaper 602.280-010
GEAR-SHAPER SET-UP OPERATOR 602.382-026
GEAR-SHAVER SET-UP OPERATOR 602.382-030
GEAR-SORTING-AND-INSPECTING MACHINE OPERATOR 602.362-014
gear-tooth-grinding-machine operator 602.382-034
gear-tooth-lapping-machine operator 602.482-010
generator operator, straight-bevel gear 602.382-018
gleason-gear generator 602.382-014
GRINDER, GEAR 602.382-034
grinder, hand 603.280-014
grinder, hand 603.280-022
grinder, hand 603.280-010
GRINDER MACHINE SETTER 603.380-010
grinder operator 603.280-038
GRINDER OPERATOR, EXTERNAL, TOOL 603.280-010
GRINDER OPERATOR, SURFACE, TOOL 603.280-014
GRINDER OPERATOR, TOOL 603.280-018
GRINDER SET-UP OPERATOR 603.382-
GRINDER SET-UP OPERATOR, CENTERLESS 603.382-014
Grinder Set-Up Operator, External 603.382-034
GRINDER SET-UP OPERATOR, GEAR, TOOL 602.360-010
Grinder Set-Up Operator, Internal 603.382-034
GRINDER SET-UP OPERATOR, INTERNAL 603.280-022
GRINDER SET-UP OPERATOR, JIG 603.280-026
Grinder Set-Up Operator, Surface 603.382-034
Grinder Set-Up Operator, Thread 603.382-034
GRINDER SET-UP OPERATOR, THREAD TOOL 603.260-010
GRINDER SET-UP OPERATOR, UNIVERSAL 603.280-030
GRINDING MACHINE TENDER 603.685-062
hack-saw operator 607.682-010
hand scraper 705.384-010
hobbing-machine operator 602.382-010
Hob Grinder 603.280-038
hob mill operator 602.685-010
hone operator 603.382-018
honer 603.482-034
honing-machine operator 603.382-018
HONING-MACHINE OPERATOR, PRODUCTION 603.482-034
honing-machine operator, semiautomatic 603.482-034
honing-machine operator, tool 603.382-022
HONING-MACHINE SET-UP OPERATOR 603.382-018
HONING-MACHINE SET-UP OPERATOR, TOOL 603.382-022
horizontal-boring-drilling-and-milling-machine operator 606.280-014
horizontal-boring-mill operator 606.280-014
hypoid-gear generator 602.382-014
inner-diameter grinder, tool 603.280-022
INSPECTION SUPERVISOR 609.131-010
inspector, chief 609.131-010
INSPECTOR, FLOOR 609.361-010
INSPECTOR, GAUGE AND INSTRUMENT 601.281-018
inspector, rough castings 600.281-014
INSPECTOR, SET-UP AND LAY-OUT 601.261-010
INSPECTOR, TOOL 601.281-022
Internal-Grinder Tender 603.685-062
internal grinder, tool 603.280-022
internal-grinding-machine hand 603.280-022
internal-grinding-machine operator 603.280-022
Jig-And-Fixture Maker 601.281-026
jig-borer 606.280-010
JIG-BORING MACHINE OPERATOR, NUMERICAL CONTROL 606.382-014

jig grinder 603.280-026
jig-grinding-machine operator 603.280-026
job honer 603.382-022
JOB SETTER, HONING 603.280-034
JOB SETTER, SPLINE-ROLLING MACHINE 617.480-010
Job Setter, Thread-Rolling Machine 617.480-010
KEYSEATING-MACHINE SET-UP OPERATOR 605.382-018
KNIFE GRINDER 603.382-038
LABORATORY SUPERVISOR 706.131-010
LABORER, GENERAL 609.684-014
Lacquerer 740.684-022
lap hand, tool 705.481-014
LAPPER, HAND, TOOL 705.481-014
LAPPING-MACHINE OPERATOR, PRODUCTION 603.685-070
LAPPING-MACHINE SET-UP OPERATOR 603.382-026
LATHE OPERATOR, NUMERICAL CONTROL 604.362-010
Lathe Set-Up Operator, Large 604.280-010
LATHE TENDER 604.685-026
LAY-OUT INSPECTOR 600.281-014
lay-out worker 600.281-014
LAY-OUT WORKER 600.281-018
machine operator, all around 600.380-018
machine operator, general 600.380-018
machine repairer 600.280-042
MACHINE SETTER 600.360-014
MACHINE SET-UP OPERATOR 600.380-018
machine-shop apprentice 600.280-026
machine shop production worker 609.685-018
MACHINE-SHOP SUPERVISOR, PRODUCTION 609.130-010
MACHINE-SHOP SUPERVISOR, TOOL 600.130-010
machine specialist 600.380-018
machine-tool operator, general 601.280-054
machinist 600.380-018
machinist 601.280-054
MACHINIST 600.280-022
MACHINIST APPRENTICE 600.280-026
MACHINIST, EXPERIMENTAL 600.260-022
machinist, first-class 600.280-022
machinist, general 600.280-022
machinist, general maintenance 600.280-042
machinist, job setter 600.360-014
MAINTENANCE MACHINIST 600.280-042
micromatic-hone operator 603.685-070
milling-machine operator 605.282-018
milling-machine operator, gear 602.382-022
MILLING-MACHINE SET-UP OPERATOR I 605.280-010
MILLING-MACHINE SET-UP OPERATOR II 605.282-010
MILLING-MACHINE SET-UP OPERATOR, NUMERICAL CONTROL 605.380-010
MILLING-MACHINE TENDER 605.685-030
milling-planer operator 605.282-018
model maker, plastic 601.381-030
MOLD FINISHER 705.684-038
MOLD MAKER, DIE-CASTING AND PLASTIC MOLDING 601.280-030
mold maker, plastic molds 601.280-030
Mold Repairer, Die-Casting And Plastic Molding 601.280-030
MOLD STAMPER 709.684-054
multiple-spindle-drilling-machine operator 606.380-010
Nipple-Machine Operator 604.682-014
Numerical Control Machine Machinist 600.280-022
NUMERICAL-CONTROL-MACHINE OPERATOR 609.362-010
NUMERICAL CONTROL MACHINE SET-UP OPERATOR 609.360-010
Oil Extractor 609.684-014
outer-diameter grinder, tool 603.280-010
PANTOGRAPH-MACHINE SET-UP OPERATOR 605.382-022
Pipe-Threading-Machine Operator 604.682-014
PLANER SET-UP OPERATOR, TOOL 605.282-014
Planer-Type Milling-Machine Operator, Numerical Control ... 605.380-010
PLANER-TYPE-MILLING-MACHINE SET-UP OPERATOR 605.282-018
PLASTIC-FIXTURE BUILDER 601.381-030
PLASTIC TOOL MAKER 601.381-026
power-saw operator 607.682-010
precision filer, hand 705.484-010
precision grinder 603.280-018
precision grinder 603.280-022
precision grinder, external 603.280-010
precision grinder, surface 603.280-014
precision grinder, universal 603.280-030
precision-honing-machine operator 603.382-022
precision inspector 601.281-022
precision jig grinder 603.280-026
precision lap hand 705.481-014
precision-lathe operator 604.280-010
precision-thread-grinder operator 603.260-010
PRINTING-ROLLER POLISHER 603.382-030
production broacher 605.682-014
production-drilling-machine operator 606.682-014
production-gear cutter 602.685-010
production grinder 603.685-062
production-honing-machine operator 603.482-034
PRODUCTION-MACHINE TENDER 609.685-018
Profile-Mill Operator, Tape Control 605.380-010
profiler 605.280-014
profiler 605.382-026
PROFILING-MACHINE SET-UP OPERATOR I 605.280-014
PROFILING-MACHINE SET-UP OPERATOR II 605.382-026
PROFILING-MACHINE SET-UP OPERATOR, TOOL 605.280-018
Progressive-Die Maker 601.281-010
prototype machinist 600.260-022
Punch Finisher 601.381-010
quality-control supervisor 609.131-010
REAMER, HAND 709.684-058
Reamer Operator 606.682-014
robotic machine tender, production 609.655-018
Roll Grinder Operator 603.280-010
ROTARY-HEAD-MILLING-MACHINE SET-UP OPERATOR 605.382-030
Rotary Planer Set-Up Operator 605.282-014
rotary-surface grinder 603.280-014
ROUTER SET-UP OPERATOR, NUMERICAL CONTROL 605.360-010
scraper 705.384-010
SCRAPER, HAND 705.384-010
Scrap Wheeler 929.687-030
screw-machine operator 604.280-014
SCREW-MACHINE OPERATOR, MULTIPLE SPINDLE 604.382-010
SCREW-MACHINE OPERATOR, SINGLE SPINDLE 604.382-014
Screw-Machine Repairer 638.261-030
screw-machine setter 604.280-014
SCREW-MACHINE SET-UP OPERATOR 604.380-022
SCREW-MACHINE SET-UP OPERATOR, MULTIPLE SPINDLE 604.280-014
SCREW-MACHINE SET-UP OPERATOR, SINGLE SPINDLE 604.280-018
Screw-Machine Set-Up Operator, Tool 604.280-022
SCREW-MACHINE TENDER 604.685-034
SETTER, COLD-ROLLING MACHINE 617.682-022
set-up-operator, tool 601.280-054
shaper machine hand 605.382-038
shaper operator 605.382-038
SHAPER SET-UP OPERATOR, TOOL 605.382-038
shaping-machine operator 605.382-038
shop mechanic 600.280-042
skid-machine operator 605.382-014
slab-miller operator 605.282-018
SOLAR-FABRICATION TECHNICIAN 809.381-034
Sorter 609.684-014
spiral-gear generator 602.382-014
stamping-die maker, bench 601.281-010
straight-tooth-gear-generator operator 602.382-018
surface grinder 603.280-014
Surface-Grinder Tender 603.685-062
surface-grinding-machine hand 603.280-014
surface-plate inspector 601.281-022
Tape Control Skin-Or-Spar-Mill Operator 605.380-010
Tape Keller Operator 605.380-010
Tapper Operator 606.682-014
TEMPLATE MAKER, EXTRUSION DIE 601.280-038
thread-grinder, tool 603.260-010
THREADING-MACHINE FEEDER, AUTOMATIC I 604.666-010
Threading-Machine Feeder, Automatic II 609.684-014
THREADING-MACHINE OPERATOR 604.682-014
THREADING-MACHINE SETTER 609.380-014
THREAD-MILLING-MACHINE SET-UP OPERATOR 605.382-042
Tire Mold Engraver, Numerical Control 605.382-014
tool-and-die inspector 601.281-022
TOOL-AND-DIE MAKER 601.260-010
TOOL-AND-DIE-MAKER APPRENTICE 601.260-014
Tool-And-Die Repairer 601.260-010
TOOL-AND-DIE SUPERVISOR 601.130-010
tool-and-gauge inspector 601.281-022
tool dresser 603.280-038
tool filer, hand 705.484-010
tool grinder 603.382-038
tool grinder 603.280-038
TOOL-GRINDER OPERATOR 603.280-038
tool-grinding-machine operator 603.280-038
tooling inspector 601.281-022
TOOL-MACHINE SET-UP OPERATOR 601.280-054

TOOL MAKER 601.280-042
TOOL-MAKER APPRENTICE 601.280-058
TOOL MAKER, BENCH 601.281-026
Tool Marker 609.684-014
Tool Repairer 601.280-042
Tool Repairer, Bench 601.281-026
tool-room gear-machine operator 602.280-010
tool-room-lathe operator 604.280-010
tool sharpener 603.280-038
tracer-controlled-milling-machine operator 605.280-018
tracer-lathe set-up operator 604.280-010
Tracing-Lathe Set-Up Operator 604.380-018
TRANSFER-MACHINE OPERATOR 609.685-022
trim die maker 601.280-014
trimmer maker 601.280-014
Turret Lathe Operator, Numerical Control 604.362-010
TURRET-LATHE SET-UP OPERATOR 604.380-026
TURRET-LATHE SET-UP OPERATOR, TOOL 604.280-022
Turret-Lathe Set-Up Operator, Tool, Vertical 604.280-022
turret-lathe tender 604.685-026
universal grinder, tool 603.280-030
VALVE GRINDER 706.684-098
valve lapper 706.684-098

machine tools—MACHINE TOOLS AND ACCESSORIES INDUSTRY: This designation includes occupations concerned with manufacturing and repairing power-driven machines, such as lathes, milling machines, and planers; the manufacture of accessories for such metalworking machines as milling cutters, reamers, taps, twist drills, and dies for the direct machining of metal; and the manufcture of power-driven handtools.

assembler, special machine 600.281-022
bench hand 600.281-022
Broaching-Machine Repairer 638.261-030
detail maker and fitter 600.360-010
DIAMOND-DIE POLISHER 770.381-022
DIAMOND DRILLER 770.381-018
DIAMOND MOUNTER 739.384-010
die cutter, diamond 770.381-022
Die Filer 705.484-010
die polisher 770.381-022
driller, fine-diamond dies 770.381-018
field engineer 638.261-018
field servicer 638.261-018
Finisher, Fine-Diamond Dies 770.381-018
fitter 600.281-022
Honing-Machine Try-Out Setter 600.360-010
loft patternmaker 777.381-038
MACHINE BUILDER 600.281-022
MACHINE TRY-OUT SETTER 600.360-010
machinist, bench 600.281-022
MANUFACTURER'S SERVICE REPRESENTATIVE 638.261-018
PLASTER-PATTERN CASTER 777.381-038
PLASTIC DUPLICATOR 754.684-038
service engineer 638.261-018
service representative 638.261-018
SPOTTER 770.381-042
vise hand 600.281-022

meat products—MEAT PRODUCTS INDUSTRY: This designation includes occupations concerned with slaughtering cattle, hogs, sheep, and other animals; preparing and packing meat products, including lard; dressing and packing poultry, rabbits, and other small game; and drying and freezing eggs. Occupations concerned with the production of oleomargarine, tallow, and certain lubricants are included in the ANIMAL AND VEGETABLE OILS, FATS, AND GREASE INDUSTRY (oils & grease). Occupations concerned with the production of soap are included in the SOAP, CLEANING, AND TOILET PREPARATION INDUSTRY (soap & rel.). Occupations concerned with the preparation of glue are included in the CHEMICAL INDUSTRY (chemical).

Aitchbone Breaker 525.684-018
ANIMAL EVISCERATOR 525.687-010
Backer 525.684-046
bagger 525.587-010
Bagger, Meat 525.587-014
BAND-SAW OPERATOR 525.685-010
beamer 525.687-046
Beef Boner 525.684-010
Beef Grader 525.387-010
Beef-Pluck Trimmer 525.684-038
Beef Ribber 525.684-018
beef trimmer 521.687-106
Belly Opener 525.687-010
Belly Packer 525.687-026
Belly Trimmer 525.684-054
Bladder Trimmer 525.684-038
Blade Boner 525.684-010
BLEACHER, LARD 521.685-026
Bologna Lacer 529.687-034
BONER, MEAT 525.684-010
Bone Sawyer 525.684-018
BOX-TRUCK WASHER 579.687-018
Brain Picker 525.684-034
Breast Sawyer 525.684-018
Bruise Trimmer 525.687-010
Bulk-Sausage-Casing Tier-Off 529.687-034
Bulk-Sausage-Stuffing-Machine Operator 520.685-210
Bung Dropper 525.687-010
Bung Grader 525.684-038
Bung-Gut Tier 525.687-010
bung sewer 529.687-030
BUTCHER, ALL-ROUND 525.381-014
BUTCHER APPRENTICE 525.381-010
Butt Presser 520.685-182
Butt Trimmer 525.684-054
Calf Skinner 525.684-046
Calfskin Trimmer 525.687-046
Calf Sticker 525.684-050
Canadian-Bacon Tier 529.687-034
CARCASS SPLITTER 525.684-018
car ice-bunker filler 910.687-018
CAR ICER 910.687-018
CASING CLEANER 525.686-010
CASING GRADER 529.687-026
casing inspector 529.687-026
Casing-Machine Operator 525.686-010
Casing Packer 525.686-010
Casing Puller 525.684-038
casing runner 525.685-014
CASING-RUNNING-MACHINE TENDER 525.685-014
Casing Salter 525.687-026
CASING SEWER 529.687-030
Casing Soaker 525.686-010
casing sorter 529.687-026
CASING SPLITTER 525.687-014
casing tester 529.687-026
CASING TIER 529.687-034
Cattle Dropper And Pritcher 525.684-046
Cattle Header 525.684-046
Cattle Sticker 525.684-050
Caul-Fat Puller 525.687-010
Chicken Cleaner 525.687-074
Chicken Dresser 525.687-070
CHILLER TENDER 523.585-014
CHILLING-HOOD OPERATOR 523.685-018
Chiseler, Head 525.684-034
CHOPPING-MACHINE OPERATOR 520.685-066
Chuck Boner 525.684-010
Comber 525.587-014
CONVEYOR LOADER I 525.687-018
CONVEYOR LOADER II 525.686-014
COOK 526.685-010
COOK-BOX FILLER 523.685-030
COOK, DOG-AND-CAT FOOD 526.682-014
Cooker And Presser 529.685-202
Cooler-Conveyor Loader 525.686-014
COOLER ROOM WORKER 525.687-022
Cow Trimmer 525.687-046
Crackling-Press Operator 529.685-202
curing packer 522.687-034
CUTLET MAKER, PORK 529.686-022
DEHAIRING-MACHINE TENDER 525.685-018
Dropper, Dehairing Machine 525.685-018
DRY CURER 525.687-026
Fatback Trimmer 525.684-054
Feed-in Tender, Dehairing Machine 525.685-018
FINAL-DRESSING CUTTER 525.684-026
Final-Rail Cutter 525.684-026
Foot Cutter 525.687-074
frankfurter inspector 529.587-014
fresh-meat grader 529.687-106
GAMBRELER 525.687-030
GAMBRELER HELPER 525.687-034
Gizzard-Skin Remover 525.687-074
GRADER, DRESSED POULTRY 529.687-102
GRADER, GREEN MEAT 529.687-106
GRADER, MEAT 525.387-010
Grader, Sausage And Wiener 920.587-018
green-hide inspector 525.687-042

green-meat packer 522.687-034
Gut Puller 525.687-010
Gut Sorter 525.687-010
gutter 525.687-010
Halal Butcher 525.361-010
Ham Boner 525.684-010
Ham-Hock Mopper 525.687-026
Ham Molder 520.685-182
HAM-ROLLING-MACHINE OPERATOR 529.685-138
Ham Sawyer 525.684-018
Hand Molder, Meat 520.685-174
hanger 525.687-086
Hanger, Meat 525.587-014
hanger-off 525.687-030
HASHER OPERATOR 521.685-170
head-bone grinder 521.687-130
head boner 525.684-034
HEAD-MACHINE FEEDER 525.686-018
HEAD TRIMMER 525.684-034
hide grader 525.687-042
HIDE HANDLER 525.687-038
HIDE INSPECTOR 525.687-042
HIDE PULLER 525.685-022
Hide Salter 525.687-038
hide selector 525.687-038
Hide Shaker 525.687-038
Hide Spreader 525.687-038
HIDE TRIMMER 525.687-046
hide washer 582.685-134
Hog Grader 525.387-010
Hog-Head Singer 525.687-098
Hog Ribber 525.684-010
Hog Sawyer 525.684-018
Hog Sticker 525.684-050
Hog Stomach Preparer 529.687-034
icer, air conditioning 910.687-018
injection-machine operator 522.685-086
Islamic Butcher 525.361-010
Jawbone Breaker 525.684-034
Jowl Trimmer 525.684-034
Kosher Cutter And Searcher 525.361-010
LABORER 529.687-130
lard maker 521.685-026
LARD REFINER 529.685-158
lard trimmer 521.687-106
Lard-Tub Washer 599.684-010
Leaf-Fat Scraper 525.687-010
Leak Patcher 525.687-010
Leg Skinner 525.684-046
Lime-Vat Tender 582.685-126
LINKER 529.687-150
LINKING-MACHINE OPERATOR 529.685-162
Liver Trimmer 525.684-038
Loin Boner 525.684-010
Loin Trimmer 525.684-054
Lung Splitter 525.684-038
MEAT GRINDER 521.685-214
meat smoker 525.682-010
Melter Loader 921.685-030
mincing-machine operator 521.685-170
MOLDER, MEAT 520.685-174
neck pinner 525.687-050
NECK SKEWER 525.687-050
OFFAL ICER, POULTRY 525.687-054
OFFAL SEPARATOR 525.684-038
Oil-Expeller 529.685-202
ORDER RUNNER 525.687-058
Packager, Meat 920.587-018
Packer, Dried Beef 920.587-018
Packer, Sausage And Wiener 920.587-018
PAINTER, DEPILATORY 525.687-062
pelt inspector 525.687-042
pelt salter 525.687-038
PICKLE PUMPER 522.685-086
PICKLER 522.687-034
pickle-water-pump operator 522.685-086
Pickling-Drum Operator 582.685-126
pickling grader 529.687-106
PICKLING SOLUTION MAKER 522.485-010
piece-meat trimmer 521.687-106
piece trimmer 521.687-106
Pigskin Trimmer 525.687-046
Plate Boner 525.684-010
POULTRY BONER 525.687-066
POULTRY DRESSER 525.687-070
POULTRY-DRESSING WORKER 525.687-082
POULTRY EVISCERATOR 525.687-074
POULTRY HANGER 525.687-078
POULTRY KILLER 525.684-042
Poultry Picker 525.687-070
POULTRY-PICKING MACHINE TENDER 525.685-026
Poultry Scalder 525.687-070
Press Operator 529.685-202
PRESS OPERATOR, MEAT 520.685-182
Pull-Through Hooker 525.685-018
PULVERIZER 521.685-266
Pumper, Hand 522.685-086
Rabbit Dresser 525.687-010
refrigerator-car icer 910.687-018
RENDERING-EQUIPMENT TENDER 529.685-202
Resin Worker 525.687-094
Retaining-Room Cutter 525.684-026
retrimmer 521.687-106
ribber 525.684-010
Rib Boner 525.684-010
roast tier 525.687-118
Rolled-Ham Lacer 529.687-034
roper 529.687-150
Round Boner 525.684-010
Rump Sawyer 525.684-018
Salt-Bellies Overhauler 525.687-026
salter 525.687-026
salt spreader 525.687-038
SAUSAGE INSPECTOR 529.587-014
sausage linker 529.687-150
SAUSAGE MAKER 520.685-202
SAUSAGE-MEAT TRIMMER 521.687-106
SAUSAGE MIXER 520.685-206
sausage stuffer 520.685-210
Scalder 525.685-018
SCALER-PACKER 929.687-046
Scaler, Sliced Bacon 920.587-018
Scraper, Meat 525.587-014
SEASONING MIXER 520.687-054
selector 525.687-046
SHACKLER 525.687-086
Shactor 525.361-010
SHACTOR HELPER 525.687-090
Shank Boner 525.684-010
SHAVER 525.687-094
Sheep Boner 525.684-010
Sheep Or Calf Grader 525.387-010
SHEEPSKIN PICKLER 582.685-126
Sheep Sticker 525.684-050
shirring tender 525.685-014
Shochet 525.361-010
Shoulder Boner 525.684-010
Shoulder Puncher 525.684-046
Shoulder Sawyer 525.684-018
SHROUDER 525.587-010
Side Splitter 525.684-018
SINGER 525.687-098
skin bundler 525.687-102
SKIN GRADER 525.687-102
SKIN LIFTER, BACON 521.687-126
SKINNER 525.684-046
SKINNING-MACHINE FEEDER 525.686-022
SKIN-PEELING-MACHINE OPERATOR 525.685-030
SKULL GRINDER 521.687-130
slat grader 589.387-018
slat pickler 582.685-126
slaughter-and-butcher apprentice 525.381-010
SLAUGHTERER, RELIGIOUS RITUAL 525.361-010
SLICING-MACHINE OPERATOR 521.685-306
SLUNK-SKIN CURER 525.687-106
Slunk Skinner 525.684-046
Small-Stock Facer 525.684-046
SMOKED MEAT PREPARER 525.587-014
smokehouse attendant 525.682-010
SMOKER 525.682-010
Snout Puller 525.684-034
SOAKER, HIDES 582.685-134
Soaker, Meat 525.587-014
Spareribs Trimmer 525.684-054
spice mixer 520.687-054
Splitter, Head 525.684-034
STEAK TENDERIZER, MACHINE 529.686-082
STEAMER 525.687-110
sticker 525.684-042
STICKER, ANIMAL 525.684-050

stuffed-casing tier 529.687-034
STUFFER 520.685-210
STUNNER, ANIMAL 525.687-114
SUPERVISOR, ABATTOIR 525.131-010
SUPERVISOR, CURED-MEAT PACKING 529.135-014
SUPERVISOR, CURED MEATS 525.132-010
SUPERVISOR, CUTTING AND BONING 525.131-014
SUPERVISOR, POULTRY PROCESSING 525.134-014
SUPERVISOR, SPECIALTY FOOD PRODUCTS 529.137-062
SUPERVISOR, TANK HOUSE 525.132-014
Tallow Pumper 529.685-202
Tankage-Grinder Operator 529.685-202
Tank Charger 529.685-202
TARE WEIGHER 221.587-034
TEMPERATURE INSPECTOR 529.687-202
Temple-Meat Cutter 525.684-034
templer, head 525.684-034
TIER 525.687-118
Tier, Meat 525.587-014
tipper 525.687-070
Toe Puller 525.687-094
Tongue Cutter 525.684-034
Tree Loader, Meat 525.587-014
TRIMMER, MEAT 525.684-054
TRIPE COOKER 526.685-062
TROLLEY CLEANER 529.687-206
turbinated-bone grinder 521.687-130
Turkey Cleaner 525.687-074
Turkey Dresser 525.687-070
TURKEY-ROLL MAKER 525.684-058
vat overhauler 522.687-034
vat packer 522.687-034
vein pumper 522.685-086
Viscera Washer 525.684-038
VOTATOR-MACHINE OPERATOR 529.685-250
WASHER, CARCASS 525.687-122
Washer, Meat 525.587-014
Weasand Rodder 525.687-010
WOOL-AND-PELT GRADER 589.387-018
WOOL PULLER 589.687-050

medical ser.—MEDICAL SERVICES: This designation includes professional occupations concerned with treating and caring for sick and injured persons and animals, wherever such jobs exist. Also included are nonprofessional occupations occurring typically in establishments operated primarily for the care of the sick and injured, such as hospitals, sanitariums, and clinics, or establishments that provide related health services, such as medical laboratories. Occupations of a public health nature, which are generally performed by governmental officials, are included under GOVERNMENT SERVICES (government ser.). Occupations concerned with fabrication of dentures and related dental appliances are included under PERSONAL PROTECTIVE AND MEDICAL DEVICES AND SUPPLIES INDUSTRY (protective dev.).

ACUPRESSURIST 079.271-014
ACUPUNCTURIST 079.271-010
ADMINISTRATOR, HEALTH CARE FACILITY 187.117-010
admissions clerk 205.362-018
ADMITTING OFFICER 205.162-010
allergist 070.101-102
ALLERGIST-IMMUNOLOGIST 070.101-102
allergy specialist 070.101-102
AMBULANCE ATTENDANT 355.374-010
AMBULANCE DRIVER 913.683-010
ANESTHESIOLOGIST 070.101-010
Anesthesiologist Assistant 079.364-018
angiographer 078.362-046
animal health technician 079.361-014
ANIMAL-HOSPITAL CLERK 245.367-010
animal technician 079.361-014
ART THERAPIST 076.127-010
assistant therapy aide 355.377-014
asylum attendant 355.377-014
AUDIOLOGIST 076.101-010
autoclave operator 599.585-010
BIOCHEMISTRY TECHNOLOGIST 078.261-010
BIRTH ATTENDANT 354.377-010
blood-bank-booking clerk 245.367-018
BLOOD-DONOR RECRUITER 293.357-010
BLOOD-DONOR-UNIT ASSISTANT 245.367-014
CALENDAR-CONTROL CLERK, BLOOD BANK 245.367-018
CARDIAC MONITOR TECHNICIAN 078.367-010
CARDIOLOGIST 070.101-014
CARDIOPULMONARY TECHNOLOGIST 078.362-030
CARDIOPULMONARY TECHNOLOGIST, CHIEF 078.161-014
cardiovascular technologist 078.362-030
central-service technician 381.687-010
CENTRAL-SUPPLY WORKER 381.687-010
CENTRIFUGE OPERATOR, PLASMA PROCESSING 599.685-018
CEPHALOMETRIC ANALYST 078.384-010
cephalometric technician 078.384-010
cephalometric tracer 078.384-010
CERTIFIED MEDICATION TECHNICIAN 355.374-014
charge attendant 355.377-014
Charting Clerk 245.362-010
chemical dependency attendant 355.377-014
Chief Electroencephalographic Technologist 078.362-022
chief, nuclear medicine technologist 078.131-010
CHIEF OF NUCLEAR MEDICINE 070.117-010
Chief Ophthalmic Technician 078.361-038
Chief Polysomnographic Technician 078.362-042
chief, radiology 078.162-010
CHIEF TECHNOLOGIST, NUCLEAR MEDICINE 078.131-010
chiropodist 079.101-022
chiropractic 079.101-010
CHIROPRACTOR 079.101-010
CHIROPRACTOR ASSISTANT 079.364-010
CLEANER, HOSPITAL 323.687-010
Clinical Pathologist 070.061-010
Clinical Transplant Coordinator 079.151-010
clinical veterinarian 073.061-030
clinic clerk 205.362-018
COMMUNICATIONS COORDINATOR 239.167-010
company doctor 070.101-078
coordinator, auxiliary personnel 079.127-010
COORDINATOR OF REHABILITATION SERVICES 076.117-010
CORRECTIVE THERAPIST 076.361-010
COUNSELOR, NURSES' ASSOCIATION 045.107-014
counselor, orientation and mobility 076.224-014
CREDIT CLERK, BLOOD BANK 245.367-022
ct technologist 078.362-054
Custodian, Blood Bank 222.387-058
CYTOGENETIC TECHNOLOGIST 078.261-026
CYTOTECHNOLOGIST 078.281-010
DANCE THERAPIST 076.127-018
dean, school of nursing 075.117-030
DENTAL ASSISTANT 079.361-018
DENTAL HYGIENIST 078.361-010
dental surgeon 072.101-010
DENTIST 072.101-010
DERMATOLOGIST 070.101-018
diagnostic cardiac sonographer 078.364-014
diagnostic medical sonographer 078.364-010
DIALYSIS TECHNICIAN 078.362-014
dietary aide 319.677-014
DIET CLERK 245.587-010
Director, Bio-Communications Laboratory 076.104-010
DIRECTOR, COMMUNITY-HEALTH NURSING 075.117-014
DIRECTOR, DENTAL SERVICES 072.117-010
DIRECTOR, DIAGNOSTIC-AND-EVALUATION CLINIC 070.107-018
DIRECTOR, EDUCATIONAL, COMMUNITY-HEALTH NURSING 075.117-018
director, educational, public-health nursing 075.117-018
director, industrial nursing 075.117-026
Director, Medical Records 079.167-014
DIRECTOR, NURSES' REGISTRY 187.167-034
DIRECTOR, NURSING SERVICE 075.117-022
DIRECTOR, OCCUPATIONAL HEALTH NURSING 075.117-026
Director, Occupational Therapy 076.121-010
director of rehabilitative services 076.117-010
DIRECTOR, OUTPATIENT SERVICES 187.117-058
DIRECTOR, PHARMACY SERVICES 074.167-010
Director, Physical Therapy 076.121-014
director, public-health nursing 075.117-014
DIRECTOR, SCHOOL OF NURSING 075.117-030
DIRECTOR, SPEECH-AND-HEARING 079.131-010
Dispensary Clerk 203.362-010
doctor, chiropractic 079.101-010
DOCTOR, NATUROPATHIC 079.101-014
doctor, osteopathic 071.101-010
dosimetrist 078.261-034
druggist 074.161-010
ecg technician 078.362-018
ECHOCARDIOGRAPH TECHNICIAN 078.364-014
educational/development assistant 076.364-010
eeg technologist 078.362-022
ekg technician 078.362-018
ELECTROCARDIOGRAPH TECHNICIAN 078.362-018
ELECTROENCEPHALOGRAPHIC TECHNOLOGIST 078.362-022
ELECTROMYOGRAPHIC TECHNICIAN 078.362-038

EMERGENCY MEDICAL SERVICES COORDINATOR 079.117-010
EMERGENCY MEDICAL TECHNICIAN 079.374-010
emg technician 078.362-038
emt-paramedic 079.364-026
ENDODONTIST 072.101-014
escort, patients 355.677-014
EXECUTIVE DIRECTOR, NURSES' ASSOCIATION 075.117-034
executive secretary, nurses' association 075.117-034
EXERCISE PHYSIOLOGIST 076.121-018
eye specialist 070.101-058
family physician 070.101-026
FAMILY PRACTITIONER 070.101-026
flight physiologist 070.101-030
FLIGHT SURGEON 070.101-030
floor housekeeper 321.137-010
FOOD-SERVICE WORKER, HOSPITAL 319.677-014
foot specialist 079.101-022
Forensic Pathologist 070.061-010
GENERAL PRACTITIONER 070.101-022
Geriatric Nurse Assistant 355.674-014
GYNECOLOGIST 070.101-034
HEALER ..... term
HEALTH-EQUIPMENT SERVICER 359.363-010
health unit clerk 245.362-014
heart specialist 070.101-014
hemodialysis technician 078.362-014
hemotherapist 078.261-042
histologic technologist 078.261-030
histologist 041.061-054
HISTOPATHOLOGIST 041.061-054
HISTOTECHNOLOGIST 078.261-030
HOLTER SCANNING TECHNICIAN 078.264-010
holter technician 078.264-010
Home Health Aide 355.674-014
Home Health Nurse, Licensed Practical 079.374-014
HORTICULTURAL THERAPIST 076.124-018
Hospital Administrator 187.117-010
HOSPITAL-ADMITTING CLERK 205.362-018
Hospital Collection Clerk 241.357-010
hospital-insurance clerk 214.362-022
hospital-receiving clerk 205.362-018
HOUSEKEEPER 321.137-010
housekeeper, hospital 323.687-010
IMMUNOHEMATOLOGIST 078.221-010
INDUSTRIAL THERAPIST 076.167-010
INSERVICE COORDINATOR, AUXILIARY PERSONNEL 079.127-010
instructor of blind 076.224-014
INSURANCE CLERK 214.362-022
internal medicine specialist 070.101-042
INTERNIST 070.101-042
laboratory assistant 078.381-014
laboratory assistant 599.687-026
LABORATORY ASSISTANT, BLOOD AND PLASMA 078.687-010
Laryngologist 070.101-062
linen checker 222.387-030
linen clerk 222.387-030
linen-exchange attendant 222.387-030
LINEN-ROOM ATTENDANT 222.387-030
linen-room houseperson 222.387-030
magnetic resonance imaging technologist 078.362-058
Manager, Tumor Registry 079.362-018
MANUAL-ARTS THERAPIST 076.124-010
MEDICAL ASSISTANT 079.362-010
medical clerk 205.362-018
medical laboratory manager 078.161-010
MEDICAL-LABORATORY TECHNICIAN 078.381-014
medical pathologist 070.061-010
Medical Photographer 143.362-010
Medical Physiologist 041.061-078
MEDICAL RADIATION DOSIMETRIST 078.261-034
MEDICAL-RECORD ADMINISTRATOR 079.167-014
MEDICAL-RECORD CLERK 245.362-010
Medical-Records Auditor 210.382-010
MEDICAL RECORD TECHNICIAN 079.362-014
MEDICAL SECRETARY 201.362-014
medical technician 078.381-014
MEDICAL TECHNOLOGIST 078.261-038
medical technologist, bacteriology 078.261-014
medical technologist, chemistry 078.261-010
MEDICAL TECHNOLOGIST, CHIEF 078.161-010
MEDICAL TECHNOLOGIST, TEACHING SUPERVISOR 078.121-010
MENTAL-RETARDATION AIDE 355.377-018
MICROBIOLOGY TECHNOLOGIST 078.261-014
MORGUE ATTENDANT 355.667-010
MUSIC THERAPIST 076.127-014
naturopathic physician 079.101-014
nerve specialist 070.101-050
NEUROLOGIST 070.101-050
Neuropathologist 070.061-010
Neurosurgeon 070.101-094
NUCLEAR MEDICAL TECHNOLOGIST 078.361-018
nurse see NURSE, PROFESSIONAL .....
nurse aide 355.674-014
NURSE ANESTHETIST 075.371-010
NURSE ASSISTANT 355.674-014
nurse, certified see NURSE, PROFESSIONAL .....
Nurse, College 075.124-010
NURSE, CONSULTANT 075.127-014
NURSE, GENERAL DUTY 075.364-010
NURSE, HEAD 075.137-014
NURSE, INFECTION CONTROL 075.127-034
NURSE, INSTRUCTOR 075.124-018
nurse, licensed see NURSE, PROFESSIONAL .....
NURSE, LICENSED PRACTICAL 079.374-014
NURSE-MIDWIFE 075.264-014
NURSE, OFFICE 075.374-014
NURSE, PRACTICAL 354.374-010
NURSE PRACTITIONER 075.264-010
NURSE, PRIVATE DUTY 075.374-018
NURSE, PROFESSIONAL ..... term
nurse, registered see NURSE, PROFESSIONAL .....
NURSE, SCHOOL 075.124-010
nurse, special 075.374-018
nurse, staff 075.364-010
NURSE, STAFF, COMMUNITY HEALTH 075.124-014
nurse, staff, industrial 075.374-022
NURSE, STAFF, OCCUPATIONAL HEALTH NURSING ... 075.374-022
NURSE, SUPERVISOR 075.167-010
NURSE, SUPERVISOR, COMMUNITY-HEALTH NURSING 075.127-026
NURSE, SUPERVISOR, EVENING-OR-NIGHT 075.127-030
nurse supervisor, industrial nursing 075.137-010
NURSE, SUPERVISOR, OCCUPATIONAL HEALTH NURSING 075.137-010
Nursing Home Administrator 187.117-010
OBSTETRICIAN 070.101-054
OCCUPATIONAL THERAPIST 076.121-010
OCCUPATIONAL THERAPY AIDE 355.377-010
OCCUPATIONAL THERAPY ASSISTANT 076.364-010
oculist 070.101-058
operating-room technician 079.374-022
OPHTHALMIC PHOTOGRAPHER 143.362-014
OPHTHALMIC TECHNICIAN 078.361-038
OPHTHALMOLOGIST 070.101-058
OPTOMETRIST 079.101-018
ORAL AND MAXILLOFACIAL SURGEON 072.101-018
ORAL PATHOLOGIST 072.061-010
oral surgeon 072.101-018
ORDER-CONTROL CLERK, BLOOD BANK 245.367-026
ORDERLY 355.674-018
organ transplant coordinator 079.151-010
ORIENTATION AND MOBILITY THERAPIST FOR THE BLIND 076.224-014
orientation therapist for blind 076.224-014
orientor 076.224-014
ORTHODONTIST 072.101-022
ORTHOPEDIC ASSISTANT 078.664-010
orthopedic cast specialist 078.664-010
Orthopedic Surgeon 070.101-094
ORTHOPTIST 079.371-014
ORTHOTICS ASSISTANT 078.361-022
Orthotics-Prosthetics Assistant 078.361-022
ORTHOTIST 078.261-018
Orthotist-Prosthetist 078.261-018
osteopath 071.101-010
OSTEOPATHIC PHYSICIAN 071.101-010
OTOLARYNGOLOGIST 070.101-062
Otologist 070.101-062
otorhinolaryngologist 070.101-062
OUTPATIENT-ADMITTING CLERK 205.362-030
Outpatient Receptionist 237.367-038
PARAMEDIC 079.364-026
PATHOLOGIST 070.061-010
patient-insurance clerk 214.362-022
PEDIATRIC DENTIST 072.101-026
PEDIATRICIAN 070.101-066
Pediatric Nurse Practitioner 075.264-010
perodontist 072.101-026
PERFUSIONIST 078.362-034
PERIODONTIST 072.101-030

PHARMACIST 074.161-010
Pharmacist, Hospital 074.161-010
pharmacy clerk 074.382-010
PHARMACY TECHNICIAN 074.382-010
PHERESIS SPECIALIST 078.261-042
PHLEBOTOMIST 079.364-022
PHYSIATRIST 070.101-070
PHYSICAL-INTEGRATION PRACTITIONER 076.264-010
physical medicine specialist 070.101-070
PHYSICAL THERAPIST 076.121-014
PHYSICAL THERAPIST ASSISTANT 076.224-010
PHYSICAL THERAPY AIDE 355.354-010
Physical Therapy Aide, Hydrotherapy 355.354-010
Physical Therapy Aide, Transport 355.354-010
physical therapy assistant 076.224-010
physical therapy technician 076.224-010
PHYSICIAN ASSISTANT 079.364-018
physician, general practice 070.101-022
PHYSICIAN, HEAD 070.101-074
physician, industrial 070.101-078
PHYSICIAN, OCCUPATIONAL 070.101-078
PHYSICIAN, RESEARCH ..... term
physiotherapist 076.121-014
pinner 712.687-014
Plastic Surgeon 070.101-094
PODIATRIC ASSISTANT 079.374-018
Podiatric Surgeon 079.101-022
PODIATRIST 079.101-022
Podiatrist, Orthopedic 079.101-022
Podopediatrician 079.101-022
POLYSOMNOGRAPHIC TECHNICIAN 078.362-042
polysomnographic technologist 078.362-042
pooling operator 599.687-026
primary care nurse practitioner 075.264-010
PROCTOLOGIST 070.101-086
Procurement Transplant Coordinator 079.151-010
prosthetic dentist 072.101-034
PROSTHETICS ASSISTANT 078.361-026
PROSTHETIST 078.261-022
PROSTHODONTIST 072.101-034
PSYCHIATRIC AIDE 355.377-014
psychiatric attendant 355.377-014
PSYCHIATRIC TECHNICIAN 079.374-026
PSYCHIATRIST 070.107-014
PUBLIC-HEALTH DENTIST 072.101-038
public-health nurse 075.124-014
PULMONARY-FUNCTION TECHNICIAN 078.262-010
pulmonary-function technologist 078.262-010
QUALITY ASSURANCE COORDINATOR 075.167-014
RADIATION-THERAPY TECHNOLOGIST 078.361-034
radiographer 078.362-026
radiographer, angiogram 078.362-046
radiographer, cardiac catheterization 078.362-050
RADIOLOGICAL-EQUIPMENT SPECIALIST 719.261-014
radiologic electronic specialist 719.261-014
RADIOLOGIC TECHNOLOGIST 078.362-026
RADIOLOGIC TECHNOLOGIST, CHIEF 078.162-010
Radiologic Technologist, Mammogram 078.362-026
RADIOLOGIST 070.101-090
RADIOLOGY ADMINISTRATOR 187.117-062
RADIOPHARMACIST 074.161-014
Receptionist, Doctor's Office 237.367-038
RECREATIONAL THERAPIST 076.124-014
registrar, nurses' registry 187.167-034
resident care aide 355.377-018
RESPIRATORY THERAPIST 076.361-014
RESPIRATORY-THERAPY AIDE 355.674-022
Rhinologist 070.101-062
SAFETY MANAGER 168.167-086
Ship's Doctor 070.101-022
SIPHON OPERATOR 599.687-026
skin specialist 070.101-018
SPECIAL PROCEDURES TECHNOLOGIST, ANGIOGRAM 078.362-046
SPECIAL PROCEDURES TECHNOLOGIST, CARDIAC CATHETERIZATION 078.362-050
SPECIAL PROCEDURES TECHNOLOGIST, CT SCAN 078.362-054
SPECIAL PROCEDURES TECHNOLOGIST, MAGNETIC RESONANCE IMAGING (MRI) 078.362-058
special vascular imaging technologist 078.362-050
STERILIZER 599.585-010
stress technician 078.362-062
STRESS TEST TECHNICIAN 078.362-062
SUPERVISOR, BLOOD-DONOR RECRUITERS 293.137-010
SUPERVISOR, CENTRAL SUPPLY 381.137-014
Supervisor, Cytogenetic Laboratory 078.261-026
Supervisor, Cytology 078.281-010
Supervisor, Histology 078.261-030
Supervisor, Microbiology Technologists 078.261-014
supervisor, public-health nursing 075.127-026
SURGEON 070.101-094
Surgeon Assistant 079.364-018
surgical orderly 079.374-022
Surgical Pathologist 070.061-010
SURGICAL TECHNICIAN 079.374-022
technologist, biochemistry 078.261-010
telemetry technician 078.367-010
therapeutic recreation worker 076.124-014
therapist for blind 076.224-014
tissue technologist 078.261-030
tracer 078.384-010
TRANSPLANT COORDINATOR 079.151-010
TRANSPORTER, PATIENTS 355.677-014
trauma coordinator 079.117-010
Tray-Line Supervisor 319.137-010
tray worker 319.677-014
TUMOR REGISTRAR 079.362-018
ULTRASOUND TECHNOLOGIST 078.364-010
uniform attendant 222.387-030
UNIT CLERK 245.362-014
UROLOGIST 070.101-098
UTILIZATION-REVIEW COORDINATOR 079.267-010
VETERINARIAN, LABORATORY ANIMAL CARE 073.061-010
VETERINARIAN 073.101-010
veterinary assistant 079.361-014
Veterinary-Hospital Attendant 410.674-010
VETERINARY PATHOLOGIST 073.061-030
Veterinary Radiologist 073.101-010
VETERINARY TECHNICIAN 079.361-014
ward attendant 355.377-014
ward clerk 245.362-014
Ward Supervisor 355.377-014
X-Ray-Developing-Machine Operator 976.685-014
x-ray technologist 078.362-026
ZOO VETERINARIAN 073.101-018

metal prod., nec—FABRICATED METAL PRODUCTS, NOT ELSEWHERE CLASSIFIED: This designation includes occupations concerned with manufacturing and repairing metal novelties and specialties, and other metal products not elsewhere classified. Typical products include leaf, hot, wound, coiled, flat, and wire springs; fabricated wire products, such as fencing, screening, and paper clips; metal foil and leaf; and safes and safe deposit boxes.

art-metal worker 619.260-014
art-metal-worker apprentice 619.260-010
art-metal-worker helper 619.484-010
asphalt-machine operator 590.362-014
ASSEMBLER, WIRE-MESH GATE 801.384-010
Automatic-Coil-Winding-Machine Operator 616.485-010
BALE-TIE-MACHINE OPERATOR 616.682-014
BARBED-WIRE-MACHINE OPERATOR 616.382-010
BENCH WORKER 616.485-010
BIRD-CAGE ASSEMBLER 709.684-026
bobbin winder 691.685-026
Bolt-Up Worker 706.684-090
BRIMER 700.687-018
Bushing-And-Broach Operator 706.684-090
cable-machine operator 616.682-034
cabling-machine operator 616.682-034
Catcher 706.684-090
CLIP-BOLTER AND WRAPPER 709.684-038
Clip Riveter 706.684-090
clip wrapper 709.684-038
Closer 616.682-034
Closing Supervisor 691.130-014
coiler 619.482-010
coil-machine operator 616.485-014
CUTCH CLEANER 700.687-030
Double-End-Production Grinder 616.485-010
Double-Spindle-Disk Grinder Tender 603.685-062
Ecclesiastical-Art-Metal Worker 619.260-014
Experimental Fabricator-And-Installer 709.381-046
FENCE-MAKING MACHINE OPERATOR 616.582-010
finished-wire inspector 691.367-010
finish roller 613.682-022
fitter, hand 709.381-042
Flexible-Shaft Winder 619.482-010
GOLDBEATER 700.381-018
GOLD CUTTER 700.684-038

GOLD RECLAIMER 709.685-010
Greaser 706.684-090
Hairspring Winder 616.685-070
HOT BOX OPERATOR 709.685-014
IMPREGNATING-MACHINE OPERATOR 590.362-014
Inspection Supervisor 691.130-014
inspector-and-unloader 709.687-038
INSPECTOR, WIRE 691.367-010
INSPECTOR, WIRE PRODUCTS 709.687-026
Inspector, Wire Rope 691.367-010
JIG BUILDER 761.684-014
KNITTER, WIRE MESH 616.685-030
knitting-machine operator 616.685-030
LABORER, GOLD LEAF 700.687-038
LATHE WINDER 619.482-010
LOAD TESTER 616.685-034
loom helper 616.687-014
Loom Setter, Fourdrinier 616.360-014
LOOM SETTER, WIRE WEAVING 616.360-014
Mold Filler 700.687-038
MOLD SHEET CLEANER 700.687-046
ornamental-metal-fabricator apprentice 619.260-010
ORNAMENTAL-METAL WORKER 619.260-014
ORNAMENTAL-METAL-WORKER APPRENTICE 619.260-010
ORNAMENTAL-METAL-WORKER HELPER 619.484-010
Painter, Spring 599.685-026
PAPERBACK-MACHINE OPERATOR 616.685-046
PATTERNMAKER 693.281-014
Pinner 706.684-090
recoil spring winder 616.685-070
rewinder 920.685-102
ROLLER, GOLD LEAF 709.685-018
ROLLER-MACHINE OPERATOR 611.482-014
roller operator 611.482-014
screen cutter and trimmer 709.684-074
Seamer 709.684-074
SHEARER AND TRIMMER, WIRE SCREEN AND FABRIC 709.684-074
shearer, screen measurer and trimmer 709.684-074
Shoder Filler 700.687-038
SOUVENIR AND NOVELTY MAKER 739.381-050
souvenir assembler 739.381-050
SPIRAL SPRING WINDER 616.685-070
SPIRAL WEAVER 616.685-074
Splicing Supervisor 691.130-014
SPOOLING-MACHINE OPERATOR 691.685-026
Spooling Supervisor 691.130-014
SPRING ASSEMBLER 706.684-090
spring bender 617.482-022
SPRING COILER 616.485-014
Spring Coiler, Hand 619.482-010
SPRING COILING MACHINE SETTER 616.260-018
SPRING FITTER 709.684-078
SPRING FORMER, HAND 709.381-042
SPRING FORMER, MACHINE 617.482-022
SPRING INSPECTOR I 616.361-010
SPRING INSPECTOR II 709.687-038
SPRING MAKER 616.280-010
SPRING SALVAGE WORKER 610.684-014
SPRING TESTER I 612.685-014
SPRING TESTER II 709.687-042
strander operator 616.682-034
STRANDING-MACHINE OPERATOR 616.682-034
Stranding Supervisor 691.130-014
strand-machine operator 616.682-034
STRIP ROLLER 613.682-022
submarine operator 617.482-022
SUPERVISOR 700.131-014
supervisor, coil springs 619.130-026
SUPERVISOR, FENCE MANUFACTURE 617.130-014
Supervisor, Forming And Tempering 616.130-018
SUPERVISOR, HOT-WOUND SPRING PRODUCTION 619.130-026
Supervisor, Leaf-Spring Fabrication 616.130-018
Supervisor, Leaf-Spring Repair 616.130-018
SUPERVISOR, SPRING PRODUCTION 616.130-018
SUPERVISOR, WIRE-ROPE FABRICATION 691.130-014
Swaging-And-Plastic Supervisor 691.130-014
TORSION SPRING COILING MACHINE SETTER 616.260-022
TRUER 616.484-010
TUBE COATER 599.685-102
WEAVER, BENCH LOOM 616.681-010
weaving-machine operator 616.685-046
WIRE-BASKET MAKER 709.687-062
wire-loop-machine operator 616.682-014
WIRE-MESH-FILTER FABRICATOR 709.381-046
WIRE-ROPE-SLING MAKER 709.684-102
Wire Stockkeeper 222.387-058
wire weaver 616.382-014
WIRE WEAVER, CLOTH 616.382-014
WIRE-WEAVER HELPER 616.687-014
WRAPPER 920.685-102
WRAPPER OPERATOR 706.684-110
Zig-Zag-Spring-Machine Operator 616.682-022

mfd. bldgs.—MANUFACTURED BUILDINGS INDUSTRY: This designation includes occupations concerned with fabricating, assembling, and erecting manufactured buildings, such as mobile, modular, and prefabricated homes, sections, and panels in the plant and on the construction site. Occupations normally performed under general contractors or subcontractors in the on-site construction of manufactured as well as other types of buildings are included in the CONSTRUCTION INDUSTRY (construction).

Appliance Installer 869.684-026
ASSEMBLER 869.684-010
ASSEMBLER, COMPONENT 762.684-014
ASSEMBLER, SUBASSEMBLY 869.684-018
Assembler, Utility Buildings 869.684-010
Assembly Supervisor 869.131-030
BUILDER, BEAM 860.684-010
Cabinet-And-Trim Installer 869.684-026
Cabinet Assembler 762.684-014
Cabinet Assembler 763.684-050
CARPENTER I 860.664-010
CARPENTER II 860.681-010
ceiling installer 869.684-038
CLEANER 869.687-018
closet builder 869.684-038
COLUMN PRECASTER 869.667-010
CONCRETE-BUILDING ASSEMBLER 869.664-010
Counter Top Assembler 762.684-014
DOOR ASSEMBLER 806.684-050
Door Installer I 809.684-030
Door Installer II 869.684-026
DRY-WALL APPLICATOR 842.684-014
dry-wall finisher 842.664-010
dry-wall nailer 842.684-014
DRY-WALL SPRAYER 842.684-010
Duct Installer 869.664-014
DUCT MAKER 809.687-010
ELECTRICIAN 824.681-010
FIELD-ASSEMBLY SUPERVISOR 869.131-018
final finisher 869.684-026
Final-Finish Supervisor 869.131-030
finisher, wallboard and plasterboard 842.664-010
Floor Assembler 869.684-018
Floor Finisher 869.684-010
Floor Framer 869.684-010
Frame Assembler 869.684-018
framer 869.684-010
Hardware Installer 869.684-026
HELPER, METAL HANGING 806.667-010
INSPECTOR 869.687-038
INSTALLER 869.684-026
installer, molding and trim 869.684-066
interior paneler, partition setter 869.684-038
Interior Wall Assembler 869.684-018
LAY-OUT WORKER 869.684-034
LOADER 921.687-018
MATERIAL-CREW SUPERVISOR 921.137-014
METAL HANGER 809.684-030
Millroom Supervisor 869.131-030
PANEL INSTALLER 869.684-038
Partition Assembler 762.684-014
PIPE CUTTER 862.682-010
PLUMBER 862.681-010
PLUMBING ASSEMBLER-INSTALLER 862.684-026
PNEUMATIC-HOIST OPERATOR 921.663-046
RAFTER-CUTTING-MACHINE OPERATOR 669.382-014
REPAIRER, MANUFACTURED BUILDINGS 869.384-010
ROOF ASSEMBLER I 869.684-042
Roof Assembler II 869.684-018
Roof Framer 869.684-010
Roof-Panel Hanger 809.684-030
ROOF-TRUSS-MACHINE TENDER 669.685-070
SHEETROCK APPLICATOR 869.684-050
sheetrock installer 842.684-014
sheetrock taper 842.664-010
Sheller 869.684-010
Side Framer 869.684-010

Side-Panel Hanger 809.684-030
SIDER 863.684-014
SIDER 860.684-014
siding applicator 863.684-014
Subassembly Supervisor 869.131-030
SUPERVISOR, COMPONENT ASSEMBLER 762.134-010
supervisor, loading 921.137-014
SUPERVISOR, MANUFACTURED BUILDINGS 869.131-030
SUPERVISOR, METAL HANGING 809.134-014
TAPER 842.664-010
taper and bedder 842.664-010
taper and floater 842.664-010
Tile Installer 869.684-026
TILE SETTER 861.684-018
Trim-Crew Supervisor 869.131-018
TRIMMER 869.684-066
UTILITY WORKER 869.684-074
WHEEL ASSEMBLER 809.684-038
Wheel Installer 869.684-010
Window Installer 809.684-030

military ser.—MILITARY SERVICES: This designation includes occupations in the uniformed military services that are unique to military requirements and for which there are no identifiable counterparts covered by other industry designations. Specific occupations found in the military services that have identifiable civilian job counterparts are classified according to the industrial designations of the appropriate civilian equivalent.

AEROSPACE PHYSIOLOGICAL TECHNICIAN 199.682-010
AIRBORNE SENSOR SPECIALIST 378.382-010
AIRCRAFT LAUNCH AND RECOVERY TECHNICIAN 912.682-010
AMPHIBIAN CREWMEMBER 378.683-010
ANTITANK ASSAULT GUNNER 378.464-010
ARMOR RECONNAISSANCE SPECIALIST 378.363-010
ARTILLERY OR NAVAL GUNFIRE OBSERVER 378.367-010
AVIATION SUPPORT EQUIPMENT REPAIRER 639.281-010
CAMOUFLAGE SPECIALIST 378.684-010
career counselor 166.267-026
COMBAT RIFLE CREWMEMBER 378.684-014
COMBAT SURVEILLANCE AND TARGET ACQUISITION CREWMEMBER 378.687-010
COMBAT SURVEILLANCE AND TARGET ACQUISITION NONCOMMISSIONED OFFICER 378.161-010
COMMAND AND CONTROL SPECIALIST 235.662-010
COUNTERINTELLIGENCE AGENT 378.267-010
DEEP SUBMERGENCE VEHICLE CREWMEMBER 623.281-014
DEEP SUBMERGENCE VEHICLE OPERATOR 911.263-010
DEFENSIVE FIRE CONTROL SYSTEMS OPERATOR 378.382-014
DISASTER OR DAMAGE CONTROL SPECIALIST 378.267-014
drill sergeant 378.227-014
ELECTRONIC INTELLIGENCE OPERATIONS SPECIALIST 193.382-010
FIELD ARTILLERY CREWMEMBER 378.684-018
FIELD ARTILLERY OPERATIONS SPECIALIST 378.367-014
FIELD ARTILLERY SENIOR SERGEANT 378.132-010
FLASH RANGING CREWMEMBER 378.367-018
FLIGHT OPERATIONS SPECIALIST 248.387-010
GRAVES REGISTRATION SPECIALIST 355.687-014
INFANTRY INDIRECT FIRE CREWMEMBER 378.684-022
INFANTRY OPERATIONS SPECIALIST 378.367-022
INFANTRY UNIT LEADER 378.137-010
INFANTRY WEAPONS CREWMEMBER 378.684-026
IN-FLIGHT REFUELING OPERATOR 912.662-010
IN-FLIGHT REFUELING SYSTEM REPAIRER 829.281-018
INTELLIGENCE CLERK 249.387-014
INTELLIGENCE SPECIALIST 059.267-014
LIGHT AIR DEFENSE ARTILLERY CREWMEMBER 378.684-030
MAINTENANCE DATA ANALYST 221.367-038
MARKSMANSHIP INSTRUCTOR 378.227-010
MEDICAL-SERVICE TECHNICIAN 079.367-018
MISSILE FACILITIES REPAIRER 828.281-018
OCEANOGRAPHER, ASSISTANT 025.267-010
OPERATIONS AND INTELLIGENCE ASSISTANT 378.367-026
PHARMACIST ASSISTANT 074.381-010
POWERED BRIDGE SPECIALIST 378.683-014
RECONNAISSANCE CREWMEMBER 378.367-030
RECRUITER 166.267-026
RECRUIT INSTRUCTOR 378.227-014
REDEYE GUNNER 378.682-010
RUBBER AND PLASTICS WORKER 891.684-014
SENIOR ENLISTED ADVISOR 166.167-042
SMOKE AND FLAME SPECIALIST 378.682-014
SOUND RANGING CREWMEMBER 378.362-010
SURVIVAL SPECIALIST 378.227-018
TANK AND AMPHIBIAN TRACTOR OPERATIONS CHIEF 620.137-010
TANK CREWMEMBER 378.683-018
TARGET AIRCRAFT TECHNICIAN 378.281-010
UNATTENDED-GROUND-SENSOR SPECIALIST 378.382-018
VULCAN CREWMEMBER 378.663-010

millwork-plywood—MILLWORK, VENEER, PLYWOOD, AND STRUCTURAL WOOD MEMBERS INDUSTRY: This designation includes occupations concerned with slicing and peeling wood blocks and logs to form veneer sheets, gluing sheets to form plywood or other products, and laminating or fabricating trusses, arches, and other structural members. Occupations concerned with manufacturing nonlaminated roof trusses are included in the MANUFACTURED BUILDINGS INDUSTRY (mfd. bldgs.).

BACK FEEDER, PLYWOOD LAYUP LINE 569.686-010
BARKER OPERATOR 663.682-010
BREAK-OFF WORKER 663.686-014
CHAIN SAW OPERATOR 454.687-010
chute feeder 921.686-022
CLAMP REMOVER 569.687-010
CLIPPER, AUTOMATIC 663.585-010
clipper offbearer 663.686-018
cold-press operator 569.685-058
CORE-COMPOSER FEEDER 669.685-038
CORE-COMPOSER-MACHINE TENDER 569.685-022
core feeder 569.685-042
CORE FEEDER, PLYWOOD LAYUP LINE 569.685-018
core layer, plywood 762.687-026
CORE LAYER, PLYWOOD LAYUP LINE 569.686-014
CORE-LAYING-MACHINE OPERATOR 569.685-026
CREW LEADER, GLUING 569.565-010
CROSSBAND LAYER 762.687-026
defect cutter 663.585-010
drop clipper 663.685-050
dry-clipper tender 663.685-050
EDGE BANDER, MACHINE 762.685-010
EDGE-BANDING-MACHINE OFFBEARER 762.686-010
EDGE-GLUE-MACHINE TENDER 569.685-034
Edge Gluer 569.685-062
edge plugger 769.685-010
face layer 762.687-066
Flitch Hanger 663.686-022
glue spreader helper 762.687-026
glue-spreader operator 569.685-042
GLUE SPREADER, VENEER 569.685-042
GREEN-CHAIN OFFBEARER 663.686-018
Hot-Plate Plywood-Press Feeder 569.686-026
Hot-Plate Plywood-Press Offbearer 569.686-026
HOT-PLATE-PLYWOOD-PRESS OPERATOR 569.685-054
hot-plate-press operator 569.685-054
HYDRAULIC-PRESS OPERATOR 569.685-058
jacker feeder 921.686-022
LABORER, HOT-PLATE PLYWOOD PRESS 569.686-026
LATHE SPOTTER 663.686-022
log-chain feeder 921.686-022
Log Hooker 921.667-022
LOG MARKER 454.687-018
LOG SCALER 455.487-010
Multiple-Cut-Off-Saw Operator 667.682-022
OPERATOR, PREFINISH 562.685-018
PANEL EDGE SEALER 769.685-010
platen-drier operator 563.685-026
Plywood Builder 762.687-026
Plywood Patcher 769.684-030
PLYWOOD-SCARFER TENDER 665.685-022
Plywood-Stock Grader 569.687-034
poler 921.686-022
POND WORKER 921.686-022
QUALITY CONTROL INSPECTOR 569.687-030
Raimann-Machine Operator 669.685-098
rotary-slicing-machine operator 664.662-010
rotary-veneer-machine operator 664.662-010
SAMPLE MAKER, VENEER 769.684-042
scarfer operator 665.685-022
SCARF GLUER 762.684-054
SHEET TURNER 762.687-062
SIDING STAPLER 762.684-058
sinker puller 921.686-022
Skoog-Machine Operator 669.685-098
slip feeder 921.686-022
splicer matcher 769.687-046
SPLICER OPERATOR 569.685-062
STACKER TENDER 921.685-062

straight-slicing-machine operator 663.682-018
SUPERVISOR, DRYING 563.135-010
SUPERVISOR, GREEN END DEPARTMENT 663.132-010
SUPERVISOR, LOG SORTING 455.134-010
SUPERVISOR, VENEER 569.135-010
tape machine tailer 569.686-054
tenderizer tender 669.685-038
TIPPLE TENDER 669.685-090
VENEER CLIPPER 663.685-050
VENEER-CLIPPER HELPER 663.686-030
veneer cutter 663.685-050
VENEER DRIER 563.685-022
VENEER-DRIER FEEDER 563.686-014
veneer-drier tailer 563.685-022
veneer-glue-jointer feedback 665.686-018
veneer gluer 569.685-042
VENEER GRADER 569.687-034
veneer joiner 569.685-074
VENEER JOINTER 665.682-038
VENEER-JOINTER HELPER 665.686-018
VENEER-JOINTER OFFBEARER 665.686-022
veneer-jointer returner 665.686-018
VENEER-LATHE OPERATOR 664.662-010
VENEER MATCHER 769.687-046
veneer-press operator 569.685-054
VENEER REDRIER 563.685-026
VENEER REPAIRER, MACHINE 669.685-098
VENEER-SLICING-MACHINE OPERATOR 663.682-018
Veneer Sorter 921.685-054
veneer splicer 569.685-062
Veneer Stacker 569.687-010
VENEER-STOCK LAYER 762.687-066
VENEER TAPER 569.685-074
VENEER-TAPING-MACHINE OFFBEARER 569.686-054
veneer-taping-machine operator 569.685-074
veneer trimmer 663.685-
WOOD SCRAP HANDLER 564.686-010

mine & quarry—COAL, METAL, AND NONMETAL MINING AND QUARRYING INDUSTRY: This designation includes occupations concerned with extracting coal; metal and nonmetal ores; and rocks, stone, gravel, salt, and sand from underground and surface excavations, such as mines, pits, and quarries. It includes exploraion, prospecting, and development operations, as well as excavation operations such as: undercutting, drilling, and blasting; loading, hauling, and hoisting; and timbering, ventilating, draining, and reclaiming. Also included are the preparation of coal, which includes operations, such as crushing, cleaning, and sizing; the primary (mine-site type) crushing, reduction, and processing of metal and nonmetal ores, rocks, stones, and minerals; and the dressing of ferrous ores. Occupations concerned with the dressing of nonferrous metal ores are included in the SMELTING AND REFINING INDUSTRY (smelt. & refin.).

additive-plant operator 939.362-014
AERIAL-TRAM OPERATOR 932.685-010
Airdox Fitter 862.281-022
air-drill operator 930.684-018
air-hammer operator 930.684-018
AIR-TABLE OPERATOR 549.685-010
Auger Supervisor 939.137-018
BANK BOSS 932.132-010
battery charger 729.684-042
Battery Starter 932.687-010
BELT PICKER 939.687-010
bit grinder 603.685-030
BIT-SHARPENER OPERATOR 603.685-030
BLASTER 931.261-010
bolting-machine operator 930.683-026
BOTTOMER I 932.667-010
Bottomer II 939.667-010
braddisher 869.684-058
breaker boss 549.137-014
Breaker Repairer 630.281-022
bucker 579.484-010
BURNER TENDER 571.685-010
CAGER 939.667-010
calciner 573.382-010
CALCINER OPERATOR 513.362-010
CALCINER-OPERATOR HELPER 513.667-010
Car Cleaner 939.687-014
car distributor 932.167-010
CAR DROPPER 932.683-010
Car Inspector 622.381-030
Carpenter, Mine 860.281-010
car pincher 932.683-010
car runner 932.683-010
Car Salter 939.687-014
Car-Shakeout Operator 921.685-038
Chain-Hoist Operator 921.663-026
channeling-machine operator 930.383-010
CHANNELING-MACHINE RUNNER 930.383-010
check viewer 168.267-074
chute blaster 933.687-010
CHUTE LOADER 932.687-010
chute tapper 933.687-010
cleaner 939.687-014
coal-cutting-machine operator 930.683-014
coal-drier operator 543.682-014
coal inspector 579.484-010
Coal-Mine Inspector 168.267-074
COAL WASHER 541.382-010
coal-washer tender 541.382-010
Colliery Clerk 219.362-010
COMPANY LABORER 939.687-014
CONE OPERATOR 934.685-010
CONTINUOUS-MINING-MACHINE OPERATOR 930.683-010
CONTROLLER, COAL OR ORE 939.167-010
conveyor attendant 939.362-014
CRAYON GRADER 579.684-014
CRAYON SAWYER 677.685-022
crusher, dry-ground mica 579.685-010
crusher operator 939.362-014
CRUSHER SETTER 933.664-010
crusher, wet-ground mica 570.685-038
CUTTER OPERATOR 930.683-014
CUTTER-OPERATOR HELPER 930.687-018
cutting-machine operator 930.683-014
digger 939.687-014
dimension-quarry supervisor 939.137-014
Dinkey Operator, Mine 919.663-014
Dinkey Operator, Slate 919.663-014
director, safety 010.061-026
DISPATCHER 932.167-010
dragger 921.663-050
Dragline Oiler 850.684-018
DREDGE OPERATOR 850.663-010
DREDGE OPERATOR SUPERVISOR 939.132-010
dredge pumper 850.663-010
DRIER-AND-GRINDER TENDER 579.685-010
drier operator 573.382-010
DRIER OPERATOR 543.682-014
Drift Miner 939.281-010
DRILLER HELPER 930.666-010
DRILLER, MACHINE 930.382-010
driller operator 930.382-010
DRILLING-MACHINE OPERATOR 930.482-010
DRY-PLACER-MACHINE OPERATOR 939.382-010
Duck-Bill Operator 850.683-030
DUST-COLLECTOR ATTENDANT 511.685-022
DUST SAMPLER 939.585-010
dynamiter 931.261-010
Electric-Hoist Operator 921.663-026
Entry-Driver Operator 930.683-014
Entry Miner 939.281-010
Feed-Preparation Operator 511.685-050
firer 931.261-010
FLAME CHANNELER 930.684-010
Flume Maker 860.281-010
Foot Cager 939.667-010
foot tender 932.667-010
furnace operator 543.682-014
Gas Inspector 168.267-074
Gravity-Meter Observer 010.261-018
grinding-mill operator 939.362-014
GRINDING-MILL OPERATOR 515.382-010
GRIZZLY WORKER 933.687-010
HARDNESS TESTER 519.585-010
hardness tester 579.484-010
haulage boss 932.167-010
Head Cager 939.667-010
heavy-equipment operator 859.683-010
heavy-equipment-operator apprentice 859.683-014
HEAVY-MEDIA OPERATOR 541.685-010
HOIST OPERATOR 921.663-026
horizontal-drill operator 930.482-010
hydraulic-jack operator 910.663-010
inspector 779.687-026
JACKHAMMER OPERATOR 930.684-018
JACK SETTER 939.684-010
jet channeler 930.684-010

lander 939.667-010
LATRINE CLEANER 939.687-022
LEASE BUYER 191.117-030
leaser 191.117-030
LINER REPLACER 801.664-010
loader 932.687-010
Loader 939.687-014
loader, machine 932.683-014
loader operator 932.683-018
LOADING-MACHINE OPERATOR 932.683-014
LOADING-MACHINE-OPERATOR HELPER 939.686-010
LOADING-SHOVEL OILER 932.667-014
LOAD-OUT SUPERVISOR 921.133-014
long-wall-mining-machine helper 930.666-014
LONG-WALL-MINING-MACHINE TENDER 930.665-010
LONG-WALL SHEAR OPERATOR 930.662-010
machine boss 939.137-018
MACHINE RUNNER ..... term
Magnetometer Operator 010.261-018
MAINTENANCE SUPERVISOR, MOBILE BATTERY EQUIPMENT 638.131-034
materials inspector 579.484-010
measurer 679.567-010
mechanic 630.281-022
MECHANICAL-SHOVEL OPERATOR 932.683-018
Metal-Mine Inspector 168.267-074
MICA INSPECTOR 779.687-026
MICA-LAMINATING-MACHINE FEEDER 579.686-018
MICA PATCHER 579.687-026
MICA-PLATE LAYER 579.685-026
MICA-PLATE LAYER, HAND 579.684-022
MICA SIZER 779.687-030
MICA SPLITTER 779.681-010
MICA-WASHER GLUER 729.687-022
mill attendant 939.362-014
MILLER 570.685-038
mine captain 939.137-018
MINE-CAR REPAIRER 622.381-030
Mine Electrician 824.261-010
MINE INSPECTOR 168.267-074
Mine-Machinery Mechanic 620.261-022
MINER I 939.281-010
MINER II ..... term
Miner, Pick 939.281-010
MINER, PLACER 939.684-014
MINE SUPERINTENDENT 181.117-014
MINING ENGINEER 010.061-014
mining-machine operator ..... see MACHINE RUNNER
MONITOR CAR OPERATOR 939.682-010
motor boss 932.167-010
muck boss 939.137-018
Mucker 939.687-014
mucking-machine operator 932.683-018
Nozzle Worker 939.684-014
oiler 850.684-018
OPERATING ENGINEER 859.683-010
OPERATING-ENGINEER APPRENTICE 859.683-014
ore grader 939.167-010
ore sampler 579.484-010
PANELBOARD OPERATOR 939.362-014
passing boss 932.167-010
PIPE CHANGER 891.564-010
pit car repairer 622.381-030
PIT SUPERVISOR 939.137-014
Placer Miner, Hydraulic 939.684-014
plug-drill operator 930.684-018
POWDER LOADER 931.667-010
Preparation-Plant Repairer 630.281-022
PRESS OPERATOR 575.685-070
PULLEY MAINTAINER 630.687-010
QUARRY PLUG-AND-FEATHER DRILLER 930.684-022
QUARRY SUPERVISOR, DIMENSION STONE 930.134-010
QUARRY SUPERVISOR, OPEN PIT 939.131-010
QUARRY WORKER 939.667-014
railroad-car loader 932.687-010
raise driller 930.683-026
Raise Miner 939.281-010
REPAIRER 630.281-022
RESEARCH ENGINEER, MINING-AND-OIL-WELL EQUIPMENT 010.061-022
roaster 573.382-010
Rock Contractor 939.281-010
ROCK-DUST SPRAYER 939.687-026
rock splitter 930.684-022
ROOF BOLTER 930.683-026
room boss 939.137-018
Rotary-Drill Operator 930.382-010
Rotary-Dump Operator 921.685-038
ROTARY-KILN OPERATOR 573.382-010
SAFETY ENGINEER, MINES 010.061-026
safety inspector 168.267-074
SAFETY-LAMP KEEPER 729.684-042
SALES ENGINEER, MINING-AND-OIL-WELL EQUIPMENT AND SERVICES 010.151-010
SAMPLER 579.484-010
SAMPLE TESTER-GRINDER 519.585-018
SAND FILLER 939.687-034
SANDFILL OPERATOR 939.485-010
Sandfill Operator, Surface 939.485-010
Sandfill Operator, Underground 939.485-010
SAND PLANT ATTENDANT 934.685-014
Sandstone Splitter 930.684-022
scraper 939.687-014
SCRAPER-LOADER OPERATOR 921.663-050
Scraper Operator 850.683-010
SCREEN-AND-CYCLONE REPAIRER 630.664-014
SCREEN REPAIRER, CRUSHER 630.684-030
SECTION SUPERVISOR 939.137-018
SHAFT MECHANIC 899.684-034
shaft repairer 899.684-034
Shaft Sinker 939.281-010
shaft tender 899.684-034
SHAKER TENDER 934.685-018
SHALE PLANER OPERATOR 930.663-010
SHALE PLANER OPERATOR HELPER 930.667-010
shift boss 939.137-018
shooter 931.261-010
shop blacksmith 622.381-030
SHORE HAND, DREDGE OR BARGE 939.667-018
shot firer 931.261-010
shot lighter 931.261-010
Shoveler 939.687-014
shovel operator 932.683-018
SHUTTLE-CAR OPERATOR 932.683-022
skip tender 939.667-010
Slope-Hoist Operator 921.663-026
sluice tender 939.684-014
slusher operator 921.663-050
sorter 933.687-010
Specimen Boss 939.137-018
SPIRAL RUNNER 934.685-022
splitter 779.681-010
spragger 932.683-010
Steam-Hoist Operator 921.663-026
STONE GRADER 679.567-010
Stope Miner 939.281-010
STOPPING BUILDER 869.684-058
strip-mine supervisor 939.137-014
Stripper 939.687-014
STRIPPING-SHOVEL OILER 850.684-018
STRIPPING-SHOVEL OPERATOR 850.663-026
superintendent, colliery 181.117-014
superintendent, quarry 181.117-014
SUPERVISOR 570.137-010
Supervisor, Blasting 939.137-014
Supervisor, Drilling And Shooting 939.137-014
supervisor, general 181.167-018
SUPERVISOR, MINE 181.167-018
SUPERVISOR, PREPARATION PLANT 549.137-014
SUPERVISOR, RECLAMATION 850.133-010
SURFACE SUPERVISOR 932.132-014
switch-house operator 939.362-014
TAILER 930.666-014
TEST ENGINEER, MINING-&-OILFIELD EQUIPMENT 010.061-030
tester 579.484-010
TIER-AND-DETONATOR 931.664-010
Timber Cutter 667.682-022
TIMBER FRAMER 869.381-034
TIMBER-FRAMER HELPER 869.687-042
timber repairer 869.381-034
Timber Sprinkler 741.687-018
Tipple Repairer 630.281-022
tipple supervisor 549.137-014
Top Cager 939.667-010
Tower-Hoist Operator 921.663-026
track-laying-machine operator 910.663-010
TRACK-MOVING-MACHINE OPERATOR 910.663-010
Tractor-Drill Operator 930.382-010
Tractor Operator, Battery 929.683-014
Trimmer 939.687-014

motion picture

Tractor-Drill Operator ..... 930.3[illegible]-010
Tractor Operator, Battery 929.683-014
Trimmer 939.687-014
Tripod-Drill Operator 930.684-018
TROLLEY-WIRE INSTALLER 821.684-022
Tugger Operator 921.663-026
Tunnel Miner 939.281-010
turn keeper 932.167-010
undercutter 930.683-014
ventilation worker 869.684-058
Wagon-Drill Operator 930.382-010
Walking-Dragline Oiler 850.684-018
wash-box operator 541.382-010
wash-box operator 939.362-014
WASHER-AND-CRUSHER TENDER 939.685-014
washer operator 541.382-010
washery boss 549.137-014

motion picture—MOTION PICTURE INDUSTRY: This designation includes occupations concerned with producing motion pictures. It does not include entertainers or occupations involved in the distribution and projection of films in theaters, which are included in AMUSEMENT AND RECREATION (amuse. & rec.). Occupations involved in the recording of images on electromagnetic tape for transmission by television stations or networks are included in the RADIO AND TELEVISION BROADCASTING INDUSTRY (radio-tv broad.). Occupations concerned with developing, printing, and preparing film are included in the PHOTOFINISHING INDUSTRY (photofinishing).

Ager 840.681-010
animated-cartoon artist 141.081-010
animator 141.081-010
ART DIRECTOR 142.061-062
assistant camera operator 962.361-010
audiovisual equipment operator 960.362-010
board operator 194.262-018
BODY-MAKE-UP ARTIST 333.271-010
boom operator 962.384-010
buyer-renter 162.157-030
CAMERA OPERATOR 143.062-022
CAMERA OPERATOR, ANIMATION 143.382-010
camera operator, first 143.062-010
camera operator, head 143.062-010
Camera Operator, Second 143.062-022
Camera Operator, Sound Effects 143.062-022
CAMERA OPERATOR, TITLE 976.382-010
Camera-Storeroom Clerk 222.387-058
CAPTION WRITER 203.362-026
Cartoon-Background Artist 141.081-010
CARTOONIST, MOTION PICTURES 141.081-010
Cartoonist, Special Effects 141.081-010
CHIEF PROJECTIONIST 960.132-010
cinematographer 143.062-010
cinetechnician 714.281-018
cinetechnician supervisor 714.131-010
Construction Grip 962.687-022
CONTINUITY CLERK 209.382-010
COSTUMER 346.261-010
COSTUMER ASSISTANT 346.374-010
custodian, wardrobe 346.374-010
cutter 962.262-010
daily release and dupe printer 976.682-010
Decalcomaniac 976.381-010
DENSITY CONTROL PUNCHER 976.684-010
developer operator 976.382-018
Developing-Machine Tender 976.685-018
DIRECTOR, CASTING 159.267-010
DIRECTOR, MOTION PICTURE 159.067-010
DIRECTOR, MUSIC 152.047-018
DIRECTOR OF PHOTOGRAPHY 143.062-010
Director of Photography, Special Effects 143.062-010
DIRECTOR, RESEARCH 052.167-010
Disc Recordist 962.382-010
DOUBLE 961.364-010
DRAPER 962.381-010
Drying Machine Tender 976.685-018
DUBBING-MACHINE OPERATOR 962.665-010
editing-machine operator 962.382-014
editor, sound 962.382-014
ELECTRICIAN, CHIEF 824.137-010
ENTERTAINER ..... term
EXTRA 159.647-014
FILM DEVELOPER 976.382-018
FILM INSPECTOR 976.684-014
FILM LABORATORY TECHNICIAN 976.684-014
FILM LABORATORY TECHNICIAN I 976.381-010
FILM LABORATORY TECHNICIAN II 976.685-018
Film Librarian 222.367-026
FILM LOADER 962.687-014
Film Numberer 976.685-018
FILM OR VIDEOTAPE EDITOR 962.262-010
FILM PRINTER 976.682-010
Film Recordist 962.382-010
FILM-REPLACEMENT ORDERER 976.567-010
Film Splicer 976.684-014
film technician 976.131-014
FILM-VAULT SUPERVISOR 222.137-010
GARDENER, SPECIAL EFFECTS AND INSTRUCTION MODELS 406.381-010
General Extra 159.647-014
Greens Planter 406.381-010
GRIP 962.687-022
GRIP BOSS 962.137-010
ILLUSTRATOR, SET 141.061-030
INKER AND OPAQUER 970.681-018
laboratory contact supervisor 976.131-014
LIGHT TECHNICIAN 962.362-014
LOCATION MANAGER 191.167-018
MACHINIST, MOTION-PICTURE EQUIPMENT 714.281-018
MAKE-UP ARTIST 333.071-010
Matte Cutter 976.684-010
MICROPHONE-BOOM OPERATOR 962.384-010
miniature-set builder 962.381-018
MINIATURE-SET CONSTRUCTOR 962.381-018
Miniature Set Designer 142.061-046
mixer operator 194.262-018
model-set artist 962.381-018
motion-picture-camera repairer 714.281-018
motion-picture commentator 150.147-010
MOTION-PICTURE PROJECTIONIST 960.362-010
MOTOR-POWER CONNECTOR 962.684-018
musical director 152.047-018
music department head 152.047-018
music mixer 194.262-018
NARRATOR 150.147-010
Negative Developer 976.382-018
Negative Notcher 976.684-010
operative supervisor 962.134-010
operator, lights 962.362-014
OPTICAL-EFFECTS-CAMERA OPERATOR 143.260-010
OPTICAL-EFFECTS LAYOUT PERSON 962.361-010
optical-effects-line-up person 962.361-010
OUTSIDE PROPERTY AGENT 162.157-030
PAINTER, ANIMATED CARTOONS 970.681-026
painter, set 840.681-010
PAINTER, STAGE SETTINGS 840.681-010
performer see ENTERTAINER
plotter 962.361-010
Positive Developer 976.382-018
positive printer operator 976.682-010
process projectionist 960.362-010
PRODUCER 187.167-174
PRODUCER, ASSISTANT 187.167-182
Production Grip 962.687-022
projectionist 960.362-010
PROPERTY CUSTODIAN 222.387-042
property handler 962.687-022
PROP MAKER 962.281-010
READER 131.087-014
RECORDIST 962.382-010
RECORDIST, CHIEF 962.134-010
RERECORDING MIXER 194.362-014
Rewinder 976.685-018
SALES REPRESENTATIVE, AUDIOVISUAL PROGRAM PRODUCTIONS 259.157-010
scenario writer 131.067-030
Scenic Artist 144.061-010
SCREEN WRITER 131.067-050
script reader 131.087-014
SCRIPT SUPERVISOR 201.362-026
script writer 131.067-050
Sensitometrist 976.381-010
SET DECORATOR 142.061-042
SET DESIGNER 142.061-046
set electrician, assistant chief 962.362-014
set-model builder 962.381-018
Sewing Room Grip 962.687-022
Silent Bit Extra 159.647-014
SINGER 152.047-022
sketch maker 141.061-030

SOUND CUTTER 962.382-014
sound installation worker 194.381-010
SOUND MIXER 194.262-018
Special Ability Extra 159.647-014
SPECIAL EFFECTS SPECIALIST 962.281-018
Stand-By 358.677-010
STAND-IN 961.667-014
Stock Clerk, Makeup 222.387-042
story analyst 131.087-014
STORY EDITOR 132.037-026
studio engineer 194.262-018
studio technician 194.262-018
STUNT PERFORMER 159.341-014
subtitle writer 203.362-026
Supervising Editor, Feature 962.132-010
Supervising Editor, Trailer 962.132-010
SUPERVISING FILM EDITOR 962.132-010
SUPERVISOR, COSTUMING 962.137-018
SUPERVISOR, CUTTING AND SPLICING 976.134-010
Supervisor, Drapery Hanging 962.137-022
SUPERVISOR, FILM PROCESSING 976.131-014
supervisor, grips 962.137-010
SUPERVISOR, MOTION-PICTURE EQUIPMENT 714.131-010
SUPERVISOR, PROPERTIES 962.137-026
SUPERVISOR, PROP-MAKING 962.137-022
SUPERVISOR, SCENIC ARTS 149.031-010
Supervisor, Special Effects 962.137-022
Supervisor, Stage Carpentry 962.137-022
Supervisor, Upholstering 962.137-022
talent director 159.267-010
TECHNICAL TESTING ENGINEER 194.381-010
theater projectionist 960.362-010
theatrical performer see ENTERTAINER .....
Tuner 976.381-010
Title Artist 141.061-022
wardrobe draper 346.374-010
WARDROBE-SPECIALTY WORKER 969.381-010
Waxer Tender 976.685-018

motor-bicycles—MOTORCYCLES, BICYCLES, AND PARTS INDUSTRY: This designation includes occupations concerned with manufacturing complete motorcycles and sidecars; bicycles; and motorcycle and bicycle parts, such as saddles, seat posts, frames, and handlebars. Occupations concerned with the assembly of complete motorcycles and bicycles from purchased parts are included in this designation. Occupations concerned with the sale of motorcycles and bicycles are included in the RETAIL TRADE INDUSTRY (retail trade). Occupations involving repair of motorcycles are included under AUTOMOTIVE SERVICES (automotive ser.).

ASSEMBLER, BICYCLE I 806.684-014
ASSEMBLER, BICYCLE II 806.687-010
BENCH HAND 706.684-046
Bicycle, Subassembler 806.687-010
Brake Assembler 806.684-094
Clutch Assembler 806.684-094
development mechanic 600.260-014
EXPERIMENTAL MECHANIC 600.260-014
EXPERIMENTAL MECHANIC, ELECTRICAL 806.281-014
FINAL INSPECTOR, MOTORCYLES 806.281-018
Fork Assembler 806.684-094
Fork Repairer 620.684-026
frame aligner 807.484-010
Frame Assembler 806.684-094
FRAME REPAIRER 807.381-018
FRAME STRAIGHTENER 807.484-010
Handle-Bar Assembler 806.684-094
INSPECTOR, BICYCLE 806.687-030
MOTORCYCLE ASSEMBLER 806.684-090
MOTORCYCLE SUBASSEMBLER 806.684-094
MOTORCYCLE SUBASSEMBLY REPAIRER 620.684-026
MOTORCYCLE TESTER 620.384-010
Repairer, Assembly Line 620.684-026
roller-bearing assembler 706.687-034
ROLLER-BEARING INSPECTOR 706.687-034
straightener-and-aligner 807.484-010
STRIPER, MACHINE 749.686-010
SUPERVISOR, ASSEMBLY 806.131-014
Supervisor, Frame Assembly 806.131-014
SUPERVISOR, INSPECTION AND TESTING 806.131-026
Supervisor, Motorcycle And Wheel Assembly 806.131-014
Supervisor, Transmission And Fork Assembly 806.131-014
Test Rider 806.281-018
Transmission Assembler 806.684-094
Transmission Repairer 620.684-026
Utility Assembler 806.684-090
wheel assembler 706.684-106
WHEEL LACER AND TRUER 706.684-106
wheel truer 706.684-106
WHEEL-TRUING MACHINE TENDER 706.685-014

motor trans.—MOTOR VEHICLE TRANSPORTATION INDUSTRY: This designation includes occupations concerned with providing all types of public motor vehicle transportation for passengers and freight, including operating public warehousing and storage establishments. The principal types of activities include: (1) bus transportation lines for city, suburban, intercity, and long-distance use, and for such other purposes as sightseeing and charter trips; (2) taxicab services; (3) all types of public warehousing and storage establishments; (4) truck lines engaged in local and long-distance hauling; and (5) collecting and carting garbage and rubbish.

assignment agent 215.367-010
ASSIGNMENT CLERK 215.367-010
BAGGAGE CHECKER 357.477-010
Bulk Driver 905.663-018
bulletin clerk 215.367-010
BUS ATTENDANT 352.577-010
BUS DISPATCHER, INTERSTATE 913.167-010
BUS DRIVER 913.463-010
Bus Driver, Garage 909.663-010
Bus Driver, School 913.463-010
cab driver 913.463-018
cab starter 913.367-010
charter representative 214.362-030
Chauffeur, Airport Limousine 913.463-018
chauffeur, motorbus 913.463-010
CHECKER 919.687-010
city service supervisor 184.117-018
coach operator 913.463-010
CRATING-AND-MOVING ESTIMATOR 252.357-010
DIRECTOR, TRANSPORTATION 184.117-014
dispatcher 913.367-010
dispatcher 913.167-010
dispatcher 184.163-010
DISPATCHER, BUS AND TROLLEY 913.167-014
DISPATCHER, TRAFFIC OR SYSTEM 919.162-010
DISTRICT SUPERVISOR 184.117-018
division superintendent 184.167-158
DOCUMENTATION-BILLING CLERK 214.362-014
DRIVER 913.663-018
DRIVERS' CASH CLERK 211.462-030
DRIVER SUPERVISOR 909.137-010
EMPLOYEE RELATIONS SPECIALIST 166.267-042
ESCORT-VEHICLE DRIVER 919.663-022
EXPRESS CLERK 222.367-022
FARE-REGISTER REPAIRER 729.384-014
Freight-Traffic Agent 252.257-010
furniture mover 905.687-014
furniture-mover driver 905.663-018
GARBAGE-COLLECTION SUPERVISOR 909.137-014
GARBAGE COLLECTOR 955.687-022
GARBAGE COLLECTOR DRIVER 905.663-010
gas-and-oil checker 915.587-010
GAS-AND-OIL SERVICER 915.587-010
GENERAL AGENT, OPERATIONS 184.167-042
GENERAL CLAIMS AGENT 186.117-030
hook-up driver 909.663-010
HOSTLER 909.663-010
INFORMATION CLERK 237.367-018
INSTRUCTOR, BUS, TROLLEY, AND TAXI 919.223-010
INTERLINE CLERK 214.382-022
LABORER, GENERAL 909.687-014
labor-gang supervisor 929.137-018
luggage checker 357.477-010
MANAGER, BUS TRANSPORTATION 184.167-054
MANAGER, OPERATIONS 184.117-050
manager, rates and schedules 184.117-066
MANAGER, REGIONAL 184.117-054
MANAGER, TRAFFIC 184.117-066
MANAGER, TRAFFIC I 184.167-102
MANAGER, TRAFFIC II 237.367-030
MANAGER, TRUCK TERMINAL 184.167-110
Manifest Clerk 214.362-014
MOBILE-LOUNGE DRIVER 913.663-014
Motor-Coach Driver 913.463-010
Motor-Express Clerk 222.367-022
NEW-CAR INSPECTOR 919.363-010
operations manager 184.117-050
OPERATIONS MANAGER 184.167-118

museums

Passenger Traffic Agent 252.257-010
Pick-Up Driver 906.683-022
PORTER 357.677-010
porter, baggage 357.677-010
RATE ANALYST, FREIGHT 214.267-010
RATE CLERK, PASSENGER 214.362-030
redcap 357.677-010
REVISING CLERK 214.382-026
ROAD SUPERVISOR 913.133-010
rubbish-collection supervisor 909.137-014
SAFETY COORDINATOR 909.127-010
SAFETY INSPECTOR, TRUCK 919.687-018
sales representative 252.257-010
SALES REPRESENTATIVE 250.357-022
SALES REPRESENTATIVE, SHIPPING SERVICES 252.357-014
SCHEDULE MAKER 913.167-018
service center manager 184.167-042
service inspector 168.167-082
shop superintendent 184.167-170
shuttle-bus driver 913.663-018
SUPERINTENDENT, DIVISION 184.167-158
superintendent, drivers 913.133-010
SUPERINTENDENT, MAINTENANCE 184.167-170
SUPERINTENDENT, MAINTENANCE OF EQUIPMENT ... 184.167-178
SUPERINTENDENT, STATIONS 184.167-206
supervisor 909.127-010
SUPERVISOR, CAB 913.133-014
Supervisor, Car-Loading-And-Unloading 929.137-018
SUPERVISOR, CUSTOMER SERVICES 248.137-018
Supervisor, Lost And Found 241.137-014
SUPERVISOR, TELEPHONE INFORMATION 237.137-010
SUPERVISOR, TERMINAL OPERATIONS 184.167-242
TAXICAB COORDINATOR 215.367-018
TAXICAB STARTER 913.367-010
TAXI DRIVER 913.463-018
TAXI SERVICER 915.687-030
terminal manager 184.167-110
Tour Agent 252.152-010
TRAFFIC AGENT 252.257-010
TRAFFIC INSPECTOR 184.163-010
transit-operations supervisor 913.167-014
transportation inspector 184.163-010
TRANSPORTATION INSPECTOR 168.167-082
Transport Driver 904.383-010
trash-collection supervisor 909.137-014
Trash Collector 955.687-022
TRAVEL AGENT 252.152-010
travel clerk 237.367-018
travel counselor 252.152-010
Traveling-Freight-And-Passenger Agent 252.257-010
Trolley-Coach Driver 913.463-010
TRUCK SUPERVISOR 909.137-018
undercover agent 168.167-082
VAN DRIVER 905.663-018
van driver 913.663-018
VAN-DRIVER HELPER 905.687-014
van helper 905.687-014
Vehicle-Fare Collector 211.462-038
WAREHOUSE SUPERVISOR 929.137-018
Waybill Clerk 214.362-014
yard spotter 909.663-010

museums—MUSEUMS, ART GALLERIES, AND BOTANICAL AND ZOOLOGICAL GARDENS: This designation includes occupations concerned with operating all types of museums, art galleries, and botanical and zoological gardens, in whatever institutions or organizations they may occur.

ANIMAL-NURSERY WORKER 412.674-014
Antique-Auto-Museum-Maintenance Worker 899.384-010
ARMORER TECHNICIAN 109.281-010
ART CONSERVATOR 102.167-010
art preparator 102.367-010
astro-technician 962.261-010
children's zoo caretaker 412.674-014
COMMISSARY ASSISTANT 412.687-010
commissary helper 412.687-010
CONSERVATION TECHNICIAN 102.261-010
CRAFT DEMONSTRATOR 109.364-010
CURATOR 102.017-010
Curator, Art Gallery 102.017-010
Curator, Herbarium 102.017-010
Curator, Horticultural Museum 102.017-010
Curator, Medical Museum 102.017-010
Curator, Natural History Museum 102.017-010
Curator, Zoological Museum 102.017-010
DIRECTOR, EDUCATION 099.117-030
Director, Industrial Museum 102.017-010
DIRECTOR, MUSEUM-OR-ZOO 102.117-014
EDUCATIONAL RESOURCE COORDINATOR 099.167-030
education department registrar 238.367-034
EXHIBIT ARTIST 149.261-010
EXHIBIT BUILDER 739.261-010
Exhibit Carpenter 739.261-010
Exhibit Cleaner 899.384-010
EXHIBIT DESIGNER 142.061-058
Exhibit Electrician 739.261-010
exhibition specialist 739.261-010
exhibit technician 739.261-010
FINE ARTS PACKER 102.367-010
Finish Specialist 763.380-010
food preparer 412.687-010
furnishings conservator 763.380-010
FURNITURE RESTORER 763.380-010
gardener-florist 406.684-018
GARDENER, SPECIAL EFFECTS AND INSTRUCTION MODELS 406.381-010
GARDEN WORKER 406.684-018
Guard, Museum 372.667-034
HISTORIC-SITE ADMINISTRATOR 102.167-014
INSTALLER 922.687-050
Maintenance Carpenter 899.384-010
maintenance worker 899.384-010
MUSEUM ATTENDANT 109.367-010
museum craft worker 739.261-010
MUSEUM INTERN ..... term
museum preparator 102.381-010
museum service scheduler 238.367-034
MUSEUM TECHNICIAN 102.381-010
Planetarium Sky Show Technician 739.261-010
PLANETARIUM TECHNICIAN 962.261-010
REGISTRAR, MUSEUM 102.167-018
renovator 899.384-010
RESEARCH ASSOCIATE 109.067-014
RESTORER, CERAMIC 102.361-014
RESTORER, LACE AND TEXTILES 102.361-010
RESTORER, PAPER-AND-PRINTS 109.361-010
SCHEDULER 238.367-034
Science Center, Display Builder 739.261-010
Security Chief, Museum 372.167-014
SUPERINTENDENT, HORTICULTURE 180.161-014
SUPERVISOR, LANDSCAPE 406.134-014
TEACHER 099.227-038
technical specialist 962.261-010
TRANSPORTATION-EQUIPMENT-MAINTENANCE WORKER 899.384-010
transportation-museum helper 899.384-010
Upholstery Restorer 763.380-010

musical inst.—MUSICAL INSTRUMENTS AND PARTS INDUSTRY: This industry includes occupations concerned with making and repairing all musical instruments and parts by cutting, shaping, machining, assembling, polishing, and finishing.

ACCORDION MAKER 730.281-010
adjuster, piano action 730.681-010
assembler 730.381-018
ASSEMBLER, MUSICAL INSTRUMENTS 730.684-010
ASSEMBLER, PIANO 730.384-010
ball-ender 730.685-010
band-instrument maker 730.381-018
Bass-Mechanism Maker 730.281-010
Bass-String Winder 692.682-062
BELL MAKER 730.381-014
Bell Maker, Sousaphones 730.381-014
BELL-NECK HAMMERER 730.684-014
Bellows Maker 730.281-010
BELL SPINNER 619.682-010
Bell Spinner, Sousaphones 619.682-010
BELLY BUILDER 730.684-018
body maker 730.682-010
Bottom Board And Truss Leg Installer 763.684-058
BOW MAKER 730.281-058
Box Maker 730.281-010
BRASS-WIND-INSTRUMENT MAKER 730.381-018
Bridge Fitter 730.684-010
chipper 730.684-026
CHIP TUNER 730.684-026
CONSOLE ASSEMBLER 730.684-030

CROOK OPERATOR 609.682-018
CUTTER, WOODWIND REEDS 730.686-010
DRILLER-AND-REAMER, AUTOMATIC 606.382-010
Drum-Shell Maker 730.381-042
ELECTRIC-ORGAN ASSEMBLER AND CHECKER 730.381-022
ELECTRIC-ORGAN INSPECTOR AND REPAIRER 730.281-018
Final Assembler, Brass-Wind Instruments 730.684-010
FINAL INSPECTOR 730.367-010
Finisher, Accordion 730.281-010
folder-and-notcher 730.684-014
FRETTED-INSTRUMENT INSPECTOR 730.684-034
FRETTED-INSTRUMENT MAKER, HAND 730.281-022
gate tender 690.686-042
Guitar Maker, Hand 730.281-022
Harmonic Tuner 730.381-058
HARP-ACTION ASSEMBLER 730.381-030
HARP MAKER 730.281-030
HARP REGULATOR 730.381-026
HARPSICHORD MAKER 730.281-034
INJECTION-MOLDING-MACHINE OFFBEARER 690.686-042
INSPECTOR, WOODWIND INSTRUMENTS 730.684-038
Key-Bed Installer 763.684-058
KEYBOARD-ACTION ASSEMBLER 730.684-042
Knobber 730.684-010
LOOPER 730.685-010
MANUAL WINDER 730.684-046
Mounter, Brass-Wind Instruments 730.684-010
Mounter, Clarinets 730.684-010
Mounter, Flutes And Piccolos 730.684-010
Mounter, Keyed Instruments 730.684-010
Mounter, Saxophones 730.684-010
Mounter, Sousaphones 730.684-010
Mounter, Trombones 730.684-010
Mounter, Trumpets And Cornets 730.684-010
MOUTHPIECE MAKER 730.685-014
MUSICAL-STRING MAKER 730.684-050
Neck Fitter 730.684-010
Octave Tuner 730.381-058
organ installer 730.381-046
Organ-Pipe Finisher 730.381-038
ORGAN-PIPE MAKER, METAL 709.381-030
ORGAN-PIPE VOICER 730.381-038
pedal assembler 730.684-090
Piano Bench Assembler 763.684-058
PIANO CASE AND BENCH ASSEMBLER 763.684-058
Piano-Case Maker 660.280-010
PIANO REGULATOR-INSPECTOR 730.681-010
Piano-Sounding-Board Matcher 761.684-018
PIANO STRINGER 730.684-054
PIPE-ORGAN BUILDER 730.281-042
PIPE-ORGAN INSTALLER 730.381-046
PISTON MAKER 730.681-014
PLAYER-PIANO TECHNICIAN 730.381-050
PREASSEMBLER AND INSPECTOR 730.684-058
RACKER, OCTAVE BOARD 730.684-062
Rib Bender 569.685-014
SANDER-AND-BUFFER 730.684-066
Saxophone Assembler 730.381-018
SEAM HAMMERER 730.684-070
SHEET-METAL-PATTERN CUTTER 730.684-074
Side Gluer 763.684-058
SLIDING-JOINT MAKER 730.684-078
SOCKET PULLER 730.682-010
STOPBOARD ASSEMBLER 730.684-082
Stringed-Instrument Assembler 730.684-010
STRING-WINDING-MACHINE OPERATOR 692.682-062
SUPERVISOR 730.131-010
TESTER 730.684-086
TONE CABINET ASSEMBLER 730.684-090
TONE REGULATOR 730.684-094
Top Case Assembler 763.684-058
TROMBONE-SLIDE ASSEMBLER 730.381-054
TUBE BENDER, BRASS-WIND INSTRUMENTS 617.382-010
TUNER, PERCUSSION 730.381-058
Valve Maker I 730.381-018
VALVE MAKER II 730.681-018
VIOLIN MAKER, HAND 730.281-046
Violin Restorer 730.281-046
voicer 730.381-038
Wood Buffer 761.684-026

narrow fabrics—NARROW FABRICS INDUSTRY: This designation includes occupations concerned with manufacturing narrow woven and braided articles, such as belts, belting, binding, edgings, shoelaces, tape, weaving tape, webbing, and wicks. Occupations concerned with the weaving of lace are included in the TEXTILE PRODUCTS INDUSTRY, NOT ELSEWHERE CLASSIFIED (tex. prod., nec).

beam warper 681.685-018
BEAM-WARPER TENDER, AUTOMATIC 681.685-018
BELTING-AND-WEBBING INSPECTOR 683.487-010
BLOCKER 689.685-014
braider tender 683.685-010
BRAIDING-MACHINE OPERATOR 683.685-010
braid maker 683.260-010
BRAID-PATTERN SETTER 683.260-010
CARD CUTTER, JACQUARD 683.582-010
CARD LACER, JACQUARD 683.685-018
CLOTH EXAMINER, HAND 689.687-022
dobby-loom chain-pegger 689.687-054
endless-belt finisher 782.684-062
FINISHING-MACHINE OPERATOR 582.682-010
fixer 683.260-018
fixer supervisor 683.130-014
FLOOR SUPERVISOR, ENDLESS-BELT-WEAVING DEPARTMENT 683.130-010
FOLDER 686.685-030
HANDER-IN 683.687-018
HEDDLES TIER, JACQUARD LOOM 683.680-014
HOOK PULLER 683.687-022
inspector 689.687-022
jackspooler 681.685-142
JACQUARD-LOOM WEAVER 683.682-022
knotting-machine operator, portable 683.685-034
knot-tying operator 683.685-034
Label Cutter 585.685-062
LABEL-CUTTING-AND-FOLDING-MACHINE OPERATOR, AUTOMATIC 689.685-086
LABEL PINKER 585.685-062
lacing-machine operator, jacquard cards 683.685-018
LOOM FIXER 683.260-018
LOOM-FIXER SUPERVISOR 683.130-014
loom repairer 683.260-018
NARROW-FABRIC CALENDERER 583.685-074
Narrow-Fabric-Loom Fixer 683.260-018
PEGGER, DOBBY LOOMS 689.687-054
piano-machine operator 683.582-010
Quill Changer 689.686-038
Quill Winder 681.685-154
Ribbon Blocker 689.685-014
RIBBON CUTTER 781.687-050
Ribbon Weaver 683.682-046
section beamer 681.685-018
section warper 681.685-018
shoelace tipper 686.685-062
SHOELACE-TIPPING-MACHINE OPERATOR 686.685-062
shuttleless-loom weaver 683.665-010
SINGER 585.687-030
SKEINER 681.685-102
skein winder 681.685-102
SMASH HAND 683.684-026
splicer 782.684-062
spooler 681.685-142
Spooler 689.685-014
Tape Weaver 683.682-046
Tape Winder 689.685-014
tipping-machine operator, automatic 686.685-062
tricot-warper tender 681.665-018
tying-in-machine operator 683.685-034
WARPER 681.685-146
warper tender 681.685-018
WARP SPOOLER 681.685-142
Warp-Spool Slasher 552.562-010
warp-tying-machine knotter 683.685-034
WARP-TYING-MACHINE TENDER 683.685-034
WEAVER, HAND 782.684-062
WEAVER, NARROW FABRICS 683.682-046
WEAVER, NEEDLE LOOM 683.665-010
Woven-Label Designer 142.061-014

nonfer. metal—NONFERROUS METAL ALLOYS AND PRIMARY PRODUCTS INDUSTRY: This designation includes occupations concerned with producing nonferrous metal alloys, such as aluminum, brass, bronze, babbitt, solder, and other white metals; rolling, drawing, insulating, extruding, and otherwise forming nonferrous alloys and metals into primary shapes, such as bars, extrusions, pipe, plates, rods, sheets, tubing, and wire; and fabricating other primary nonferrous alloy and metal products not elsewhere classified. Also included are occupations concerned with the manufacture of insulated fiber optic

cable. Occupations concerned with the manufacture of glass fiber optic materials are included in the GLASS MANUFACTURING INDUSTRY (glass mfg.).

ALODIZE-MACHINE HELPER 509.685-010
ALODIZE-MACHINE OPERATOR 509.462-010
Aluminum-Foil-Spooling-Machine Operator 699.682-030
Approach-Table Operator 613.682-026
armored-cable-machine operator 691.685-010
ARMORING-MACHINE OPERATOR 691.685-010
ASBESTOS-WIRE FINISHER 691.682-010
BAND-REAMER-MACHINE OPERATOR 603.685-010
BATCH MAKER 515.685-010
BATTERY-WRECKER OPERATOR 515.686-010
billet header 514.584-010
blender 510.685-018
bobbin winder 691.685-026
braider 691.682-014
BRAIDER OPERATOR 691.682-014
braider tender 691.682-014
breaker operator 614.684-014
briquette-press operator 617.685-038
cable armorer 691.685-010
cable-machine operator 616.682-034
cable-mill helper 616.687-010
Cable Spooler 691.685-026
cabling-machine operator 616.682-034
CASTER 502.482-010
casting header 514.584-010
CASTING-HOUSE WORKER 514.687-014
CASTING-MACHINE OPERATOR 502.682-014
CASTING OPERATOR 514.662-010
CASTING-OPERATOR HELPER 514.687-018
CENTRIFUGE-SEPARATOR TENDER 541.585-010
charge-gang weigher 509.687-022
Chip-Crusher Operator 519.686-010
Chip Drier 519.686-010
Coarse-Wire Drawer 614.382-010
coat-insulator operator 691.682-018
coat-operator, insulator 691.682-018
COIL BINDER 619.687-010
COILER 613.685-010
coiler operator 613.685-010
COIL-REWIND-MACHINE OPERATOR 619.685-030
coining-press operator 617.685-038
Cold-Mill Operator 613.462-018
Cold-Mill Supervisor 619.132-014
compact-press operator 617.685-038
Continuous-Vulcanizing-Machine Operator 691.382-010
DEBRIDGING-MACHINE OPERATOR 607.685-014
Delivery-Table Operator 613.682-026
DENTAL-AMALGAM PROCESSOR 509.382-014
DIE POLISHER 601.381-018
Double-Lay-Winder-And-Paraffin-Unit Operator 691.682-018
draw-bench operator 614.685-022
DRAW-BENCH OPERATOR 614.482-010
DRAW-BENCH-OPERATOR HELPER 614.686-010
EMBOSSING-MACHINE OPERATOR 617.685-018
EXTRUDING-MACHINE OPERATOR 691.382-010
extruding-press operator 691.382-014
EXTRUSION-DIE REPAIRER 705.381-014
fettler 512.684-014
FILLING-MACHINE OPERATOR 699.685-038
Fine-Wire Drawer 614.382-010
finished-wire inspector 691.367-010
Floor Worker, Transfer Bay 921.667-022
FLUOROSCOPE OPERATOR 502.382-014
FLUX-TUBE ATTENDANT 519.687-018
FURNACE CHARGER 512.684-014
FURNACE HELPER 512.666-010
FURNACE OPERATOR 613.462-014
FURNACE OPERATOR 512.362-014
FURNACE TENDER 512.685-010
General Scrap Worker 519.686-010
header 514.584-010
Hot-Metal Crane Operator I 921.663-010
Hot-Mill Operator 613.462-018
Hot-Mill Supervisor 619.132-014
hydraulic-corrugating-machine operator 611.685-014
HYDRAULIC OPERATOR 611.685-014
IMPREGNATOR 509.685-030
INGOT HEADER 514.584-010
INSPECTION SUPERVISOR 709.137-010
Inspection Supervisor 691.130-014
Inspection Supervisor 691.130-010
INSPECTOR, BALL POINTS 733.687-046
INSPECTOR I 619.364-010
Inspector II 519.686-010
INSPECTOR, INSULATION 691.387-010
INSPECTOR, WIRE 691.367-010
INSULATING-MACHINE OPERATOR 691.682-018
LABORER, GENERAL 519.686-010
LABORER, SOLDER MAKING 519.667-014
LAGGING-MACHINE OPERATOR 691.685-014
LEAD-PRESS OPERATOR 691.382-014
lead-sheet cutter 502.684-014
LINER ASSEMBLER 613.667-010
LUBRICATOR-GRANULATOR 509.685-042
MAGNESIUM-MILL OPERATOR 607.686-010
materials-handling coordinator 222.167-010
METAL-CONTROL COORDINATOR 222.167-010
Metal Expediter 512.132-018
METALLIC-YARN-SLITTING-MACHINE OPERATOR 619.685-070
METAL-SPONGE-MAKING-MACHINE OPERATOR 616.685-038
Metal-Storage Worker 921.683-050
MILL HELPER 502.684-014
Mill Recorder 221.382-018
MIXER 510.685-018
nicker and breaker 614.684-014
NOZZLE-AND-SLEEVE WORKER 514.684-018
NOZZLE TENDER 512.685-014
PAIRING-MACHINE OPERATOR 691.685-022
PALLETIZER 929.687-054
Paper-Wrapping-Machine Operator 691.682-018
PERMANENT-MOLD SUPERVISOR 514.130-010
picker 509.686-018
piercer operator 613.482-014
PIERCING-MACHINE OPERATOR 613.482-014
Plastic-Extruding-Machine Operator 691.382-010
Plastic-Tubing-Insulation Supervisor 691.130-010
PNEUMATIC JACKETER 691.667-010
press operator 691.382-014
PRESS SETTER 617.480-014
PRODUCTION HELPER 691.687-010
push-bench-operator helper 614.686-010
REAMING-MACHINE TENDER 606.685-034
RECLAMATION SUPERVISOR 512.132-014
Reel Tender 691.685-030
REMELT-FURNACE EXPEDITER 512.132-018
remelt operator 512.685-010
Rod-Drawing Supervisor 614.132-010
ROD-PULLER AND COILER 619.685-078
ROLLING-MILL OPERATOR 613.462-018
ROLLING-MILL-OPERATOR HELPER 613.685-026
Salvager, Inserts 509.686-018
SALVAGE WORKER 619.387-010
sampler 509.584-010
SCALPER OPERATOR 605.682-022
scalp-machine operator 605.682-022
Scrap Baler 920.685-010
SCRAP BALLER 509.685-046
SCRAP SORTER 509.686-018
seamless-tube drawer 614.685-022
SHEET-MILL SUPERVISOR 619.132-014
SINTERING-PRESS OPERATOR 617.685-038
SLAB-CONDITIONER SUPERVISOR 609.132-010
slitting-machine coiler 613.685-010
soaking-pit operator 613.462-014
Soap Worker 519.686-010
Solder Cream Maker 519.667-014
sparker and patcher 728.684-018
SPARK TESTER 728.684-018
special-machine operator 509.382-014
Spooler And Coiler 691.685-030
SPOOLING-MACHINE OPERATOR 691.685-026
SPOOL WINDER 619.485-010
steel sampler 509.584-010
strander operator 616.682-034
STRANDING-MACHINE OPERATOR 616.682-034
STRANDING-MACHINE-OPERATOR HELPER 616.687-010
strand-machine operator 616.682-034
STRETCHER-LEVELER OPERATOR 619.582-010
STRETCHER-LEVELER-OPERATOR HELPER 619.686-030
STRIPPING-MACHINE OPERATOR 652.682-026
STRUCTURAL-MILL SUPERVISOR 619.132-022
SUPERVISOR 691.130-010
SUPERVISOR, DRAWING 614.132-010
Supervisor, Electrolytic Tinning 500.131-010

SUPERVISOR, POWDERED METAL 509.130-010
SUPERVISOR, SOLDER MAKING 519.132-022
TABLE OPERATOR 613.682-026
Tandem-Mill Operator 613.462-018
Tandem-Taping-And-Paper-Wrapping-Machine Operator 691.682-018
tape armorer 691.685-010
TAPPER 514.664-014
test assembler 509.584-010
test carrier 509.584-010
TESTER OPERATOR 614.684-014
TESTER-OPERATOR HELPER 614.686-014
TEST PREPARER 509.584-010
TRUCK LOADER, OVERHEAD CRANE 921.663-070
TUBE DRAWER 614.685-022
tube-draw helper 614.686-010
Tube-Drawing Supervisor 614.132-010
tube-machine operator 691.382-010
Tuber Feeder 691.685-030
TUBING-MACHINE OPERATOR 613.685-030
UTILITY WORKER, EXTRUSION 691.685-030
Varnish-Cambric-Covering-Machine Operator 691.682-018
WEIGHER, ALLOY 509.687-022
WIRE DRAWER 614.382-010
WIRE-DRAWING-MACHINE TENDER 614.685-026
Wire-Drawing Supervisor 614.132-010
wire-draw operator 614.382-010
wire-taping-machine operator 691.682-018

nonmet. min.—ABRASIVE, ASBESTOS, AND MISCELLANEOUS NONMETALLIC MINERAL PRODUCTS INDUSTRY: This designation includes occupations concerned with (1) manufacturing and repairing abrasive grinding wheels of natural or synthetic materials and other abrasive products; (2) manufacturing and repairing asbestos textiles, asbestos building materials, and insulating materials for covering boilers and pipes; (3) manufacturing and repairing gaskets, gasketing materials, compression packings, molded packings, oil seals, and mechanical seals, regardless of material; (4) crushing, grinding, pulverizing, or otherwise preparing clay, ceramic and refractory minerals, barite, graphite, and miscellaneous nonmetallic minerals that are not fuels; (5) manufacturing and repairing mineral wool and mineral wool insulation products made of such silicious materials as rock, slag, and glass, or combinations thereof; (6) manufacturing and repairing statuary and art goods made of plaster of paris and paper mache; and (7) manufacturing and repairing sand lime products and other nonmetallic products, not elsewhere classified.

ABRASIVE-BAND WINDER 692.685-010
ABRASIVE-COATING-MACHINE OPERATOR 574.462-010
ABRASIVE GRINDER 673.685-010
ABRASIVE MIXER 570.485-010
ABRASIVE-MIXER HELPER 570.686-014
ABRASIVE SAWYER 677.685-010
ABRASIVE-WHEEL MOLDER 575.685-010
alley tender 680.665-018
alley tender 680.685-018
APRON CLEANER 680.687-010
apron scratcher 680.687-010
Asbestos-Cloth Inspector 689.685-038
ASBESTOS-SHINGLE INSPECTOR 679.687-010
ASBESTOS-SHINGLE SHEARING-MACHINE OPERATOR 679.686-010
BATTING-MACHINE OPERATOR, INSULATION 677.382-010
beam warper 681.685-018
BEAM-WARPER TENDER, AUTOMATIC 681.685-018
beater 570.686-018
BELT MAKER 776.684-010
BELT-MAKER HELPER 776.687-010
BEVELER 673.685-022
Blending-Machine Feeder 570.686-018
BLOCKER 689.685-014
braider tender 683.685-010
BRAIDING-MACHINE OPERATOR 683.685-010
BRAKE-LINING CURER 573.686-010
BRAKE-LINING FINISHER, ASBESTOS 579.665-010
BRAKE-LINING-FINISHER HELPER, ASBESTOS 579.687-010
BUSHER 502.687-014
CALENDER-MACHINE OPERATOR 583.585-010
card-apron cleaner 680.687-010
card fixer 680.380-010
CARD GRINDER 680.380-010
card hand 680.685-018
card operator 680.685-018
Cardroom Supervisor 579.137-014
CARDROOM WORKER ..... term
card setter 680.380-010
CARD TENDER 680.685-018
CASTER 575.684-018
caster 779.684-046
cloth calender 583.585-010
COATER, BRAKE LININGS 574.685-010
Cop Winder 681.685-154
CUT-OFF-SAW OPERATOR, PIPE BLANKS 677.685-026
Cutter, Brake Lining 579.687-010
CUTTER-INSPECTOR 751.684-010
cutter operator, asbestos shingle 679.686-010
DIAMOND-POWDER TECHNICIAN 673.685-046
Diamond-Wheel Molder 575.685-010
DISC-PAD GRINDER 673.685-086
DISC-PAD GRINDING MACHINE FEEDER 673.686-030
DISC-PAD KNOCKOUT WORKER 579.687-034
DISC-PAD-PLATE FILLER 579.687-038
drier unloader 921.583-010
DRILLER, BRAKE LINING 676.685-010
Emery-Wheel Molder 575.685-010
facing grinder 673.685-010
feeder 570.685-050
FINISHER 775.687-010
FINISHER-CARD TENDER 680.685-042
FINISHING-MACHINE OPERATOR 674.682-010
fixer 683.260-018
Foam Caster 754.684-022
FOLDER-TIER 759.684-034
GASKET INSPECTOR 739.687-102
GRAPHITE PAN-DRIER TENDER 549.685-014
Grinder, Brake Lining 579.687-010
GRINDING-WHEEL INSPECTOR 776.487-010
GROOVER 673.685-062
HAMMER-MILL OPERATOR 570.685-030
HOT-PRESS OPERATOR 575.685-042
imitation-marble mechanic 556.484-010
impregnator operator 579.665-010
INSPECTOR 776.667-010
inspector, brake lining 776.667-010
intermediate-card tender 680.665-018
LACER 774.687-014
LOOM FIXER 683.260-018
loom operator apprentice 683.682-042
loom operator 683.682-038
loom repairer 683.260-018
MACHINE SETTER 692.260-010
MIDDLE-CARD TENDER 680.665-018
MILL SUPERVISOR 559.132-034
MIXER 570.685-050
mixer 550.382-030
MIXER, DIAMOND POWDER 570.484-010
mixer helper 550.686-038
mixer operator 570.485-010
molder 575.685-010
MOLDER-MACHINE TENDER 575.685-062
MOLD MAKER 777.684-014
MOSAIC WORKER 779.381-014
OVEN-PRESS TENDER I 573.685-042
OVEN-PRESS TENDER II 573.685-046
picker 739.687-102
Picker Feeder 570.686-018
Plaque Maker 779.684-046
PLASTER MAKER 779.684-046
PREPARATION-ROOM WORKER 570.686-018
PRODUCTION SUPERVISOR 539.137-014
radius grinder 673.685-010
ROOF-CEMENT-AND-PAINT MAKER 550.382-030
ROOF-CEMENT-AND-PAINT-MAKER HELPER 550.686-038
ROOFING-MACHINE TENDER 590.685-098
ROPE MAKER, MACHINE 681.685-082
SAMPLER-TESTER 579.585-010
SAWYER I 677.686-010
SAWYER II 677.685-038
SCAGLIOLA MECHANIC 556.484-010
section beamer 681.685-018
section warper 681.685-018
SIZING-MACHINE OPERATOR 554.685-026
sleeve maker 776.684-010
sleeve wheel maker 776.684-010
spinner 682.685-010
SPINNER, FRAME 682.685-010
SPINNER, MULE 682.685-014
spinning-frame tender 682.685-010
STEAM-TANK OPERATOR 573.683-010
STEEL-WOOL-MACHINE OPERATOR 605.482-010
STICKER-ON 774.684-034
Stock Mixer 570.686-018

nonprofit org.

STRAND-AND-BINDER CONTROLLER 680.685-106
SUPERVISOR, ASBESTOS-CEMENT SHEET 679.130-018
SUPERVISOR, ASBESTOS PIPE 679.130-014
SUPERVISOR, ASBESTOS TEXTILE 579.137-014
Supervisor, Braiding 692.130-022
Supervisor, Finishing 692.130-022
SUPERVISOR, FINISHING DEPARTMENT 679.137-010
SUPERVISOR I 779.131-010
SUPERVISOR II 579.132-010
SUPERVISOR III 575.130-014
SUPERVISOR, INSULATION 590.130-014
SUPERVISOR IV 692.132-010
Supervisor, Molding 679.130-014
SUPERVISOR, SCOURING PADS 759.135-010
SUPERVISOR V 692.132-014
SUPERVISOR VI 692.130-022
TAB-MACHINE OPERATOR 754.685-010
tape calender 583.585-010
TAPE COATER 692.685-210
Tape Weaver 683.682-046
Tape Winder 689.685-014
TRANSFER-CAR OPERATOR, DRIER 921.583-010
tricot-warper tender 681.685-018
tube maker 692.685-234
TUBE WINDER, HAND 692.685-234
TWISTER TENDER 681.685-130
warper tender 681.685-018
WEAVER 683.682-038
WEAVER APPRENTICE 683.682-042
weaver, broadloom 683.682-038
WEAVER, NARROW FABRICS 683.682-046
WEAVING SUPERVISOR 683.130-022
winder operator 692.685-234

nonprofit org.—NONPROFIT MEMBERSHIP, CHARITABLE, AND RELIGIOUS ORGANIZATIONS: This designation includes occupations concerned with promoting interests of members of organizations functioning on a nonprofit membership basis. Typical organizations are business and professional associations; labor interests; civil, social, and fraternal clubs and societies; nonprofit organizations that promote the interests of a national, state, or local political party or candidate; animal humane societies; automobile owners' clubs; farm granges; historical clubs; and religious and charitable organizations. Occupations found in membership golf clubs are included in AMUSEMENT AND RECREATION (amuse. & rec.). Occupations found in insurance offices maintained by fraternal organizations are included in the INSURANCE INDUSTRY (insurance). Occupations found in group health associations are included in MEDICAL SERVICES (medical ser.). Occupations found in credit unions are included in FINANCIAL INSTITUTIONS (financial). Occupations in organizations providing social and rehabilitative services are included under SOCIAL SERVICES (social ser.).

Activities Director, Scouting 187.117-046
animal control officer 379.263-010
animal humane agent supervisor 379.137-010
ANIMAL-SHELTER CLERK 249.367-010
animal shelter supervisor 410.134-018
ANIMAL TREATMENT INVESTIGATOR 379.263-010
Archivist, Nonprofit Foundation 101.167-010
AUTOMOBILE-CLUB-SAFETY-PROGRAM COORDINATOR 249.167-010
Book Sorter 222.387-054
braille coder 203.582-014
braille coder 209.584-010
BRAILLE PROOFREADER 209.367-014
braille transcriber 203.582-014
BRAILLE TRANSCRIBER, HAND 209.584-010
BRAILLE TYPIST 203.582-014
Chief Clerk, Shelter 249.137-010
chief, dog license inspector 379.137-014
Claims And Insurance Information Clerk, Automobile Club 237.267-010
Clothing Sorter 222.387-054
community planning director, community chest 187.167-234
contribution solicitor 293.357-014
counselor, orientation and mobility 076.224-014
department manager, chamber of commerce 187.167-042
DIRECTOR, COMMUNITY ORGANIZATION 187.167-234
director, council of social agencies 187.167-234
director, federated fund 187.167-234
DIRECTOR, FUNDRAISING 165.117-010
DIRECTOR, RELIGIOUS EDUCATION 129.107-022
DIRECTOR, SERVICE 187.167-214
director, united fund 187.167-234
Disaster Director 187.167-214
DISTRICT ADVISER 187.117-022
district director 187.117-022
District Scout Executive 187.117-022
DIVISION MANAGER, CHAMBER OF COMMERCE 187.167-042
DOG LICENSER 249.367-030
EVALUATOR 249.367-034
executive, community planning 187.167-234
Executive Director, Contract Shop 187.117-026
EXECUTIVE DIRECTOR, RED CROSS 187.117-066
EXECUTIVE DIRECTOR, SHELTERED WORKSHOP 187.117-026
EXECUTIVE VICE PRESIDENT, CHAMBER OF COMMERCE 187.117-030
FUND RAISER I 293.157-010
FUND RAISER II 293.357-014
INFORMATION CLERK, AUTOMOBILE CLUB 237.267-010
inspector 379.137-010
instructor of blind 076.224-014
janitor, church 389.667-010
Jewelry Sorter 222.387-054
liaison officer 187.167-198
MANAGER, ANIMAL SHELTER 187.167-218
Manager, Aviation And Space 187.167-042
manager, chamber of commerce 187.117-030
Manager, Construction Industries 187.167-042
Manager, Domestic Trade 187.167-042
MANAGER, WORLD TRADE AND MARITIME DIVISION 187.167-170
MEMBERSHIP SECRETARY 201.362-018
national insurance officer 187.167-198
OFFICE SUPERVISOR, ANIMAL HOSPITAL 249.137-010
ORDER-CONTROL CLERK, BLOOD BANK 245.367-026
ORIENTATION AND MOBILITY THERAPIST FOR THE BLIND 076.224-014
orientation therapist for blind 076.224-014
orientor 076.224-014
PASTORAL ASSISTANT 129.107-026
Picket, Labor Union 299.687-014
pricer-sorter 222.387-054
Program Director, Scouting 187.117-046
RECEIVER-DISPATCHER 239.367-022
REHABILITATION CLERK 205.367-046
rehabilitation officer 187.167-198
ROUTING CLERK 249.367-070
Safety Director 187.167-214
SALES EXHIBITOR 279.357-010
service aide 239.367-022
service officer 187.167-198
SEXTON 389.667-010
SORTER-PRICER 222.387-054
SUPERVISOR, ANIMAL CRUELTY INVESTIGATION 379.137-010
SUPERVISOR, CONTRACT-SHELTERED WORKSHOP 187.134-010
SUPERVISOR, DOG LICENSE OFFICER 379.137-014
SUPERVISOR, KENNEL 410.134-018
therapist for blind 076.224-014
touring counselor 238.167-014
Transportation Director 187.167-214
TRAVEL COUNSELOR, AUTOMOBILE CLUB 238.167-014
traveling clerk 238.167-014
Travel-Ticketing Reviewer 238.167-014
verger 389.667-010
veterans' claims representative 187.167-198
VETERANS CONTACT REPRESENTATIVE 187.167-198
veterans' counselor 187.167-198
veterans' service officer 187.167-198
Wares Sorter 222.387-054
World-Travel Counselor 238.167-014

nut & bolt—SCREW MACHINE PRODUCTS AND BOLTS, NUTS, SCREWS, RIVETS, AND WASHERS INDUSTRY: This designation includes occupations concerned with manufacturing bolts, nuts, screws, rivets, lock washers, plate washers, turnbuckles, toggle bolts, and similar products.

Bolt-Machine Operator 612.462-010
BURRING-MACHINE OPERATOR 615.685-010
FASTENER TECHNOLOGIST 612.260-010
NUT-AND-BOLT ASSEMBLER 929.587-010
NUT FORMER 612.462-014
nutter-up 929.587-010
PRODUCTION-MACHINE TENDER 619.365-010
Rivet Maker 612.462-010
ROLL-THREADER OPERATOR 619.462-010
SUPERVISOR 616.130-010
TAPPER OPERATOR 606.682-022
Tapping-Machine Operator, Automatic 619.365-010
TRIMMER OPERATOR 619.462-014

office machines—OFFICE, COMPUTING, AND ACCOUNTING MACHINES INDUSTRY: This designation includes occupations concerned with manufacturing and repairing such machines as typewriters, teletypewriters, adding and calculating machines, electronic computers and peripheral equipment, bookkeeping machines, cash registers, coin changers, fare registers and recording fare boxes, ticket-counting machines, nonlaboratory balances and scales, and addressing, check-writing, mailing, duplicating, and other related machines. Occupations concerned with the manufacture of electronic components for computers are included in the ELECTRONIC COMPONENTS AND ACCESSORIES INDUSTRY (electron. comp.). Occupations concerned with the manufacture of photocopy and microfilm equipment are included in the PHOTOGRAPHIC APPARATUS AND MATERIALS INDUSTRY (photo. appar.).

Adjuster 706.381-030
AGATE SETTER 710.684-010
ALIGNER, TYPEWRITER 706.381-010
alining checker 706.687-022
assembler-adjuster 706.684-014
ASSEMBLER AND TESTER, ELECTRONICS 710.281-010
ASSEMBLER I 706.684-014
ASSEMBLER II 710.381-010
ASSEMBLER, TYPE-BAR-AND-SEGMENT 706.684-026
ASSEMBLY TECHNICIAN 633.261-010
automatic component insertion operator 726.685-014
BALANCER, SCALE 710.381-014
cable maker 728.684-010
CHIEF INSPECTOR 706.131-018
CLEANER-TOUCH-UP WORKER 706.587-010
Clearing Inspector 706.387-014
component insertion operator 726.685-014
Customer-Engineering Specialist 828.261-022
DEBURRING-AND-TOOLING-MACHINE OPERATOR 690.280-010
DIAL MAKER 710.684-018
die setter 556.380-010
Dynamometer Assembler And Tester 710.281-010
Electronic-Scale Assembler And Tester 710.281-010
ELECTRONIC-SCALE SUBASSEMBLER 726.684-014
FINAL ASSEMBLER 706.381-018
Final Inspector 706.387-014
Fitter, Type-Bar-And-Segment 706.684-026
flow-solder machine operator 726.362-014
Former, Type-Bar-And-Segment 706.684-026
FUNCTIONAL TESTER, TYPEWRITERS 706.382-010
grinder 690.385-010
grinding-machine operator 690.385-010
Guide-Installer, Type-Bar-And-Segment 706.684-026
harness maker 728.684-010
INSERTION MACHINE TENDER, ELECTRONIC COMPONENTS 726.685-014
INSPECTOR 710.384-014
INSPECTOR-ADJUSTER, OFFICE-MACHINE COMPONENTS 706.384-010
INSPECTOR, ALINING 706.687-022
INSPECTOR, AUTOMATIC TYPEWRITER 706.387-010
Inspector, Conveyor Line 706.381-022
Inspector, Final Assembly-Conveyor Line 706.381-022
Inspector, Floor Sub-Assembly 706.381-022
inspector, manufactured parts 706.381-022
inspector, mechanical 706.381-022
Inspector, Purchased Parts 706.381-022
inspector, scales 710.381-014
Inspector, Station Assembly-Conveyor Line 706.381-022
INSPECTOR, TYPE 706.687-026
INSPECTOR, TYPEWRITER ASSEMBLY AND PARTS 706.381-022
KEYMODULE-ASSEMBLY-MACHINE TENDER 692.685-274
MACHINE TESTER 706.387-014
MODEL MAKER, SCALE 710.361-010
MOLD SETTER 556.380-010
Parts Counter-Weigher 221.587-030
PLATEN GRINDER 690.385-010
Quality Assurance Supervisor 726.130-010
REPAIRER, TYPEWRITER 706.381-030
Sampling Inspector 706.387-014
SCALE ASSEMBLY SET-UP WORKER 710.360-010
SCROLL ASSEMBLER 710.584-010
SEALER 710.684-038
setter, plastics-molding machine 556.380-010
SORTER 706.587-014
Spacer, Type-Bar-And-Segment 706.684-026
SUBASSEMBLER 706.684-094
SUPERVISOR 706.131-014
SUPERVISOR, ASSEMBLY I 710.137-010
Supervisor, Assembly II 706.131-014
Supervisor, Electronics Assembly 726.130-010
Supervisor, Fabrication 706.131-014
Supervisor, Inspection 706.131-014
SUPERVISOR, KEYMODULE ASSEMBLY 692.130-038
Supervisor, Soldering 706.131-014
Supervisor, Type-Bar-And-Segment 706.131-014
TESTER, ELECTRONIC SCALE 710.381-046
TIE-UP WORKER 710.687-034
TOOL-MAINTENANCE WORKER 701.384-010
touch-up worker 706.587-010
TYPE-ROLLING-MACHINE OPERATOR 619.382-022
TYPE-SOLDERING-MACHINE TENDER 706.685-010
TYPING-ELEMENT-MACHINE OPERATOR 616.382-018
Utility Inspector 706.387-014
WAVE-SOLDERING MACHINE OPERATOR 726.362-014
WIRE HARNESS ASSEMBLER 728.684-010
wirer 728.684-010
WIRER 729.281-042
WIRER, SUBASSEMBLIES 729.684-062
WIRE-WRAPPING-MACHINE OPERATOR 692.662-022

oils & grease—ANIMAL AND VEGETABLE OILS, FATS, AND GREASE INDUSTRY: This designation includes occupations concerned with extracting and refining oils from plant seeds, such as nuts, kernels, and grains, and from animal sources; treating these oils to produce products, such as shortening, salad oils, margarine, industrial oils, and lubricating greases; rendering grease and soap stock from animal fat, bones, meat scraps; and rendering tallow from fat. These operations include extracting and purifying the oils by mechanical or chemical processing, and modifying their physical properties by processes such as hydrogenation (solidifying) or winterizing (removal of fatty stearin). These oils frequently are marketed to other industries before or after refining for use in other products. Occupations concerned with the processing of by-products, such as meal, cake, and lint, are included in this designation. Occupations concerned with processing corn and its derivatives, including corn oil, are included in the GRAIN AND FEED MILLING INDUSTRY (grain-feed mills). Occupations concerned with producing aromatic synthetic oils and perfume bases of coal-tar origin are included in the CHEMICAL INDUSTRY (chemical). Occupations concerned with refining fish and vegetable oils for medicinal purposes are included in the PHARMACEUTICALS AND RELATED PRODUCTS INDUSTRY (pharmaceut.) and occupations concerned with manufacturing lubricating greases in petroleum refineries are included in the PETROLEUM REFINING INDUSTRY (petrol. refin.).

acidulator 551.685-070
beamer 525.687-046
BLEACHER, LARD 521.685-026
Blender 529.382-026
BLENDER-MACHINE OPERATOR 520.685-018
BLENDING-PLANT OPERATOR 520.682-010
BUTTER LIQUEFIER 523.585-010
butter melter 523.585-010
CAKE FORMER 520.685-038
CAKE PULLER 521.686-014
CAKE STRIPPER 520.685-042
CENTRIFUGE OPERATOR 521.685-050
charge loader 921.685-030
charger 521.685-242
CHURNER 520.565-010
CHURN OPERATOR, MARGARINE 520.685-070
CLARIFIER 521.685-054
clarifier 529.382-026
cooker 523.685-034
COOKER LOADER 921.685-030
COOKER, MEAL 523.685-034
COOKER TENDER 553.665-022
corn-oil extractor 529.685-106
COTTON PULLER 521.686-022
cottonseed-meat presser 521.685-242
Crusher Tender 529.685-106
DRIER TENDER I 523.685-074
Drier Tender II 529.685-106
Emulsification Operator 558.685-062
EXPELLER OPERATOR 529.685-106
EXTRACTOR OPERATOR 551.685-054
EXTRACTOR-PLANT OPERATOR 559.665-018
Extractor Puller 551.686-018
FAT-PURIFICATION WORKER 551.685-070
filter-press pumper 559.685-146
former 520.685-038
former puller 520.685-038
GENERAL HELPER 529.687-094
ginner 521.685-198
GREASE-AND-TALLOW PUMPER 559.585-014
grease-press helper 551.686-018
GREASE-REFINER OPERATOR 551.685-086

Hide Shaker 525.687-038
HIDE TRIMMER 525.687-046
HOPPER FEEDER 551.686-018
HYDROGENATION OPERATOR 529.382-026
knocker 521.686-014
lard maker 521.685-026
LARD REFINER 529.685-158
linseed-oil-mill tender 559.685-122
LINSEED-OIL-PRESS TENDER 559.685-122
LINSEED-OIL REFINER 559.382-030
linter 521.685-198
LINTER-SAW SHARPENER 603.682-018
LINTER TENDER 521.685-198
MAT SEWER 529.687-154
meal cook 523.685-034
meal temperer 523.685-034
MIXING-TANK OPERATOR 520.685-170
Oil-Expeller 529.685-106
OILSEED-MEAT PRESSER 521.685-242
oil winterizer 521.685-374
Oleo-Hasher-And-Renderer 529.685-158
ORDER FILLER, LINSEED OIL 920.686-022
Packaging Supervisor 529.137-030
pan shaker 521.685-242
pan shoveler 521.685-242
pan shover 521.685-242
PASTEURIZER 523.585-026
pelt salter 525.687-038
picker-box operator 520.565-010
PRESS OPERATOR 551.685-114
PRESSROOM WORKER, FAT 559.685-146
REDUCTION-FURNACE-OPERATOR HELPER 559.686-038
refiner bleacher 559.685-146
refinery operator 559.382-030
Refinery Supervisor 529.137-030
REFINING-MACHINE OPERATOR 529.685-198
roll operator 529.685-106
salt spreader 525.687-038
SAMPLER 529.387-034
saw filer 603.682-018
scale-tank operator 529.485-026
seed cleaner 599.665-010
SEED-CLEANER OPERATOR 599.665-010
seed-cleaning-machine operator 599.665-010
selector 525.687-046
sharpener 603.682-018
Sharples-Machine Operator 529.685-198
Shortening Mixer 520.685-070
SUPERVISOR 529.137-030
SUPERVISOR, GREASE REFINING 553.132-010
tank charger 921.685-030
VOTATOR-MACHINE OPERATOR 529.685-250
WEIGH-TANK OPERATOR 529.485-026
WHIPPED-TOPPING FINISHER 529.682-034
WINTERIZER 521.685-374

optical goods—OPTICAL GOODS INDUSTRY: This designation includes occupations concerned with grinding lenses and manufacturing and repairing optical goods. The major products are spectacles, eyeglasses, goggles, eyeglass frames, lenses, prisms, opera and field glasses, microscopes, and telescopes.

ABRASIVE GRADER 570.682-010
ABRASIVE-GRADER HELPER 570.686-010
ARTIFICIAL-GLASS-EYE MAKER 713.261-010
ARTIFICIAL-PLASTIC-EYE MAKER 713.261-014
ASSEMBLER, CLIP-ON SUNGLASSES 713.684-010
ASSEMBLER, GOLD FRAME 713.384-010
ASSEMBLER, MOLDED FRAMES 713.684-014
backside grinder 716.685-018
Bench-Lay-Out Technician 716.381-014
BENCH WORKER 713.684-018
BLOCKER AND CUTTER, CONTACT LENS 716.681-010
BLOCKER, HAND 716.684-010
BLOCKING-MACHINE TENDER 716.685-010
BURR GRINDER 673.686-014
Camera-Lens Inspector 716.381-010
Cataract-Lens Generator 716.682-014
CEMENTER 711.684-014
cleaner 716.687-010
clip baker 713.687-010
CLIP COATER 713.687-010
clocker 716.687-026
Contact-Lens-Curve Grinder 716.685-022
contact-lens cutter 716.382-010
Contact-Lens-Edge Buffer 716.685-022
CONTACT-LENS-FLASHING PUNCHER 713.687-014
Contact-Lens Inspector 716.381-010
CONTACT-LENS MOLDER 690.685-090
Contact-Lens Polisher 716.682-018
CONTACT PRINTER, PHOTORESIST 976.684-034
DEBLOCKER 716.687-010
dipper 713.687-010
DRILLER 716.685-014
edging-machine catcher 673.686-014
edging-machine feeder 673.686-014
EMBOSSER 713.684-022
EXPEDITER CLERK 221.387-026
EYEGLASS-FRAME TRUER 713.684-026
EYEGLASS-LENS CUTTER 716.682-010
Eyeglass-Lens Generator 716.682-014
Eyeglass-Lens Grinder 716.382-018
feeder 575.686-014
FINAL ASSEMBLER 713.687-018
Final Inspector 716.381-010
flat optical element maker 716.280-018
frame assembler 713.684-014
FRAME CARVER, SPINDLE 713.684-030
furnace clerk 573.686-014
FUSING-FURNACE LOADER 573.686-014
Fusing-Line Inspector 716.687-018
Fusion-Juncture Grinder 716.685-022
GLASS CHECKER 716.687-014
GLASS CUTTER, HAND 716.681-014
glass etcher 716.681-022
GRINDER, HAND 716.685-018
Groover 713.684-018
heating-fixture tender 713.687-042
in-Process Inspector 716.381-010
INSPECTOR, CLIP-ON SUNGLASSES 713.667-010
INSPECTOR, EYEGLASS 713.384-014
INSPECTOR, EYEGLASS FRAMES 713.687-022
inspector-in-process 716.687-022
INSPECTOR, MULTIFOCAL LENS 716.687-018
inspector, optical elements 716.381-010
INSPECTOR, OPTICAL INSTRUMENT 711.281-010
INSPECTOR, PRECISION 716.381-010
Instrument-Lens Generator 716.682-014
Instrument-Lens Grinder 716.382-018
instrument-lens-grinder apprentice 716.382-022
Instrument-Lens Inspector 716.381-010
jewelry setter 700.381-054
LAP CUTTER-TRUER OPERATOR 604.685-022
LATHE OPERATOR, CONTACT LENS 716.382-010
LAY-OUT TECHNICIAN 716.381-014
lens assorter 716.687-026
lens assorter 716.687-022
LENS-BLANK GAUGER 716.687-026
LENS-BLOCK GAUGER 716.687-030
lens cutter 716.682-010
Lens-Edge Grinder, Machine 716.685-022
LENS EXAMINER 716.687-022
LENS-FABRICATING-MACHINE TENDER 716.685-022
Lens-Generating-Machine Tender 716.685-022
lens grinder 716.382-018
lens-grinder apprentice 716.382-022
lens grinder, rough 673.685-074
LENS HARDENER 573.685-030
LENS INSERTER 713.687-026
lens inspector 716.687-022
lens inspector 716.381-010
LENS MATCHER 713.687-030
LENS-MOLD SETTER 713.381-010
Lens Mounter I 690.685-014
LENS MOUNTER II 713.681-010
LENS POLISHER, HAND 716.681-018
melter 713.687-042
Metal-Frame Inserter 713.681-010
MOLDER 575.381-010
MOLDER HELPER 575.686-014
Molding-Room Supervisor 716.130-010
mold setter 713.381-010
multifocal-button assembler 713.684-034
Multifocal-Button Countersink Grinder 716.685-022
Multifocal-Button Generator 716.682-014
Multifocal-Button Grinder 716.382-018
Multifocal-Button Inspector 716.687-018
MULTIFOCAL-LENS ASSEMBLER 713.684-034
neutralizer 716.687-026
oculariST 713.261-014

ocularist, glass 713.261-010
Ophthalmic-Lens Inspector 716.381-010
ophthalmic-technician apprentice 716.280-010
OPTICAL-ELEMENT COATER 716.382-014
OPTICAL-GLASS ETCHER 716.681-022
optical-glass inspector 716.687-034
OPTICAL-GLASS SILVERER 574.484-010
OPTICAL-INSTRUMENT ASSEMBLER 711.381-010
optical mechanic 716.280-014
optical-mechanic apprentice 716.280-010
optical model maker and tester 716.280-018
optical technician 716.382-018
OPTICIAN 716.280-014
OPTICIAN 716.280-018
OPTICIAN APPRENTICE 716.280-010
OPTICIAN APPRENTICE, DISPENSING 299.361-014
Optician, Contact-Lens Dispensing 299.361-010
OPTICIAN, DISPENSING II 299.361-010
OPTOMECHANICAL TECHNICIAN 007.161-030
pad maker 739.687-154
picker 573.686-014
PITCH WORKER 551.666-010
plastic-eye technician 713.261-014
Plastic-Frame Inserter 713.681-010
POLISHER, EYEGLASS FRAMES 713.684-038
POLISHER, IMPLANT 713.687-034
POLISHING-PAD MOUNTER 739.687-154
PRECISION-LENS CENTERER AND EDGER 716.462-010
PRECISION-LENS GENERATOR 716.682-014
PRECISION-LENS GRINDER 716.382-018
PRECISION-LENS-GRINDER APPRENTICE 716.382-022
PRECISION-LENS POLISHER 716.682-018
precision lens technician 716.280-018
PRECISION-OPTICAL WORKER ..... term
Prescription Clerk, Frames 222.367-050
PRESCRIPTION CLERK, LENS-AND-FRAMES 222.367-050
Prescription Clerk, Lenses 222.367-050
Prism Inspector 716.381-010
puncher 713.687-014
REDUCING-MACHINE OPERATOR 614.685-018
reticle printer 976.684-034
roll-over loader 713.687-026
ROLL-OVER-PRESS OPERATOR 690.685-326
ROUGE MIXER 570.685-082
ROUGE SIFTER AND MILLER 579.685-046
SALVAGER 713.687-038
SAWYER, OPTICAL GLASS 677.382-014
sifter and miller 579.685-046
Silk Screener 920.685-078
silverer 574.484-010
sizer 716.687-026
SIZER, MACHINE 716.360-010
stone operator 673.685-074
STONE ROUGHER 673.685-074
STONE SETTER 700.381-054
STONE-SETTER APPRENTICE 700.381-058
Stone Setter, Metal Optical Frames 700.381-054
SUNGLASS-CLIP ATTACHER 713.687-042
SUPERVISOR 716.130-010
Supervisor, Contact Lens 716.130-010
Supervisor, Fusing Room 716.130-010
Supervisor, Grinding And Polishing 716.130-010
Supervisor, Inspecting 716.130-010
Supervisor, Lens Generating 716.130-010
Supervisor, Multifocal Lens 716.130-010
Supervisor, Precision Optical Elements 716.130-010
Supervisor, Sunglasses 716.130-010
Surface-Lay-Out Technician 716.381-014
Topside Inspector 716.687-018
Trim Mounter I 713.684-022
Trim Mounter II 713.681-010
Truer 716.682-014
WASHER 713.684-042
WET INSPECTOR, OPTICAL GLASS 716.687-034

ordnance—ORDNANCE AND ACCESSORIES (EXCEPT VEHICLES AND GUIDED MISSILES) INDUSTRY: This designation includes occupations concerned with manufacturing and repairing ammunition; small arms having a bore less than 30 mm; and ordnance and related accessories having a bore more than 30 mm, such as field artillery, bazookas, tanks, flame throwers, and torpedo tubes. Occupations concerned with manufacturing guided missiles are included in the AIRCRAFT-AEROSPACE MANUFACTURING INDUSTRY (aircraft mfg.).

adjuster leader 619.137-010
aligner 736.684-042
ALIGNER, BARREL AND RECEIVER 736.684-010
ammunition storekeeper 222.137-018
ammunition supervisor 222.137-018
ANVIL-SEATING-PRESS OPERATOR 694.685-010
ARTILLERY-MAINTENANCE SUPERVISOR 632.131-010
ASSEMBLER 737.687-010
ASSEMBLER I 736.381-010
ASSEMBLER, IGNITER 737.381-010
ASSEMBLER II 736.684-014
ASSEMBLER, MECHANICAL ORDNANCE 737.684-010
assembly-machine tool setter 616.360-034
assembly-machine tool setter 616.360-030
AUTOMOTIVE-TIRE TESTER 736.367-010
AUTOMOTIVE-TIRE-TESTING SUPERVISOR 736.131-010
BAG LOADER 737.687-014
ballistics tester 739.484-010
BANDING-MACHINE OPERATOR 619.685-018
BANDOLEER PACKER 920.687-034
BANDOLEER STRAIGHTENER-STAMPER 737.587-010
bar-gauger and lubricator tender 590.685-058
BARREL FINISHER 736.684-018
Barrel Lapper 603.685-070
BARREL LOADER AND CLEANER 736.587-010
BARREL POLISHER, INSIDE 603.685-014
Barrel Reamer 606.682-014
BARREL REPAIRER 736.684-022
BARREL-RIB MATTING-MACHINE OPERATOR 605.682-010
BARREL RIFLER 605.685-010
Barrel Rifler, Broach 605.685-010
Barrel Rifler, Button 605.685-010
Barrel Rifler, Hook 605.685-010
barrel-rifler operator 605.685-010
BARREL STRAIGHTENER I 736.684-026
Barrel Straightener II 617.482-026
BASE-DRAW OPERATOR 504.685-010
Base-Wad Operator-Adjuster 535.482-010
BB SHOT PACKER 920.685-018
belt-and-link-shop supervisor 737.137-022
BLASTING-CAP ASSEMBLER 737.687-018
Bluer 599.685-026
BOMB LOADER 737.684-014
BOOSTER ASSEMBLER 737.687-022
Borderer 761.381-034
BROWNING PROCESSOR 505.685-010
BUCKSHOT-SWAGE OPERATOR 612.682-010
BULLET-ASSEMBLY-PRESS OPERATOR 694.685-014
BULLET-ASSEMBLY-PRESS SETTER-OPERATOR 694.682-010
BULLET-CASTING OPERATOR 502.682-010
BULLET-GROOVING-SIZING-AND-LUBRICATING-MACHINE OPERATOR 619.382-010
BULLET-LUBRICANT MIXER 543.685-010
BULLET-LUBRICATING-MACHINE OPERATOR 694.685-018
BULLET-SLUG-CASTING-MACHINE OPERATOR 502.382-010
bullet-swaging-machine adjuster 617.360-014
bullet-swaging-machine operator 617.585-010
BURNING-PLANT OPERATOR 509.685-018
CAMOUFLAGE ASSEMBLER 869.687-014
cartridge-assembling-machine adjuster 632.360-014
cartridge gauger 737.684-026
cartridge-loading operator 694.685-026
Carver And Checkerer, Specials 761.381-034
CASE-FINISHING-MACHINE ADJUSTER 626.381-010
CASE PREPARER-AND-LINER 509.384-010
Centerless-Grinding-Machine Adjuster 638.261-030
CHAMFERING-MACHINE OPERATOR I 606.685-014
CHAMFERING-MACHINE OPERATOR II 606.685-018
checkerer, hand 761.381-034
CHECKERING-MACHINE ADJUSTER 669.360-010
checkering-machine operator 665.685-034
CHECK WEIGHER 737.687-026
CHEST-PAINTING AND SEALING SUPERVISOR 749.137-010
chest-painting leader 749.137-010
chip separator 694.585-010
CHOKE REAMER 606.685-022
CHRONOGRAPH OPERATOR 739.484-010
CLEANER 503.684-010
cleaner-greaser 736.687-010
CLIP-LOADING-MACHINE ADJUSTER 694.362-010
CLIP-LOADING-MACHINE FEEDER 694.686-010
Cloth Printer 651.685-022
cold-working supervisor 619.130-010
cold-work operator 694.682-014
compressor operator-adjuster 535.482-010

continuous-washer operator 503.685-026
CORE LOADER 737.687-030
cup filler 737.687-102
CUP-TRIMMING-MACHINE OPERATOR 615.685-018
CUT-AND-PRINT-MACHINE OPERATOR 659.682-010
cut-off-machine operator 609.685-026
CUT-OFF-MACHINE OPERATOR 615.685-022
DEMOLITION SPECIALIST 737.687-034
DETONATOR ASSEMBLER 737.687-038
DIP-LUBE OPERATOR 503.685-014
DROP TESTER 737.387-010
DRY-HOUSE TENDER 559.585-010
dry mixer 550.565-010
electric-blasting-cap assembler 737.687-018
EMBOSSING-MACHINE OPERATOR 619.685-038
EMBOSSING TOOLSETTER 616.260-010
enthone solder stripper 503.685-046
Explosive Operator, Bomb 737.687-046
Explosive Operator, Fuse 737.687-046
Explosive Operator, Grenade 737.687-046
EXPLOSIVE OPERATOR I 737.687-042
EXPLOSIVE OPERATOR II 737.687-046
EXPLOSIVE-OPERATOR SUPERVISOR 694.132-010
EXPLOSIVES-TRUCK DRIVER 903.683-010
EXTRUDING-PRESS OPERATOR 614.685-010
FELT CUTTER 686.685-026
FILER, FINISH 705.481-010
Filer Repairer 705.481-010
FILING-AND-POLISHING SUPERVISOR 603.137-010
final assembler 736.381-010
Final Inspector 736.387-010
Finisher, Special Stocks 763.381-010
FIREARMS-ASSEMBLY SUPERVISOR 736.131-014
FITTER, VENTILATED RIB 736.381-014
FOILING-MACHINE ADJUSTER 629.381-010
FOILING-MACHINE OPERATOR 692.685-086
forming-machine operator 617.585-010
FRONT-SIGHT ATTACHER 736.684-030
FURNACE-AND-WASH-EQUIPMENT OPERATOR 503.685-026
FUSE ASSEMBLER 737.684-022
FUSE-CUP EXPANDER 694.685-022
Gaging-Machine Operator 737.685-010
GAS-CHECK-PAD MAKER 736.684-034
GAUGE-AND-WEIGH-MACHINE ADJUSTER 632.360-010
GAUGE-AND-WEIGH-MACHINE OPERATOR 737.685-010
GREASER 736.687-010
grip checkerer, machine 665.685-034
GUN EXAMINER 736.281-010
Gun Examiner And Repairer 736.281-010
gun numberer 652.582-010
GUN-REPAIR CLERK 222.387-022
GUNSMITH, BALLISTICS LABORATORY 609.260-010
gunstock repairer 761.381-038
Gunstock-Spray-Unit Adjuster 599.382-010
Gunstock-Spray-Unit Feeder 599.686-014
GUN SYNCHRONIZER 632.381-010
HEAD-GAUGE-UNIT OPERATOR 619.685-054
heading-and-priming operator 694.685-042
heading-and-priming tool setter 616.360-030
HOPPER FEEDER 619.686-018
HYDRAULIC-PRESS SERVICER 626.381-018
HYDRAULIC-PRESSURE-AUTO-FRETTAGE-MACHINE OPERATOR 694.682-014
HYDRAULIC-PRESSURE-AUTO-FRETTAGE-MACHINE-OPERATOR SUPERVISOR 619.130-010
IGNITER CAPPER 737.687-050
INLETTER 669.682-050
inside polisher 603.685-014
INSPECTING-MACHINE ADJUSTER 632.380-010
INSPECTION SUPERVISOR I 736.131-018
INSPECTION SUPERVISOR II 737.134-010
INSPECTOR, ASSEMBLY 736.387-010
INSPECTOR, BARREL 736.687-014
INSPECTOR, BULLET SLUGS 737.687-058
INSPECTOR, CHIEF 737.137-010
INSPECTOR, COLD WORKING 612.384-010
INSPECTOR, FIREARMS 632.381-014
INSPECTOR I 737.387-014
INSPECTOR II 737.687-054
INSPECTOR III 737.367-010
INSPECTOR IV 559.387-010
INSPECTOR, LIVE AMMUNITION 736.687-018
inspector, materials and processes 737.364-010
INSPECTOR, SALVAGE 737.684-026
INSPECTOR, SHELLS 737.687-066
IRON-PLASTIC BULLET MAKER 590.365-010
KNURLING-MACHINE OPERATOR 604.685-018
laboratory-mechanic helper 736.387-014
LABORER, AMMUNITION ASSEMBLY I 737.687-070
LABORER, AMMUNITION ASSEMBLY II 737.687-074
lacquer-machine feeder 694.685-046
LACQUER-PIN-PRESS OPERATOR 737.687-078
lacquer-press adjuster 632.380-018
LEAD HANDLER 599.687-018
LEAD-SECTION SUPERVISOR 619.132-010
LOADING-MACHINE ADJUSTER 632.360-014
LOADING-MACHINE OPERATOR 694.685-026
loading-machine operator 694.665-010
LOADING-MACHINE TOOL-SETTER 694.260-010
LOADING-UNIT OPERATOR 694.685-030
Loading-Unit Operator, Crimping 694.685-030
Loading-Unit Operator, Powder Charging 694.685-030
Loading-Unit Operator, Seating 694.685-030
loading-unit plate filler 737.685-014
LOADING-UNIT TOOL-SETTER 632.380-014
LUBRICATING-MACHINE TENDER 509.685-038
MACHINE-ADJUSTER LEADER 619.137-010
Machine-Adjuster Leader, Bullet Assembly 619.137-010
Machine-Adjuster Leader, Cannelure And Finish 619.137-010
Machine-Adjuster Leader, Case Trim 619.137-010
Machine-Adjuster Leader, Primer Assembly 619.137-010
machine-casting operator and adjuster 502.382-010
MACHINE-PACK ASSEMBLER 920.687-122
machine pack-shaker lubricator 694.685-018
MAGAZINE SUPERVISOR 222.137-018
MANUAL-PLATE FILLER 737.687-082
MARKER 652.582-010
MERCURY-CRACKING TESTER 737.687-086
MODEL MAKER, FIREARMS 600.260-018
MOLDER, LEAD INGOT 502.685-010
MUNITIONS HANDLER 929.687-034
Munitions-Handler Supervisor 922.137-018
oiler and packer, gun parts 736.687-010
ORDNANCE ENGINEER 019.061-022
ORDNANCE TRUCK INSTALLATION MECHANIC 806.684-098
outside repairer, special 761.381-038
OVEN TENDER 534.565-010
package opener 222.387-022
PACKER 929.684-010
Painter, Ordnance 741.684-026
patcher-wood welder 761.684-042
PELLET-PRESS OPERATOR 694.685-034
piece marker, small arms 652.582-010
plate filler 737.685-014
POWDER-AND-PRIMER-CANNING LEADER 737.137-014
POWDER-TRUCK DRIVER 903.683-014
Powder Trucker 929.687-030
POWDER WORKER, TNT 737.684-030
PRESSURE-TEST OPERATOR 737.387-018
primer-and-powder-canning leader 737.137-014
primer assembler 694.685-010
PRIMER ASSEMBLER 737.687-098
PRIMER BOXER 737.587-018
PRIMER CHARGER 737.687-102
PRIMER-CHARGING TOOL SETTER 694.360-010
PRIMER-INSERTING-MACHINE ADJUSTER 632.360-018
PRIMER-INSERTING-MACHINE OPERATOR 694.685-042
PRIMER INSPECTOR 737.687-106
PRIMER-POWDER BLENDER, DRY 550.565-010
primer-press operator 694.685-010
PRIMER SUPERVISOR 737.132-010
PRIMER-WATERPROOFING-MACHINE ADJUSTER 632.380-018
PRIMER-WATERPROOFING-MACHINE OPERATOR 694.685-046
priming-machine operator 694.685-042
PRIMING-MIXTURE CARRIER 922.587-010
PROCESS CHECKER 737.364-010
PROCESS INSPECTOR 736.381-018
PRODUCTION ASSEMBLER 737.684-034
PROOF INSPECTOR 736.384-010
PROOF TECHNICIAN 199.171-010
PROOF-TECHNICIAN HELPER 736.387-014
proof tester 736.384-010
PROPELLANT-CHARGE LOADER 737.487-010
PROPELLANT-CHARGE-ZONE ASSEMBLER 737.687-110
pyrometer operator 619.662-010
Renovation-Plant Supervisor 694.132-010
Repairer And Checker 761.381-034
RESTRICTIVE-PREPARATION OPERATOR 559.685-154
rib matcher and fitter 736.381-014
rim-fire charger operator 694.685-050

RIM-FIRE-PRIMING OPERATOR 694.685-050
RIM-FIRE-PRIMING TOOL SETTER 632.380-022
ROCKET-TEST-FIRE WORKER 806.384-022
salvage inspector, wood parts 769.387-010
SALVAGE-MACHINE OPERATOR 694.382-010
salvage-machine operator 737.684-026
SALVAGER I 737.687-114
SALVAGER II 737.687-118
sample maker 600.260-018
SANDBLAST OPERATOR 503.685-038
SCREW-EYE ASSEMBLER 737.687-122
Screw-Machine Adjuster, Automatic 638.261-030
SHADOWGRAPH-SCALE OPERATOR 737.687-126
SHAKER-PLATE OPERATOR 737.685-014
shaper 761.381-038
SHELLACKER 737.687-130
SHELL ASSEMBLER 737.684-038
shell-reprint operator 659.685-018
SHELL-SHOP SUPERVISOR 619.132-018
SHELL-SIEVE OPERATOR 694.585-010
shell-trim operator 609.685-026
shell-trim tool setter 609.280-010
shooter 736.384-010
SHOT BAGGER 920.687-170
SHOT DROPPER 502.362-010
SHOT-GRINDER OPERATOR 603.685-074
SHOTGUN-SHELL-ASSEMBLY-MACHINE ADJUSTER 616.360-030
SHOTGUN-SHELL-ASSEMBLY-MACHINE OPERATOR 694.385-010
SHOTGUN-SHELL-LOADING-MACHINE OPERATOR 694.665-010
SHOTGUN-SHELL-REPRINTING-UNIT OPERATOR 659.685-018
shot packer 920.687-170
SHOT POLISHER AND INSPECTOR 509.485-014
shot-tube-machine tender 920.685-018
SHRINK-PIT OPERATOR 619.662-010
SHRINK-PIT SUPERVISOR 619.131-018
sighter 736.684-042
SIGHT MOUNTER 736.481-010
SIZING-MACHINE OPERATOR 649.582-014
SKIVING-MACHINE OPERATOR 664.682-018
SLURRY MIXER 539.362-018
SOLDERER, BARREL RIBS 736.684-038
SPACE-AND-STORAGE CLERK 219.387-026
STEEL-SHOT-HEADER OPERATOR 611.682-010
STOCK CHECKERER I 761.381-034
STOCK CHECKERER II 665.685-034
STOCKING-AND-BOX-SHOP SUPERVISOR 769.137-010
STOCK MAKER, CUSTOM 761.381-038
STOCK PATCHER 761.684-042
stock repairer 761.684-042
STOCK SHAPER 761.684-046
Stock Turner 664.685-018
Straightener, Gun Parts 709.484-014
STRAIGHT-LINE-PRESS SETTER 616.360-034
STRIP-TANK TENDER 503.685-046
subassembler 736.684-014
SUPERINTENDENT, AMMUNITION STORAGE 189.167-038
SUPERVISOR 737.137-018
Supervisor, Ammunition-Loading 737.137-018
SUPERVISOR, BELT-AND-LINK ASSEMBLY 737.137-022
SUPERVISOR, ORDNANCE TRUCK INSTALLATION 806.137-014
Supervisor, Powder-And-Primer-Canning 737.137-018
Supervisor, Propellant-Charge-Loading 737.137-018
Supervisor, Pyrotechnic-Loading 737.137-018
SUPERVISOR, ROCKET PROPELLANT PLANT 559.137-046
SUPERVISOR, TUMBLERS 599.132-010
SWAGE TENDER 617.685-042
swage toolsetter 617.360-014
SWAGING-MACHINE ADJUSTER 617.360-014
SWAGING-MACHINE OPERATOR 617.585-010
TAPPER, HAND 737.687-134
TARGETEER 736.684-042
Thermite-Bomb Loader 737.684-014
THREADING-MACHINE OPERATOR 604.685-038
tracer-bullet assembly-machine tool setter 616.360-034
TRACER-BULLET-CHARGING-MACHINE OPERATOR 694.382-014
TRACER-BULLET-SECTION SUPERVISOR 694.131-010
trim and burr operator 609.685-026
TRIM-MACHINE ADJUSTER 609.280-010
TRIM-MACHINE OPERATOR 609.685-026
TUBE SIZER-AND-CUTTER OPERATOR 640.685-086
VARNISHING-UNIT OPERATOR 737.687-138
VARNISHING-UNIT TOOL SETTER 632.380-026
volumetric weigher 920.687-170
WAD-BLANKING-PRESS ADJUSTER 690.360-010
WAD-COMPRESSOR OPERATOR-ADJUSTER 535.482-010
WAD IMPREGNATOR 590.685-054
WAD LUBRICATOR 590.685-058
WAD-PRINTING-MACHINE OPERATOR 652.685-102
wash-barrel leader 599.132-010
WINDING-LATHE OPERATOR 619.685-086
WOODWORK-SALVAGE INSPECTOR 769.387-010

paint & varnish—PAINT AND VARNISH INDUSTRY: This designation includes occupations concerned with manufacturing paints in paste form, paints mixed ready for use, varnishes, lacquers, calcimines, japans, putty, enamels, fillers, stains, and shellac. Occupations concerned with the manufacture of boneblack, carbon black, and lampblack are included in the CHEMICAL INDUSTRY (chemical).

baker, paint 553.685-082
Barytes Grinder 599.685-058
batch mixer 550.685-078
Black-Ash Worker 559.685-110
blender 550.685-078
blender 550.585-038
Bulk-Pigment Reducer 550.585-038
CADMIUM-LIQUOR MAKER 553.685-026
CALCINE FURNACE LOADER 553.486-010
CALCINE-FURNACE TENDER 553.685-030
CENTRIFUGE OPERATOR 551.685-034
chip applier 641.685-030
CHIP-APPLYING MACHINE TENDER 641.685-030
chipper 559.684-022
COLOR-CARD MAKER 794.687-014
color matcher 550.381-014
color shader 550.381-014
Cover Marker 920.685-078
dispersion mixer 550.685-078
enamel burner 553.685-082
Enamel Shader 550.381-014
Equipment Cleaner 559.685-110
finish mixer 550.381-014
Formula Figurer 216.482-022
furnace-room supervisor 559.132-110
furnace tender 572.685-010
Glass Enamel Mixer 550.685-078
GLASS-FURNACE TENDER 572.685-010
grinder operator see PAINT GRINDER .....
kiln operator 553.685-030
kiln tender 553.685-082
LABORER, GENERAL 559.685-110
Lacquer Blender 550.685-078
Lacquer Filterer 551.685-034
LACQUER MAKER 559.682-030
lacquer mixer 559.682-030
Lacquer Shader 550.381-014
Latex-Paint Shader 550.381-014
liquor maker 553.685-026
MIXER 550.685-078
mounting-machine operator 641.685-030
Oil-Paint Shader 550.381-014
OVEN TENDER 553.685-082
oxide-furnace tender 558.685-054
PAINT GRINDER ..... term
paint grinder, roller mill 555.682-014
paint grinder, stone mill 555.682-022
Paint Maker 550.685-078
paint tinter 550.381-014
Panel Finisher 741.684-026
Paste Mixer 550.685-078
Paste Thinner 550.585-038
Pebble-Mill Operator 599.685-058
Pigment Mixer 550.685-078
PIGMENT PROCESSOR 559.685-130
Putty Maker 550.685-078
PUTTY TINTER-MAKER 559.482-014
RED-LEAD BURNER 558.685-054
reducer 550.585-038
Resin Filterer 551.685-082
ROLLER-MILL OPERATOR 555.682-014
SALVAGE SUPERVISOR 559.137-010
SAMPLE-COLOR MAKER 550.584-014
SAND-MILL GRINDER 555.682-018
shader 550.381-014
Stain Maker 550.585-038
stock grinder see PAINT GRINDER .....
stone-grinder operator 555.682-022
STONE-MILL OPERATOR 555.682-022
Strainer 559.685-110

SUPERVISOR, FILLING-AND-PACKING 920.137-022
Supervisor, Grinding 559.132-114
SUPERVISOR, LITHARGE 559.132-110
Supervisor, Mixing 559.132-114
SUPERVISOR, PAINT 559.132-114
SUPERVISOR, PUTTY AND CALKING 559.137-042
SUPERVISOR, TANK CLEANING 559.137-050
Supervisor, Thinning-Tinting 559.132-114
SUPERVISOR, VARNISH 559.132-134
TANK CLEANER 559.684-022
tankroom supervisor 559.132-134
THINNER 550.585-038
TINTER 550.381-014
varnish blender 553.382-022
varnish cooker 553.382-022
Varnish Filterer I 551.685-034
Varnish Filterer II 551.685-082
VARNISH INSPECTOR 559.584-014
VARNISH MAKER 553.382-022
VARNISH-MAKER HELPER 553.686-042
varnish melter 553.382-022
Varnish Thinner 550.585-038

paper & pulp—PAPER AND PULP INDUSTRY: This designation includes occupations concerned with manufacturing pulp and producing paper, molded pulp goods, and paperboard of all kinds from either woodpulp or rags. Coating, coloring, glazing, waxing, and impregnating paper are also included in this designation.

ACID MAKER 559.662-010
AIR-DRIER-MACHINE OPERATOR 534.682-010
apron operator 539.587-010
Back Tender, Cylinder 534.662-010
Back Tender, Fourdrinier 534.662-010
BACK TENDER, PAPER MACHINE 534.662-010
Back Tender, Pulp Drier 534.662-010
BARK-PRESS OPERATOR 563.685-010
BEATER-AND-PULPER FEEDER 530.686-010
BEATER ENGINEER 530.662-010
BEATER-ENGINEER HELPER 530.665-010
beater, head 530.132-014
Beater, Lead 530.662-010
beater operator 530.662-010
beater-operator helper 530.665-010
BLACK-ASH-BURNER OPERATOR 553.682-010
BLEACH-BOILER FILLER 533.685-010
bleach-boiler packer 533.685-010
Bleach-Boiler Puller 539.587-010
Bleacher, Groundwood Pulp 533.362-010
Bleacher, Kraft Pulp 533.362-010
BLEACHER, PULP 533.362-010
Bleacher, Sulfite Pulp 533.362-010
BLEACH-LIQUOR MAKER 550.662-010
block chopper, hand 569.687-026
block hacker 569.687-026
BLOCK-SPLITTER OPERATOR 663.685-010
BLOW-PIT HELPER 533.686-010
BLOW-PIT OPERATOR 533.665-010
Broke-Beater Tender 530.685-014
Broke Handler 929.687-022
BROWN-STOCK WASHER 533.685-014
butt sawyer 667.685-034
CAUSTICISER 558.382-018
caustic-liquor maker 558.382-018
CAUSTIC OPERATOR 558.485-010
Centrifugal-Screen Tender 533.685-022
CHIP-BIN CONVEYOR TENDER 921.685-022
chip deliverer 921.685-022
CHIPPER 564.685-014
chip-silo tender 921.685-022
CHIP TESTER 539.387-010
CHIP UNLOADER 921.663-018
chute feeder 921.686-022
Clay-Coating-Machine Tender 534.682-018
clay mixer 530.685-010
Coating-Line Checker 539.667-010
COATING-MACHINE OPERATOR 534.682-018
Coating-Machine-Operator Helper 534.686-010
COATING-MIXER SUPERVISOR 530.132-010
COATING-MIXER TENDER 530.685-010
COLOR DEVELOPER 530.261-010
COMBINER OPERATOR 534.682-026
Combiner-Operator Helper 534.686-010
combiner-sheet operator 534.682-026
composition-board-press operator 535.685-010
continuous-loft operator 534.682-010
CONTROL INSPECTOR 539.667-010
cook 532.362-010
Cooker, Soda 532.362-010
Cooker, Sulfate 532.362-010
Cooker, Sulfite 532.362-010
COOKER TENDER 532.685-014
cook helper 532.686-010
Core Cutter 649.685-026
CORE WINDING OPERATOR 640.682-014
CUT-OFF SAWYER, LOG 667.685-034
Cutter 539.587-010
cutter operator 530.666-010
CUTTER, WET MACHINE 539.686-010
CYLINDER-MACHINE OPERATOR 539.362-010
Cylinder-Machine Operator, Pulp Drier 539.362-010
DAMPENER OPERATOR 534.685-010
DECKER OPERATOR 533.682-010
deck sawyer 667.685-034
digester cook 532.362-010
digester-cook helper 532.686-010
DIGESTER OPERATOR 532.362-010
DIGESTER-OPERATOR HELPER 532.686-010
double-cut sawyer 667.682-034
Drum-Barker Operator 669.485-010
Dry-End Tester 539.364-010
EVAPORATOR OPERATOR 532.685-018
filler 533.685-010
FINAL INSPECTOR, PAPER 539.367-010
FIRER HELPER 553.665-034
Forming-Machine Operator 539.685-018
FOURDRINIER-MACHINE OPERATOR 539.362-014
Fourdrinier-Paper-Machine Supervisor 539.132-010
grounding-machine operator 534.682-018
ground-wood supervisor 530.132-022
head paper tester 539.367-010
HEAD SAWYER, AUTOMATIC 667.682-034
head-stock operator 539.132-018
high-density-press operator 535.685-010
hot-melt-machine operator 534.682-026
hot-press operator 535.685-010
Hydraulic-Barker Operator 669.485-010
hydraulic-press tender 532.685-026
Hydropulper 530.685-014
INSPECTOR 649.487-010
inspector and counter 649.687-010
inspector, rag sorting 530.687-010
jacker feeder 921.686-022
jogger operator 649.685-066
knife changer 564.684-010
KNIFE SETTER, GRINDER MACHINE 564.684-010
laboratory assistant 078.381-014
LABORER, RAGS 539.587-010
laminating-machine operator 534.682-026
lap-machine tender 539.685-030
LAYBOY TENDER 649.685-066
LEACHER 551.685-090
LIME-KILN OPERATOR 559.685-118
limerock tower loader 559.666-010
lime slaker 559.685-118
LIME-SLUDGE KILN OPERATOR 553.685-074
LIME-SLUDGE MIXER 550.585-026
LOADER, MAGAZINE GRINDER 530.686-014
log-chain feeder 921.686-022
LOG-HAUL CHAIN FEEDER 921.686-018
LOG SCALER 455.487-010
MACHINE-CLOTHING REPLACER 629.361-010
magazine loader 530.686-014
MATRIX-DRIER TENDER 532.585-010
MOISTURE-CONDITIONER OPERATOR 532.685-022
MOLDING-MACHINE TENDER 539.685-018
OILING-MACHINE OPERATOR 534.685-018
overlooker 649.687-010
paper coater 534.682-018
PAPER COATER 534.685-022
paper-machine operator 539.362-014
PAPER-PROCESSING-MACHINE HELPER 534.686-010
Paper Slitter 699.682-030
PAPER SORTER AND COUNTER 649.687-010
Paper Tester 539.364-010
paster operator 534.682-026
plater 649.686-026
PLATE WORKER 535.685-010

PLATING-MACHINE OPERATOR 649.686-026
Pocket-Grinder Operator 530.662-014
poler 921.686-022
pondsaw operator 667.685-034
Pond Scaler 455.487-010
POND WORKER 921.686-022
Pony-Roll Finisher 920.685-090
POWER-BARKER OPERATOR 669.485-010
PULP-AND-PAPER TESTER 539.364-010
PULPER 530.685-014
PULPER, SYNTHETIC SOIL BLOCKS 530.582-010
PULP GRINDER AND BLENDER 530.682-010
pulp-machine operator 539.685-030
pulp-making-plant operator 532.686-010
PULP-PRESS TENDER 532.685-026
PULP-REFINER OPERATOR 530.382-010
Pulp Tester 539.364-010
Pulpwood Scaler 455.487-010
PUMP MECHANIC 629.281-034
PUMP-PRESS OPERATOR 539.685-022
RAG-CUTTING-MACHINE FEEDER 530.666-010
RAG-CUTTING-MACHINE TENDER 530.665-014
RAG INSPECTOR 530.687-010
rag-willow operator 533.685-030
RECOVERY OPERATOR 552.362-018
Riffler Tender 533.685-022
Ring-Grinder Operator 530.662-014
Rod-Machine Operator 533.685-022
POLL EXAMINER 640.687-010
ROLL FINISHER 920.685-090
roll skinner 539.686-010
Roll Weigher 222.387-074
roll wrapper 920.685-090
ROTARY-CUTTER FEEDER 640.686-010
rotary-filter operator 533.682-010
SAMPLE CLERK, PAPER 209.587-046
SAVE-ALL OPERATOR 533.685-018
SCREEN HANDLER 539.685-026
screen-room operator 533.685-022
SCREEN TENDER 533.685-022
SCREEN TENDER 534.665-010
SCREEN TENDER, CHIPS 533.685-026
SCREEN-TENDER HELPER 533.687-010
screen washer 533.687-010
second hand, paper machine 534.662-010
sheeter helper 649.685-066
Sheeter Operator 649.682-022
sheet taker 539.686-010
Siding-Coreboard Inspector 539.667-010
sinker puller 921.686-022
SIZE MAKER 550.682-010
skinner 539.686-010
SLASHER OPERATOR 667.685-054
slasher sawyer 667.685-054
slip feeder 921.686-022
Slitter-And-Cutter Operator 649.682-038
slusher operator 530.685-014
solid-fiber-paster operator 534.682-026
sorter 649.687-010
spudder 569.687-026
starch and prosize mixer 550.682-010
Stock Pitcher 539.587-010
SUPERCALENDER OPERATOR 534.682-038
Supercalender-Operator Helper 534.686-010
Superintendent, Board Mill 539.132-010
SUPERVISOR, BEATER ROOM 530.132-014
Supervisor, Bleach Plant 539.132-014
SUPERVISOR, CALENDERING 534.132-010
SUPERVISOR, COREMAKER 640.132-010
supervisor, groundwood mill 530.132-022
SUPERVISOR, PAPER COATING 534.132-014
SUPERVISOR, PAPER MACHINE 539.132-010
SUPERVISOR, PAPER TESTING 539.134-010
SUPERVISOR, PULP PLANT 539.132-014
SUPERVISOR, RAG ROOM 539.137-010
SUPERVISOR, REPULPING 539.132-018
SUPERVISOR, WET ROOM 539.130-014
SUPERVISOR, WOOD ROOM 530.132-018
THRASHER FEEDER 533.685-030
timber trimmer 667.685-034
TOWER ATTENDANT 559.666-010
TRANSFER OPERATOR 921.685-066
WASHER ENGINEER 533.685-034
WASHER-ENGINEER HELPER 533.686-014
WASTE-PAPER-HAMMERMILL OPERATOR 530.686-018
WATER-QUALITY TESTER 539.367-014
web-machine tender 539.686-010
WEIGHT TESTER 539.485-010
Wet-End Tester 539.364-010
WET-MACHINE TENDER 539.685-030
wet-press tender 539.686-010
WINDER HELPER 539.687-010
wood barker 569.687-026
WOOD GRINDER, HEAD 530.132-022
WOOD GRINDER OPERATOR 530.662-014
WOOD HACKER 569.687-026
WOOD HANDLER 921.687-034
WOOD INSPECTOR 663.687-010
wood-mill supervisor 570.132-018
wood-preparation supervisor 530.132-018
YARD LABORER 922.687-102

paper goods—PAPER GOODS INDUSTRY: This designation includes occupations concerned with making paper, paperboard, and cardboard products, such as cardboard boxes, cards, containers, envelopes, paper bags, tags, tubes, spools, cones, mailing cases with or without metal ends, paper napkins, towels, straws, and designing and printing wallpaper. Occupations concerned with the making of bags from cellulose, polyethylene, glassine, and similar films from purchased materials are also included in this designation. Occupations concerned with making paper, paperboard, and cardboard from pulp and other materials are included in the PAPER AND PULP INDUSTRY (paper & pulp). Occupations concerned with coating, finishing, and laminating materials with vinyl for covering and decorating walls and ceilings are included in the TEXTILE PRODUCTS INDUSTRY, NOT ELSEWHERE CLASSIFIED (textile prod. nec).

Adjustable-Die Cutter 699.682-022
air-hammer stripper 794.687-050
Assembly Inspector 649.367-010
AUTOMATIC-MACHINE ATTENDANT 649.685-010
back tender 652.687-050
bag-end sewer 787.686-014
bag inspector 649.367-010
BAG-MACHINE OPERATOR 649.685-014
BAG-MACHINE-OPERATOR HELPER 649.686-010
Bag-Machine Set-Up Operator 649.380-010
bag-making-machine operator 649.685-014
BAG REPAIRER 794.684-030
BAG SEWER 787.686-010
BANDER, HAND 920.687-126
BAND-SAW OPERATOR 640.685-090
BENDER, MACHINE 641.685-010
bending-machine operator 641.685-010
binder operator 641.685-090
BINDERY WORKER 649.685-018
blanker operator 649.685-138
blanker-press operator 649.682-026
BLANKET-WINDER HELPER 641.686-030
BLANKET-WINDER OPERATOR 641.682-010
Board-Lining-Machine Operator 641.562-010
body-rolling-machine tender 641.685-062
BOOK-JACKET-COVER-MACHINE OPERATOR 640.685-074
Book-Pocket-Machine Operator 649.685-042
BOTTOMING-MACHINE OPERATOR 649.685-022
BOX BENDER 641.687-010
Box Coverer, Hand 795.687-014
box-covering-machine operator 641.685-034
BOX-FOLDING-MACHINE OPERATOR 649.682-010
BOX-LINING-MACHINE FEEDER 641.685-018
BOX-SEALING INSPECTOR 641.687-014
BOX-SEALING-MACHINE OPERATOR 641.662-010
breaker 794.687-050
calender operator 649.685-022
CARTON-FORMING-MACHINE TENDER 641.685-026
Carton-Waxing-Machine Operator 534.485-010
Cellophane-Bag-Machine Operator 649.685-014
clasp machine operator 649.685-070
Clay-Coating-Machine Tender 534.682-018
COATING-MACHINE OPERATOR 534.685-018
COATING-MACHINE OPERATOR, HARDBOARD 534.682-022
Coating-Machine-Operator Helper 534.686-010
Combination Valving-And-Sewing-Machine Operator 641.685-094
COMBINER OPERATOR 534.682-026
Combiner-Operator Helper 534.686-010
combiner-sheet operator 534.682-026
COMPENSATOR 640.685-026
CONE TREATER 534.687-010
CONVOLUTE-TUBE WINDER 640.682-010
cook 532.361-010

Cooker, Soda 532.362-010
Cooker, Sulfate 532.362-010
Cooker, Sulfite 532.362-010
C & helper 532.686-010
supervisor 794.684-022
-end-reel operator 640.685-046
CORE-CUTTER AND REAMER 649.685-026
Coremaker 640.682-022
CORNER CUTTER 640.685-030
corner-cutter-machine operator 640.685-030
corrugated-combining-machine operator 641.562-010
CORRUGATOR OPERATOR 641.562-010
CORRUGATOR-OPERATOR HELPER 641.686-018
COUNTER, HAND 794.687-018
COUNTING-MACHINE OPERATOR 649.685-030
covering-machine operator 641.685-098
COVER STRIPPER 641.685-034
creasing-and-cutting-press feeder 659.686-014
Crepe-Laminator Operator 534.682-030
CREPING-MACHINE OPERATOR 534.682-030
CREPING-MACHINE-OPERATOR HELPER 534.687-014
crinkling-machine operator 534.682-030
CUT-OFF-MACHINE OPERATOR 640.685-034
cutting-and-creasing-machine operator 649.682-014
cutting-and-creasing-press operator 659.662-010
CYLINDER-DIE-MACHINE HELPER 649.686-018
CYLINDER-DIE-MACHINE OPERATOR 649.682-014
DIE MAKER 739.381-018
DIE-MAKER APPRENTICE 739.381-022
DIE MOUNTER 659.684-010
digester cook 532.362-010
digester-cook helper 532.686-010
DIGESTER OPERATOR 532.362-010
DIGESTER-OPERATOR HELPER 532.686-010
disc-ruler operator 659.682-022
DOMER 641.685-038
Double-Corner Cutter 640.685-030
Double-Ending-Machine Operator 641.685-042
Double-End Sewer 787.686-010
Double-Facing-Corrugating-Machine Operator 641.562-010
Double-Fold-Machine Operator 649.685-046
DRILL-PUNCH OPERATOR 649.685-034
edger 795.684-014
EDGE STRIPPER 795.684-014
EMBOSSER OPERATOR 659.682-022
embossing-machine-operator helper 640.685-070
EMBOSSING-MACHINE TENDER 649.685-038
ENDING-MACHINE OPERATOR 641.685-042
envelope folder 794.687-022
ENVELOPE-FOLDING-MACHINE ADJUSTER 641.380-010
envelope-fold operator 649.685-042
ENVELOPE-MACHINE OPERATOR 649.685-042
ESTIMATOR, PAPERBOARD BOXES 221.362-018
EXPANSION ENVELOPE MAKER, HAND 794.684-018
EXTENSION EDGER 641.685-046
FINISHING-MACHINE OPERATOR 649.686-022
Five-Piece-Expansion Maker, Hand 794.684-018
flanging-machine operator 641.685-046
Flexo-Folder-Gluer-Machine Helper 659.686-014
Flexo-Folder-Gluer Operator 659.662-010
FLEXOGRAPHIC-PRESS OPERATOR 651.682-010
Folded-Towel-Machine Operator 649.685-046
Folder-Gluer Operator 649.682-010
FOLDER, HAND 794.687-022
folder, machine 649.685-042
Folder-Stitcher Operator 649.682-010
Folder-Taper Operator 649.682-010
FOLDING-MACHINE FEEDER 641.685-050
FOLDING-MACHINE OPERATOR 649.685-046
FOUR-CORNER-STAYER-MACHINE OPERATOR 641.685-054
FOURDRINIER-MACHINE OPERATOR 539.362-014
french-edge operator 641.685-046
Garment-Tag Stringer 794.687-054
GLUER AND SLICER, HAND 794.687-030
Gluing-Machine Adjuster 649.380-010
grounding-machine operator 534.682-018
gummed-tape-press operator 640.685-050
Gusset Maker 794.684-018
hand folder 794.687-022
HANDLE-MACHINE OPERATOR 649.685-050
hand worker 794.687-054
head ruler, linoprint ruling machine operator 659.682-022
hot-melt-machine operator 534.682-026
IMPREGNATION OPERATOR 539.685-014
inserter 794.687-058
insert-machine operator 653.685-030
INSPECTOR, PAPER PRODUCTS 649.367-010
jogger operator 649.685-066
knocker-off 794.687-050
KNOTTING-MACHINE OPERATOR 649.685-054
laboratory assistant 078.381-014
LACE-PAPER-MACHINE OPERATOR 649.685-058
laminating-machine operator 534.682-026
LAUNDRY-BAG-PUNCH OPERATOR 649.685-062
LAYBOY TENDER 649.685-066
LINER-MACHINE OPERATOR 641.685-058
LINER-MACHINE-OPERATOR HELPER 641.686-022
machine assembler 649.685-010
MACHINE OPERATOR, GENERAL 649.685-070
MACHINE SET-UP OPERATOR, PAPER GOODS 649.380-010
multifold operator 649.685-046
Napkin-Band Wrapper 920.687-026
Napkin-Machine Operator 649.685-046
novelty maker 794.684-022
OILING-MACHINE OPERATOR 534.685-018
One-Piece-Expansion Maker, Hand 794.684-018
PACKAGING TECHNICIAN 739.281-010
packer operator 649.682-042
paint-coating-machine operator 534.682-022
PANEL-MACHINE OPERATOR 640.685-038
PANEL-MACHINE SETTER 640.360-010
panel-machine tender 649.685-038
Paper-Bag Inspector 649.367-010
PAPER-BAG-PRESS OPERATOR 641.686-026
Paper Baler 920.685-010
paper coater 534.682-018
PAPER COATER 534.685-022
PAPER-CONE-DRYING-MACHINE OPERATOR 532.686-014
PAPER-CONE GRADER 649.687-014
PAPER-CONE-MACHINE TENDER 641.685-062
PAPER-CORE-MACHINE OPERATOR 640.685-042
paper-cup-handle-machine operator 649.685-050
PAPER-CUP-MACHINE OPERATOR 639.685-078
paper-machine operator 539.362-014
PAPER-NOVELTY MAKER 794.684-022
PAPER-PATTERN FOLDER 794.687-034
PAPER-PATTERN INSPECTOR 649.687-018
PAPER-PROCESSING-MACHINE HELPER 534.686-010
paper reeler 640.685-046
PAPER-REEL OPERATOR 640.685-046
Paper Slitter 699.682-030
PAPER STRIPPER 922.687-078
paper-tube cutter 640.685-034
Paper-Tube Grader 649.687-014
paper-tube sawyer 640.685-034
Papeterie-Table Assembler 920.687-026
PARAFFIN-MACHINE OPERATOR 534.685-026
PARTITION-MAKING-MACHINE OPERATOR 649.685-082
partition-slotter helper 640.686-014
paster operator 534.682-026
PATCH-MACHINE OPERATOR 641.685-066
PATTERN CHART-WRITER 789.381-014
PATTERNMAKER, ENVELOPE 649.361-010
peeler 794.687-050
pen-ruler operator 659.682-022
plate mounter 659.684-010
PLATEN-PRESS OPERATOR 649.682-026
Plunger-Machine Operator 649.685-042
Polyethylene-Bag-Machine Operator 649.685-014
Polyethylene Combiner 534.682-026
pony winder 640.685-058
PRINTER-SLOTTER HELPER 659.686-014
PRINTER-SLOTTER OPERATOR 659.662-010
PROCESS-MACHINE OPERATOR 640.685-050
production clerk 221.162-010
production planner 221.162-010
PRODUCTION SCHEDULER, PAPERBOARD PRODUCTS 221.162-010
pulp-making-plant operator 532.686-010
PUNCHBOARD ASSEMBLER I 794.687-042
PUNCHBOARD ASSEMBLER II 794.687-046
PUNCHBOARD-FILLING-MACHINE OPERATOR 649.685-094
punchboard inserter 794.687-042
punchboard stuffer 794.687-042
quad stayer 641.685-054
quality-control inspector 649.367-010
quality-control inspector 652.687-042
QUALITY-CONTROL TESTER 559.367-010
Rack Carrier 929.687-030
RACKER 659.687-010
reel cutter 640.685-046

REELER 640.685-054
reel operator 640.685-046
rewinder 640.685-058
REWINDER OPERATOR 640.685-058
RIBBON-HANKING-MACHINE OPERATOR 640.355-010
RING-MAKING-MACHINE OPERATOR 649.685-098
roll-embosser operator 649.682-022
ROLLING-MACHINE OPERATOR 640.685-070
ROLL RECLAIMER 640.685-062
Roll Weigher 222.387-074
roll winder 640.685-058
Rotary-Envelope-Machine Operator 649.685-042
ROUND-CORNER-CUTTER OPERATOR 640.685-074
RULING-MACHINE SET-UP OPERATOR 659.682-022
SALVAGE WINDER AND INSPECTOR 649.685-102
SAMPLE-BOOK MAKER 659.685-014
SAMPLE CLERK, PAPER 209.587-046
SAMPLE MAKER, HAND 794.684-030
scheduler 221.162-010
SCORER 641.685-070
Scorer, Double 641.685-070
SCORER HELPER 641.686-030
Scorer, Single 641.685-070
scoring-machine-operator helper 641.686-030
SCRAPPER 794.687-050
SCREEN MAKER 739.684-150
SCREEN-PRINTING-EQUIPMENT SETTER 979.360-010
SEALING-MACHINE OPERATOR 641.685-074
semiautomatic-stitcher operator 649.685-114
semiautomatic-taper operator 649.685-126
SEWING-MACHINE OPERATOR, PAPER BAGS 787.685-054
sheeter 640.685-046
sheeter helper 649.685-066
Sheeter-Machine Operator 659.685-014
sheeter-waxer operator 534.482-010
SHOT-TUBE-MACHINE TENDER 649.685-106
Side-Seam-Envelope-Machine Operator 649.685-042
Single-Corner Cutter 640.685-030
Single-Ending-Machine Operator 641.685-042
Single-End Sewer 787.686-010
Single-Facing-Corrugating-Machine Operator 641.562-010
Single-Fold-Machine Operator 649.685-046
SLEEVER 641.686-034
Slitter-And-Cutter Operator 649.682-038
SLITTER-CREASER-SLOTTER HELPER 649.686-030
SLITTER-CREASER-SLOTTER OPERATOR 649.682-034
SLITTER-SCORER-CUT-OFF OPERATOR 649.682-038
SLOTTER OPERATOR 640.685-078
SLOTTER-OPERATOR HELPER 640.686-014
Solid-Die Cutter 699.682-022
solid-fiber-paster operator 534.682-026
SORTING-MACHINE OPERATOR 649.665-010
SPIRAL BINDER 653.685-030
spiral-bind operator 653.685-030
SPIRAL-MACHINE OPERATOR 692.685-186
SPIRAL-TUBE WINDER 640.682-022
SPIRAL-TUBE-WINDER HELPER 640.687-014
spiral-winding-machine helper 640.687-014
SPOOL MAKER 641.685-082
staying-machine operator 641.685-054
steel-rule die maker 739.381-018
steel-rule-die-maker apprentice 739.381-022
STEEL-TIE ADJUSTER, AUTOMATIC 649.685-110
STITCHER OPERATOR 649.685-114
Stitcher Set-Up Operator, Automatic 649.380-010
straight ruling machine operator 659.682-022
STRAP-MACHINE OPERATOR 534.682-034
strap-making-machine operator 534.682-034
STRINGER 794.687-054
Stringing-Machine Operator 649.685-054
STRING-TOP SEALER 641.685-086
STRIPER 651.682-018
stripping-machine operator 641.685-034
STRIPPING-MACHINE OPERATOR 641.685-090
stuffing-machine operator 649.685-094
SUPERVISOR, INSPECTING 979.137-014
SUPERVISOR, PAPER COATING 534.132-014
SUPERVISOR, PAPER PRODUCTS 649.130-010
SUPERVISOR, PAPER TESTING 539.134-010
SUPERVISOR, PRODUCTION 979.137-018
surface printer 652.662-014
TABBER 794.687-058
TABLET-MAKING-MACHINE OPERATOR 649.682-042
TABLET-MAKING-MACHINE-OPERATOR HELPER 649.685-130
table worker 794.687-022
tagger 794.687-058
TAG-MACHINE OPERATOR 649.685-118
TAG-PRESS OPERATOR 649.682-046
TAPE-FASTENER-MACHINE OPERATOR 649.685-122
TAPER OPERATOR 649.685-126
tension machine operator 649.685-070
tie fastener 649.685-122
tie-tape-machine operator 649.685-122
TIGHTENING-MACHINE OPERATOR 640.685-082
tin-tie-machine operator, automatic 649.685-110
Towel Bander 920.687-026
TRIMMER, HAND 794.687-062
trimming-machine operator 640.685-034
tube cutter 640.685-034
Tube Inspector 649.367-010
TUBE-MACHINE OPERATOR 641.662-014
TUBE-MACHINE-OPERATOR HELPER 641.686-038
tube maker 641.662-014
tube-making-machine operator 641.662-014
tuber helper 641.686-038
TYING-MACHINE OPERATOR 929.685-014
VALVING-MACHINE OPERATOR 641.685-094
VULCANIZED-FIBER-UNIT OPERATOR 539.565-010
WALLCOVERING TEXTURER 749.684-054
wallpaper-embosser helper 640.685-070
WALLPAPER INSPECTOR 652.687-042
WALLPAPER INSPECTOR AND SHIPPER 652.687-046
WALLPAPER-PRINTER HELPER 652.687-050
WALLPAPER PRINTER I 652.662-014
Wallpaper Printer II 979.684-034
Waterproof-Coating-Machine Tender 534.682-018
wax-coating-machine tender 534.482-010
Waxed-Bag-Machine Operator 649.685-014
waxer operator 534.482-010
WAXING-MACHINE OPERATOR 534.482-010
Waxing-Machine-Operator Helper 534.686-010
winder 640.682-022
winder helper 640.687-014
window-machine operator 641.685-066
wire-spiral binder 653.685-030
Wiring-Machine Operator 649.685-054
wrapping-machine operator 641.685-034
WRAPPING-MACHINE OPERATOR 641.685-098

pen & pencil—PEN, PENCIL, MARKING DEVICE, AND ARTISTS' MATERIALS MANUFACTURING INDUSTRY: This designation includes occupations concerned with manufacturing pens, fountain pens, ballpoint pens, refill ink cartridges, metal pen points, and mechanical pencils; wood-cased lead pencils, holders, and leads; crayons; rubber marking and branding merchandise; artists' materials, such as drawing boards, palettes, colors, waxes, and drafting equipment; carbon paper; inked ribbons for typewriters and other business machines; and related merchandise. Occupations concerned with the manufacture of drafting instruments are included in the INSTRUMENTS AND APPARATUS INDUSTRY (inst. & app.); occupations concerned with the manufacture of drawing, writing, and stamp pad inks are included in the CHEMICAL INDUSTRY (chemical).

air-hammer operator 733.687-014
ASSEMBLER 733.685-010
ASSEMBLER, MARKING DEVICES 733.687-010
ASSEMBLER, MECHANICAL PENCILS AND BALLPOINT PENS 733.687-014
Assembly-Machine Feeder 692.686-010
Assembly-Machine Offbearer 692.686-010
ASSEMBLY-MACHINE OPERATOR 692.686-010
BALLPOINT-PEN-ASSEMBLY-MACHINE OPERATOR 692.382-010
BALLPOINT PEN CARTRIDGE TESTER 733.281-010
BANDER 733.687-018
bench-assembler operator 733.687-014
bench-assembler operator 733.687-034
bench-boring-machine operator 733.685-018
CARBON-COATER-MACHINE OPERATOR 534.682-014
CARBON-PAPER-COATING-MACHINE SETTER 534.380-010
CARBON-PAPER INTERLEAFER 640.685-018
Cartridge Assembler 733.685-010
Cartridge Feeder 692.686-010
Cementer 733.687-030
CHALK CUTTER 733.687-022
CHALK-EXTRUDING-MACHINE OPERATOR 575.685-018
CHALK-MOLDING-MACHINE OPERATOR 575.685-022
CLAMPER 733.687-026
coater, carbon paper 534.682-014
COATING-MACHINE OPERATOR 692.685-054
Crayon-Molding-Machine Operator 575.685-022

personal ser.

CRAYON-SORTING-MACHINE FEEDER 929.686-018
cut-off-machine operator 690.685-306
DATER ASSEMBLER 733.687-030
DESK-PEN-SET ASSEMBLER 733.687-034
DIPPER 733.687-038
drum sander 662.685-030
end trimmer 669.685-062
end trimmer 662.685-030
ENGRAVER, RUBBER 733.381-010
ENGRAVER, SEALS 704.381-034
engraver, signature 733.381-010
FELT-TIPPING-MACHINE TENDER 686.686-010
FILLING-MACHINE OPERATOR 733.685-014
FORMULA WEIGHER 559.685-082
Fountain-Brush Assembler 733.687-010
FOUNTAIN PEN TURNER 690.685-190
Fountain-Roller Assembler 733.687-010
GLUE-MACHINE OPERATOR 692.685-094
GOLD-NIB GRINDER 705.682-010
GROOVING-MACHINE OPERATOR 733.685-018
Guillotine Operator 699.685-014
HEADING-MACHINE OPERATOR 669.685-062
HYDRAULIC-BILLET MAKER 575.685-046
hydraulic-press operator 733.687-026
IMPREGNATOR 562.685-014
INJECTION-MOLDING-MACHINE OFFBEARER 690.686-038
inking-machine tender 692.685-142
INSPECTOR 733.687-042
INSPECTOR, FINAL ASSEMBLY 733.687-050
INSPECTOR, RUBBER-STAMP DIE 733.687-054
inter-fold roll cutter 640.685-066
Knurling-Machine Tender 604.685-026
LEAD FORMER 575.685-050
lead-laying-and-gluing-machine operator 692.685-094
lead presser 575.685-050
marker assembler 733.687-010
mixing-and-molding-machine operator 570.685-066
MOLDING-MACHINE TENDER 570.685-066
nib adjuster 733.687-042
Nib Assembler 733.685-010
NIB FINISHER 705.684-050
NIB INSPECTOR 733.687-058
painting-machine operator 692.685-054
Pen Assembler 733.687-010
PENCIL INSPECTOR 733.687-062
pencil sorter 733.687-062
pen-point smoother 733.685-026
PLATE MOLDER 556.582-010
PLUG CUTTER 690.685-306
PRINTER 652.685-062
QUALITY-CONTROL TECHNICIAN, INKED RIBBONS 733.364-010
REPAIRER, PENS AND PENCILS 733.384-010
RIBBON INKER 692.685-142
RIBBON WINDER 733.685-022
ROLL-SLICING-MACHINE TENDER 640.685-066
ROUNDING-MACHINE TENDER 663.685-026
RUBBER-ROLLER GRINDER 690.686-050
rubber-stamp assembler 733.684-018
RUBBER-STAMP MAKER 733.381-014
salvage clerk 733.384-010
Sander, Wooden Pencils 662.685-014
SET-UP MECHANIC 692.380-010
SET-UP MECHANIC, AUTOMATIC LINE 692.380-014
Set-Up Mechanic, Coating Machines 692.380-010
Set-Up Mechanic, Heading Machines 692.380-010
Set-Up Mechanic, Stamping Machines 692.380-010
shaping-machine tender 663.685-026
SIZING-MACHINE TENDER 662.685-030
small kick-press operator 733.687-014
small press operator 733.687-014
SMOOTHER 733.685-026
spooler 733.685-022
STAMPING-MACHINE OPERATOR 692.685-194
stamp maker 733.381-014
STAMP MOUNTER 733.684-018
STAMP-PAD FINISHER 733.687-066
STAMP-PAD MAKER 733.687-070
STENCIL INSPECTOR 733.687-074
SUPERVISOR, ASSEMBLY 733.137-010
SUPERVISOR, CARBON-PAPER-COATING 534.137-010
SUPERVISOR, CUTTING DEPARTMENT 669.130-014
SUPERVISOR, ENGRAVING 704.131-014
SUPERVISOR, FINISHING DEPARTMENT 733.137-014
SUPERVISOR, INSPECTION 733.137-018
SUPERVISOR, PAINTING DEPARTMENT 692.137-010
SUPERVISOR, PLATING AND POINT ASSEMBLY 733.130-010
SUPERVISOR, RUBBER STAMPS AND DIES 733.131-010
SWAGER OPERATOR 616.685-078
TIP BANDER 733.685-030
tip-banding-machine operator 733.685-030
tipper 733.685-034
TIPPING-MACHINE OPERATOR 733.685-034
tipping-machine operator 686.686-010
tip tightener 733.687-014
trimmer 662.685-030
typewriter-ribbon winder 733.685-022
Vulcanizer, Rubber Plate 556.582-010
WASHER 733.687-078
winder 640.685-018

personal ser.—PERSONAL SERVICE: This designation includes occupations concerned with rendering services either upon or for persons and animals or upon personal effects. With very few exceptions, the services rendered are personal in the sense that there is fairly close and often physical contact between the providers and recipients of the services; or the services are performed on personal effects, such as wearing apparel. These services characteristically are performed in establishments devoted primarily to the rendering of such services, but they are also performed in establishments operated for other purposes. Typical of the services included are those performed in the following establishments: barber shops; beauty parlors; costume and dress-suit rental agencies; garment alteration and repair shops; glove repair shops; photographic studios; physical culture schools and gymnasiums; public baths, including turkish baths, sulfur baths, and steam baths; shoe repair shops; shoeshine shops; textile weaving (re-weaving) and mending shops; and undertaking establishments.

alcohol rubber 335.677-010
ALTERATION TAILOR 785.261-010
alterer 785.261-010
alterer apprentice 785.261-018
BARBER 330.371-010
BARBER APPRENTICE 330.371-014
barker 353.363-010
bath attendant 334.677-010
bath attendant 334.374-010
bath-house attendant 334.374-010
beautician 332.271-010
beautician apprentice 332.271-014
beauty culturist 332.271-010
beauty-culturist apprentice 332.271-014
beauty operator 332.271-010
beauty-operator apprentice 332.271-014
Beauty Parlor Cleaner 323.687-014
BLIND AIDE 359.573-010
BODYGUARD 372.667-014
bootblack 366.677-010
boot polisher 366.677-010
busheler 785.261-010
cage clerk 358.677-014
Caterer 187.167-106
CATERER HELPER 319.677-010
CHAPERON 359.667-010
CHAUFFEUR, FUNERAL CAR 359.673-014
CHILD-CARE ATTENDANT, SCHOOL 355.674-010
cicerone 353.363-010
clerk guide 359.573-010
cobbler 365.361-014
COOLING-ROOM ATTENDANT 335.677-010
cosmetician 332.271-010
cosmetician apprentice 332.271-014
COSMETOLOGIST 332.271-010
COSMETOLOGIST APPRENTICE 332.271-014
counter attendant 369.477-014
CREMATOR 359.685-010
CUSTOM TAILOR 785.261-014
DIRECTOR, FUNERAL 187.167-030
dispensary attendant 339.687-010
DOG BATHER 418.677-010
dog beautician 418.674-010
DOG GROOMER 418.674-010
dog-hair clipper 418.674-010
dressing-room attendant 358.677-014
Dry-Heat-Cabinet Attendant 335.677-014
Dry-Heat-Room Attendant 335.677-014
electric-bath attendant 335.677-014
electric-needle specialist 339.371-010
ELECTROLOGIST 339.371-010
electrolysis operator 339.371-010
EMBALMER 338.371-014
EMBALMER APPRENTICE 338.371-010

embalmer assistant 339.361-010
ESCORT 359.367-010
escort, blind 359.573-010
Facial Operator 332.271-010
FINGERNAIL FORMER 331.674-014
Finger Waver 332.271-010
Finnish Rubber 334.677-010
french weaver 782.381-022
FUNERAL ATTENDANT 359.677-014
funeral driver 359.673-014
funeral-home attendant 339.361-010
Funeral-Limousine Driver 359.673-014
GUIDE 353.367-010
GUIDE, ALPINE 353.164-010
Guide, Cruise 353.167-010
Guide, Delegate 353.367-010
Guide, Domestic Tour 353.167-010
guide escort 359.367-010
guide, excursion 353.167-010
Guide, Foreign Tour 353.167-010
guide, itinerary 353.167-010
GUIDE, SIGHTSEEING 353.363-010
guide, tour 353.167-010
GUIDE, TRAVEL 353.167-010
guide, visitor 353.367-010
hair-and-scalp specialist 339.371-014
Hair Colorist 332.271-010
haircutter 330.371-010
hairdresser 332.361-010
hairdresser 332.271-018
HAIR STYLIST 332.271-018
Hair Tinter 332.271-010
Hearse Driver 359.673-014
HOME ATTENDANT 354.377-014
home health aide 354.377-014
HOT-ROOM ATTENDANT 335.677-014
hypertrichologist 339.371-010
inweaver 782.381-022
jagger 339.571-010
locker attendant 358.677-014
LOCKER-ROOM ATTENDANT 358.677-014
locker-room clerk 358.677-014
made-to-measure tailor 785.261-014
made-to-measure-tailor apprentice 785.261-022
MANAGER, BARBER OR BEAUTY SHOP 187.167-058
MANAGER, FOOD SERVICE 187.167-106
manager, funeral home 187.167-030
MANAGER, HEALTH CLUB 339.137-010
MANICURIST 331.674-010
Marceller 332.271-010
MASSEUR/MASSEUSE 334.374-010
master-tailor apprentice 785.261-022
mortician 187.167-030
MORTUARY BEAUTICIAN 339.361-010
nutrition educator 359.367-014
overweaver 782.381-022
PALLBEARER 359.687-010
Permanent Waver 332.271-010
personal attendant 358.677-014
porter, bath 335.677-014
public-bath attendant 335.677-014
REDUCING-SALON ATTENDANT 359.567-010
rehabilitation technician 365.131-010
repair weaver 782.381-022
reweaver 782.381-022
RUBBER 334.677-010
rubber 334.374-010
Russian Rubber 334.677-010
SALESPERSON, WIGS 261.351-010
scalp specialist 339.371-014
SCALP-TREATMENT OPERATOR 339.371-014
section weaver 782.381-022
SECURITY CONSULTANT 189.167-054
SERVICE-ESTABLISHMENT ATTENDANT 369.477-014
Shampooer 332.271-010
SHOE DYER 364.684-014
shoemaker 365.361-014
shoe polisher 366.677-010
SHOE REPAIRER 365.361-014
SHOE-REPAIRER HELPER 365.674-010
SHOE-REPAIR SUPERVISOR 365.131-010
SHOE SHINER 366.677-010
shoe tinter 364.684-014
Shower Attendant 335.677-014
slumber-room attendant 335.677-010
spieler 353.363-010
Steam-Room Attendant 335.677-014
storekeeper 339.687-010
suit attendant 358.677-014
SUPPLY CLERK 339.687-010
sweat-box attendant 335.677-014
tailor 785.261-014
TAILOR APPRENTICE, ALTERATION 785.261-018
TAILOR APPRENTICE, CUSTOM 785.261-022
TATTOO ARTIST 339.571-010
tattooer 339.571-010
tattooist 339.571-010
thread weaver 782.381-022
tonsorial artist 330.371-010
trichologist 339.371-014
tub attendant 335.677-014
Turkish Rubber 334.677-010
undertaker 187.167-030
undertaker assistant 359.677-014
usher 359.677-014
WEAVER, HAND 782.381-022
WEIGHT-REDUCTION SPECIALIST 359.367-014
WIG DRESSER 332.361-010
Wig Stylist 261.351-010

petrol. & gas—PETROLEUM AND NATURAL GAS PRODUCTION INDUSTRY: This designation includes occupations concerned with extracting crude petroleum and natural gas from the earth through wells drilled into oil-bearing or gas-bearing strata. Activities include prospecting for gas or oil; drilling wells; controlling the natural flow of the fluids; pumping of the fluids; maintenance and cleaning out of productive wells; and maintenance of oil or gas well storage facilities, treating facilities, flow lines, and other lease facilities and equipment. Occupations primarily concerned with petroleum refining are included in the PETROLEUM REFINING INDUSTRY (petrol. refin.). Occupations primarily concerned with the transportation of petroleum and gas products through pipelines are included in the PIPE LINES INDUSTRY (pipe lines).

Acidizer 939.462-010
Acidizer Helper 939.684-018
Acoustical Logging Engineer 010.261-022
analyst, geochemical prospecting 024.381-010
Back-Up Worker 930.684-026
Bailer 930.363-010
Bottom-Hole-Pressure-Recording Operator 930.167-010
BOTTOM-HOLE-PRESSURE-RECORDING-OPERATOR HELPER 930.687-010
BULK-STATION OPERATOR 570.362-010
cable splicer 728.684-014
CASER 930.664-010
casing puller 930.382-030
Cathead Worker 930.684-026
Cementer Helper 939.684-018
Cementer, Oil Well 939.462-010
CHIEF CLERK, MEASUREMENT DEPARTMENT 221.132-010
CHIEF DISPATCHER 939.137-010
CHIEF ENGINEER 010.167-010
Chief Engineer, Drilling And Recovery 010.167-010
Chief Engineer, Pipe-Line 010.167-010
Chief Engineer, Production 010.167-010
CHIEF ENGINEER, RESEARCH 010.161-010
chief gauger 914.134-010
CHIEF PETROLEUM ENGINEER 010.161-014
Chief, Reservoir Engineering 010.167-010
CLAIM AGENT 191.167-014
CLEAN-OUT DRILLER 930.363-010
CLEAN-OUT-DRILLER HELPER 930.664-014
connection worker 869.684-046
core analyst 024.381-010
core driller 930.382-018
core driller 930.382-026
CRUDE-OIL TREATER 541.382-014
dehydrator operator 541.382-014
DERRICK WORKER, WELL SERVICE 930.683-018
diesel-engine engineer 950.382-022
DIGITIZER OPERATOR 213.582-010
Director, Geothermal Operations 010.161-014
DISPATCHER, CHIEF I 184.167-038
DISPATCHER, CHIEF II 914.167-010
Dispatcher, Chief, Natural Gas 184.167-038
DISPATCHER, OIL 914.167-014
DISPATCHER, OIL WELL SERVICES 939.362-010
district gauger 914.134-010
district superintendent 181.167-014
district superintendent, gas and gasoline 914.167-010

DISTRICT SUPERVISOR, MUD-ANALYSIS WELL LOGGING 010.167-014
division superintendent 181.167-014
DRAFTER, DIRECTIONAL SURVEY 010.281-010
DRAFTER, GEOLOGICAL 010.281-014
DRAFTER, GEOPHYSICAL 010.281-018
DRAFTER, OIL AND GAS 017.281-030
Drafter, Seismograph 010.281-018
driller 930.382-018
driller 930.382-026
driller helper 930.684-026
Drilling Engineer 010.061-018
drilling inspector 930.167-010
DUMPER-BAILER OPERATOR 931.684-010
ELECTRICAL-LINE SPLICER 728.684-014
electrical-logging engineer 010.261-014
electrical-prospecting operator 010.261-014
Electrical Prospector 024.061-026
ELECTRICAL SUPERVISOR 826.131-010
electronics supervisor 710.131-034
FIELD ENGINEER, SPECIALIST 010.261-010
field gauger 914.384-010
Field Mechanic 629.381-014
Field Operator 710.381-022
field operator 914.382-022
field-party manager 181.167-010
field seismologist 010.161-018
FIELD SUPERVISOR, OIL-WELL SERVICES 930.131-010
Fire-Truck Driver 905.663-014
FISHING-TOOL TECHNICIAN, OIL WELL 930.261-010
FLOOR WORKER, WELL SERVICE 930.684-014
Formation-Fracturing Operator 939.462-010
Formation-Fracturing-Operator Helper 939.684-018
FORMATION-TESTING OPERATOR 930.261-014
gang supervisor, pipe lines 862.131-022
gang worker 869.684-046
gas-engine engineer 950.382-022
GAUGER 914.384-010
GAUGER, CHIEF 914.134-010
general manager, land department 186.117-046
general-office dispatcher 914.167-010
GEOLOGICAL AIDE 024.267-010
GEOLOGIST, PETROLEUM 024.061-022
geophysical operator 010.161-018
GEOPHYSICAL PROSPECTOR 024.061-026
Gravity-Meter Observer 010.261-018
gravity-prospecting operator 010.261-018
gravity-prospecting-operator helper 939.663-010
Gravity Prospector 024.061-026
gun perforator 931.382-010
GUN-PERFORATOR LOADER 931.384-010
head well-puller 939.131-018
HOIST OPERATOR 932.363-010
Hydraulic Oil-Tool Operator 930.382-030
INSTRUMENT-MAKER AND REPAIRER 600.280-014
LABORATORY ASSISTANT 024.381-010
laboratory tester 024.381-010
LABORER 939.687-018
land-and-leases supervisor 186.117-046
land department head 186.117-046
Lead-Tong Worker 930.684-026
lease agent 186.117-046
LEASE BUYER 191.117-030
leaser 191.117-030
leases-and-land supervisor 186.117-046
lease supervisor 939.131-014
line rider 869.564-010
LINE WALKER 869.564-010
Magnetic Prospector 024.061-026
Magnetometer Operator 010.261-018
MAINTENANCE MECHANIC 620.281-046
MAINTENANCE MECHANIC HELPER 620.664-014
MANAGER, CONTRACTS 163.117-010
Manager, Contracts-And-Titles 186.167-038
Manager, Divisional Leasing 186.117-046
MANAGER, FIELD PARTY, GEOPHYSICAL PROSPECTING 181.167-010
manager, land department 186.117-046
MANAGER, LAND LEASES-AND-RENTALS 186.167-038
MANAGER, LEASING 186.117-046
Manager, Natural-Gas Utilization 163.117-010
manager, oil-well services 010.167-018
Manager, Titles-And-Land-Records 186.167-038
Material Stockkeeper, Yard 222.387-058
measurement superintendent 184.167-190
mechanic helper 620.664-014
mud-analysis-well-logging captain 010.131-010
mud-analysis-well-logging operator 010.281-022
mud-analysis-well-logging supervisor, district 010.167-014
mud engineer 010.167-014
mud-logging superintendent 010.167-014
MUD-PLANT OPERATOR 930.685-010
NATURAL-GAS-TREATING-UNIT OPERATOR 549.382-010
Nuclear Logging Engineer 010.261-022
OBSERVER, ELECTRICAL PROSPECTING 010.261-014
OBSERVER, GRAVITY PROSPECTING 010.261-018
observer helper 939.364-010
OBSERVER HELPER, GRAVITY PROSPECTING 939.663-010
OBSERVER HELPER, SEISMIC PROSPECTING 939.364-010
OBSERVER, SEISMIC PROSPECTING 010.161-018
oil dispatcher 914.167-014
OIL-FIELD EQUIPMENT MECHANIC 629.381-014
OIL-FIELD EQUIPMENT MECHANIC SUPERVISOR 629.131-014
Oil-Field-Pipe-Line Supervisor 862.131-022
OIL-PIPE INSPECTOR 930.267-010
OIL-PIPE-INSPECTOR HELPER 930.364-010
OIL PUMPER 914.382-010
oil-well-electrical-wall-sampling-device operator 931.361-010
oil-well-fishing-tool operator 930.261-010
oil-well formation tester 930.261-014
oil-well gun-perforator operator 931.382-010
oil-well-logging engineer 010.261-022
oil-well pumper 914.382-010
OIL-WELL-SERVICE OPERATOR 939.462-010
OIL-WELL-SERVICE-OPERATOR HELPER 939.684-018
OIL-WELL-SERVICES SUPERVISOR 939.132-014
oil-well shooter 931.361-014
oil-well-sounding-device operator 930.361-010
PERFORATOR OPERATOR, OIL WELL 931.382-010
PERMIT AGENT, GEOPHYSICAL PROSPECTING 191.117-042
PETROLEUM ENGINEER 010.061-018
pipe inspector 930.267-010
pipe-line gauger 914.384-010
pipe puller 930.382-030
Pipe Racker 930.684-026
PIPE TESTER 930.382-014
pipe-thread inspector 862.381-038
playback operator 194.382-010
PNEUMATIC-JACK OPERATOR 939.682-014
Production Engineer 010.061-018
production operator 541.382-014
Property-And-Equipment Clerk 222.387-026
PROSPECTING DRILLER 930.382-018
Prospecting-Driller Helper 939.364-010
pulling-machine operator 930.382-030
pumper 541.382-014
pumper 914.382-010
PUMPER, HEAD 914.382-022
RADIOACTIVITY-INSTRUMENT MAINTENANCE TECHNICIAN 828.281-022
radioactivity technician 828.281-022
recorder, gravity prospecting 010.261-018
recorder helper, gravity prospecting 939.663-010
recorder helper, seismograph 939.364-010
RESEARCH ENGINEER, MINING-AND-OIL-WELL EQUIPMENT 010.061-022
Reservoir Engineer 010.061-018
rig operator 930.382-030
ROTARY DERRICK OPERATOR 930.382-022
ROTARY DRILLER 930.382-026
ROTARY-DRILLER HELPER 930.684-026
Rotary Driller, Marine Operations 930.382-026
rotary driller, prospecting 930.382-018
rotary helper 930.684-026
ROTARY-RIG ENGINE OPERATOR 950.382-022
roughneck 930.684-026
roughneck 869.684-046
roustabout 939.687-018
ROUSTABOUT 869.684-046
roustabout, head 862.131-022
SALES ENGINEER, MINING-AND-OIL-WELL EQUIPMENT AND SERVICES 010.151-010
SAMPLE-TAKER OPERATOR 931.361-010
SAMPLE WASHER 939.687-030
SCOUT 010.267-010
SECTION-PLOTTER OPERATOR 194.382-010
section-plotter operator 010.161-018
Seismic Prospector 024.061-026
seismograph-operator helper 939.364-010
service engineer 620.281-046

SERVICE-UNIT OPERATOR, OIL WELL 930.361-010
SHOOTER 931.361-014
Shooter Helper, Seismograph 939.364-010
SHOOTER, SEISMOGRAPH 931.361-018
shop mechanic 620.281-046
shop-mechanic helper 620.664-014
shot-hole driller 930.382-018
shot-hole shooter 931.361-018
superintendent, drilling 930.130-010
SUPERINTENDENT, DRILLING AND PRODUCTION 181.167-014
superintendent, land department 186.117-046
SUPERINTENDENT, MEASUREMENT 184.167-190
Superintendent, Oil-Field Drilling 181.167-014
SUPERINTENDENT, OIL-WELL SERVICES 010.167-018
superintendent, pressure 914.167-010
Superintendent, Production 181.167-014
superintendent, scheduling 184.167-038
SUPERVISOR, MAPPING 018.167-030
SUPERVISOR, NATURAL-GAS FIELD PROCESSING 549.131-010
SUPERVISOR, PIPE-LINES 862.131-022
SUPERVISOR, PRODUCTION 939.131-014
supervisor, research shop 710.131-034
SUPERVISOR, SHOP 710.131-034
Supply Representative, Dry Gas 163.117-010
supply representative, petroleum products 163.117-010
SURVEYOR, GEOPHYSICAL PROSPECTING 018.167-042
SURVEYOR, OIL-WELL DIRECTIONAL 010.261-022
Swabber 930.363-010
tank builder 801.361-022
tank-builder helper 801.687-018
tank-farm gauger 914.384-010
TANK SETTER 801.361-022
TANK-SETTER HELPER 801.687-018
TECHNICAL OPERATOR 930.167-010
terminal gauger 914.384-010
TEST ENGINEER, MINING & OILFIELD EQUIPMENT 010.061-030
testing-tool operator 930.261-014
THREAD INSPECTOR 862.381-038
TITLE CLERK 162.267-010
TOOL PUSHER 930.130-010
Tool Pusher, Shallow-Exploratory Drilling 930.130-010
torpedo shooter 931.361-014
treater 541.382-014
tube puller 930.382-030
Water-Truck Driver I 904.383-010
WATER-TRUCK DRIVER II 905.683-010
well cleaner 930.363-010
well driller 930.382-026
WELL-LOGGING CAPTAIN, MUD ANALYSIS 010.131-010
WELL-LOGGING OPERATOR, MUD ANALYSIS 010.281-022
WELL PULLER 930.382-030
WELL PULLER, HEAD 939.131-018
well shooter 931.361-014
winch operator 932.363-010
work-over rig operator 930.382-030

petrol. refin.—PETROLEUM REFINING INDUSTRY. This designation includes occupations concerned with refining crude petroleum by such methods as distillation, absorption, extraction, adsorption, thermal and catalytic cracking and reforming, polymerization, coking, alkylation, treating, and blending. The principal products are gasoline, kerosene, fuel and lubricating oils, gases, solvents, asphalts (including paving materials), waxes, greases, and petroleum coke.

Absorption-Plant Operator 549.260-010
Absorption-Plant-Operator Helper 542.362-014
Acid-Tank Cleaner 891.687-022
Acid Treater 549.362-014
Alkylation Operator 559.382-018
Asphalt Blender 540.462-010
Batch-Unit Treater 549.362-014
BLENDER 540.462-010
burner operator 573.685-014
Butadiene Operator, Chief 559.132-078
Butane-Compressor Operator 950.382-014
CARGO INSPECTOR 549.387-010
catalyst supervisor 559.132-078
chart clerk 216.685-010
chief gauger 914.134-010
chief operator 549.132-030
chief operator, hydroformer 549.132-030
clay burner 573.685-014
Clay-Plant Treater 549.362-014
CLAY ROASTER 573.685-014
COMPOUNDER 540.382-010
COMPOUNDER HELPER 540.686-010
CONSTRUCTION-AND-MAINTENANCE INSPECTOR 914.362-014
CONTROL-PANEL OPERATOR 546.382-010
Control-Panel Operator, Cracking Unit 546.382-010
Control-Panel Operator, Crude Unit 546.382-010
Control-Panel Operator, Polymerization Unit 546.382-010
Control-Panel Operator, Solvent-Treating Unit 546.382-010
Cooling-Tower Operator 549.362-010
Crude-Oil Treater 549.362-014
crude tester 029.261-022
dehydrogenation operator, head 559.132-078
DISPATCHER, CHIEF I 184.167-038
DISPATCHER, CHIEF II 914.167-010
Dispatcher, Chief, Petroleum Products 184.167-038
DISPATCHER, OIL 914.167-014
district gauger 914.134-010
district superintendent, gas and gasoline 914.167-010
DRAFTER, OIL AND GAS 017.281-030
drum chainer 509.687-034
DRUM CLEANER 509.687-034
DRUM TESTER 509.687-038
earth burner 573.685-014
Electrician, Refinery 829.261-018
Ethylbenzene-Cracking Supervisor 559.132-078
Ethyl Blender 540.462-010
extraction supervisor 549.132-030
field gauger 914.384-010
FIELD-MECHANICAL-METER TESTER 953.281-010
field operating superintendent 181.117-010
Fire Marshal, Refinery 373.167-018
fractionation operator, head 549.132-030
fractionation supervisor 549.132-030
Fuel-Oil-Delivery Driver 903.683-018
FURNACE OPERATOR 542.562-010
gang boss 899.137-018
gang pusher 899.137-018
gas analyst 029.261-022
Gas-Delivery Driver 903.683-018
gasoline finisher 540.462-010
GAS-REGULATOR REPAIRER 710.381-026
GAS-REGULATOR-REPAIRER HELPER 710.384-010
GAS-USAGE METER CLERK 216.685-010
GAUGER 914.384-010
GAUGER, CHIEF 914.134-010
general-office dispatcher 914.167-010
GREASE MAKER 549.682-010
GREASE MAKER, HEAD 549.132-010
Hydrogen Treater 549.362-014
inspector 549.261-010
laboratory inspector 029.261-022
laboratory sampler 549.587-014
laboratory technician 029.261-022
laboratory tester 029.261-022
Laborer, Filter Plant 549.687-018
LABORER, PETROLEUM REFINERY 549.687-018
lead blender 540.462-010
LEAD RECOVERER, CONTINUOUS-NAPHTHA-TREATING PLANT 541.685-014
Leak Operator, Paraffin Plant 541.682-010
line rider 869.564-010
LINE WALKER 869.564-010
LOADING-RACK SUPERVISOR 914.137-014
loading supervisor 549.137-018
MANAGER, BULK PLANT 181.117-010
MANAGER, CONTRACTS 163.117-010
MECHANICAL INSPECTOR 549.261-010
mechanical-meter tester 953.281-010
meter inspector 953.281-010
MOLDER, WAX 549.685-018
Naphtha-Plant Treater 549.362-014
oil dispatcher 914.167-014
OIL-RECOVERY-UNIT OPERATOR 549.382-014
oil tester 029.261-022
operator, control room 546.382-010
Painter, Barrel 741.687-018
PAINT STRIPPER 599.685-130
PARAFFIN-PLANT OPERATOR 541.682-010
PARAFFIN-PLANT-SWEATER OPERATOR 543.682-022
Pilot-Plant Research Technician 008.261-010
pipe-line gauger 914.384-010
plant supervisor 542.130-010
Press Operator, Paraffin Plant 541.682-010
process helper 549.687-018

process pumper 549.362-010
PUMPER 549.360-010
PUMPER-GAUGER 914.382-014
PUMPER-GAUGER APPRENTICE 914.382-018
PUMPER HELPER 549.684-010
pump operator 549.362-010
Purification Operator 549.260-010
Purification-Operator Helper 542.362-014
reclamation supervisor 929.131-010
REFINERY OPERATOR 549.260-010
Refinery Operator, Alkylation 549.260-010
Refinery Operator, Coking 549.260-010
Refinery Operator, Cracking Unit 549.260-010
Refinery Operator, Crude Unit 549.260-010
Refinery Operator, Gas Plant 549.260-010
REFINERY OPERATOR HELPER 542.362-014
Refinery Operator Helper, Cracking Unit 542.362-014
Refinery Operator Helper, Crude Unit 542.362-014
Refinery Operator, Light-Ends Recovery 549.260-010
Refinery Operator, Polymerization Plant 549.260-010
Refinery Operator, Reforming Unit 549.260-010
Refinery Operator, Vapor Recovery Unit 549.260-010
Refinery Operator, Visbreaking 549.260-010
research-test-engine evaluator 010.261-026
research-test-engine operator 029.261-018
SALVAGER 709.684-070
salvage repairer 709.684-070
SALVAGER HELPER 709.687-034
SAMPLER 549.587-014
Solvent-Plant Treater 549.362-014
Still And Tank Inspector 549.261-010
Still Cleaner, Tube 891.687-030
STILL-PUMP OPERATOR 549.362-010
Styrene Operator, Chief 559.132-078
superintendent, pressure 914.167-010
superintendent, scheduling 184.167-038
Supervisor, Benzene-Refining 549.132-030
SUPERVISOR, DEHYDROGENATION 559.132-078
SUPERVISOR, DOCK 914.137-018
supervisor, grease making 549.132-010
SUPERVISOR, MAINTENANCE 899.137-018
SUPERVISOR, METER-AND-REGULATOR SHOP 710.137-014
SUPERVISOR, NATURAL-GAS PLANT 542.130-010
SUPERVISOR, PURIFICATION 549.132-030
SUPERVISOR, SALVAGE 929.131-010
SUPERVISOR, SPECIALTY PLANT 549.137-018
Supervisor, Tank Cleaning 899.137-018
SUPERVISOR, TOWER 549.130-010
SUPERVISOR, TREATING AND PUMPING 549.132-034
Supply Representative, Dry Gas 163.117-010
supply representative, petroleum products 163.117-010
sweater operator 543.682-022
Tank-Car Cleaner 891.687-022
TANK-CAR INSPECTOR 910.384-010
tank-farm gauger 914.384-010
TANK-TRUCK DRIVER 903.683-018
Tar Heat-Exchanger Cleaner 891.687-030
terminal gauger 914.384-010
terminal superintendent 181.117-010
terminal supervisor 914.137-018
TEST-ENGINE EVALUATOR 010.261-026
TEST-ENGINE OPERATOR 029.261-018
TESTER 029.261-022
TITLE CLERK 162.267-010
Trailer-Tank-Truck Driver 903.683-018
TREATER 549.362-014
TREATER HELPER 549.685-030
treating and pumping supervisor 549.132-034
treating-plant operator 549.362-014
valve repairer, reclamation 709.684-070
wax pumper 541.682-010
Wax Treater 549.362-014
wharf tender, head 914.137-018

pharmaceut.—PHARMACEUTICALS AND RELATED PRODUCTS INDUSTRY: This designation includes occupations concerned with producing medicinal chemicals and ethical and proprietary pharmaceuticals, such as capsules, ointments, pills, serums, vaccines, and powdered, liquid, and emulsified compounds. Also inccluded are occupations concerned with grading, grinding, and milling botanicals. Occupations concerned with producing cosmetics, perfumes and colognes, and related products are included in the SOAP, CLEANING, AND TOILET PREPARATION INDUSTRY (soap & rel.).

ALUMINUM-HYDROXIDE-PROCESS OPERATOR 559.685-014
AMPOULE EXAMINER 559.687-010
AMPOULE FILLER 559.685-018
ampoule filler and sealer 559.685-018
AMPOULE SEALER 559.687-014
AMPOULE-WASHING-MACHINE OPERATOR 559.685-022
autoclave operator 599.585-010
batcher 559.686-022
CAPSULE-FILLING-MACHINE OPERATOR 559.682-010
CENTRIFUGE OPERATOR, PLASMA PROCESSING 599.685-018
Chemical Mixer 550.685-090
CHEMICAL-PROCESSING SUPERVISOR 559.130-010
COATER 554.382-010
compounder 550.685-090
COMPOUNDER 550.685-046
compounder, sterile products 559.682-054
COMPRESSOR 556.682-022
COSMETICS PRESSER 556.685-026
COSMETICS SUPERVISOR 550.131-010
Cream Maker 550.685-090
Dental-Cream Maker 550.685-090
DRIER OPERATOR 553.685-042
drum-drier operator 553.685-042
EFFERVESCENT-SALTS COMPOUNDER 559.685-058
EGG PROCESSOR 559.687-034
EXTRACTOR OPERATOR 551.685-058
FERMENTER OPERATOR 559.685-070
FREEZING-MACHINE OPERATOR 559.685-090
granulator 559.382-026
GRANULATOR-MACHINE OPERATOR 559.382-026
harvester 559.687-034
Helper, Animal Laboratory 410.674-010
INSPECTOR 559.387-014
INSPECTOR, PACKAGING MATERIALS 920.387-010
ION-EXCHANGE OPERATOR 558.685-038
laboratory aide 559.384-010
laboratory assistant 599.687-026
LABORATORY ASSISTANT, BLOOD AND PLASMA 078.687-010
LABORATORY ASSISTANT, CULTURE MEDIA 559.384-010
laboratory technician 559.382-042
LABORATORY TECHNICIAN PHARMACEUTICAL 559.685-170
LABORER 559.686-022
Lanolin-Plant Operator 559.382-018
Lipstick Molder 556.687-022
Liquid Compounder I 559.382-042
Liquid Compounder II 550.685-090
medical technologist, bacteriology 078.261-014
MICROBIOLOGY TECHNOLOGIST 078.261-014
mixer 550.685-090
MIXING-MACHINE TENDER 550.685-090
molder 556.685-026
MOLDER, MACHINE 556.685-050
MOLDER, TOILET PRODUCTS 556.687-022
Ointment-Mill Tender 550.685-090
packaging inspector 920.387-010
Perfume And Toilet Water Maker 550.685-090
perfume compounder 550.685-046
PHARMACEUTICAL-COMPOUNDING SUPERVISOR 559.131-010
PHARMACEUTICAL OPERATOR 559.382-042
pill coater 554.382-010
pooling operator 599.687-026
POULTICE-MACHINE OPERATOR 692.685-134
Powder Compounder 550.685-090
process operator 559.685-058
process operator 550.685-090
QUALITY-CONTROL CLERK 229.587-014
QUALITY-CONTROL COORDINATOR 168.167-066
Roller-Mill Tender 550.685-090
Rouge Mixer 550.685-090
rouge presser 556.685-026
shell-freezing-machine operator 559.685-090
SIFTER 551.687-030
SIPHON OPERATOR 599.687-026
STERILE-PRODUCTS PROCESSOR 559.682-054
STERILIZER 599.585-010
SUPERVISOR, ANIMAL MAINTENANCE 410.137-018
Suppository Molder 556.687-022
SUPPOSITORY-MOLDING-MACHINE OPERATOR 556.686-022
synthetic department supervisor 559.130-010
tablet coater 554.382-010
TABLET TESTER 559.667-010
technical assistant 559.384-010
TOXICOLOGIST 022.081-010
UTILITY WORKER, PRODUCTION 559.684-034
utility worker, virus 559.684-034
vacuum-drum-drier operator 553.685-042

washing-machine operator 559.685-022
wet-mix operator 559.382-026

photo. appar.—PHOTOGRAPHIC APPARATUS AND MATERIALS INDUSTRY: This designation includes occupations concerned with manufacturing and repairing photographic apparatus, equipment, parts, attachments, and accessories, such as still and motion cameras and projection apparatus; photocopy and microfilm equipment; blueprinting and diazo-type (white printing) machines; tripods, plate holders, film rewinders and reels, and developing tanks; sensitized film, paper, and cloth; dry plates and films; and lantern and stereopticon slides, and slide viewers. Occupations concerned with the manufacture of lenses are included in the OPTICAL GOODS INDUSTRY (optical goods).

AIRCRAFT PHOTOGRAPHIC EQUIPMENT MECHANIC 714.281-010
ASSEMBLER, PHOTOGRAPHIC EQUIPMENT 714.381-010
assembler, precision-mechanical 714.381-010
ASSEMBLER, PRODUCTION LINE 714.684-010
bellows assembler 714.684-014
BELLOWS MAKER 714.684-014
Blueprint-Paper-Coating-Machine Operator 534.582-010
Camera Assembler 714.684-010
CAMERA REPAIRER 714.281-014
CHECKER, FILM TESTS 714.687-010
cinetechnician 714.281-018
cinetechnician supervisor 714.131-010
coater 534.582-010
Dye Mixer 550.685-090
FIELD-SERVICE ENGINEER 826.261-010
FILM SPOOLER 692.685-082
INSPECTOR, PHOTOGRAPHIC EQUIPMENT 714.381-014
inspector, precision 714.381-014
MACHINIST, MOTION-PICTURE EQUIPMENT 714.281-018
Meter Assembler 714.684-010
motion-picture-camera repairer 714.281-018
OPTOMECHANICAL TECHNICIAN 007.161-030
PAPER-COATING-MACHINE OPERATOR 534.582-010
PHOTOGRAPHIC EQUIPMENT MAINTENANCE TECHNICIAN 714.281-026
PHOTOGRAPHIC EQUIPMENT TECHNICIAN 714.281-022
Photographic-Paper-Coating-Machine Operator 534.582-010
Projector Assembler 714.684-010
research assembler 714.281-010
research mechanic 714.281-010
SENSITIZED-PAPER TESTER 714.667-010
sensitizer 534.582-010
SUPERVISOR, COATING 534.130-010
SUPERVISOR, MOTION-PICTURE EQUIPMENT 714.131-010
Synchro Assembler 714.684-010
technical-maintenance technician 714.281-026

photofinishing—PHOTOFINISHING INDUSTRY: This designation includes occupations concerned with developing exposed still and movie film of various types and sizes and making photographic prints and enlargements for the trade and general public. Occupations concerned with the processing of motion picture film for use in theaters and television are included in this designation.

checker 976.687-014
checking department supervisor 976.137-014
CHEMICAL MIXER 550.485-010
COLORIST, PHOTOGRAPHY 970.381-010
Color-Laboratory Technician 976.681-010
COLOR-PRINTER OPERATOR 976.382-014
Color-Print Inspector 976.687-014
COMPUTER-CONTROLLED-COLOR-PHOTOGRAPH-PRINTER OPERATOR 976.380-010
continuous process machine operator 976.685-014
COUNTER CLERK 249.366-010
CUTTER 976.685-010
darkroom worker 976.681-010
DETAILER, SCHOOL PHOTOGRAPHS 976.564-010
DEVELOPER 976.681-010
DEVELOPER, AUTOMATIC 976.685-014
developer operator 976.382-018
doper 976.681-010
EDITOR, SCHOOL PHOTOGRAPH 976.687-010
film cutter 976.685-010
FILM DEVELOPER 976.382-018
FILM INSPECTOR 976.362-010
FILM LABORATORY TECHNICIAN 976.684-014
film machine operator 976.685-014
film numberer 976.687-018
film sorter 976.687-018
film technician 976.131-014
finishing department supervisor 976.137-014
Full-Roll Inspector 976.687-014
hand developer 976.681-010
inspector 976.687-014
LABORATORY CHIEF 976.131-010
laboratory contact supervisor 976.131-014
laboratory manager 976.131-010
MOUNTER, AUTOMATIC 976.685-022
MOUNTER, HAND 976.684-018
Mounting Inspector 976.687-014
Negative Developer 976.382-018
Negative Spotter 970.381-034
PHOTO CHECKER AND ASSEMBLER 976.687-014
PHOTOFINISHING LABORATORY WORKER 976.687-018
photograph enlarger 976.381-018
PHOTOGRAPH FINISHER 976.487-010
photographic-laboratory supervisor 976.131-010
photograph printer 976.682-014
PHOTOGRAPH RETOUCHER 970.281-018
Positive Developer 976.382-018
pricer-bagger 976.687-018
PRINT CONTROLLER 976.360-010
print cutter 976.685-010
PRINT DEVELOPER, AUTOMATIC 976.685-026
PRINTER OPERATOR, BLACK-AND-WHITE 976.682-014
print finisher 976.487-010
PRINT INSPECTOR 976.687-022
PRINT WASHER 976.684-022
projection-camera operator 976.381-018
PROJECTION PRINTER 976.381-018
proof sorter 976.687-018
quality-control projectionist 976.362-010
QUALITY CONTROL TECHNICIAN 976.267-010
racker 976.687-018
reel-film inspector 976.362-010
reprint sorter 976.687-018
retoucher 970.281-018
Reversal-Print Inspector 976.687-014
SERVICE TECHNICIAN, COMPUTERIZED-PHOTOFINISHING EQUIPMENT 714.281-030
Slitter, Processed Film 976.684-026
solution mixer 550.485-010
sorter-packer 976.687-018
SPLICER 976.684-026
SPOTTER, PHOTOGRAPHIC 970.381-034
SUPERVISOR, CUTTING AND SPLICING 976.134-010
SUPERVISOR, FILM PROCESSING 976.131-014
SUPERVISOR, FILM PROCESSING 976.132-010
SUPERVISOR, FINISHING DEPARTMENT 976.137-014
SUPERVISOR, QUALITY CONTROL 976.131-022
Take-Down Inspector 976.687-014
TAKE-DOWN SORTER 976.665-010
tinter, photograph 970.381-010
Trailer Chief 976.131-010
UTILITY WORKER, FILM PROCESSING 976.685-030

pipe lines—PIPE LINES INDUSTRY: This designation includes occupations concerned with transporting crude petroleum or refined petroleum products, such as gasoline and fuel oil, through pipelines. Also included are occupations concerned with the transportation of such materials as coal slurry and mixed, natural, and manufactured gases; the operation of pumping or compressor stations; and the maintenance of pipelines. Occupations pertaining to pipeline construction are included in the CONSTRUCTION INDUSTRY (construction).

CARGO INSPECTOR 549.387-010
chart clerk 216.685-010
CHIEF CLERK, MEASUREMENT DEPARTMENT 221.132-010
CHIEF ENGINEER 010.167-010
chief gauger 914.134-010
CLAIM AGENT 191.167-014
COAL-PIPE-LINE OPERATOR 914.362-010
Compressor-Station Engineer 950.382-014
COMPRESSOR-STATION ENGINEER, CHIEF 914.132-010
CORROSION-CONTROL FITTER 820.361-010
crew supervisor 869.134-018
Dispatcher, Chief, Coal Slurry 184.167-038
DISPATCHER, CHIEF I 184.167-038
DISPATCHER, CHIEF II 914.167-010
Dispatcher, Chief, Natural Gas 184.167-038
Dispatcher, Chief, Oil 184.167-038
Dispatcher, Chief, Petroleum Products 184.167-038
DISPATCHER, OIL 914.167-014
Dispatcher, Refinery 914.167-014
DISPATCHER, RELAY 221.362-014
DISTRIBUTION SUPERVISOR 914.137-010

district gauger 914.134-010
district superintendent, gas and gasoline 914.167-010
district supervisor 914.132-022
DRIP PUMPER 953.583-010
field gauger 914.384-010
FIELD-MECHANICAL-METER TESTER 953.281-010
Fitter 869.664-014
GAS DISPATCHER 953.167-010
GAS-LEAK INSPECTOR 953.367-010
GAS-LEAK INSPECTOR HELPER 953.667-010
GAS-REGULATOR REPAIRER 710.381-026
GAS-REGULATOR REPAIRER HELPER 710.384-010
GAS USAGE METER CLERK 216.685-010
GAUGER 914.384-010
GAUGER, CHIEF 914.134-010
gauger, chief delivery 914.132-022
Gauger, Delivery 914.384-010
general-office dispatcher 914.167-010
LABORER, PIPE-LINES 914.687-010
leak locator 953.367-010
line rider 869.564-010
LINE WALKER 869.564-010
maintenance-crew supervisor 869.134-018
maintenance inspector 953.367-010
MAINTENANCE MECHANIC 620.281-046
MAINTENANCE MECHANIC HELPER 620.664-014
MANAGER, CONTRACTS 163.117-010
measurement superintendent 184.167-190
mechanical-meter tester 953.281-010
mechanic helper 620.664-014
meter inspector 953.281-010
oil dispatcher 914.167-014
oil-pump-station operator, chief 914.132-014
pipe-line gauger 914.384-010
pipe-line maintenance supervisor 869.134-018
PIPELINER 899.684-026
Pipe-Line Superintendent, District 184.167-198
Pipe-Line Superintendent, Division 184.167-198
PIPE-WRAPPING-MACHINE OPERATOR 862.682-014
plant superintendent 914.132-010
PUMPER-GAUGER 914.382-014
PUMPER-GAUGER APPRENTICE 914.382-018
pump-station operator 914.362-018
SENIOR TECHNICIAN, CONTROLS 828.261-018
service engineer 620.281-046
shop mechanic 620.281-046
shop-mechanic helper 620.664-014
station chief 914.132-014
STATION ENGINEER, CHIEF 914.132-014
STATION ENGINEER, MAIN LINE 914.362-018
Station Engineer, Operating Chief 914.132-014
station operator 914.362-018
SUPERINTENDENT, COMPRESSOR STATIONS 184.167-146
SUPERINTENDENT, MEASUREMENT 184.167-190
SUPERINTENDENT, PIPE-LINES 184.167-198
superintendent, pressure 914.167-010
superintendent, scheduling 184.167-038
SUPERVISOR, DOCK 914.137-018
SUPERVISOR, FIELD-PIPE-LINES 914.132-022
SUPERVISOR, MAPPING 018.167-030
SUPERVISOR, NATURAL-GAS-FIELD PROCESSING 549.131-010
SUPERVISOR, PIPE-LINE MAINTENANCE 869.134-018
Supply Representative, Dry Gas 163.117-010
supply representative, petroleum products 163.117-010
tank-farm gauger 914.384-010
terminal gauger 914.384-010
terminal-gauger supervisor 914.132-022
terminal supervisor 914.137-018
TITLE CLERK 162.267-010
wharf tender, head 914.137-018

plastic prod.—FABRICATED PLASTIC PRODUCTS INDUSTRY: This designation includes occupations concerned with fabricating, including molding and casting, plastics materials (which are usually known by trade names, such as Celluloid, Lucite, and Bakelite) into products or articles. Occupations concerned with manufacturing plastics materials, such as pyroxylin plastics and phenolic plastics used in fabricating plastics products, are included in the PLASTIC AND SYNTHETIC MATERIALS INDUSTRY (plastic-synth.). Occupations concerned with manufacturing cellophane bags (from purchased cellophane) are included in the PAPER GOODS INDUSTRY (paper goods).

ASSEMBLER 754.684-010
ASSEMBLER-AND-GLUER, LAMINATED PLASTICS 754.684-014
ASSEMBLER, SKYLIGHTS 869.684-014
ASSEMBLY-MACHINE TENDER 754.685-014
BAGGER 553.685-014
BATCH-RECORDS CLERK 221.387-054
biscuit-machine operator 556.685-058
Blender 550.685-134
BLENDER HELPER 550.586-010
BLOW-MOLDING-MACHINE OPERATOR 556.682-010
briquetting-machine operator 556.685-058
BUFFER 752.684-022
CALENDER OPERATOR, FOUR-ROLL 554.662-010
CASTER 754.684-022
CELLOPHANE-CASTING-MACHINE REPAIRER 629.281-014
CENTRIFUGAL-CASTING-MACHINE TENDER 556.685-090
Cold-Molding-Press Operator 556.682-014
Color Mixer 550.685-134
compounder helper 550.586-010
COMPRESSION-MOLDING-MACHINE OPERATOR 556.682-014
Compression-Molding-Machine Setter 556.380-010
COMPRESSION-MOLDING-MACHINE TENDER 556.685-022
customer-return inspector 559.381-010
cutter operator 555.685-026
Cutter, Plastics Sheets 690.685-122
DECORATING-AND-ASSEMBLY SUPERVISOR 754.130-010
DESIGN INSERTER 692.685-070
die setter 556.380-010
dip-tube assembler, machine 690.682-074
EAR-MOLD LABORATORY TECHNICIAN 777.361-010
EDGE GRINDER 690.685-142
EXTRUDER-OPERATOR HELPER 557.564-010
EXTRUDER OPERATOR 557.382-010
fabricator 754.684-010
FIBERGLASS-DOWEL-DRAWING-MACHINE OPERATOR 575.682-010
FINISHER, HAND 754.684-030
FINISHER, MACHINE 690.685-170
flexigraphic printer 651.382-026
FOAM-GUN OPERATOR 741.684-014
FOAM-MACHINE OPERATOR 559.685-078
FORM MAKER, PLASTER 777.684-010
GLUER, WET SUIT 795.687-018
GRINDER 555.685-026
GROOVING-LATHE TENDER 690.685-202
HEAT WELDER, PLASTICS 553.684-010
injection molder 556.382-014
INJECTION-MOLDING-MACHINE OPERATOR 556.382-014
Injection-Molding-Machine Setter 556.380-010
INJECTION-MOLDING-MACHINE TENDER 556.685-038
INK PRINTER 652.685-038
Inlayer, Silver 692.685-070
INSPECTOR 559.381-010
INSPECTOR AND HAND PACKAGER 559.687-074
INTERNAL CARVER 754.381-010
jig and form maker 754.381-014
KNOCK-OUT HAND 754.684-034
LABORER, GENERAL 754.687-010
Lacquer Coater 599.685-074
LACQUERER 599.685-054
Laminating-Press Operator 690.682-062
LAMINATOR, PREFORMS 754.684-050
MACHINE SETTER-AND-REPAIRER 690.380-014
Mandrel Cleaner 690.685-438
Mandrel Puller 690.685-438
MATERIAL MIXER 550.685-130
MIXING-MACHINE OPERATOR 550.685-134
MIXING SUPERVISOR 550.135-014
molder 556.685-022
molder 556.382-014
molder 777.684-010
molder operator 556.685-090
MOLDER, PIPE COVERING 556.665-018
molder, vacuum 556.685-082
MOLDING SUPERVISOR 556.130-018
MOLD SETTER 556.380-010
mold stripper 556.686-018
PAD CUTTER 690.685-302
PATTERNMAKER, ALL-AROUND 693.280-014
PATTERNMAKER, PLASTICS 754.381-014
pelletizer 556.685-058
pellet-machine operator 556.685-058
PILLING-MACHINE OPERATOR 556.685-058
plastic-press molder 556.685-022
PLASTIC ROLLER 690.685-498
plastics bench mechanic 754.381-018
PLASTICS FABRICATOR 754.381-018
plastics fabricator and assembler 754.381-018

Plastic-Sheeting Cutter 699.682-026
Plastic-Sign Fabricator 754.381-018
Plastics Plater 500.380-010
PLASTICS REPAIRER 754.684-046
plate worker 690.682-062
plug maker 754.381-014
POINTING-MACHINE OPERATOR 690.685-310
POLYSTYRENE-BEAD MOLDER 556.382-018
POLYSTYRENE-MOLDING-MACHINE TENDER 556.685-062
pourer 754.684-022
preformer, impregnated fabrics 754.684-050
preform-machine operator 556.685-058
PRESS HELPER 651.586-010
PRESS OPERATOR 690.682-062
PRINTER, PLASTIC 651.382-026
process inspector 559.381-010
pulverizer 555.685-026
QUALITY-CONTROL SUPERVISOR 559.134-010
Regrinder Operator 555.685-026
Rework Machine Operator 605.685-054
Rotary Preformer 556.685-058
ROUTER MACHINE OPERATOR 605.685-054
SAMPLE CLERK 222.387-066
SAWYER 690.482-010
SEQUINS STRINGER 754.687-014
sequins winder 920.686-046
setter, plastics-molding machine 556.380-010
SHAPING-MACHINE OPERATOR 690.685-354
Single-Stroke Preformer 556.685-058
SKI-TOP TRIMMER 690.685-370
SLINGER, SEQUINS 692.685-178
slusher 777.684-010
solid-glass-rod-dowel-machine operator 575.682-010
SPAGHETTI-MACHINE OPERATOR 690.682-074
Specialty Molder 556.665-018
SPONGE BUFFER 690.685-390
SPOOLER, SEQUINS 920.686-046
squeegeer and former 754.684-050
STOCK PREPARER 751.387-010
Straightening-Press Operator 690.682-062
STRETCH-MACHINE OPERATOR 559.682-058
STRIPPER 556.686-018
Stripper, Soft Plastic 556.686-018
stuffer, vertical hydraulic 557.382-010
SUPERVISOR 690.130-018
SUPERVISOR 700.131-010
SUPERVISOR, EXTRUDING DEPARTMENT 557.130-010
Supervisor, Hand Workers 700.131-010
Supervisor, Machine Workers 700.131-010
SUPERVISOR, PLASTIC SHEETS 557.130-014
SUPERVISOR, PLASTICS PRODUCTION 556.130-010
tablet-machine operator 556.685-058
Tacker 690.685-438
TRIMMER 690.482-014
TUBE MOLDER, FIBERGLASS 690.685-438
Tube Roller 690.685-438
tuber operator 557.382-010
UTILITY WORKER, MOLDING 559.684-026
vacuum-forming-machine operator 553.685-014
VACUUM PLASTIC-FORMING MACHINE OPERATOR 556.685-082
welder, plastic 553.684-010
Wrapper 690.685-438

plastic-synth.—PLASTIC AND SYNTHETIC MATERIALS INDUSTRY: This designation includes occupations concerned with manufacturing synthetic resins and plastic materials, synthetic rubbers, and cellulosic and man-made organic fibers. Occupations concerned with the preliminary synthesizing or processing of the chemical components used in producing plastic materials are included in the CHEMICAL INDUSTRY (chemical); occupations concerned with the fabrication of plastic articles are included in the FABRICATED PLASTIC PRODUCTS INDUSTRY (plastic prod.). Occupations concerned with throwing, spinning, or weaving synthetic fibers are included in the TEXTILE INDUSTRY (textile); occupations concerned with knitting synthetic fibers are included in the KNITTING INDUSTRY (knitting).

ACETONE-RECOVERY WORKER 552.685-010
Acid-Bath Tender 557.685-030
Acid-Correction Hand 550.684-010
AGER OPERATOR 553.482-010
aging room operator 559.585-018
BALER 690.685-022
bath mixer 550.684-010
BATH-MIX OPERATOR 552.685-018
bath-solution maker 550.684-010
biscuit-machine operator 556.685-058
bleacher 582.685-162
Blender 550.685-134
BLENDER HELPER 550.586-010
Bobbin Drier 581.685-018
bobbin salvager 922.687-018
BOBBIN SORTER 922.687-018
Bobbin Washer 582.685-162
BOX TENDER 689.280-010
briquetting-machine operator 556.685-058
BULK-SEALER OPERATOR 554.685-010
Cake Inspector 681.687-018
CAKE-PRESS OPERATOR 556.665-010
CAKE-PRESS-OPERATOR HELPER 556.686-010
Cake Washer 582.685-162
CAKE WRAPPER 589.687-010
Cake Wringer 581.685-038
calender-roll operator 554.682-018
CALENDER SUPERVISOR 559.132-014
caster 559.682-022
Casting-And-Locker-Room Servicer 381.687-018
CASTING-MACHINE-SERVICE OPERATOR 559.687-018
CASTING-ROOM OPERATOR 556.585-010
CAUSTIC OPERATOR 554.684-010
caustic-room attendant 551.685-138
CELL INSPECTOR 556.684-010
cell-making supervisor, plastics sheets 579.137-022
CELLOPHANE-BATH MIXER 550.585-014
cell pourer 556.684-018
CELL PREPARER 556.687-014
CELL STRIPPER 556.686-014
cell stripper, final 556.587-010
chemical-building worker see CHEMICAL-DEPARTMENT WORKER
CHEMICAL-DEPARTMENT WORKER ..... term
chemical operator see CHEMICAL-DEPARTMENT WORKER
CHURN TENDER 550.685-034
clarifier 559.687-038
COAGULATING-BATH MIXER 550.684-010
coagulating-bath operator 550.585-014
Coagulating-Drying Supervisor 559.132-022
COAGULATION OPERATOR 559.582-010
coagulator 559.685-190
COATER OPERATOR 554.585-014
COLD-ROLL INSPECTOR 751.584-010
COLOR MATCHER 550.381-010
color mixer 550.381-010
Color Mixer 550.685-134
COMBINING-MACHINE OPERATOR 554.685-018
compounder helper 550.586-010
cone inspector 681.687-030
CORRUGATOR OPERATOR 556.665-014
cotton cleaner 559.687-030
COTTON WASHER 559.687-030
Cotton Wringer 559.687-030
CRACKING-UNIT OPERATOR 558.682-010
crimping-machine operator 589.685-102
customer-return inspector 559.381-010
cutter operator 555.685-026
CUTTER OPERATOR 555.585-010
cutter, plastics rolls 690.665-010
Cutter, Plastics Sheets 690.685-122
DEBUBBLIZER 553.585-010
DEHYDRATING-PRESS OPERATOR 551.685-046
Desulfurizer, Hand 582.685-162
Desulfurizer, Machine 582.685-162
DICER OPERATOR 690.685-130
Dipper 582.685-162
dipping-machine operator 554.585-014
Disulfurizer Tender 550.685-034
doffer 582.685-162
DRAW-MACHINE OPERATOR 680.665-014
Drier Operator, Head 559.132-042
DRIER OPERATOR I 559.562-010
DRIER OPERATOR II 553.685-046
DRIER OPERATOR III 581.685-018
DRUM-DRIER OPERATOR 581.685-082
DRY-END OPERATOR 559.665-014
drying-machine operator 581.685-018
drying-room operator 581.685-018
EMBOSSING-MACHINE-OPERATOR HELPER 583.685-038
EXTRUDER-OPERATOR HELPER 557.564-010
EXTRUDER OPERATOR 557.382-010
filling inspector 681.687-030

plastic-synth.

FILM-CASTING OPERATOR 559.682-022
filter changer 559.687-038
FILTER CLEANER 559.687-038
filterer 559.687-038
filter operator 551.582-010
fine-chemicals operator 559.382-046
finished-yarn examiner 681.687-030
FINISHER 554.586-010
FINISHING-AREA OPERATOR 559.362-014
FINISHING-AREA SUPERVISOR 559.132-022
FINISHING SUPERVISOR, PLASTIC SHEETS 554.137-010
flat-sheet maker 556.684-018
flocculator operator 559.582-010
FOAM-MACHINE OPERATOR 559.685-078
Funnel Setter 557.685-026
Glycol-Service Operator 914.682-010
GRINDER 555.685-026
hopper operator 556.585-010
HYDRAULIC-STRAINER OPERATOR 551.582-010
impregnating-machine operator 554.585-014
impregnator 554.687-010
INSPECTOR 559.381-010
JET HANDLER 557.684-010
JET WIPER 557.684-014
kettle chipper 559.687-062
KETTLE OPERATOR 558.382-042
kettle operator 558.382-050
kettle operator, head 559.132-042
laboratory technician 559.382-046
LABORATORY TESTER 022.281-018
LABORER, GENERAL 559.667-014
Lacing Cutter 781.687-026
lay-up operator 690.585-014
MASKING-MACHINE FEEDER 920.586-010
MASKING-MACHINE OPERATOR 554.682-014
mercerizer 551.687-034
mill operator, head 559.132-042
mill-roll operator 554.682-018
MILL-ROLL REWINDER 690.585-010
mixer, pigment 550.381-010
MIXING-MACHINE OPERATOR 550.685-134
MOLD-FILLING OPERATOR 556.684-018
mold inspector 556.684-010
MOLD PARTER 556.587-010
mold stripper 556.686-014
Monomer-Recovery Supervisor 559.132-042
MOTTLE-LAY-UP OPERATOR 690.585-014
NAPHTHA-WASHING-SYSTEM OPERATOR 559.382-038
OPERATOR, CATALYST CONCENTRATION 550.382-026
Operator, Scales 929.687-062
oven attendant 556.585-014
PACK-ROOM OPERATOR 559.684-010
parter 556.587-010
pelletizer 556.685-058
pellet-machine operator 556.685-058
PILLING-MACHINE OPERATOR 556.685-058
PILOT-CONTROL OPERATOR 559.382-046
PILOT-CONTROL-OPERATOR HELPER 559.664-014
pilot-plant-operator helper 559.664-014
pilot-plant technician 559.382-046
PLANISHING-PRESS OPERATOR 690.682-058
PLASTICS-SEASONER OPERATOR 553.665-042
plastics-sheet-finishing-press operator 690.682-058
PLASTICS-SPREADING-MACHINE OPERATOR 554.382-014
poly-area supervisor 559.132-042
POLYMERIZATION HELPER 558.585-038
POLYMERIZATION-KETTLE OPERATOR 558.382-050
POLYMERIZATION OPERATOR ..... term
POLYMERIZATION-OVEN OPERATOR 556.585-014
Polymerization Supervisor 559.132-042
Polymer Operator 559.382-018
preform-machine operator 556.685-058
press operator 690.682-058
PROCESS-AREA SUPERVISOR 559.132-042
process control supervisor 559.137-038
process inspector 559.381-010
process operator 559.382-046
PROCESSOR 557.685-018
pull-out operator 559.584-010
pulverizer 555.685-026
PUMP TESTER 557.564-014
QUALITY-CONTROL SUPERVISOR 559.131-014
QUALITY-CONTROL TESTER 559.367-010
quill inspector 681.687-030
reactor-kettle operator 558.382-042
recovery-unit operator 558.682-010
research-manufacturing operator 559.382-046
Resin Compounder, Batch Lot 550.685-134
resin maker 558.382-050
RIPENING-ROOM ATTENDANT 559.682-038
ripening-room hand 559.585-018
Ripening-Room Operator 559.585-018
ROD-AND-TUBE STRAIGHTENER 559.587-010
ROLL INSPECTOR 554.587-010
ROLL OPERATOR 554.682-018
ROLL-TENSION TESTER 559.584-010
Roll Weigher 222.387-074
roper operator 559.562-010
Rotary Preformer 556.685-058
Rubber Compounder 929.687-062
RUBBER-MILL OPERATOR 559.682-042
RUBBER-MILL TENDER 550.685-102
SAWYER 690.482-010
SECOND-FLOOR OPERATOR 557.685-022
sheet-combining operator 690.682-058
SHEETER OPERATOR 690.382-010
Sheet Straightener 690.682-058
shell-press operator 690.682-058
SHREDDER OPERATOR 555.685-058
SHREDDING-FLOOR-EQUIPMENT OPERATOR 559.382-050
Single-Stroke Preformer 556.685-058
Skein Drier 581.685-018
Skein Washer 582.685-162
SLASHER 690.665-010
slit-roll inspector 554.587-010
slitter operator 690.382-010
soaking-room operator 551.687-034
SODA DIALYZER 551.685-134
SODA-ROOM OPERATOR 551.687-034
Solution Mixer 550.685-134
SOLUTIONS OPERATOR 550.382-034
Solvent Recoverer 552.685-026
Sorter 681.687-018
SPINNER 557.685-026
Spinner, Box 557.685-026
Spinner, Continuous 557.685-026
spinnerette cleaner 557.684-010
SPINNING-BATH PATROLLER 557.685-030
spinning operator 557.685-026
SPINNING-ROOM WORKER ..... term
spin-tank tender 559.585-018
spool salvager 922.687-018
SPREADER 554.687-010
Staple Fiber Washer 582.685-162
steeping-press operator 551.687-034
STEEPING-PRESS TENDER 551.685-138
stripper, preliminary 556.686-014
stuffer, vertical hydraulic 557.382-010
SUPERVISOR, CHEMICAL 558.132-010
SUPERVISOR, COATING 554.137-014
SUPERVISOR, DRYING AND WINDING 559.134-014
SUPERVISOR, INSPECTION 559.137-038
SUPERVISOR, MOLD-MAKING PLASTICS SHEETS 579.137-022
SUPERVISOR, PLASTICS PRODUCTION 556.130-010
SUPERVISOR, SAMPLE 754.137-010
Supervisor, Shipping 690.130-014
SUPERVISOR, SLITTING-AND-SHIPPING 690.130-014
SUPERVISOR, SPINNING AND WINDING 689.130-038
SYNTHETIC-FILAMENT EXTRUDER 557.565-014
synthetic-resin operator 558.382-050
SYNTHETIC-STAPLE EXTRUDER 557.665-010
syrup-kettle operator 558.382-050
tablet-machine operator 556.685-058
TAKE-UP OPERATOR 557.685-034
TANK CLEANER 559.687-062
TANKROOM TENDER 559.585-018
Tank Worker 550.685-034
TEMPERATURE-CONTROL INSPECTOR 559.467-010
THREAD INSPECTOR 681.687-018
tube-and-rod straightener 559.587-010
tuber operator 557.382-010
TWISTER TENDER 681.685-130
Viscose-Cellar Attendant 559.682-038
WASHER 582.685-162
WET-END OPERATOR I 559.685-186
WET-END OPERATOR II 559.685-190
YARN EXAMINER 681.687-030
yarn inspector 681.687-030
YARN-TEXTURING-MACHINE OPERATOR 589.685-102

plumbing-heat.—PLUMBING AND HEATING SUPPLIES INDUSTRY: This designation includes occupations concerned with manufacturing and repairing porcelain-enameled (enameled-iron) sanitary ware, such as bathtubs, laundry tubs, lavatories, and sinks; plumbers' brass goods, plumbers' woodwork, galvanized-iron and copper range boilers, and miscellaneous bathroom and other fixtures closely related to plumbing work; and heating equipment (nonelectric or warm air), such as gas, oil, and stoker coal fired equipment, for the automatic utilization of gaseous, liquid, and solid fuels. The designation does not include occupations concerned with the manufacture of vitreous-china sanitary ware, which are included in the POTTERY AND PORCELAIN WARE INDUSTRY (pottery & porc.).

assembler 706.684-086
enamel drier 509.684-010
ENAMELER 509.684-010
FITTINGS FINISHER 619.382-014
fittings tightener 706.684-086
lead fabricator 619.382-014
PLUMBING-HARDWARE ASSEMBLER 706.684-086
SUPERVISOR 609.130-018

pottery & porc.—POTTERY AND PORCELAIN WARE INDUSTRY: This designation includes occupations concerned with producing and repairing such clay products as chinaware, earthenware, porcelain ware, stoneware, vitreous-china plumbing fixtures, and porcelain electrical insulation materials.

back grinder 774.684-042
back polisher 774.684-042
bander 740.681-010
BANDING-MACHINE OPERATOR 679.682-010
batter 575.684-010
BATTER-OUT 575.684-010
BEDDER 573.687-010
BISQUE CLEANER 774.684-010
bisque finisher 774.684-010
bisque grader 774.684-010
BISQUE GRADER 774.687-010
Bisque-Kiln Drawer 573.667-010
Bisque-Kiln Placer 573.686-026
block and case maker 777.684-018
blocker 777.684-018
blunger-machine operator 570.482-010
caser 777.684-018
CASTER 575.684-014
Ceramic Sprayer 741.684-026
claying-up worker 573.687-010
CLAY MAKER 570.482-010
clay mixer 570.482-010
clay temperer 570.382-010
clay thrower 774.381-010
clay washer 570.482-010
Decorating-Kiln Operator 573.662-010
DECORATOR 740.684-014
decorator, hand 740.681-010
decorator inspector 774.687-018
DIE PRESSER 575.685-026
DIPPER 774.684-014
duster 574.684-010
Dye Tester 774.687-026
Enameler 741.684-026
fettler 774.684-018
FINISHER 774.684-018
finisher 774.687-022
FINISH-MACHINE TENDER 673.685-058
Firer, Bisque Kiln 573.662-010
Firer, Glost Kiln 573.662-010
FIRER, KILN 573.662-010
Firer, Round Kiln 573.662-010
Firer, Tunnel Kiln 573.662-010
Flatwork Finisher 774.684-018
FLOWER-POT-PRESS OPERATOR 575.685-034
Flush Tester 774.687-026
former 575.685-026
frit burner 579.685-014
frit maker 570.685-098
FRIT-MIXER-AND-BURNER 579.685-014
gilder 740.681-010
GLAZE MAKER 570.685-098
GLAZE SUPERVISOR 574.132-010
Glost-Kiln Drawer 573.667-010
Glost-Kiln Placer 573.686-026
gold bander, striper 679.682-010
GOLD BURNISHER 775.687-022
grinder 774.684-010
GROUND LAYER 574.684-010
Handle Finisher 774.684-018
HANDLE MAKER 575.684-030
HANDLER 774.684-022
handle sticker 774.684-022
INSPECTOR I 575.687-034
INSPECTOR II 774.384-010
INSTRUCTOR, DECORATING 740.221-010
jigger operator 774.382-010
Jollier 774.382-010
kiln burner 573.662-010
KILN DRAWER 573.667-010
KILN-FURNITURE CASTER 579.684-018
kiln maintenance laborer 573.687-022
kiln operator 573.662-010
KILN PLACER 573.686-026
kiln setter 573.686-026
KILN WORKER 573.687-022
line decorator 740.681-010
LINER 740.681-010
MACHINE OPERATOR, CERAMICS 679.685-010
MILL OPERATOR 570.382-010
mixer 570.685-086
modeler 777.281-014
MODEL MAKER 777.281-014
MOLD MAKER 777.684-018
PATCHER 774.684-046
patternmaker 777.281-014
PIN MAKER 575.686-018
PLASTER-DIE MAKER 774.684-026
pot maker 774.381-010
pot maker 774.382-010
pot-press operator 575.685-034
Potter 774.382-010
POTTERY-MACHINE OPERATOR 774.382-010
Pottery Striper 741.687-022
pourer 575.684-014
press operator 575.685-026
Print Decorator 749.684-010
PRINT INSPECTOR 774.687-018
pugger helper 570.685-074
Pug Mill Operator 575.382-010
PUG-MILL-OPERATOR HELPER 570.685-074
pulverizer 570.685-098
ram-die maker 774.684-026
RAM-PRESS OPERATOR 575.682-022
round-kiln drawer 573.667-010
sagger filler 573.686-026
Sagger Former 774.381-010
SAGGER MAKER 774.684-030
SAGGER PREPARER 570.685-086
sagger soak 570.685-086
sander-up 573.687-010
scourer 774.684-010
scraper 774.684-010
setter-in 573.686-026
shaper 774.684-018
Sketch Liner 970.381-022
slip maker 570.482-010
slip mixer 570.482-010
sponger 774.684-018
sprayer, automatic spray machine 574.682-014
SPRAY-MACHINE LOADER 574.686-010
SPRAY-MACHINE OPERATOR 574.682-014
STAMPER, MACHINE 652.682-022
sticker 774.684-022
SUPERVISOR, CLAY PREPARATION 570.130-010
SUPERVISOR, CLAY SHOP 774.130-010
Supervisor, Decaling 749.131-010
SUPERVISOR, DECORATING 749.131-010
SUPERVISOR, MOLD SHOP 777.131-010
TESTER 774.687-026
THROWER 774.381-010
TOOL FILER 701.684-030
tube-machine operator 575.685-026
Tunnel-Kiln Drawer 573.667-010
Tunnel-Kiln Repairer 861.381-014
TURNER 774.684-038
WARE CLEANER 774.687-022
WARE DRESSER 774.684-042
WARE FORMER ..... term
Ware Washer 599.687-030
wet mixer 570.482-010

print. & pub.—PRINTING AND PUBLISHING INDUSTRY: This designation includes occupations concerned with printing and publishing newspapers, peri-

odicals, books, music, banknotes, bonds, blankbooks, maps, greeting cards, and other material, including designing, coloring, and related processes. In addition to including the usual functions carried on by printing and publishing establishments, this designation also includes allied processes that are frequently performed by separate establishments. Typical functions are: (1) preparing steel and copper engraving plates, preparing photoengraved, electrotype, and stereotype plates, and preparing wood cuts; and (2) printing from such plates and wood cuts. Occupations concerned with printing signs in small quantities, as performed in retail stores and other establishments that print signs for their own use, are not included as are printing occupations found in photocopying service establishments.

ad clerk 247.367-010
Ad Compositor 973.381-010
ad-terminal-makeup operator 208.382-010
ADVERTISING-DISPATCH CLERK 247.387-014
advertising-sales representative 254.357-014
advertising solicitor 254.357-014
ADVERTISING SPACE CLERK 247.387-018
Art Critic 131.067-018
artist, color separation 970.281-026
artist, woodblock 979.281-014
Assembler, Cards And Announcements 794.687-010
ASSEMBLER, PRINTED PRODUCTS 794.687-010
assistant editor 132.267-014
ASSISTANT-PRESS OPERATOR 651.585-010
ASSISTANT PRESS OPERATOR, OFFSET 651.685-026
associate editor 132.267-014
back sewer 653.682-010
BAG PRINTER 651.685-010
BENCH WORKER, BINDING 977.684-026
BEN-DAY ARTIST 970.681-010
bindery chief 653.131-010
bindery leadperson 653.360-018
BINDERY-MACHINE FEEDER-OFFBEARER 653.686-026
BINDERY-MACHINE SETTER 653.360-018
bindery operator 640.685-010
bindery operator 653.685-010
BINDERY WORKER 653.685-010
Blankbook Forwarder 794.687-026
Blankbook-Stitching-Machine Operator I 653.685-014
Blankbook-Stitching-Machine Operator II 653.682-010
block cutter 979.281-014
BLOCKER I 979.682-010
BLOCKER II 971.684-010
BLOCKER, METAL BASE 974.682-010
BOOKBINDER 977.381-010
BOOKBINDER APPRENTICE 977.381-014
bookbinder, chief 653.131-010
Book Critic 131.067-018
bookmaker 977.381-010
bookmaker, map 979.684-022
book paster 977.684-018
book sewer 653.685-014
BOOK-SEWING-MACHINE OPERATOR I 653.685-014
BOOK-SEWING-MACHINE OPERATOR II 653.682-010
book stripper 972.381-022
BOOK TRIMMER 640.685-010
braille coder 203.582-014
braille coder 209.584-010
BRAILLE-DUPLICATING-MACHINE OPERATOR 207.685-010
BRAILLE OPERATOR 203.582-010
BRAILLE PROOFREADER 209.367-014
braille-thermoform operator 207.685-010
braille transcriber 203.582-014
BRAILLE TRANSCRIBER, HAND 209.584-010
BRAILLE TYPIST 203.582-014
Bronzer 970.681-014
BUREAU CHIEF 132.067-010
Camera Supervisor 972.137-010
CARBON PRINTER 979.684-010
CARD DECORATOR 649.686-014
CARTOONIST 141.061-010
CASE-MAKING-MACHINE OPERATOR 653.685-018
Caser 977.684-018
caser-in 653.686-010
caser-in 977.684-018
caser operator 653.685-018
CASING-IN-LINE FEEDER 653.686-010
CASING-IN-LINE SETTER 653.360-010
caster operator 654.382-010
CASTING-MACHINE OPERATOR 654.382-010
Check Imprinter 651.362-010
chip applier 641.685-030
CHIP-APPLYING-MACHINE TENDER 641.685-030
CIRCULATION CLERK 209.362-010
CIRCULATION-SALES REPRESENTATIVE 299.167-010
City-Distribution Clerk 209.362-010
city editor 132.037-014
CLAMPER 979.382-010
CLASSIFIED-AD CLERK I 247.367-010
CLASSIFIED-AD CLERK II 247.387-022
classified-copy-control clerk 247.387-022
COLLATING-MACHINE OPERATOR 653.382-014
COLLATOR 653.687-010
COLLATOR, HAND 977.687-010
Color-Control Operator 651.362-030
color corrector 972.281-010
COLORER 970.681-014
color stripper 972.281-022
Columnist 131.067-010
COLUMNIST/COMMENTATOR 131.067-010
commercial stripper 972.281-022
Communications Manager 132.037-022
composer 971.382-018
composing-machine operator 650.582-014
composing-machine operator 650.582-010
composing-machine operator 203.382-018
COMPOSING-ROOM MACHINIST 627.261-010
COMPOSITOR 973.381-010
COMPOSITOR APPRENTICE 973.381-014
Computer-Assisted Retoucher, Photoengraving 970.381-030
COMPUTER TYPESETTER-KEYLINER 979.382-026
console operator 979.282-010
contact-frame operator 971.382-014
CONTACT WORKER, LITHOGRAPHY 976.684-038
Copper Etcher 971.381-014
copy-camera-operator apprentice 972.382-010
COPY CUTTER 221.167-010
COPY HOLDER 209.667-010
Copy Reader 132.267-014
Copy Reader, Book 132.267-014
Correspondent 131.262-018
country printer 973.381-018
country-printer apprentice 973.381-022
COVERER, LOOSELEAF BINDER 795.687-010
COVERING-MACHINE OPERATOR 653.682-014
cover-making-machine operator 653.685-018
CRITIC 131.067-018
CROSSWORD-PUZZLE MAKER 139.087-010
CUSTOMER SERVICES COORDINATOR 221.167-026
CUT-FILE CLERK 222.367-014
cutter operator 640.682-018
CUTTING-MACHINE OPERATOR 640.682-018
CYLINDER GRINDER 500.381-010
CYLINDER-PRESS FEEDER 651.686-010
CYLINDER-PRESS OPERATOR 651.362-010
CYLINDER-PRESS-OPERATOR APPRENTICE 651.362-014
cylinder-press-operator helper 651.686-010
desktop publisher 979.382-026
dial printer 651.685-018
die cutter 979.281-010
die engraver 979.281-010
DIE MAKER 979.281-010
die-stamping-press operator 651.382-010
disc-ruler operator 659.682-022
DOT ETCHER APPRENTICE 972.281-018
DOT ETCHER 972.281-010
Drama Critic 131.067-018
DRILL-PUNCH OPERATOR 649.685-034
EDITOR, BOOK 132.067-014
EDITOR, CITY 132.037-014
EDITOR, DEPARTMENT 132.037-018
Editor, Farm Journal 132.037-022
EDITOR, GREETING CARD 132.067-022
Editor, House Organ 132.037-022
EDITORIAL ASSISTANT 132.267-014
Editorial Cartoonist 141.061-010
EDITORIAL WRITER 131.067-022
editor-in-chief, newspaper 132.017-014
EDITOR, INDEX 132.367-010
Editor, Magazine 132.037-022
EDITOR, MANAGING, NEWSPAPER 132.017-010
EDITOR, NEWS 132.067-026
EDITOR, NEWSPAPER 132.017-014
EDITOR, PUBLICATIONS 132.037-022
EDITOR, TELEGRAPH 132.267-010
Editor, Trade Journal 132.037-022
editor, wire 132.267-010

Electronic Color Correction Operator 979.282-010
electronic imaging system operator 979.282-010
ELECTRONIC MASKING SYSTEM OPERATOR 972.282-018
Electronic Page Makeup System Operator 979.282-010
electronic plotting system operator 972.282-018
ELECTRONIC PREPRESS SYSTEM OPERATOR 979.282-010
electronic scanner operator 972.282-010
Electrotype Caster 974.381-010
Electrotype Molder 974.381-010
ELECTROTYPER 974.381-010
ELECTROTYPER APPRENTICE 974.381-014
Electrotyper Helper 979.684-026
ELECTROTYPE SERVICER 659.462-010
embosser 659.682-014
EMBOSSER 659.382-010
Embosser 652.682-030
EMBOSSING-PRESS OPERATOR 659.682-014
EMBOSSING-PRESS-OPERATOR APPRENTICE 659.682-018
ENGRAVER, BLOCK 979.281-014
Engraver, Copperplate 979.381-010
ENGRAVER I 979.381-010
ENGRAVER II 979.684-014
Engraver, Letter 979.281-018
ENGRAVER, MACHINE 979.382-014
ENGRAVER, PICTURE 979.281-018
ENGRAVER, RUBBER 979.581-010
Engraver, Steel Plate 979.381-010
engraver, wood 979.281-014
engraving operator 971.381-022
engraving photographer 971.382-014
ENGRAVING-PRESS OPERATOR 651.382-010
Envelope-Press Operator I 651.362-010
Envelope-Press Operator II 651.362-018
EQUIPMENT MONITOR, PHOTOTYPESETTING 650.682-010
Estimator, Binding 221.367-014
Estimator, Printing-Plate-Making 221.367-014
ESTIMATOR, PRINTING 221.367-014
etcher apprentice 971.381-010
ETCHER APPRENTICE, PHOTOENGRAVING 971.381-010
ETCHER, HAND 971.261-010
ETCHER HELPER, HAND 971.687-010
ETCHER, PHOTOENGRAVING 971.381-014
EXAMINER 979.687-010
facsimile operator 193.362-010
FEEDER 651.686-014
FILM FLAT INSPECTOR 972.284-010
film masker 971.684-010
film painter 971.684-010
finisher, map and chart 979.684-022
finishing machine operator 653.382-010
finishing machine operator 653.662-010
finishing machine operator 640.682-018
first press operator 651.382-042
flat-bed-press feeder 651.686-010
flatbed-press operator 651.362-010
flexographic-press helper 651.585-010
FLEXOGRAPHIC-PRESS OPERATOR 651.682-010
floorleader 653.131-010
folder, machine 653.382-010
folder operator 653.382-010
Folding-Machine Feeder 653.686-026
FOLDING-MACHINE OPERATOR 653.382-010
Folding-Machine Setter 653.360-018
Foreign Correspondent 131.262-018
FORM DESIGNER 970.361-010
form drafter 970.361-010
FORWARDER 794.687-026
GALLEY STRIPPER 973.681-010
Gathering-Machine Feeder 653.686-026
Gathering-Machine Setter 653.360-018
GENERAL WORKER, LITHOGRAPHIC 979.687-034
GLOBE MOUNTER 795.684-018
gluer 795.684-022
GLUING-MACHINE OPERATOR, AUTOMATIC 641.682-014
graphic arts technician 979.382-018
grinder and plater 500.381-010
hand gluer 795.684-022
Hand Worker 794.687-010
HEAD-BANDER-AND-LINER OPERATOR 653.682-018
head ruler, lithoprint ruling machine operator 659.682-022
image assembler 972.281-022
Impression Printer 979.381-034
indexer 132.367-010
Industrial Editor 132.037-022
INKER 659.667-010
INLAYER 977.684-014
insert-machine operator 653.685-030
inspector 970.361-014
inspector 653.667-010
INSPECTOR, PUBLICATIONS 653.667-010
INSPECTOR, SCREEN PRINTING 979.667-010
INSTANT PRINT OPERATOR 979.362-010
JACKET PREPARER 221.387-030
Job Compositor 973.381-010
JOB-PRESS OPERATOR ..... term
JOB PRINTER 973.381-018
JOB-PRINTER APPRENTICE 973.381-022
JOGGER 651.686-018
jogger operator 649.685-066
joint creaser 977.684-018
Justowriter Operator 203.582-062
KEYING-MACHINE OPERATOR 652.685-042
keyliner 972.381-030
Label-Press Operator I 651.362-010
Label-Press Operator II 651.362-018
laser-beam-color-scanner operator 972.282-010
LAYBOY TENDER 649.685-066
lead printer 979.130-014
LINE-UP EXAMINER 979.381-014
linotype-maintenance-mechanic apprentice 627.281-018
LINOTYPE OPERATOR 650.582-010
lithographer apprentice 972.382-010
lithographer retoucher 972.281-010
lithographic-camera operator 972.382-014
LITHOGRAPHIC PLATEMAKER 972.381-010
LITHOGRAPHIC-PLATE-MAKER APPRENTICE 972.381-014
Lithographic-Press Feeder 651.686-010
lithographic-press operator 651.382-042
lithographic-press operator apprentice 651.382-046
lithographic-press-plate-maker apprentice, photomechanical 972.381-014
Lithographic Proofer 651.582-010
LITHOGRAPHIC-PROOFER APPRENTICE 651.582-014
lithographic retoucher apprentice 972.281-018
L-Type-Ruling-Machine Operator 659.682-022
machine adjuster 653.360-010
machine operator 653.662-010
MACHINIST APPRENTICE, COMPOSING ROOM 627.261-014
MACHINIST APPRENTICE, LINOTYPE 627.261-018
MACHINIST, LINOTYPE 627.261-022
MAGAZINE REPAIRER 653.385-022
MAGNETIC-TAPE-COMPOSER OPERATOR 203.382-018
MAILER 222.587-030
MAILER APPRENTICE 222.587-034
MAILING-MACHINE OPERATOR 208.462-010
MAILROOM SUPERVISOR 222.137-022
make-ready apprentice 651.382-022
make-ready worker 651.384-010
MAKE-UP ARRANGER 973.381-026
makeup editor 132.067-026
MANAGER, ADVERTISING 163.167-010
MANAGER, CIRCULATION 163.167-014
Manager, City Circulation 163.167-014
Manager, Classified Advertising 163.167-010
Manager, Display Advertising 163.167-010
Manager, Local Advertising 163.167-010
Manager, National Advertising 163.167-010
Manager, Newspaper Circulation 163.167-014
managing editor 132.017-010
Manuscript Reader 132.267-014
MAP-AND-CHART MOUNTER 971.684-022
Map Colorer 971.681-014
mechanical artist 970.381-030
MESSENGER, COPY 230.677-010
metropolitan editor 132.037-014
monotype caster 654.382-010
MONOTYPE-KEYBOARD OPERATOR 650.582-014
monotype operator 650.582-014
mounter 979.682-010
mounting-machine operator 641.685-030
Movie Critic 141.067-018
multiple-knife-edge-trimmer operator 653.685-010
music autographer 971.581-010
MUSIC COPYIST 249.582-010
Music Critic 141.067-018
MUSIC ENGRAVER 972.681-010
MUSIC GRAPHER 979.581-010
music typographer 979.582-010
National Editor 132.037-014
negative assembler 971.381-050
negative checker 971.684-010

negative turner 971.381-050
negative-turner apprentice 971.381-054
newspaper-press-operator apprentice 651.362-034
newsperson 131.262-018
NEWSWRITER 131.262-014
OFFICE COPY SELECTOR 249.687-010
OFFSET-DUPLICATING-MACHINE OPERATOR 651.682-014
offset-duplicating machine operator, instant print 979.362-010
OFFSET-PRESS-OPERATOR APPRENTICE 651.382-046
offset press operator, helper 651.685-026
OFFSET-PRESS OPERATOR I 651.382-042
OFFSET-PRESS OPERATOR II 651.685-018
Offset-Proof-Press Operator 651.582-010
Pagination System Operator 979.282-010
PAINTER, PLATE 970.681-030
PANTOGRAPHER 979.382-022
pantograph operator 979.381-010
PANTOGRAPH SETTER 979.380-010
paper cutter 640.682-018
PAPER STRIPPER 922.687-078
paste-make-up-artist apprentice 979.381-022
PASTE-UP ARTIST 972.381-030
PASTE-UP COPY-CAMERA OPERATOR APPRENTICE 979.381-022
pen-ruler operator 659.682-022
Perfect-Binder Feeder-Offbearer 653.686-026
Perfect-Binder Setter 653.360-018
PERFORATING-MACHINE OPERATOR 649.685-090
perforator operator 203.582-062
PHOTOCOMPOSING-MACHINE OPERATOR 650.582-018
PHOTOCOMPOSING-PERFORATOR-MACHINE OPERATOR 203.582-042
PHOTOCOMPOSITION-KEYBOARD OPERATOR 203.582-046
PHOTOENGRAVER 971.381-022
PHOTOENGRAVER APPRENTICE 971.381-026
PHOTOENGRAVING FINISHER 971.381-030
Photoengraving Helper 979.684-026
PHOTOENGRAVING PRINTER 971.381-034
PHOTOENGRAVING PROOFER 971.381-038
PHOTOENGRAVING-PROOFER APPRENTICE 971.381-040
PHOTOGRAPHER APPRENTICE, LITHOGRAPHIC 972.382-010
PHOTOGRAPHER, LITHOGRAPHIC 972.382-014
photographer, news 143.062-034
PHOTOGRAPHER, PHOTOENGRAVING 971.382-014
PHOTOJOURNALIST 143.062-034
PHOTOLETTERING-MACHINE OPERATOR 652.585-010
photolithographer 972.382-014
photolithographer apprentice 972.382-010
photolithographic process worker 972.382-014
photolith operator 971.381-022
PHOTORADIO OPERATOR 193.362-010
phototypesetter 650.582-022
PHOTOTYPESETTER OPERATOR 650.582-022
plate colorer 970.681-030
PLATE FINISHER 659.360-010
plate finisher, photoengraving 971.381-030
PLATE GAUGER 979.687-018
PLATE GRAINER 972.682-010
PLATE-GRAINER APPRENTICE 972.682-014
PLATE INSPECTOR 972.687-010
platemaker 972.381-010
Plate Maker, Zinc 971.381-022
PLATE MOLDER 556.582-010
PLATEN BUILDER-UP 651.384-010
PLATEN-PRESS FEEDER 651.685-022
PLATEN-PRESS OPERATOR 651.362-018
PLATEN-PRESS-OPERATOR APPRENTICE 651.362-022
plate preparer 972.682-010
plate printer 651.382-030
PLATE SETTER, FLEXOGRAPHIC PRESS 659.381-010
Pony-Cylinder-Press Feeder 651.686-010
Pony-Cylinder-Press Operator 651.362-010
PRESSER 977.684-018
PRESS FEEDER ..... term
press operator 651.362-010
PRESS OPERATOR ..... term
press operator, instant print shop 979.362-010
press-plate maker 972.381-026
press tender 651.686-018
PRINTER 979.382-018
printer 973.381-018
printer's devil 973.381-022
printer, small print shop 979.382-018
printing-equipment mechanic 627.261-010
printing-equipment-mechanic apprentice 627.261-014
Printing-Plate Clerk 222.387-058
printing-plate router 979.682-026
PRINT-SHOP HELPER 979.684-026
process artist 972.281-010
process-camera operator 972.382-014
process stripper 972.281-022
PRODUCTION MANAGER, REPRODUCTION 652.137-010
PRODUCTION PROOFREADER 247.667-010
proofer 651.582-010
proofer apprentice 651.582-014
proofer apprentice 971.381-040
Proofer, Black And White 971.381-038
Proofer, Color 971.381-038
PROOFER, PREPRESS 972.381-034
Proofing-Machine Operator 652.382-010
proof-plate maker 971.381-034
PROOF-PRESS OPERATOR 651.582-010
PROOFREADER 209.387-030
proof runner 239.677-010
PROOFSHEET CORRECTOR 973.381-030
prover 971.381-038
PUBLISHER ..... term
quality control inspector 653.667-010
quick print operator 979.362-010
radio-photo technician 193.362-010
RAISED PRINTER 652.686-034
REMELTER 502.685-014
REPEAT CHIEF 970.361-014
REPEAT-PHOTOCOMPOSING-MACHINE OPERATOR 971.382-018
REPORTER 131.262-018
RETOUCHER, PHOTOENGRAVING 970.381-030
rewriter 131.262-014
ROLLER ENGRAVER, HAND 979.681-018
ROLLER MAKER 759.664-018
roller painter 971.684-014
roller printer 971.685-010
ROLLER-PRINT TENDER 971.685-010
ROLLER VARNISHER 979.682-022
roll setter 651.686-022
ROLL TENDER 651.686-022
ROTOGRAVURE-PRESS OPERATOR 651.362-026
rounder 653.685-026
rounder and backer 653.685-026
ROUNDING-AND-BACKING-MACHINE OPERATOR 653.685-026
ROUTER 979.682-026
RULING-MACHINE SET-UP OPERATOR 659.682-022
SADDLE-AND-SIDE WIRE STITCHER 692.685-146
Saddle-Stitching-Machine Feeder-Offbearer 653.686-026
Saddle-Stitching-Machine Operator 653.662-010
SALES AGENT, PSYCHOLOGICAL TESTS AND INDUSTRIAL RELATIONS 251.257-014
SALES REPRESENTATIVE, ADVERTISING 254.357-014
Sales Representative, Classified Advertising 254.357-014
Sales Representative, Display Advertising 254.357-014
SCANNER OPERATOR 972.282-010
Scanner Supervisor 972.137-010
schedule clerk 247.387-014
second press operator 651.685-026
section manager 653.131-010
set-making-machine operator 653.382-014
shearing-machine operator 640.685-010
sheeter helper 649.685-066
SHIFT SUPERVISOR, FILM PROCESSING 979.132-010
SIDEROGRAPHER 979.381-030
Side-Stitching-Machine Feeder-Offbearer 653.686-026
Side-Stitching-Machine Operator 653.662-010
SKETCH MAKER I 979.381-034
SKETCH MAKER II 972.381-018
SKETCH MAKER, PHOTOENGRAVING 970.281-026
space clerk 247.387-018
SPIRAL BINDER 653.685-030
spiral-bind operator 653.685-030
Sports Cartoonist 141.061-010
stacker 651.686-018
STAGER 971.684-014
State Editor 132.037-014
STEEL-DIE PRINTER 651.382-030
STENOGRAPHER, PRINT SHOP 202.362-018
Stereotype Caster 974.382-014
Stereotype Molder 974.382-014
STEREOTYPER 974.382-014
STEREOTYPER APPRENTICE 974.382-010
Stereotyper Helper 979.684-026
STITCHER, HAND 977.684-022
stitcher operator 653.662-010
stitcher operator 692.685-146

STITCHING-MACHINE OPERATOR 653.662-010
Stitching-Machine Setter 653.360-018
stone-and-plate-preparer apprentice 972.682-014
stone hand 973.381-026
straight ruling machine operator 659.682-022
STRIPPER 971.381-050
stripper-and-opaquer apprentice 971.381-054
stripper and printer 971.381-034
STRIPPER APPRENTICE 971.381-054
stripper, black and white 972.381-022
Stripper, Black And White 971.381-050
Stripper, Color 971.381-050
STRIPPER, LITHOGRAPHIC I 972.281-022
STRIPPER, LITHOGRAPHIC II 972.381-022
stripper-opaquer 972.381-022
subscription clerk 209.362-010
supervisor 653.131-010
SUPERVISOR, ADVERTISING-DISPATCH CLERKS 247.137-010
Supervisor, Assembly Room 653.131-010
SUPERVISOR, BINDERY 653.131-010
SUPERVISOR, CLASSIFIED ADVERTISING 247.137-014
SUPERVISOR, COMPOSING-ROOM 973.137-010
SUPERVISOR, ELECTROTYPING AND STEREOTYPING 974.131-010
Supervisor, Finishing/Binding 653.131-010
SUPERVISOR, FINISHING ROOM 979.137-010
supervisor, layout 979.131-010
Supervisor, Offset-Plate Preparation 972.137-010
Supervisor, Photocomposition 650.132-010
SUPERVISOR, PHOTOENGRAVING 971.131-010
supervisor, prep 972.137-010
SUPERVISOR, PREPRESS 972.137-010
SUPERVISOR, PRESS ROOM 651.130-010
Supervisor, Printing Department 979.130-014
SUPERVISOR, PRINT SHOP 979.130-014
SUPERVISOR, PUBLICATIONS PRODUCTION 979.131-010
Supervisor, Ruling 653.131-010
Supervisor, Stripping 972.137-010
SUPERVISOR, TYPESETTING 650.132-010
system operator 979.282-010
Systems Manager 972.137-010
TAB-CARD-PRESS OPERATOR 651.382-034
table worker 653.685-010
Tag-And-Label Cutter 699.682-018
tape-sewing-machine operator 653.685-014
Telephone Ad-Taker 247.367-010
telephoto engineer 193.362-010
telephoto operator 239.382-010
teletypesetter monitor 650.685-010
Tension Regulator 651.362-030
TERMINAL-MAKEUP OPERATOR 208.382-010
thermograph operator 652.686-034
TINNING-MACHINE SET-UP OPERATOR 653.682-022
tint layer 970.681-010
TIPPER 795.684-022
tone artist 972.281-010
tone artist apprentice 972.281-018
TRANSFER OPERATOR 651.382-038
TRANSFERRER 972.381-026
trimmer operator, three knife 640.685-010
type caster 654.382-010
TYPE-CASTING MACHINE OPERATOR 654.582-010
TYPESETTER ..... term
typesetter 973.381-010
typesetter 650.582-018
typesetter 652.585-010
typesetter apprentice 973.381-014
TYPESETTER-PERFORATOR OPERATOR 203.582-062
TYPESETTING-MACHINE TENDER 650.685-010
typographer 973.381-010
VARNISHING-MACHINE OPERATOR 534.685-030
Vulcanizer, Rubber Plate 556.582-010
WEB-PRESS OPERATOR 651.362-030
WEB-PRESS-OPERATOR APPRENTICE 651.362-034
web-press-operator assistant 651.585-010
web-press-operator helper, offset 651.685-026
WING-MAILER-MACHINE OPERATOR 208.685-034
WIRE-PHOTO OPERATOR, NEWS 239.382-010
wire-spiral binder 653.685-030
wood-cut engraver 979.281-014
wood-type finisher 979.281-014
Zinc Etcher 971.381-014
zinc-plate grainer 972.682-010

profess. & kin.—PROFESSIONAL AND KINDRED OCCUPATIONS: This designation includes occupations requiring extensive study or experience in professions, technical services, sciences, art, and related types of work. The preparation for these occupations (with certain exceptions, such as occur in art and literature) is typically acquired through university, college, and technical institute training; experience providing institute training; experience providing equivalent backgrounds; or some combination of these. The functions of these occupations are predominantly mental rather than manual. This designation includes only occupations which cross industrial designation lines or which by the nature of the jobs cannot be identified as belonging to any one industry. Occupations which are found in only one DOT industry are classified in that industry rather than here.

ABSORPTION-AND-ADSORPTION ENGINEER 008.061-010
abstract clerk 119.267-010
abstract maker 119.267-010
ABSTRACTOR 119.267-010
abstract searcher 119.267-010
abstract writer 119.267-010
ACCELERATOR OPERATOR 015.362-010
ACCOUNTANT 160.162-018
ACCOUNTANT, BUDGET 160.162-022
ACCOUNTANT, CERTIFIED PUBLIC ..... term
ACCOUNTANT, COST 160.162-026
Accountant, Machine Processing 160.167-026
ACCOUNTANT, PROPERTY 160.167-022
ACCOUNTANT, SYSTEMS 160.167-026
ACCOUNTANT, TAX 160.162-010
accounting-system expert 160.167-026
ACTUARY 020.167-010
Actuary, Casualty 020.167-010
Actuary, Life 020.167-010
adapter 152.067-010
Ad Hoc Arbitrator 169.107-010
ADMINISTRATOR, SOCIAL WELFARE 195.117-010
adsorption-and-absorption engineer 008.061-010
advocate 110.107-010
AEROSPACE ENGINEER ..... term
Agricultural Economist 050.067-010
AGRICULTURAL ENGINEER 013.061-010
AGRICULTURAL-ENGINEERING TECHNICIAN 013.161-010
AGRICULTURAL-RESEARCH ENGINEER 013.061-014
AGRICULTURIST ..... term
AGRONOMIST 040.061-010
AIR ANALYST 012.261-010
AIRBRUSH ARTIST 970.281-010
Airbrush Artist, Photography 970.281-010
Airbrush Artist, Technical 970.281-010
Air-Conditioning Technician 007.181-010
Air Intelligence Specialist 059.167-010
Air Pollution Analyst 029.081-010
Air-Pollution Engineer 019.081-018
AIRPORT ENGINEER 005.061-010
air tester 012.261-010
ANATOMIST 041.061-010
ANIMAL BREEDER 041.061-014
Animal Cytologist 041.061-042
Animal Ecologist 041.061-090
Animal Nutritionist 040.061-014
Animal Physiologist 041.061-078
ANIMAL SCIENTIST 040.061-014
Animal Taxonomist 041.061-090
Anthropological Linguist 055.067-010
ANTHROPOLOGIST 055.067-010
ANTHROPOLOGIST, PHYSICAL 055.067-014
Anthropometrist 055.067-014
APICULTURIST 041.061-018
APPLICATIONS ENGINEER ..... term
APPLICATIONS ENGINEER, MANUFACTURING 007.061-038
applications programmer 030.162-010
applications programmer-analyst 030.162-014
Applied Anthropologist 055.067-010
APPRAISER, ART 191.287-014
Aquaculturist 041.061-022
AQUATIC BIOLOGIST 041.061-022
aquatic ecologist 041.061-022
ARBITRATOR 169.107-010
ARCHEOLOGIST 055.067-018
Archeologist, Classical 055.067-018
ARCHITECT 001.061-010
ARCHITECT, MARINE 001.061-014
architect, naval 001.061-014
Architectural Renderer 970.281-014
ARCHIVIST 101.167-010
Archivist, Economic History 101.167-010
Archivist, Military History 101.167-010

Archivist, Political History 101.167-010
AREA ENGINEER ..... term
area supervisor 187.167-238
ARRANGER 152.067-010
ART DIRECTOR 141.031-010
artist 141.061-022
artist 144.061-010
artist, scientific 141.061-026
ASSAYER 022.281-010
ASSOCIATION EXECUTIVE 189.117-010
ASTRONOMER 021.067-010
attorney 110.107-010
audiometric technician 078.362-010
AUDIOMETRIST 078.362-010
AUDIOVISUAL PRODUCTION SPECIALIST 149.061-010
AUDITOR 160.167-054
AUDITOR, INTERNAL 160.167-034
AUDITOR, TAX 160.167-038
AUTHOR ..... term
bacteriologist 041.061-058
Bacteriologist, Dairy 041.061-058
Bacteriologist, Fishery 041.061-058
Bacteriologist, Food 041.061-058
Bacteriologist, Industrial 041.061-058
Bacteriologist, Medical 041.061-058
Bacteriologist, Pharmaceutical 041.061-058
Bacteriologist, Soil 041.061-058
band leader 152.047-014
BAR EXAMINER 110.167-010
BIBLIOGRAPHER 100.367-010
BIOCHEMIST 041.061-026
BIOGRAPHER 052.067-010
BIOLOGICAL PHOTOGRAPHER 143.362-010
BIOLOGIST 041.061-030
BIOLOGY SPECIMEN TECHNICIAN 041.381-010
biomedical electronics technician 019.261-010
biomedical engineering technician 019.261-010
BIOMEDICAL ENGINEER 019.061-010
BIOMEDICAL EQUIPMENT TECHNICIAN 019.261-010
BIOPHYSICIST 041.061-034
BOTANIST 041.061-038
broker 162.157-018
Budget Consultant 160.207-010
BUDGET OFFICER 161.117-010
Building-Illuminating Engineer 003.061-046
business and financial counsel 110.117-022
BUSINESS REPRESENTATIVE, LABOR UNION 187.157-018
buyer 162.157-038
BUYER 162.157-018
calligrapher 970.661-010
CANTOR 129.027-010
CARTOGRAPHIC TECHNICIAN ..... term
cartographic technician 018.261-026
CERAMIC DESIGN ENGINEER 006.061-010
CERAMIC ENGINEER 006.061-014
CERAMIC RESEARCH ENGINEER 006.061-018
CERAMICS TEST ENGINEER 006.061-022
Certified Financial Planner 250.257-014
certified public accountant see ACCOUNTANT, CERTIFIED PUBLIC .....
Chaplain 120.107-010
CHEMICAL DESIGN ENGINEER, PROCESSES 008.061-014
CHEMICAL ENGINEER 008.061-018
CHEMICAL-ENGINEERING TECHNICIAN 008.261-010
Chemical-Engineering Technician, Prototype-Development 008.261-010
CHEMICAL-EQUIPMENT SALES ENGINEER 008.151-010
CHEMICAL-LABORATORY CHIEF 022.161-010
CHEMICAL-LABORATORY TECHNICIAN 022.261-010
CHEMICAL RESEARCH ENGINEER 008.061-022
CHEMICAL-TEST ENGINEER 008.061-026
CHEMIST 022.061-010
Chemist, Analytical 022.061-010
chemist, biological 041.061-026
Chemist, Clinical 041.061-026
Chemist, Enzymes 041.061-026
CHEMIST, FOOD 022.061-014
Chemist, Inorganic 022.061-010
CHEMIST, INSTRUMENTATION 022.261-018
Chemist, Organic 022.061-010
Chemist, Pharmaceutical 041.061-026
Chemist, Physical 022.061-010
Chemist, Proteins 041.061-026
Chemist, Steroids 041.061-026
CHEMIST, WASTEWATER-TREATMENT PLANT 022.261-022
chief chemist 022.161-010
CHIEF COMPUTER PROGRAMMER 030.167-010
CHIEF DRAFTER 007.261-010
chief engineer 019.167-014
chief information officer 109.067-010
CHIEF OF PARTY 018.167-010
Chief Planner 199.167-014
Child Psychologist 045.061-010
choir leader 152.047-010
CHORAL DIRECTOR 152.047-010
CHRISTIAN SCIENCE NURSE 129.107-010
CHRISTIAN SCIENCE PRACTITIONER 129.107-014
city planner 199.167-014
CITY PLANNING AIDE 199.364-010
city-planning engineer 199.167-014
CIVIL ENGINEER 005.061-014
CIVIL ENGINEERING TECHNICIAN 005.261-014
CLERGY MEMBER 129.107-010
CLERICAL-METHODS ANALYST 161.267-010
clinical counselor 045.107-050
Clinical Engineer 019.061-010
CLINICAL PSYCHOLOGIST 045.107-022
CLINICAL SOCIOLOGIST 054.107-010
CLINICAL THERAPIST 045.107-050
CLOTH DESIGNER 142.061-014
clothes designer 142.061-018
cloth pattern maker 142.061-014
color consultant 141.051-010
COLOR EXPERT 141.051-010
COLORIST 022.161-014
colorist 141.051-010
color maker 022.161-014
color matcher 022.161-014
color specialist 141.051-010
Combat Operations Research Specialist 059.167-010
Comedy Writer 131.067-026
commercial artist 141.061-022
commercial artist, lettering 970.661-014
COMMERCIAL DESIGNER 141.061-038
commercial photographer 143.062-030
commercial photographer apprentice 143.062-018
Commodity-Industry Analyst 050.067-010
COMMUNITY DIETITIAN 077.127-010
community health educator 079.117-014
community planner 001.061-018
COMPOSER 152.067-014
comptroller 160.167-058
Computer-Laboratory Technician 003.161-014
COMPUTER PROGRAMMER 030.162-010
COMPUTER SECURITY COORDINATOR 033.162-010
COMPUTER SECURITY SPECIALIST 033.362-010
computer systems engineer 033.167-010
COMPUTER SYSTEMS HARDWARE ANALYST 033.167-010
CONCILIATOR 169.207-010
Conductor, Dance Band 152.047-014
CONDUCTOR, ORCHESTRA 152.047-014
Conductor, Symphonic-Orchestra 152.047-014
CONFIGURATION MANAGEMENT ANALYST 012.167-010
CONSERVATOR, ARTIFACTS 055.381-010
CONSULTANT 189.167-010
CONSULTING ENGINEER ..... term
consumer services consultant 096.121-014
CONTRACT CLERK 119.267-018
contract consultant 119.267-018
contract coordinator 162.117-018
CONTRACT SPECIALIST 162.117-018
contract technician 119.267-018
CONTROLLER 160.167-058
CONTROLS DESIGNER 003.261-014
Controls Designer, Computer-Assisted 003.261-014
controls project engineer 003.261-014
coordinator, computer programming 030.167-010
COPY WRITER 131.067-014
corporate counsel 110.117-022
corrosion-control specialist 003.167-022
corrosion engineer 003.167-022
cost estimator 169.267-038
Costume Designer 142.061-018
counseling-center manager 045.107-018
counselor 110.107-010
COUNSELOR 045.107-010
counselor-at law 110.107-010
COUNSELOR, MARRIAGE AND FAMILY 045.107-054
court abstractor 119.267-010
cpa see ACCOUNTANT, CERTIFIED PUBLIC .....
CREATIVE DIRECTOR 141.067-010

CREDIT COUNSELOR 160.207-010
crime laboratory analyst 029.261-026
CRIMINALIST 029.261-026
Criminologist 054.067-014
crop-research scientist 040.061-010
crop scientist 040.061-010
...stomer service representative 032.262-010
CYTOLOGIST 041.061-042
Dairy-Management Specialist 040.061-018
dairy-manufacturing technologist 040.061-022
Dairy-Nutrition Specialist 040.061-018
dairy-products technologist 040.061-022
DAIRY SCIENTIST 040.061-018
DAIRY TECHNOLOGIST 040.061-022
DATA BASE ADMINISTRATOR 039.162-010
DATA BASE DESIGN ANALYST 039.162-014
Data Dictionary Administrator 039.162-014
DATA RECOVERY PLANNER 033.162-014
data-reduction technician 020.162-010
data security coordinator 033.162-010
DELINEATOR 970.281-014
Demographer I 020.167-026
Demographer II 054.067-014
DESIGN DRAFTER, ELECTROMECHANISMS 017.261-014
DESIGN-ENGINEER, AGRICULTURAL EQUIPMENT 013.061-018
DESIGN ENGINEER, FACILITIES ..... master
DESIGN ENGINEER, MARINE EQUIPMENT 014.061-010
DESIGN ENGINEER, MINING-AND-OILFIELD EQUIPMENT 010.061-010
DESIGN ENGINEER, NUCLEAR EQUIPMENT 015.061-010
DESIGN ENGINEER, PRODUCTS ..... master
DETAILER 017.261-018
DETAILER, FURNITURE 017.261-022
development engineer see RESEARCH ENGINEER
Development Engineer, Geothermal Operations 010.061-018
Development-Instrumentation Technician 003.161-014
DIANETIC COUNSELOR 199.207-010
dianeticist 199.207-010
DIE-DRAWING CHECKER 007.167-010
DIETETIC TECHNICIAN 077.124-010
DIETITIAN ..... term
dietitian, administrative 077.117-010
DIETITIAN, CHIEF 077.117-010
DIETITIAN, CLINICAL 077.127-014
DIETITIAN, CONSULTANT 077.127-018
DIETITIAN, RESEARCH 077.061-010
DIETITIAN, TEACHING 077.127-022
dietitian, therapeutic 077.127-014
director, chemical laboratory 022.161-010
Director, Child Support Enforcement Program 195.117-010
Director, Community Center 195.117-010
director, counseling bureau 045.107-018
DIRECTOR, CRAFT CENTER 187.167-202
director, data processing 169.167-030
director, dietetics department 077.117-010
DIRECTOR, FUNDS DEVELOPMENT 165.117-014
director, geophysical laboratory 024.167-010
DIRECTOR, INDUSTRIAL RELATIONS 166.117-010
director, laboratory see LABORATORY CHIEF
director, management information systems 169.167-030
Director, Marketing Research And Analysis 189.117-014
Director, Mental Health Agency 195.117-010
director, music 152.047-014
DIRECTOR OF COUNSELING 045.107-018
director of home economics 096.161-010
director of major or capital gifts 165.117-014
Director of Publications 189.117-010
Director, Planning 199.167-014
director, procurement services 162.167-022
director, product assurance 189.117-042
Director, Product Research And Development 189.117-014
DIRECTOR, QUALITY ASSURANCE 189.117-042
DIRECTOR, RECORDS MANAGEMENT 161.117-014
Director, Rehabilitation Program 195.117-010
Director, Social Service 195.117-010
director, social welfare 195.117-010
DIRECTOR, STATE-HISTORICAL SOCIETY 052.067-014
Director, Teen Post 187.117-046
DIRECTOR, TRANSLATION 137.137-010
director, vocational counseling 045.107-018
disaster recovery coordinator 033.162-014
display and banner designer 142.051-010
Display Artist 142.051-010
DISPLAY DESIGNER 142.051-010
Display Designer, Outside 142.051-010
district director 187.167-238
DOCUMENTATION ENGINEER 012.167-078
DOCUMENT RESTORER 979.361-010
DRAFTER ..... master
Drafter (cad), Electrical 003.281-010
DRAFTER APPRENTICE 017.281-014
DRAFTER, ARCHITECTURAL 001.261-010
DRAFTER, ASSISTANT 017.281-018
Drafter (CAD), Electronic 003.281-014
DRAFTER, CARTOGRAPHIC 018.261-010
DRAFTER, CASTINGS 007.261-014
DRAFTER, CIVIL 005.281-010
Drafter, Civil (CAD) 005.281-010
drafter, civil engineering 005.281-010
DRAFTER, COMMERCIAL 017.261-026
drafter, construction 005.281-010
DRAFTER, DETAIL 017.261-030
DRAFTER, ELECTRICAL 003.281-010
drafter, electromechanical 003.281-014
DRAFTER, ELECTRONIC 003.281-014
drafter, engineering 007.281-010
drafter, engineering 005.281-010
DRAFTER, HEATING AND VENTILATING 017.261-034
DRAFTER, LANDSCAPE 001.261-014
DRAFTER, MARINE 014.281-010
DRAFTER, MECHANICAL 007.281-010
DRAFTER, PATENT 007.261-018
DRAFTER, PLUMBING 017.261-038
Drafter, Refrigeration 017.261-034
DRAFTER, STRUCTURAL 005.281-014
DRAFTER, TOOL DESIGN 007.261-022
Drafter, Topographical 005.281-010
DRAMATIC COACH 150.027-010
dramatist 131.067-038
DRAWINGS CHECKER, ENGINEERING 007.267-010
ECOLOGIST ..... term
ecologist see ENVIRONMENTALIST
economic analyst 050.067-010
ECONOMIST 050.067-010
EDITOR, DICTIONARY 132.067-018
EDITOR, MAP 018.261-018
EDITOR, TECHNICAL AND SCIENTIFIC PUBLICATIONS 132.017-018
efficiency expert 012.167-070
ELECTRICAL-DESIGN ENGINEER 003.061-018
ELECTRICAL ENGINEER 003.061-010
electrical engineer, geophysical prospecting 003.061-022
electrical-laboratory technician 003.161-010
ELECTRICAL-PROSPECTING ENGINEER 003.061-022
ELECTRICAL-RESEARCH ENGINEER 003.061-026
ELECTRICAL TECHNICIAN 003.161-010
ELECTRICAL TEST ENGINEER 003.061-014
ELECTROLYSIS-AND-CORROSION-CONTROL ENGINEER 003.167-022
electrolysis engineer 003.167-022
electrolysis investigator 003.167-022
Electronic-Communications Technician 003.161-014
ELECTRONIC-SALES-AND-SERVICE TECHNICIAN 828.251-010
ELECTRONICS-DESIGN ENGINEER 003.061-034
ELECTRONICS ENGINEER 003.061-030
ELECTRONICS-RESEARCH ENGINEER 003.061-038
ELECTRONICS TECHNICIAN 003.161-014
Electronics Technician, Nuclear Reactor 003.161-014
ELECTRONICS-TEST ENGINEER 003.061-042
ELECTRO-OPTICAL ENGINEER 023.061-010
employee relations administrator 166.117-010
employee-service officer 166.117-014
EMPLOYER RELATIONS REPRESENTATIVE 166.257-010
EMPLOYMENT INTERVIEWER 166.267-010
employment supervisor 166.167-030
end user consultant 032.262-010
Engine Emission Technician 029.261-014
ENGINEER ..... term
engineer, geophysical laboratory 024.167-010
engineering aide see TECHNICIAN
ENGINEERING ASSISTANT, MECHANICAL EQUIPMENT 007.161-018
Engineering Geologist 024.061-018
engineering illustrator 017.281-034
ENGINEERING MANAGER, ELECTRONICS 003.167-070
engineering technician 007.161-026
ENGINEER, SOILS 024.161-010
ENGROSSER 970.661-310
ENTOMOLOGIST 041.061-046
ENVIRONMENTAL ANALYST 029.081-010

ENVIRONMENTAL ENGINEER ..... term
ENVIRONMENTALIST ..... term
environmental planner 001.061-018
Environmental-Research Test Technician 003.261-010
environmental scientist 029.081-010
environmental technician 029.261-014
Equipment Specialist 096.121-014
ESCROW OFFICER 119.367-010
ESTIMATOR 169.267-038
Ethnographer 055.067-022
ETHNOLOGIST 055.067-022
Etymologist 059.067-010
Executive Secretary 189.117-010
executive secretary, social welfare 195.117-010
experimental technician 007.161-026
factory engineer 007.167-014
FACTORY LAY-OUT ENGINEER 012.167-018
farm-seed specialist 040.361-014
Fashion Consultant 096.121-014
FASHION DESIGNER 142.061-018
FIBER TECHNOLOGIST 040.061-026
FIELD-MAP EDITOR 018.262-010
FIELD REPRESENTATIVE 189.267-010
FIELD SERVICE ENGINEER 828.261-014
field service representative 828.261-014
field technical assistant 828.261-014
Financial Economist 050.067-010
FINANCIAL PLANNER 250.257-014
fire-loss-prevention engineer 012.167-026
FIRE-PREVENTION RESEARCH ENGINEER 012.167-022
FIRE-PROTECTION ENGINEER 012.167-026
FIRE-PROTECTION ENGINEERING TECHNICIAN 019.261-026
flag decorator and designer 142.051-010
food scientist 041.081-010
FOOD TECHNOLOGIST 041.081-010
FOREST ECOLOGIST 040.061-030
FORESTER 040.167-010
Forestry Supervisor 040.167-010
FORMS ANALYST 161.267-018
Gag Writer 131.067-026
GAMMA-FACILITIES OPERATOR 015.362-014
GENEALOGIST 052.067-018
general secretary, social welfare 195.117-010
GENETICIST 041.061-050
GEODESIST 024.061-014
GEODETIC COMPUTATOR 018.167-014
GEOGRAPHER 029.067-010
GEOGRAPHER, PHYSICAL 029.067-014
Geological Engineer 024.061-018
GEOLOGIST 024.061-018
Geomagnetician 024.061-030
Geomorphologist 024.061-018
GEOPHYSICAL-LABORATORY CHIEF 024.167-010
GEOPHYSICIST 024.061-030
Glaciologist 024.061-030
Gold-And-Silver Assayer 022.281-010
GRANT COORDINATOR 169.117-014
graphic artist 141.061-022
GRAPHIC DESIGNER 141.061-018
GRAPHOLOGIST 199.267-038
head counselor 045.107-018
HEALTH PHYSICIST 015.021-010
health-physics technician 199.167-010
hearing-test technician 078.362-010
Heating Technician 007.181-010
HEAT-TRANSFER TECHNICIAN 007.181-010
Helminthologist 041.061-070
help desk representative 032.262-010
help desk supervisor 032.132-010
HERBARIUM WORKER 041.384-010
Herpetologist 041.061-090
Highway-Landscape Architect 001.061-018
HISTORIAN 052.067-022
HISTORIAN, DRAMATIC ARTS 052.067-026
Historical Archeologist 055.067-018
home and school visitor 195.107-038
HOME ECONOMIST 096.121-014
Home Economist, Consumer Service 096.121-014
HOME-SERVICE DIRECTOR 096.161-010
HORTICULTURIST 040.061-038
HOT-CELL TECHNICIAN 015.362-018
human factors specialist 045.061-014
HUMAN RESOURCE ADVISOR 166.267-046
HUMORIST 131.067-026
HYDRAULIC ENGINEER 005.061-018
hydrologic engineer 005.061-018
HYDROLOGIST 024.061-034
HYPNOTHERAPIST 079.157-010
hypnotist 079.157-010
Ic Designer, Custom 003.261-018
Ic Designer, Gate Arrays 003.261-018
Ic Designer, Standard Cells 003.261-018
Ichthyologist 041.061-090
ILLUMINATING ENGINEER 003.061-046
Illuminator 970.661-010
ILLUSTRATOR 141.061-022
ILLUSTRATOR, MEDICAL AND SCIENTIFIC 141.061-026
INDUSTRIAL DESIGNER 142.061-026
Industrial Economist 050.067-010
INDUSTRIAL ENGINEER 012.167-030
INDUSTRIAL ENGINEERING TECHNICIAN 012.267-010
INDUSTRIAL-HEALTH ENGINEER 012.167-034
industrial hygiene engineer 012.167-034
INDUSTRIAL HYGIENIST 079.161-010
Industrial-Illuminating Engineer 003.061-046
Industrial Occupational Analyst 166.067-010
Industrial Renderer 970.281-014
Industrial Sociologist 054.067-014
information broker 109.067-010
information center specialist 032.262-010
information manager 109.067-010
information processing engineer 033.167-010
information resources director 109.067-010
information resources manager 109.067-010
INFORMATION SCIENTIST 109.067-010
information security 033.162-010
INSPECTOR, BOILER 168.167-026
INSTALLATION ENGINEER ..... term
institutional-nutrition consultant 077.127-018
instructional technology specialist 149.061-010
INSTRUMENTATION ENGINEER ..... term
INSTRUMENTATION TECHNICIAN 003.261-010
INTEGRATED CIRCUIT LAYOUT DESIGNER 003.261-018
INTELLIGENCE RESEARCH SPECIALIST 059.167-010
Interior Decorator 142.051-014
INTERIOR DESIGNER 142.051-014
International-Trade Economist 050.067-010
INTERPRETER 137.267-010
INTERPRETER, DEAF 137.267-014
Invertebrate Zoologist 041.061-090
irradiation technician 015.362-018
IRRIGATION ENGINEER 005.061-022
isotope-production technician 015.362-022
JOB ANALYST 166.267-018
JOB DEVELOPMENT SPECIALIST 166.267-034
laboratory assistant 199.364-014
LABORATORY CHIEF ..... term
laboratory-development technician 007.161-026
LABORATORY SUPERVISOR 022.137-010
Labor Economist 050.067-010
Labor Relations Consultant 166.167-034
labor relations representative 166.167-034
Labor Relations Supervisor 166.167-034
land agent 186.117-058
land planner 001.061-018
land planner 199.167-014
LANDSCAPE ARCHITECT 001.061-018
LAND SURVEYOR 018.167-018
law clerk 119.267-026
law examiner 110.107-010
LAWYER 110.107-010
LAWYER, ADMIRALTY 110.117-018
LAWYER, CORPORATION 110.117-022
LAWYER, CRIMINAL 110.107-014
LAWYER, PATENT 110.117-026
LAWYER, PROBATE 110.117-030
LAWYER, REAL ESTATE 110.117-034
layer-out 007.261-010
layout artist 141.061-018
lay-out drafter 007.261-010
legal aid 119.267-026
legal assistant 119.267-026
legal assistant 119.267-022
LEGAL INVESTIGATOR 119.267-022
legislative advocate 165.017-010
LETTERER 970.661-014
lexicographer 132.067-018
LIBRETTIST 131.067-030
lie-detection examiner 199.267-026
Limnologist 041.061-022

linguist 059.067-014
LINGUIST ..... term
LOBBYIST 165.017-010
LOGISTICS ENGINEER 019.167-010
logistics specialist 019.167-010
loss-prevention research engineer 012.167-022
LYRICIST 131.067-034
lyric writer 131.067-034
MAINTAINABILITY ENGINEER 019.081-010
Mammalogist 041.061-090
MANAGEMENT ANALYST 161.167-010
MANAGER, AGRICULTURAL-LABOR CAMP 187.167-050
MANAGER, BENEFITS 166.167-018
MANAGER, COMPENSATION 166.167-022
MANAGER, COMPUTER OPERATIONS 169.167-082
MANAGER, CUSTOMER TECHNICAL SERVICES 189.117-018
MANAGER, DATA PROCESSING 169.167-030
manager, employee benefits 166.167-018
manager, employee services 166.167-018
MANAGER, EMPLOYEE WELFARE 166.117-014
MANAGER, EMPLOYMENT 166.167-030
MANAGER, EMPLOYMENT AGENCY 187.167-098
MANAGER, FORMS ANALYSIS 161.167-014
MANAGER, HOUSING PROJECT 186.167-030
manager, human resources 166.117-018
MANAGER, LABOR RELATIONS 166.167-034
MANAGER, LAND SURVEYING 018.167-022
manager, material control 162.167-022
MANAGER, PERSONNEL 166.117-018
manager, personnel services 166.167-018
MANAGER, PROCUREMENT SERVICES 162.167-022
manager, production 012.167-070
MANAGER, QUALITY CONTROL 012.167-014
MANAGER, RECORDS ANALYSIS 161.167-018
MANAGER, REPORTS ANALYSIS 161.167-022
manager, technical and scientific publications 132.017-018
manager, welfare 166.117-014
MANUFACTURING ENGINEER 012.167-042
map maker 018.261-010
mapper 018.261-010
Marine Biologist 041.061-022
MARINE ENGINEER 014.061-014
MARINE SURVEYOR 014.167-010
marketing engineer see SALES ENGINEER .....
MARKET-RESEARCH ANALYST I 050.067-014
Market-Research Analyst II 045.107-030
mask designer 003.261-018
master hypnotist 079.157-010
MATERIALS ENGINEER 019.061-014
MATERIALS SCIENTIST 029.081-014
MATHEMATICAL TECHNICIAN 020.162-010
MATHEMATICIAN 020.067-014
Mathematician, Applied 020.067-014
Mathematician, Research 020.067-014
MECHANICAL-DESIGN ENGINEER, FACILITIES 007.061-018
MECHANICAL-DESIGN ENGINEER, PRODUCTS 007.061-022
mechanical design technician 007.161-018
MECHANICAL ENGINEER 007.061-014
MECHANICAL-ENGINEERING TECHNICIAN 007.161-026
MECHANICAL RESEARCH ENGINEER 007.161-022
mechanical technician 007.161-026
MEDIA DIRECTOR 164.117-018
mediator 169.207-010
Medical Anthropologist 055.067-014
Medical Parasitologist 041.061-070
MEDICAL PHYSICIST 079.021-014
Medical Sociologist 054.067-014
MEMBERSHIP DIRECTOR 189.167-026
Membership Secretary 189.117-010
METALLOGRAPHER 011.061-014
metallurgical-laboratory assistant 011.261-010
METALLURGICAL TECHNICIAN 011.261-010
metallurgical tester 011.261-010
METALLURGIST, EXTRACTIVE 011.061-018
METALLURGIST, PHYSICAL 011.061-022
metallurgist, process 011.061-018
meteorological technician 025.267-014
METEOROLOGIST 025.062-010
methods analyst, data processing 033.167-010
methods-and-procedures analyst 012.167-070
Methods-Study Analyst 012.267-010
METROLOGIST 012.067-010
MICROBIOLOGIST 041.061-058
MICROCOMPUTER SUPPORT SPECIALIST 039.264-010
Micropaleontologist 024.061-042
MINERALOGIST 024.061-038
minister 120.107-010
Missionary 120.107-010
MOHEL 129.271-010
MOSAICIST 018.261-022
Motion-Study Analyst 012.267-010
Mushroom-Spawn Maker 041.061-062
MYCOLOGIST 041.061-062
NATURALIST ..... term
naval designer 001.061-014
NEMATOLOGIST 041.061-066
Noise-Abatement Engineer 019.081-018
NONDESTRUCTIVE TESTER 011.261-018
NUCLEAR-CRITICALITY SAFETY ENGINEER 015.067-010
Nuclear-Decontamination Research Specialist 015.021-010
NUCLEAR ENGINEER 015.061-014
NUCLEAR-FUELS RECLAMATION ENGINEER 015.061-026
NUCLEAR-FUELS RESEARCH ENGINEER 015.061-030
NUCLEAR-TEST-REACTOR PROGRAM COORDINATOR 015.167-014
NUMISMATIST ..... term
Nutritionist 096.121-014
OCCUPATIONAL ANALYST 166.067-010
Oceanographer, Geological 024.061-018
Oceanographer, Physical 024.061-030
office automation analyst 032.262-010
OPERATIONS-RESEARCH ANALYST 020.067-018
optical designer 019.061-018
OPTICAL ENGINEER 019.061-018
OPTOMETRIC ASSISTANT 079.364-014
orchestra leader 152.047-014
ORCHESTRATOR 152.067-022
Ornithologist 041.061-090
Outdoor-Illuminating Engineer 003.061-046
Pace Analyst 012.267-010
PACKAGE DESIGNER 142.081-018
PACKAGING ENGINEER 019.187-010
PAINTER 144.061-010
paintings conservator 102.261-014
PAINTINGS RESTORER 102.261-014
Paleobotanist 024.061-042
PALEONTOLOGICAL HELPER 024.364-010
PALEONTOLOGIST 024.061-042
PARALEGAL 119.267-026
PARASITOLOGIST 041.061-070
Park-Landscape Architect 001.061-018
Parole Officer 195.107-046
Pastor 120.107-010
PATENT AGENT 119.167-014
patent attorney 110.117-026
pattern designer 142.061-014
Penologist 054.067-014
personnel administrator 166.167-018
personnel analyst 166.267-018
personnel interviewer 166.267-010
personnel monitor 199.167-010
PERSONNEL RECRUITER 166.267-038
PETROLOGIST 024.061-046
PHARMACOLOGIST 041.061-074
PHILATELIST ..... term
PHILOLOGIST 059.067-010
Photogeologist 024.061-018
PHOTOGRAMMETRIC ENGINEER 018.167-026
PHOTOGRAMMETRIST 018.261-026
PHOTOGRAPHER, AERIAL 143.062-014
PHOTOGRAPHER, APPRENTICE 143.062-018
Photographer, Motion Picture 143.062-022
PHOTOGRAPHER, SCIENTIFIC 143.062-026
PHOTOGRAPHER, STILL 143.062-030
PHOTOGRAPHIC ENGINEER 019.081-014
photograph restorer 970.281-010
photo-optical instrumentation engineer 019.081-014
PHOTO-OPTICS TECHNICIAN 029.280-010
physical-laboratory assistant 011.261-010
physical tester 011.361-010
physical-testing supervisor 011.161-010
PHYSICIST 023.061-014
Physicist, Acoustics 023.061-014
Physicist, Astrophysics 023.061-014
Physicist, Atomic, Electronic And Molecular 023.061-014
Physicist, Cryogenics 023.061-014
Physicist, Electricity And Magnetism 023.061-014
Physicist, Fluids 023.061-014
Physicist, Light And Optics 023.061-014
Physicist, Nuclear 023.061-014
Physicist, Plasma 023.061-014

Physicist, Solid Earth 023.061-014
Physicist, Solid State 023.061-014
PHYSICIST, THEORETICAL 023.067-010
Physicist, Theranodynamics 023.061-014
PHYSIOLOGIST 041.061-078
pile operator 015.362-014
placement interviewer 166.267-010
planner, chief 012.167-050
planning assistant 199.364-010
planning engineer 012.167-018
planning supervisor 012.167-050
PLANT BREEDER 041.061-082
Plant Cytologist 041.061-042
Plant Ecologist 041.061-038
PLANT ENGINEER 007.167-014
PLANT PATHOLOGIST 041.061-086
Plant Physiologist 041.061-078
Plant Taxonomist 041.061-038
PLAYWRIGHT 131.067-038
POET 131.067-042
police chemist 029.261-026
POLITICAL SCIENTIST 051.067-010
POLLUTION-CONTROL ENGINEER 019.081-018
POLLUTION-CONTROL TECHNICIAN 029.261-014
POLYGRAPH EXAMINER 199.267-026
portrait photographer apprentice 143.062-018
POULTRY SCIENTIST 040.061-042
preacher 120.107-010
presc[illegible]uonist 055.381-010
Price Economist 050.067-010
priest 120.107-010
PRINTED CIRCUIT DESIGNER 003.261-022
PRINTMAKER 144.061-014
PRISONER-CLASSIFICATION INTERVIEWER 166.267-022
PROBATION-AND-PAROLE OFFICER 195.107-046
Probation Officer 195.107-046
Process-Description Writer 131.267-026
process planner 012.167-050
production engineer 012.167-070
PRODUCTION ENGINEER 012.167-046
production estimator 169.267-038
production expert 012.167-070
production illustrator 017.281-034
PRODUCTION MANAGER, ADVERTISING 141.137-010
PRODUCTION PLANNER 012.167-050
production-planning supervisor 012.167-050
production scheduler 012.167-050
Product Representative 096.121-014
PRODUCT-SAFETY ENGINEER 012.061-010
professional engineer see ENGINEER .....
Program Director 187.137-014
PROGRAM DIRECTOR, GROUP WORK 187.117-046
PROGRAM MANAGER 189.167-030
PROGRAMMER-ANALYST 030.162-014
programmer, business 030.162-010
PROGRAMMER, ENGINEERING AND SCIENTIFIC 030.162-018
PROGRAM SPECIALIST, EMPLOYEE-HEALTH MAINTENANCE 166.167-050
project development coordinator 033.162-018
PROJECT DIRECTOR 189.117-030
PROJECT ENGINEER 019.167-014
project manager 189.117-030
PROJECT MANAGER, ENVIRONMENTAL RESEARCH 029.167-014
protective-clothing-and-equipment specialist 142.061-038
Protozoologist 041.061-070
Psychological Anthropologist 055.067-010
Psychological Stress Evaluator 199.267-026
PSYCHOLOGIST, CHIEF 045.107-046
psychologist, clinical 045.107-022
Psychologist, Comparative 045.061-018
PSYCHOLOGIST, COUNSELING 045.107-026
PSYCHOLOGIST, DEVELOPMENTAL 045.061-010
PSYCHOLOGIST, EDUCATIONAL 045.067-010
PSYCHOLOGIST, ENGINEERING 045.061-014
PSYCHOLOGIST, EXPERIMENTAL 045.061-018
PSYCHOLOGIST, INDUSTRIAL-ORGANIZATIONAL 045.107-030
Psychologist, Military Personnel 045.107-030
Psychologist, Personnel 045.107-030
Psychologist, Physiological 045.061-018
PSYCHOLOGIST, SCHOOL 045.107-034
PSYCHOLOGIST, SOCIAL 045.067-014
PSYCHOMETRIST 045.067-018
PUBLIC HEALTH EDUCATOR 079.117-014
public-health engineer 005.061-030
public-health engineer see ENVIRONMENTAL ENGINEER .....
Public Information Officer 165.167-014
public-relations practitioner 165.167-014
PUBLIC-RELATIONS REPRESENTATIVE 165.167-014
PUBLIC-UTILITIES ENGINEER ..... term
PURCHASE-PRICE ANALYST 162.167-030
PURCHASING AGENT 162.157-038
QUALITY ASSURANCE ANALYST 033.262-010
QUALITY-CONTROL ENGINEER 012.167-054
QUALITY-CONTROL TECHNICIAN 012.261-014
rabbi 120.107-010
RADIATION MONITOR 199.167-010
RADIATION-PROTECTION ENGINEER 015.137-010
RADIOISOTOPE-PRODUCTION OPERATOR 015.362-022
RAILROAD ENGINEER 005.061-026
Range Conservationist 040.061-046
range-management specialist 040.061-046
RANGE MANAGER 040.061-046
Rate Engineer 160.162-026
RATER, TRAVEL ACCOMMODATIONS 168.367-014
REACTOR OPERATOR, TEST-AND-RESEARCH 015.362-026
reactor-service operator 015.362-014
REAL-ESTATE AGENT 186.117-058
RECORDS-MANAGEMENT ANALYST 161.267-022
recreation specialist 187.167-238
RECREATION SUPERVISOR 187.167-238
Rector 120.107-010
Referee 169.107-010
Refrigerating Technician 007.181-010
REHABILITATION THERAPIST ..... term
RELIABILITY ENGINEER 019.061-026
renderer 970.281-014
REPORTS ANALYST 161.267-026
Representative, Government Relations 189.117-010
research assistant 199.364-014
RESEARCH ASSISTANT I 109.267-010
RESEARCH ASSISTANT II 199.267-034
RESEARCH ASSOCIATE ..... term
Research Director 189.117-010
RESEARCH ENGINEER ..... master
research engineer, geophysical laboratory 024.167-010
RESEARCH ENGINEER, MARINE EQUIPMENT 014.061-018
RESEARCH ENGINEER, NUCLEAR EQUIPMENT 015.061-018
researcher 199.267-034
Research-Home Economist 096.121-014
research nutritionist 077.061-010
RESEARCH WORKER, ENCYCLOPEDIA 109.267-014
RESEARCH WORKER, SOCIAL WELFARE 054.067-010
ritual circumciser 129.271-010
Rocket-Control Technician 003.261-010
Rural Sociologist 054.067-014
SAFETY-CLOTHING-AND-EQUIPMENT DEVELOPER 142.061-038
SAFETY ENGINEER 012.061-014
safety-engineer, pressure vessels 168.167-026
SAFETY MANAGER 012.167-058
SALES ENGINEER ..... master
SALES ENGINEER, AGRICULTURAL EQUIPMENT 013.151-010
SALES ENGINEER, CERAMIC PRODUCTS 006.151-010
SALES-ENGINEER, ELECTRICAL PRODUCTS 003.151-010
SALES-ENGINEER, ELECTRONICS PRODUCTS AND SYSTEMS 003.151-014
SALES ENGINEER, MARINE EQUIPMENT 014.151-010
SALES ENGINEER, NUCLEAR EQUIPMENT 015.151-010
SANITARIAN 079.117-018
SANITARY ENGINEER 005.061-030
SCANNER 015.384-010
scheduler 012.167-050
school adjustment counselor 195.107-038
SCIENTIFIC HELPER 199.364-014
SCIENTIFIC LINGUIST 059.067-014
SCIENTIST ..... term
scientologist 199.207-010
scientology auditor 199.207-010
Screen Coach 150.027-010
script artist 970.661-010
SCULPTOR 144.061-018
SEED ANALYST 040.361-014
SEISMOLOGIST 024.061-050
ship surveyor 014.167-010
SILVICULTURIST 040.061-050
site planner 001.061-018
Social Ecologist 054.067-014
Social Problems Specialist 054.067-014
SOCIAL-WORK CONSULTANT ..... term

SOCIAL WORKER	term
social worker, clinical	195.107-034
social worker, clinical	195.107-030
social worker, health services	195.107-030
SOCIAL WORKER, MEDICAL	195.107-030
social worker, mental	195.107-034
SOCIAL WORKER, PSYCHIATRIC	195.107-034
SOCIAL WORKER, SCHOOL	195.107-038
SOCIOLOGIST	054.067-014
SOFTWARE ENGINEER	030.062-010
SOIL CONSERVATIONIST	040.061-054
SOIL-CONSERVATION TECHNICIAN	040.261-010
Soil Fertility Expert	040.061-058
Soils Analyst	029.081-010
SOIL SCIENTIST	040.061-058
SOLAR-ENERGY-SYSTEMS DESIGNER	007.161-038
solicitor, patent	110.117-026
song writer	131.067-034
SPECIFICATION WRITER	019.267-010
spectrographer	011.281-014
spectrographic analyst	011.281-014
SPECTROSCOPIST	011.281-014
speech clinician	076.107-010
SPEECH PATHOLOGIST	076.107-010
speech therapist	076.107-010
STAINED GLASS ARTIST	142.061-054
Standard-Practice Analyst	131.267-026
standards analyst	007.267-010
STANDARDS ENGINEER	012.061-018
Statistician, Analytical	020.167-026
STATISTICIAN, APPLIED	020.167-026
Statistician, Engineering And Physical Science	020.167-026
STATISTICIAN, MATHEMATICAL	020.067-022
statistician, theoretical	020.067-022
statue maker	144.061-018
stereo operator	018.281-010
STEREO-PLOTTER OPERATOR	018.281-010
stereoptic projection topographer	018.281-010
STRATIGRAPHER	024.061-054
STRESS ANALYST	007.061-042
SUBSTANCE ABUSE COUNSELOR	045.107-058
superintendent, camp	187.167-050
superintendent, geophysical laboratory	024.167-010
superintendent, mechanical	007.167-014
SUPERVISOR, CARTOGRAPHY	018.131-010
SUPERVISOR, DRAFTING AND PRINTED CIRCUIT DESIGN	003.131-010
SUPERVISOR, METALLURGICAL-AND-QUALITY-CONTROL-TESTING	011.161-010
supervisor, publications	132.017-018
SUPERVISOR, VOLUNTEER SERVICES	187.137-014
SURVEYOR ASSISTANT, INSTRUMENTS	018.167-034
SURVEYOR, GEODETIC	018.167-038
surveyor, hydrographic	018.167-046
SURVEYOR, MARINE	018.167-046
SURVEYOR, MINE	018.161-010
SYSTEMS ANALYST	030.167-014
systems artalyst	161.167-010
SYSTEMS PROGRAMMER	030.162-022
Systems-Testing-Laboratory Technician	003.161-014
tax agent	110.117-038
TAX ATTORNEY	110.117-038
Tax Economist	050.067-010
TAXIDERMIST	199.261-010
tax representative	110.117-038
teacher, public health	079.117-014
technical aide see TECHNICIAN	
technical assistant see TECHNICIAN	
TECHNICAL DIRECTOR, CHEMICAL PLANT	008.167-010
TECHNICAL ILLUSTRATOR	017.281-034
technical manager, chemical plant	008.167-010
technical operations specialist	033.162-018
TECHNICAL SUPPORT SPECIALIST	033.162-018
TECHNICIAN	term
TECHNICIAN, SEMICONDUCTOR DEVELOPMENT	003.161-018
Tectonophysicist	024.061-030
TEST ENGINEER	master
TEST ENGINEER, AGRICULTURAL EQUIPMENT	013.061-022
TEST ENGINEER, MARINE EQUIPMENT	014.061-022
TEST ENGINEER, MECHANICAL EQUIPMENT	007.161-034
TEST ENGINEER, NUCLEAR EQUIPMENT	015.061-022
TESTER	011.361-010
testing-machine operator	011.361-010
Test-Kitchen-Home Economist	096.121-014
TEST TECHNICIAN	019.161-014
TEXTILE ENGINEER	term
textile stylist	142.061-014
Theater Coach	150.027-010
time-study analyst	012.167-070
Time-Study Analyst	012.267-010
TIME-STUDY ENGINEER	012.167-070
title abstractor	119.267-010
TITLE ATTORNEY	110.117-042
TITLE EXAMINER	119.287-010
title examiner	110.117-042
TITLE SUPERVISOR	119.167-018
tool-and-production planner	012.167-050
TOOL DESIGNER	007.061-026
TOOL-DESIGNER APPRENTICE	007.061-030
topographic computator	018.167-014
town planner	199.167-014
TRAINEE ENGINEER	term
transcriber	152.067-010
transcripter	152.067-010
TRANSLATOR	137.267-018
translator, deaf	137.267-014
Transliterator	137.267-018
TRANSPORTATION ENGINEER	005.061-038
TREASURER	161.117-018
treasury representative	161.117-018
Umpire	169.107-010
Urban Anthropologist	055.067-010
URBAN PLANNER	199.167-014
Urban Sociologist	054.067-014
USER REPRESENTATIVE, INTERNATIONAL ACCOUNTING	189.117-038
USER SUPPORT ANALYST	032.262-010
USER SUPPORT ANALYST SUPERVISOR	032.132-010
Valuation Engineer	160.162-026
VETERINARY ANATOMIST	073.061-014
Veterinary Bacteriologist	073.061-018
VETERINARY EPIDEMIOLOGIST	073.061-022
VETERINARY MICROBIOLOGIST	073.061-018
VETERINARY PARASITOLOGIST	073.061-026
VETERINARY PHARMACOLOGIST	073.061-034
VETERINARY PHYSIOLOGIST	073.061-038
Veterinary Virologist	073.061-018
Vibration Technician	003.261-010
vice president, industrial relations	166.117-010
Virologist	041.061-058
visiting teacher	195.107-038
VISUAL-INFORMATION SPECIALIST	term
VOICE PATHOLOGIST	076.104-010
Volcanologist	024.061-030
volunteer services assistant	187.137-014
wage and salary administrator	166.167-022
WASTE-MANAGEMENT ENGINEER, RADIOACTIVE MATERIALS	005.061-042
Water Quality Analyst	029.081-010
Water Quality-Control Engineer	019.081-018
Water-Treatment-Plant Engineer	005.061-030
weather forcaster	025.062-010
WEATHER OBSERVER	025.267-014
WEIGHT ANALYST	020.167-030
weight engineer	020.167-030
WELDING ENGINEER	011.061-026
WELDING TECHNICIAN	011.261-014
Wildlife Biologist	041.061-030
Woods Manager	040.167-010
WOOD TECHNOLOGIST	040.061-062
work-measurement engineer	012.167-070
writer	131.067-046
WRITER, PROSE, FICTION AND NONFICTION	131.067-046
WRITER, TECHNICAL PUBLICATIONS	131.267-026
ZOOLOGIST	041.061-090

protective dev.—PERSONAL PROTECTIVE AND MEDICAL DEVICES AND SUPPLIES INDUSTRY: This designation includes occupations concerned with manufacturing medical (surgical, orthopedic, and prosthetic dental) devices and supplies and personal safety devices. It includes the manufacture of such products as artificial teeth, limbs, braces, splints, abdominal supporters and trusses, adhesive tape and plasters, cotton swabs, elastic hosiery, arch supporters, bandages, gauze dressings, sutures, dental floss, industrial and gas masks, bullet-proof vests, ear and nose protectors, and safety gloves and belts. Occupations concerned with the manufacture of medical instruments are included in the INSTRUMENTS AND APPARATUS INDUSTRY (inst. & app.). Occupations concerned with fabricating personal protective devices used in athletic and sporting activities are included in the TOYS, GAMES, AND SPORTS EQUIPMENT INDUSTRY (toy-sport equip.). Also excluded from this designation are

occupations concerned with fabricating safety glasses, which are included in the OPTICAL GOODS INDUSTRY (optical goods); and safety shoes, which are included in the BOOT AND SHOE INDUSTRY (boot & shoe).

ADHESIVE-BANDAGE-MACHINE OPERATOR 692.685-014
ARCH-SUPPORT TECHNICIAN 712.381-010
Assembler, Patient Lifting Device 706.684-018
ASSEMBLER, SURGICAL GARMENT 712.684-010
autoclave operator 599.585-010
BITE-BLOCK MAKER 712.684-014
BLOCK MAKER 719.381-018
BONER 789.687-018
CARRIER PACKER 920.687-066
ceramics technician 712.381-042
COILER 712.687-014
CONTOUR WIRE SPECIALIST, DENTURE 712.381-014
COTTON-BALL BAGGER 920.686-014
COTTON-BALL-MACHINE TENDER 580.685-022
COTTON-ROLL PACKER 920.685-054
DENTAL CERAMIST 712.381-042
DENTAL CERAMIST ASSISTANT 712.664-010
DENTAL FLOSS PACKER 920.687-082
DENTAL-LABORATORY TECHNICIAN 712.381-018
DENTAL-LABORATORY-TECHNICIAN APPRENTICE 712.381-022
dental technician 712.381-018
dental-technician apprentice 712.381-022
Dental Technician, Crown And Bridge 712.381-018
Dental Technician, Metal 712.381-018
denture finisher 712.381-050
DENTURE-MODEL MAKER 712.684-046
DENTURE WAXER 712.381-046
DESIGNER 712.281-014
DIAPER MACHINE TENDER 692.685-278
durable medical equipment repairer 639.281-022
Elastic Assembler 712.684-010
FABRICATOR, ARTIFICIAL BREAST 712.684-042
finisher 712.381-050
FINISHER, DENTURE 712.381-050
finisher-polisher 712.381-050
GAS-MASK ASSEMBLER 712.684-022
GAS-MASK INSPECTOR 712.687-022
GAUGER 712.687-018
gut winder 712.687-034
Inspector 789.687-070
INSPECTOR, SURGICAL GARMENT 712.487-010
KICK-PRESS OPERATOR 692.685-102
LACER 789.687-094
LATEXER I 584.685-038
Latexer II 712.684-010
Leather Worker 712.684-040
MANAGER, DENTAL LABORATORY 187.167-090
MEDICAL-EQUIPMENT REPAIRER 639.281-022
molder 712.684-034
OPAQUER 712.684-030
ORTHODONTIC BAND MAKER 712.381-026
ORTHODONTIC TECHNICIAN 712.381-030
ORTHOPEDIC-BOOT-AND-SHOE DESIGNER AND MAKER 788.261-010
Orthotics-Prosthetics Technician 712.381-034
ORTHOTICS TECHNICIAN 712.381-034
PACKER, DENTURE 712.684-034
packing-and-final-assembly supervisor 712.137-014
pad maker 689.685-130
POLY-PACKER AND HEAT-SEALER 920.686-038
porcelain-buildup assistant 712.684-030
porcelain finisher 712.664-010
porcelain waxer 712.664-010
PRESS OPERATOR 686.685-050
PROSTHETICS TECHNICIAN 712.381-038
REFINER 712.684-038
restoration technician 712.381-038
SANITARY-NAPKIN-MACHINE TENDER 692.685-150
SEWING-MACHINE OPERATOR 787.682-050
SPLICER 759.684-070
Spring Bender 712.684-010
stayer 789.687-018
STERILIZER 599.585-010
STRINGER-MACHINE TENDER 692.485-010
stripper 789.687-018
SUPERVISOR, ARTIFICIAL BREAST FABRICATION 712.134-010
SUPERVISOR, DENTAL LABORATORY 712.131-010
Supervisor, Denture Department 712.131-010
SUPERVISOR, FACEPIECE LINE 712.137-010
SUPERVISOR, FINAL ASSEMBLY AND PACKING 712.137-014
Supervisor, Gold Department 712.131-010
SUPERVISOR, HEARING-AID ASSEMBLY 726.131-014
SUPERVISOR I 692.137-014
SUPERVISOR II 789.134-014
Supervisor, Partial Denture Department 712.131-010
Supervisor, Porcelain Department 712.131-010
SUPERVISOR, SURGICAL GARMENT ASSEMBLY 712.132-010
SURGICAL-DRESSING MAKER 689.685-130
SURGICAL-ELASTIC KNITTER, HAND FRAME 685.382-010
suture gauger 712.687-018
suture measurer 712.687-018
SUTURE POLISHER 712.687-030
SUTURE WINDER, HAND 712.687-034
TESTER, REGULATOR 710.387-010
TOOTH CLERK 222.687-038
TOOTH INSPECTOR 712.687-038
Truss Assembler 712.684-010
waxer 712.381-046
wheelchair repairer 639.281-022

radio-tv broad.—RADIO AND TELEVISION BROADCASTING INDUSTRY. This designation includes occupations concerned with creating and broadcasting local, national, and international aural and visual programs, including the following phases of work: preparing and directing musical programs, plays, and skits; making electrical recordings; operating and maintaining broadcasting, audio, and video equipment; selling programs to sponsors; and transmitting such special events as public rallies and sporting engagements. Program participants, such as actors, comedians, musicians, and speakers, are included under AMUSEMENT AND RECREATION (amuse. & rec.). Occupations concerned with recording and manufacturing records and tapes are included in the RECORDING INDUSTRY (recording).

ACCESS COORDINATOR, CABLE TELEVISION 194.122-010
account executive 259.357-018
adjustment clerk 239.362-014
Anchorperson 131.262-010
animated-cartoon artist 141.081-010
animator 141.081-010
ANNOUNCER 159.147-010
Announcer, International Broadcast 159.147-010
application clerk 239.362-014
Art Critic 131.067-018
ART DIRECTOR 142.061-062
ASSIGNMENT EDITOR 132.132-010
assistant camera operator 962.687-010
associate director 962.167-014
associate producer 159.117-010
audio engineer 194.262-010
AUDIO OPERATOR 194.262-010
audio technician 194.262-010
board operator 194.262-018
Book Critic 131.067-018
boom operator 962.384-010
BROADCAST CHECKER 249.387-010
CABLE TELEVISION INSTALLER 821.281-010
CABLE TELEVISION LINE TECHNICIAN 821.261-010
camera control operator 194.282-010
CAMERA OPERATOR 143.062-022
camera operator, first 143.062-010
camera operator, head 143.062-010
Camera Operator, Second 143.062-022
Camera Operator, Sound Effects 143.062-022
Camera Operator, Television 143.062-022
CAPTION WRITER 203.362-026
Cartoon-Background Artist 141.081-010
CARTOONIST, MOTION PICTURES 141.081-010
Cartoonist, Special Effects 141.081-010
chief engineer, broadcasting operations 003.167-030
cinematographer 143.062-010
CLERK, TELEVISION PRODUCTION 221.367-086
color-television console monitor 194.282-010
COLUMNIST/COMMENTATOR 131.067-010
Combination Operator 159.147-014
Commentator 131.067-010
COMMERCIAL ENGINEER 003.187-014
CONTESTANT COORDINATOR 166.167-010
CONTINUITY DIRECTOR 132.037-010
Continuity Reader 131.267-022
CONTINUITY WRITER 131.087-010
coordinator, program planning 132.067-030
copy reader 131.267-022
copyright clerk 249.267-010
COPYRIGHT EXPERT 249.267-010
Correspondent 131.262-018

COSTUMER 346.261-010
COSTUMER ASSISTANT 346.374-010
CRITIC 131.067-018
CUE SELECTOR 152.067-018
custodian, wardrobe 346.374-010
CUSTOMER-SERVICE REPRESENTATIVE 239.362-014
CUSTOMER SERVICE REPRESENTATIVE SUPERVISOR 239.137-014
cutter 962.262-010
desk assistant 209.367-038
director, broadcast 159.167-014
DIRECTOR, CASTING 159.267-010
DIRECTOR, EDUCATIONAL PROGRAMMING 169.167-070
Director, Educational Radio 184.117-010
Director, International Broadcasting 184.117-062
Director, International Programs 184.167-030
DIRECTOR, MEDIA MARKETING 163.117-022
DIRECTOR, MUSIC 152.047-018
DIRECTOR, NEWS 184.167-014
director of engineering 003.167-034
DIRECTOR OF PHOTOGRAPHY 143.062-010
Director of Photography, Special Effects 143.062-010
DIRECTOR, OPERATIONS 184.167-018
DIRECTOR, OPERATIONS, BROADCAST 184.167-022
DIRECTOR, PROGRAM 184.167-030
DIRECTOR, PUBLIC SERVICE 184.117-010
DIRECTOR, RADIO 159.167-014
Director, Radio News 184.167-014
DIRECTOR, RESEARCH 052.167-010
DIRECTOR, SPORTS 184.167-034
DIRECTOR, TECHNICAL 962.162-010
DIRECTOR, TELEVISION 159.067-014
Director, Television News 184.167-014
director, underwriter sales 163.117-026
DIRECTOR, UNDERWRITER SOLICITATION 163.117-026
DISK JOCKEY 159.147-014
Disk-Recording-Machine Operator 194.362-010
DOLLY PUSHER 962.687-010
DOUBLE 961.364-010
Drama Critic 131.067-018
DRAPER 962.381-010
DUBBING-MACHINE OPERATOR 962.665-010
editor 131.267-022
editor, continuity and script 132.037-010
EDITOR, TELEGRAPH 132.267-010
editor, wire 132.267-010
engineer, chief 003.167-034
ENGINEER-IN-CHARGE, STUDIO OPERATIONS 003.167-030
ENGINEER-IN-CHARGE, TRANSMITTER 003.167-034
ENTERTAINER ..... term
Executive Producer 159.117-010
EXECUTIVE PRODUCER, PROMOS 159.167-022
EXTRA 159.647-014
FIELD ENGINEER 193.262-018
FIELD SUPERVISOR, BROADCAST 193.167-014
field technician 193.262-018
FILM OR VIDEOTAPE EDITOR 962.262-010
film technician 976.131-014
FLYER 962.687-018
FOREIGN-BROADCAST SPECIALIST ..... term
Foreign Correspondent 131.262-018
game show host/hostess 159.147-018
General Extra 159.647-014
General Manager, Broadcasting 184.117-062
GRIP 962.684-014
GRIP 962.687-022
HIGH RIGGER 962.664-010
ILLUSTRATOR, SET 141.061-030
Interviewer 166.167-010
laboratory contact supervisor 976.131-014
librarian 100.367-022
LIGHT TECHNICIAN 962.362-014
Local Announcer 159.147-010
LOCATION MANAGER 191.167-018
log clerk 249.387-010
log operations coordinator 199.382-010
MAKE-UP ARTIST 333.071-010
MANAGER, PRODUCTION 184.162-010
manager, program 184.167-030
manager, public service 184.117-010
MANAGER, SOUND EFFECTS 962.167-010
MANAGER, STATION 184.117-062
MANAGER, TRAFFIC 184.167-090
managing editor 132.132-010
master control engineer 194.262-022
MASTER CONTROL OPERATOR 194.262-022
media coordinator 199.382-010
MICROPHONE-BOOM OPERATOR 962.384-010
Microwave Engineer 193.262-018
Miniature Set Designer 142.061-046
mixer operator 194.262-018
Movie Critic 131.067-018
musical director 152.047-018
Music Critic 131.067-018
music department head 152.047-018
music director 100.367-022
MUSIC LIBRARIAN 100.367-022
MUSIC LIBRARIAN, INTERNATIONAL BROADCAST 100.367-026
music mixer 194.262-018
Network Announcer 159.147-010
News Analyst 131.067-010
News Anchor 131.262-010
NEWS ASSISTANT 209.367-038
NEWSCASTER 131.262-010
newsperson 131.262-010
newsperson 131.262-018
NEWSWRITER 131.262-014
operator, lights 962.362-014
order clerk 239.362-014
outside contact clerk 239.362-014
PAGE 353.367-022
PAINTER, ANIMATED CARTOONS 970.681-026
performer ..... see ENTERTAINER
photographer, news 143.062-034
PHOTOJOURNALIST 143.062-034
PRIZE COORDINATOR 162.167-026
PRODUCER 159.117-010
Producer-Director 159.067-014
production supervisor 194.162-010
production assistant 962.167-014
production assistant 194.062-010
production coordinator 962.167-014
production technician 194.062-010
PROGRAM ASSISTANT 962.167-014
program checker 249.387-010
PROGRAM DIRECTOR, CABLE TELEVISION 194.162-010
PROGRAM PROPOSALS COORDINATOR 132.067-030
program schedule clerk 199.382-010
PROPERTY COORDINATOR 962.167-018
property handler 962.687-022
Radio Announcer 159.147-010
radio board operator-announcer 159.147-010
Radio Producer 159.117-010
READER 131.087-014
RECORDING ENGINEER 194.362-010
REPORTER 131.262-018
RERECORDING MIXER 194.362-014
rewriter 131.262-014
RIGGER 823.281-022
rigger, chief 823.131-014
RIGGER SUPERVISOR 823.131-014
SALES REPRESENTATIVE, RADIO AND TELEVISION TIME 259.357-018
SALES REPRESENTATIVE, TELEVISION CABLE SERVICE 259.357-022
scenario writer 131.067-050
Scenic Artist 144.061-010
SCREEN WRITER 131.067-050
script reader 131.087-014
SCRIPT READER 131.267-022
SCRIPT SUPERVISOR 201.362-026
script writer 131.067-050
service representative 239.362-014
SET DECORATOR 142.061-042
SET DESIGNER 142.061-046
set electrician, assistant chief 962.362-014
SHOW HOST/HOSTESS 159.147-018
Silent Bit Extra 159.647-014
SINGER 152.047-022
sketch maker 141.061-030
sound-effects supervisor 962.167-010
SOUND-EFFECTS TECHNICIAN 962.281-014
sound engineer, audio control 194.262-010
SOUND MIXER 194.262-018
sound recording technician 194.362-010
Special Ability Extra 159.647-014
SPECIAL EFFECTS SPECIALIST 962.281-018
Sports Announcer 159.147-010
stage manager 962.167-014
STAND-IN 961.667-014
STATIONS-RELATIONS-CONTACT REPRESENTATIVE 184.167-134

railroad equip.

Statistician 216.382-062
STENOCAPTIONER 202.382-010
story analyst 131.087-014
STORY EDITOR 132.037-026
studio engineer 194.262-018
studio technician 194.262-018
studio technician-video operator 194.382-018
STUNT PERFORMER 159.341-014
subtitle writer 203.362-026
Supervising Editor, Feature 962.132-010
Supervising Editor, News Reel 962.132-010
Supervising Editor, Trailer 962.132-010
SUPERVISING FILM EDITOR 962.132-010
SUPERVISOR, COSTUMING 962.137-018
SUPERVISOR, FILM PROCESSING 976.131-014
SUPERVISOR, MICROWAVE 003.167-058
SUPERVISOR, SCENIC ARTS 149.031-010
switching operator 962.162-010
talent 159.147-018
talent director 159.267-010
talk show host/hostess 159.147-018
tape duplicator 194.382-014
Tape-Recording-Machine Operator 194.362-010
TAPE TRANSFERRER 194.382-014
TECHNICIAN, NEWS GATHERING 194.362-022
technician-photographer/editor 194.362-022
TECHNICIAN, PLANT AND MAINTENANCE 822.281-030
TELECINE OPERATOR 194.362-018
Television Announcer 159.147-010
Television Producer 159.117-010
TELEVISION-SCHEDULE COORDINATOR 199.382-010
TELEVISION TECHNICIAN 194.062-010
theatrical performer see ENTERTAINER .....
Title Artist 141.061-022
TRAFFIC CLERK 209.382-022
traffic engineer 003.187-014
traffic manager 209.382-022
transmission engineer 003.167-030
transmitter engineer 003.167-034
transmitter engineer 193.262-038
TRANSMITTER OPERATOR 193.262-038
UTILIZATION COORDINATOR 169.167-078
video engineer 194.282-010
VIDEO OPERATOR 194.282-010
videotape engineer 194.382-018
VIDEOTAPE OPERATOR 194.382-018
Videotape-Recording Engineer 194.362-010
wardrobe draper 346.374-010
WARDROBE-SPECIALTY WORKER 969.381-010

railroad equip.—RAILROAD EQUIPMENT BUILDING AND REPAIRING INDUSTRY: This designation includes occupations concerned with building, rebuilding, and repairing railroad cars and locomotives in steam railroad, electric railroad, diesel-electric railroad, and street railway shops; car- and locomotive-building companies; and other establishments, such as petroleum refineries and mines.

Accessories Repairer 825.281-026
AIR-COMPRESSOR MECHANIC 622.684-010
AIR-VALVE REPAIRER 622.381-010
BATTERY INSPECTOR 829.684-010
Bearing-Press-Machine Operator 616.682-010
BLOWER INSULATOR 863.664-010
Boxcar Weigher 221.587-030
car-body inspector 807.381-026
car-body-inspector helper 807.687-014
car cleaner 845.684-010
CAR INSPECTOR 910.667-010
Car Letterer 970.381-038
CARPENTER, RAILCAR 860.381-038
Carpenter, Streetcar 860.381-038
CAR REPAIRER 622.381-014
car repairer 721.381-010
CAR-REPAIRER APPRENTICE 622.381-022
CAR-REPAIRER HELPER 622.684-014
Car-Roof Repairer 807.381-026
CAR SCRUBBER 845.684-010
Car Straightener 622.381-014
Car Tester 622.684-014
Car-Top Bolter 622.684-014
CAR TRIMMER 806.684-046
Car Varnisher 740.684-022
compressor repairer 622.684-010
control inspector 825.381-018
CONTROLLER REPAIRER-AND-TESTER 825.381-018
Destination-Sign Repairer 807.381-026
Door-Engine Repairer 620.381-018
drop-pit worker 622.381-014
Electrical Inspector 807.381-026
Electrician, Control Equipment 825.281-026
ELECTRICIAN, LOCOMOTIVE 825.281-026
Electrician Supervisor, Locomotive 829.131-014
ELECTRIC-MOTOR FITTER 721.381-010
FLOOR-COVERING LAYER 622.381-026
Freight-Air-Brake Fitter 862.281-022
hose handler 863.664-010
INSTALLER, DOOR FURRING 806.687-034
INSTALLER, METAL FLOORING 806.684-070
INSTALLER, MOVABLE BULKHEAD 806.684-074
LINE MOVER 921.664-010
LOCOMOTIVE INSPECTOR 622.281-010
Locomotive Repairer, Diesel 625.281-010
machinist 622.381-014
machinist apprentice 622.381-022
machinist helper 622.684-014
MECHANICAL-UNIT REPAIRER 620.381-018
motor assembler 721.381-010
motor overhauler 721.381-010
passenger-car scrubber 845.684-010
pit inspector 622.281-010
PORTABLE SAWYER 899.684-030
railroad-car inspector 910.667-010
RAILROAD-CAR-TRUCK BUILDER 806.684-114
RAILROAD WHEELS AND AXLE INSPECTOR 622.381-034
RIVETER 800.684-010
ROOF FITTER 806.684-126
ROUTER OPERATOR, HAND 806.684-150
SALVAGE INSPECTOR 622.381-038
Sash Repairer 807.381-026
STENCIL CUTTER 970.381-038
STREETCAR REPAIRER 807.381-026
STREETCAR-REPAIRER HELPER 807.687-014
Streetcar Sandbox And Lifeguard-Unit Repairer 807.381-026
SUPERINTENDENT, CAR CONSTRUCTION 183.167-034
SUPERVISOR, CAR INSTALLATIONS 806.137-010
SUPERVISOR, ERECTION SHOP 806.131-022
SUPERVISOR, RAILROAD CAR REPAIR 622.131-010
SUPERVISOR, ROUNDHOUSE 622.131-014
SUPERVISOR, SHIPPING TRACK 806.137-018
SUPERVISOR, WHEEL SHOP 622.131-018
Tank-Car Repairer 622.381-014
test rack operator 622.382-010
TRANSFER-TABLE OPERATOR 910.683-022
TRANSFER-TABLE OPERATOR HELPER 910.667-030
TRIPLE-AIR-VALVE TESTER 622.382-010
wheel and axle inspector 622.381-034
Wheel Fitter 622.381-014
WHEEL-PRESS CLERK 221.587-046
Wheel-Press Operator 616.682-010
Windshield-Wiper Repairer 620.381-018
Wirer, Passenger Car 825.281-026

real estate—REAL ESTATE INDUSTRY: This designation includes occupations concerned with the operation of various types of real estate offices and the functions of real estate agents, brokers, and dealers. The principal functions include real estate development (not including construction); real estate management, operation, ownership, and rental of property, such as auditoriums, concert halls, houses, and office buildings; and buying and selling buildings and land.

abstract manager 186.167-090
abstractor 209.367-046
APPRAISER, REAL ESTATE 191.267-010
business investor 189.157-010
BUSINESS-OPPORTUNITY-AND-PROPERTY-INVESTMENT BROKER 189.157-010
CEMETERY WORKER 406.684-010
chief of production 186.167-090
CLOSER 186.167-074
CONDOMINIUM MANAGER 186.167-062
floor housekeeper 321.137-010
gravedigger 406.684-010
HOUSEKEEPER 321.137-010
LEASING AGENT, RESIDENCE 250.357-014
MANAGER, APARTMENT HOUSE 186.167-018
MANAGER, CEMETERY 187.167-074
MANAGER, LAND DEVELOPMENT 186.117-042
MANAGER, PROPERTY 186.167-046

MANAGER, REAL-ESTATE FIRM 186.167-066
MANAGER, TITLE SEARCH 186.167-090
property investor 189.157-010
real-estate agent 250.357-018
Real-Estate Broker 250.357-018
rental agent 250.357-014
SALES AGENT, REAL ESTATE 250.357-018
superintendent, cemetery 187.167-074
SUPERVISOR, CEMETERY WORKERS 406.134-010
SUPERVISOR, REAL-ESTATE OFFICE 249.137-030
Tax Searcher 209.367-046
TITLE SEARCHER 209.367-046

recording—RECORDING INDUSTRY: This designation includes occupations concerned with manufacturing and repairing blank and prerecorded phonograph records, magnetic tapes, and similar devices. Included here are occupations concerned with making master recordings for duplication onto records and tapes.

board operator 194.262-018
Breaker Table Worker 559.686-010
cartridge loader 726.685-010
CENTER-PUNCH OPERATOR 690.685-078
COMPOUND WORKER 559.686-010
die setter 556.380-010
Disk-Recording-Machine Operator 194.362-010
Dubbing-Machine Operator 194.362-010
finisher 500.684-014
Grinder 559.686-010
INJECTION-MOLDING-MACHINE TENDER 556.685-038
LABEL DRIER 532.687-010
LABELING-MACHINE OPERATOR 920.685-066
MAGNETIC-TAPE WINDER 726.685-010
Maintenance Mechanic, Record Processing Equipment 638.281-014
MATRIX-BATH ATTENDANT 500.384-014
matrix inspector 194.387-010
MATRIX PLATER 500.384-010
MATRIX WORKER 500.684-014
mixer operator 194.262-018
MOLD SETTER 556.380-010
MOTHER REPAIRER 705.684-042
mother tester 194.387-010
music mixer 194.262-018
QUALITY-CONTROL INSPECTOR 194.387-010
RECORDING ENGINEER 194.362-010
RECORDING STUDIO SET-UP WORKER 962.664-014
RECORD-PRESS TENDER 556.685-070
RECORD TESTER 194.387-014
Roller Hand 559.686-010
setter, plastics-molding machine 556.380-010
SILVER SPRAY WORKER 500.684-022
SONG PLUGGER 165.157-010
SOUND MIXER 194.262-018
sound recording technician 194.362-010
studio engineer 194.262-018
studio technician 194.262-018
SUPERVISOR, MATRIX 500.134-010
SUPERVISOR, RECORD PRESS 559.130-018
tape duplicator 194.382-014
Tape-Recording-Machine Operator 194.362-010
TAPE TRANSFERRER 194.382-014
Weigher 559.686-010

retail trade—RETAIL TRADE INDUSTRY: This designation includes occupations concerned with the sale of goods to ultimate consumers for consumption or utilization, and with services incidental to the sale of goods. Most retailing is carried on in places of business that are open to the general public.

Adjustment Clerk 219.362-010
advertising clerk 216.382-066
alteration inspector 789.687-078
ALTERATIONS WORKROOM CLERK 221.367-010
ALTERATION TAILOR 785.261-010
alterer 785.261-010
alterer apprentice 785.261-018
Aluminum-Siding Installer 863.684-014
APPAREL-RENTAL CLERK 295.357-010
AREA SUPERVISOR, RETAIL CHAIN STORE 185.117-014
ARTIFICIAL-FOLIAGE ARRANGER 899.364-014
Asbestos-Siding Installer 863.684-014
Asphalt-Tile-Floor Layer 864.481-010
attendant, self-service store 299.677-010
AUCTION ASSISTANT 294.667-010
AUCTION CLERK 294.567-010
AUCTIONEER 294.257-010
Auctioneer, Art 294.257-010
Auctioneer, Furniture 294.257-010
Auctioneer, Livestock 294.257-010
Auctioneer, Real Estate 294.257-010
audio-visual-equipment-rental clerk 295.367-018
AUTOMOBILE LOCATOR 296.367-010
awning erector 869.484-010
AWNING HANGER 869.484-010
AWNING-HANGER HELPER 869.687-010
awning installer 869.484-010
AWNING MAKER-AND-INSTALLER 869.481-010
BABY-STROLLER & WHEELCHAIR RENTAL CLERK 295.367-014
BAGGER 920.687-014
Baked-Goods Stock Clerk 299.367-014
Bakery Demonstrator 297.354-010
BICYCLE-RENTAL CLERK 295.467-010
Billiard-Table Repairer 732.384-010
blower 369.685-010
BLOWER INSULATOR 863.664-010
boat accessories installer 806.464-010
BOAT-HOIST OPERATOR 921.683-010
BOAT-HOIST-OPERATOR HELPER 921.667-010
BOAT RIGGER 806.464-010
Building-Insulating Carpenter 860.381-022
busheler 785.261-010
butcher 316.684-018
butcher apprentice 316.684-022
BUYER, ASSISTANT 162.157-022
CALL-OUT OPERATOR 237.367-014
Candy-Department Manager 299.137-010
canvasser 291.357-010
car checker 806.361-026
car cleaner 915.687-022
CARPET CUTTER 929.381-010
CARPET LAYER 864.381-010
CARPET-LAYER HELPER 864.687-010
CARPET SEWER 787.682-014
car porter 915.687-022
carrier 292.457-010
CASHIER-CHECKER 211.462-014
CASHIER, COURTESY BOOTH 211.467-010
CASHIER, TUBE ROOM 211.482-010
CASHIER-WRAPPER 211.462-018
Ceramic-Maker Demonstrator 297.354-010
charge-account identification clerk 241.367-030
CHECK WRITER 219.382-010
coach see SPONSOR
Coat Baster 785.361-022
Coat Padder 785.361-022
Coat-Repair Inspector 783.387-010
Collar Setter 785.361-022
COMPARISON SHOPPER 296.367-014
Concrete-Panel installer 863.684-014
CONTRACT CLERK, AUTOMOBILE 219.362-026
Contract-Post-Office Clerk 243.367-014
Conveyor Belt Package Sorter 222.687-022
Cork-Tile-Floor Layer 864.481-010
CORSET FITTER 782.361-010
corsetier 261.354-010
Cosmetics Demonstrator 297.354-010
Costume-Rental Clerk 295.357-010
counter clerk 279.357-062
Counter Clerk, Appliance Parts 279.357-062
Counter Clerk, Automotive Parts 279.357-062
Counter Clerk, Farm Equipment Parts 279.357-062
Counter Clerk, Industrial Machinery And Equipment Parts 279.357-062
Counter Clerk, Radio, Television, And Electronics Parts 279.357-062
Counter Clerk, Tractor Parts 279.357-062
Counter Clerk, Truck Parts 279.357-062
COUPON-REDEMPTION CLERK 290.477-010
CREDIT-CARD CLERK 209.587-014
CREDIT REFERENCE CLERK 209.362-018
CUSTOMER-SERVICE CLERK 299.367-010
Customer Service Manager 299.137-010
customer-service specialist, post exchange 299.367-010
Custom Garment Designer 142.061-018
CUSTOM TAILOR 785.261-014
DEALER-COMPLIANCE REPRESENTATIVE 168.267-026
decorator consultant 295.357-018
decorator, store 298.081-010
Delicatessen-Goods Stock Clerk 299.367-014
DELI CUTTER-SLICER 316.684-014
DELIVERER, CAR RENTAL 919.663-010
Deliverer, Food 299.477-010
DELIVERER, MERCHANDISE 299.477-010

Deliverer, Pharmacy 299.477-010
delivery-route truck driver 292.353-010
DEMONSTRATOR 297.354-010
DEMONSTRATOR, KNITTING 297.354-014
DEMONSTRATOR, SEWING TECHNIQUES 297.454-010
Department-Store-Collection Clerk 241.357-010
department supervisor 299.137-010
director, merchandise 185.167-034
DIRECTOR, SERVICE 189.167-014
Discount-Variety-Store Stock Clerk 299.367-014
dispatcher, route sales-delivery drivers 292.137-014
DISPLAYER, MERCHANDISE 298.081-010
display trimmer 298.081-010
DRAPERY AND UPHOLSTERY ESTIMATOR 299.387-010
DRAPERY AND UPHOLSTERY MEASURER 299.364-010
Drapery Estimator 299.387-010
DRAPERY HANGER 869.484-014
DRAPERY-HEAD FORMER 781.684-030
DRAPERY OPERATOR 787.682-018
DRAPERY-ROD ASSEMBLER 706.484-010
Drapery Room Supervisor 789.132-010
drapery worker 787.682-018
DRIVER HELPER, SALES ROUTE 292.667-010
DRIVER, SALES ROUTE 292.353-010
durable medical equipment repairer 639.281-022
electric-motor-repair clerk 271.354-010
EMBROIDERY PATTERNMAKER 782.361-014
Fancy Packer 920.587-018
FASHION ARTIST 141.061-014
FASHION COORDINATOR 185.157-010
fashion model 297.667-014
fashion stylist 185.157-010
FEED AND FARM MANAGEMENT ADVISER 096.127-018
feeder worker power-unit operator 863.685-010
field operating superintendent 181.117-010
field representative 168.267-026
FIGURE REFINISHER AND REPAIRER 739.381-034
film booker 295.367-018
FILM-RENTAL CLERK 295.367-018
finisher-tailor apprentice 785.361-026
fitter 739.684-146
fitter 276.257-022
floor coverer 864.481-010
floor-coverer apprentice 864.481-014
Floor-Coverings Estimator 270.357-026
floor-covering-tile layer 864.481-010
FLOOR LAYER 864.481-010
FLOOR-LAYER APPRENTICE 864.481-014
Floor-Layer Helper 869687-026
Floral Arranger 142.081-010
FLORAL DESIGNER 142.081-010
florist 142.081-010
Fur Demonstrator 297.354-010
Formal-Wear-Rental Clerk 295.357-010
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washer driver 919.663-010
WATCH-AND-CLOCK-REPAIR CLERK 299.367-018
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wheelchair repairer 639.281-022
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r.r. trans.—RAILROAD TRANSPORTATION INDUSTRY: This designation includes occupations concerned with operating, maintaining, and repairing company railroads, railroad equipment, and allied services, such as sleeping and dining car service. Occupations concerned with major repairs as carried on in repair shops are included in the RAILROAD EQUIPMENT BUILDING AND REPAIRING INDUSTRY (railroad equip.). Occupations concerned with major railroad construction projects are included in the CONSTRUCTION INDUSTRY (construction). This industry also includes interurban railway and street and suburban railway occupations.

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assistant signal maintainer 822.684-018
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Ballast-Cleaning-Machine Operator 859.683-018
Ballast-Regulator Operator 859.683-018
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BATTERY INSPECTOR 829.684-010
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brake inspector 910.387-014
BRAKE REPAIRER, RAILROAD 622.261-010
BRAKER, PASSENGER TRAIN 910.364-010
BRIDGE INSPECTOR 869.287-010
BRIDGE OPERATOR, SLIP 919.682-010
bridge repairer 860.381-030
bridge tender 919.682-010
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CAR DISTRIBUTOR 910.367-014
CARPENTER, BRIDGE 860.381-030
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CAR REPAIRER, PULLMAN 622.381-018
CAR-RETARDER OPERATOR 910.382-010
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car supplier 910.367-014
check clerk 209.367-054
chef 315.381-018
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FREIGHT-LOADING SUPERVISOR 910.137-026
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TELEGRAPHER AGENT 236.562-014
telephoner 236.562-010
teletype-telegrapher 236.562-010
TERMINAL SUPERINTENDENT 184.167-254
THIRD-RAIL INSTALLER 825.381-038
TOWER OPERATOR 910.362-010
Track-Broom Operator 859.683-018
track-grinder operator 910.684-010
track inspector 910.367-030
track laborer 910.684-014
TRACK OILER 910.687-026
TRACK REPAIRER 910.684-014
track supervisor 910.367-030
TRAFFIC AGENT 252.257-010
traffic-control operator 184.167-262
TRAFFIC INSPECTOR 184.163-010
TRAIN CLERK 219.462-014
TRAIN DISPATCHER 184.167-262
TRAIN DISPATCHER, ASSISTANT CHIEF 910.167-014
TRANSFER-TABLE OPERATOR 910.683-022
TRANSFER-TABLE OPERATOR HELPER 910.667-030
transportation inspector 184.163-010
TRANSPORTATION INSPECTOR 168.167-082
travel clerk 237.367-018
Traveling-Freight-And-Passenger Agent 252.257-010
trolley-car operator 913.463-014
undercover agent 168.167-082
Upholsterer 780.381-018
vendor 291.457-014
VOUCHER CLERK 219.362-066
WAITER/WAITRESS, DINING CAR 311.477-022
Waybill Clerk 214.362-014
WAY INSPECTOR 910.367-030
WHEEL INSPECTOR 806.387-014
YARD CLERK 209.367-054
YARD COUPLER 910.664-010
YARD ENGINEER 910.363-018
YARD MANAGER 184.167-278
Yard Patroller 376.667-018
yard supervisor 910.137-022

rubber goods—RUBBER GOODS INDUSTRY: This designation includes occupations concerned with manufacturing and repairing rubber articles, such as

rubber goods

belting, clothing, erasers, footwear, garden hose, hard-rubber goods, rubber bands, molded rubber tire sundries and repair materials, and rubberized fabrics. Occupations concerned with manufacturing rubber tires and tubes are included in the RUBBER TIRE AND TUBE INDUSTRY (rubber tire).

Adhesion Tester 759.684-074
AIRPLANE-GAS-TANK-LINER ASSEMBLER 759.684-010
ARCH-CUSHION-PRESS OPERATOR 556.362-010
ARCH-CUSHION-SKIVING-MACHINE OPERATOR 690.682-010
assembler-crimper 759.687-014
BALLOON DIPPER 599.687-010
BALLOON MAKER 752.684-010
Balloon Tester 759.684-074
BAND CUTTER 690.685-026
BAND-MACHINE OPERATOR 690.685-030
BAND TUMBLER 551.685-010
BASE-PLY HAND 759.684-014
BEAD PREPARER 692.685-022
beadsaw operator 690.685-386
Beam-Press Operator 699.682-022
Belt Brander 690.685-454
BELT BUILDER 752.684-014
BELT-BUILDER HELPER 759.684-018
Belt Measurer 690.685-454
Belt Notcher 690.685-454
BELT-PRESS OPERATOR I 553.362-010
BELT-PRESS OPERATOR II 553.665-010
beveler 690.685-378
bias-binding folder 689.685-134
binder 690.686-026
BOOKER 599.687-014
boot-liner maker 795.684-026
BOOTMAKER, HAND 753.381-010
Boot Tester 759.684-074
Boring-Machine Operator 690.680-010
Bottle Assembler 752.684-038
Braid Cutter 699.685-014
BRAIDER SETTER 759.664-010
BRAIDING-MACHINE TENDER 692.665-010
BRANDING-MACHINE TENDER 690.685-042
BUCKLE-STRAP-DRUM OPERATOR 554.485-010
BUFFER 759.684-022
CALENDER FEEDER 554.686-010
calender helper 554.665-010
Calender Inspector 759.684-074
CALENDER-LET-OFF HELPER 554.686-014
CALENDER-LET-OFF OPERATOR 554.682-010
CALENDER OPERATOR 554.362-010
Calender Operator, Fabric 554.362-010
CALENDER OPERATOR, FOUR-ROLL 554.662-010
Calender Operator, Gum Stock 554.362-010
CALENDER-OPERATOR HELPER 554.686-018
CALENDER-WIND-UP HELPER 554.686-022
CALENDER-WIND-UP TENDER 554.665-010
Cap-And-Stud-Machine Operator 699.685-018
CATHETER BUILDER 752.684-026
Catheter Finisher-And-Inspector 759.684-074
CEMENT MIXER 550.685-026
chopper and cracker feeder 555.685-030
CLASSIFIER 753.467-010
Clipper, Counters 753.687-010
Clipper, Outside Back Stay 753.687-010
Clipper, Tongues 753.687-010
Coagulant Dipper 556.685-030
COMPOSITION-ROLL MAKER AND CUTTER 559.482-010
coupler 759.687-014
Covering-Machine Operator 690.662-014
Covering-Machine-Operator Helper 690.686-070
cracker 555.685-030
CRIMPER 690.686-026
curer 553.665-038
Curer, Acid Drum 556.685-066
CURER, FOAM RUBBER 553.682-014
Curing Supervisor 559.137-014
CUTTER, HAND 751.684-014
CUTTER, HOT KNIFE 751.684-018
Cutting-Machine Operator 690.680-010
cutting-table operator 751.686-010
dead header 922.687-066
debeader 690.685-386
DEICER ASSEMBLER, ELECTRIC 739.684-050
Deicer Assembler, Pneumatic 739.684-050
DEICER-ELEMENT WINDER, HAND 739.684-058
DEICER-ELEMENT WINDER, MACHINE 692.685-066
DEICER FINISHER 739.684-054
DEICER INSPECTOR, ELECTRIC 729.387-010
DEICER INSPECTOR, PNEUMATIC 759.687-010
DEICER-KIT ASSEMBLER 759.684-030
Deicer Repairer, Electric 759.684-026
Deicer Repairer, Pneumatic 759.684-026
DEICER REPAIRER 759.684-026
DEICER TESTER 729.387-014
DESIGN PRINTER, BALLOON 651.685-014
Die-Cutting-Machine Operator, Automatic 686.462-010
Dielectric Tester 759.684-074
die-press operator 690.685-286
DIPPER 556.685-030
DIPPING-MACHINE OPERATOR 556.685-034
Dip-Unit Operator 554.682-010
doubling-machine operator 554.665-014
Drier 553.665-038
Drier Tender 553.665-038
DUAL-HOSE CEMENTER 690.685-134
DUSTING-AND-BRUSHING-MACHINE OPERATOR 559.685-054
edge skiver 690.685-378
electric deicer inspector 729.387-010
Electric-Tape Slitter 699.682-030
EXPANSION-JOINT BUILDER 759.664-014
expansion-joint finisher 759.664-014
extruder operator 690.662-014
EXTRUDER TENDER 557.685-014
FABRIC NORMALIZER 559.685-066
final inspector and tester 729.387-014
Finishing Supervisor 559.137-014
FIRE-HOSE CURER 553.685-062
FITTER-PLACER 753.687-022
flipping-machine operator 690.685-450
FOAM DISPENSER 554.684-014
forming-press operator 556.685-066
FORMULA WEIGHER 550.663-010
FOXING CUTTER, HOT KNIFE 751.684-022
FOXING PAINTER 584.685-022
FROTHING-MACHINE OPERATOR 550.362-010
fuel-cell assembler 752.684-046
fuel-cell repairer 759.384-010
Garden-Hose Tuber-Machine Operator 690.662-014
Gasket Molder 556.685-066
Gasket Notcher 690.680-010
GLUING-MACHINE OPERATOR 692.685-098
Goggles Assembler 752.684-038
Graphite-Disk Assembler 752.684-038
GRINDER 555.685-030
HEATER TENDER 553.665-038
heater tender 553.585-022
heating-element builder 739.684-058
Heel Molder 556.685-066
HEEL-WASHER-STRINGING-MACHINE OPERATOR 619.685-058
hemmer 690.686-026
hog operator 555.685-030
hose builder 752.684-030
hose cementer 690.685-134
HOSE-COUPLING JOINER 759.687-014
HOSE CUTTER, HAND 751.687-010
HOSE CUTTER, MACHINE 751.686-010
hose finisher 690.685-134
Hose Inspector 759.684-074
HOSE INSPECTOR AND PATCHER 759.364-010
HOSE MAKER 752.684-030
Hose Tester 759.684-074
HOSE-TUBING BACKER 559.686-018
HOSE WRAPPER 759.684-038
Hydraulic-Punch-Press Operator 690.685-290
hydraulic-steam-press operator 556.685-066
Ice-Bag Assembler 752.684-038
ice-guard inspector 729.387-010
ice-guard repairer 759.684-026
ice-guard tester 729.387-014
Inflation Tester 759.684-074
INJECTION-MOLDING-MACHINE TENDER 556.685-038
Inspector 759.684-074
Inspector And Tester 759.684-074
Inspector, Fuel Hose 759.684-074
joiner 690.686-026
knife cutter 751.684-014
Knitting-Machine Tender 692.665-010
LABORER, GENERAL 559.686-026
LAMINATING-MACHINE TENDER 554.665-014
LAMINATOR 899.684-018
LAST PUTTER-AWAY 922.687-066

Latex Dipper 556.685-030
LATEX-RIBBON-MACHINE OPERATOR 559.682-034
LATEX SPOOLER 559.685-114
Latex-Thread-Machine Operator 559.682-034
Lathe Operator 690.680-010
lathe operator 690.685-322
leader, print rubber 652.462-010
LEAD OPERATOR, AUTOMATIC VULCANIZING 690.362-010
LINER REROLL TENDER 554.685-022
liner-roll changer 554.686-018
Loom Operator 692.665-010
machine printer, hose 690.685-042
MAT PUNCHER 690.685-286
MAT REPAIRER 759.684-042
Matting Inspector 759.684-074
MATTING-PRESS TENDER 556.685-042
Mattress Inspector 759.684-074
MILLED-RUBBER TENDER 553.685-078
Millroom Supervisor 559.137-014
Mill Tender, Break-Down 550.685-102
Mill Tender, Warm-Up 550.685-102
Mill Tender, Washing 550.685-102
MIXER, FOAM RUBBER 550.685-086
Mix-Mill Tender 550.685-102
MOLD CLEANER 556.687-018
Molded-Goods Inspector-Trimmer 759.684-074
MOLDED-RUBBER-GOODS CUTTER 690.685-290
MOLDER, FOAM RUBBER 556.685-046
molding-press operator 556.685-066
Mold Picker 222.387-058
mold stripper 556.686-018
NET WASHER 599.687-022
normalizing-equipment tender 559.685-066
Notch-Machine Operator 690.680-010
Novelty-Balloon Assembler And Packer 920.587-018
OPENER 559.686-034
OUTSOLE CUTTER, AUTOMATIC 690.462-010
Outsole Cutter, Hand 751.684-014
Outsole Molder 556.685-066
PACKING-LINE WORKER 753.687-038
PADDED-PRODUCTS FINISHER 752.684-034
Padded-Products Inspector-Trimmer 759.684-074
Piston-Cup Inspector 759.684-074
POINTING-MACHINE OPERATOR 690.685-310
POURER 556.687-026
PRESSER 690.685-318
PRESS TENDER 556.685-066
PROTOTYPE-DEICER ASSEMBLER 759.261-010
PULVERIZER-MILL OPERATOR 555.382-010
REBRANDER 559.685-150
REPAIRER, SHOE STICKS 619.685-07-
reroll tender 554.685-022
returner, lasts 922.687-066
RING-ROLLING-MACHINE OPERATOR 690.682-066
ROLL BUILDER 759.484-010
roll changer 554.665-010
ROLL CUTTER 690.685-322
Roller-Die-Cutting-Machine Operator 690.685-290
ROLLER MAKER 690.685-502
Roll Grinder 690.680-010
roll molder 559.482-010
ROTARY-CUTTER OPERATOR 551.585-022
rubber-calender helper 554.686-018
Rubber Compounder 929.687-062
Rubber-Compounder Supervisor 559.137-014
rubber curer 553.665-038
RUBBER CUTTER 559.685-158
RUBBER-CUTTING-MACHINE TENDER 690.685-342
Rubber-Flap Cutter 690.685-446
Rubber-Gasket Inspector-Trimmer 759.684-074
RUBBER-GOODS ASSEMBLER 752.684-038
RUBBER-GOODS CUTTER-FINISHER 690.680-010
Rubber-Goods Finisher 759.684-074
rubber-goods finisher 690.680-010
RUBBER-GOODS INSPECTOR-TESTER 759.684-074
Rubber-Goods Inspector-Trimmer 759.684-074
Rubber-Goods Tester, Water 759.684-074
Rubber-Heel-And-Sole Press Tender 556.685-066
RUBBER-MILL TENDER 550.685-102
RUBBER-PRINTING-MACHINE OPERATOR 652.462-010
RUBBER TESTER 559.381-014
rubber-tubing backer 559.686-018
RUBBER-TUBING SPLICER 752.684-042
Rug-Underlay-Machine Operator 559.682-050
scarfer 690.685-378
seamer 690.686-026
SECTIONAL-BELT-MOLD ASSEMBLER 752.685-010
SELF-SEALING-FUEL-TANK BUILDER 752.684-046
SELF-SEALING-FUEL-TANK REPAIRER 759.384-010
SKIN FORMER 752.684-050
skiver 690.685-386
SKIVER, MACHINE 690.685-378
skiving-machine operator 690.685-378
Slab-Off Mill Tender 550.685-102
slitting-machine operator 690.685-386
soaper 599.687-010
splicer 752.684-042
SPLITTING-MACHINE OPERATOR 690.685-386
SPONGE-PRESS OPERATOR 559.682-050
spooler, rubber strand 559.685-114
spreader machine tender 554.362-010
STEAM-PRESS TENDER I 553.665-046
STEAM-PRESS TENDER II 553.665-050
stock cutter 751.684-014
Stock-Preparation Supervisor 559.137-014
STRAP-CUTTING-MACHINE OPERATOR 690.685-402
STRAP-FOLDING-MACHINE OPERATOR 554.485-014
STRIPPER 556.686-018
STRIPPER AND TAPER 899.684-038
Stripper, Latex 556.686-018
suit maker 795.684-026
Supervisor, Assembling 759.137-010
SUPERVISOR I 759.137-010
SUPERVISOR II 559.137-014
Supervisor, Printing 759.137-010
Supervisor, Testing 759.137-010
TAPE-FOLDING-MACHINE OPERATOR 689.685-134
TESTER 899.487-010
THERMAL MOLDER 553.585-022
Thread-Machine Operator 559.682-034
trimmer, hand 751.684-014
trimming-machine operator 690.685-386
TUBE-AND-MANIFOLD BUILDER 759.684-062
tube backer 559.686-018
TUBE-BUILDING-MACHINE OPERATOR 559.685-174
TUBER-MACHINE CUTTER 690.685-446
TUBER-MACHINE OPERATOR 690.662-014
TUBER-MACHINE-OPERATOR HELPER 690.686-070
TUMBLER-MACHINE OPERATOR 559.685-178
TUMBLER OPERATOR 553.585-026
turner-splitter-machine operator 690.685-386
V-BELT BUILDER 759.684-066
V-BELT COVERER 690.685-450
V-BELT CURER 553.682-026
V-BELT FINISHER 690.685-454
V-Belt Inspector 759.684-074
v-belt mold assembler and curer 752.685-010
V-BELT SKIVER 690.685-458
Vinyl Dipper 599.685-026
vulcanizer operator 553.665-038
WADER-BOOT-TOP ASSEMBLER 795.684-026
Washer Cutter 690.680-010
WEATHERSTRIP-MACHINE OPERATOR 690.382-014
windlace-machine operator 690.382-014
wind-up operator 554.686-018
WINK-CUTTER OPERATOR 557.382-014
wire winder 690.685-490
WIRE-WINDING-MACHINE TENDER 690.685-490
wrapper rewinder 554.685-022

rubber reclaim—RUBBER RECLAIMING INDUSTRY: This designation includes occupations concerned with reclaiming rubber stock from used tires, scrap, and miscellaneous waste rubber.

BATCH TRUCKER 550.686-010
batch weigher and mixer 550.686-010
BEAD PICKER 551.686-010
beadsaw operator 690.685-386
Carcass Trimmer 690.685-386
CD-MIXER 550.685-022
CD-MIXER HELPER 553.686-014
checker 914.665-010
chopper and cracker feeder 555.685-030
Compounder 929.687-062
cracker 555.685-030
curer 553.665-038
debeader 690.685-386
DEVULCANIZER CHARGER 558.666-010
devulcanizer, head 559.132-058

Devulcanizer Inspector 559.132-058
devulcanizer operator 558.585-026
DEVULCANIZER TENDER 558.585-026
digester charger 558.585-026
DRIER FEEDER 559.686-014
Drier Operator 553.665-038
DRIER-OPERATOR HELPER 553.686-030
drum filler 914.665-010
dry-room helper 553.686-030
fabric-separator operator 551.365-010
Final-Inspection Supervisor 559.132-058
Fine Grinder 555.685-030
GRINDER 555.685-030
Grinding-Room Inspector 559.132-058
HEATER TENDER 553.665-038
High-Pressure Devulcanizer Operator 558.585-026
hog operator 555.685-030
hog-room supervisor 559.132-058
LABORER, GENERAL 559.686-026
Millroom Supervisor 559.132-058
pan devulcanizer 550.685-022
pan-devulcanizer helper 553.686-014
pan reclaim processor 550.685-022
PIGMENT PUMPER 914.665-010
pigment supplier 914.665-010
PRESS OPERATOR 559.685-138
PULVERIZER-MILL OPERATOR 555.382-010
roll-contour grinder 629.682-010
ROLL GRINDER 629.682-010
Rubber-Compounder Supervisor 559.132-058
rubber curer 553.665-038
Rubber-Goods Inspector-Trimmer 759.684-074
RUBBER-MILL TENDER 550.685-102
Scrap-Tire Shearer 690.685-386
shipping-room supervisor 559.132-058
skiver 690.685-386
Slab Inspector 759.684-074
slitting-machine operator 690.685-386
solvent-station attendant 914.665-010
SPLITTING-MACHINE OPERATOR 690.685-386
strainer-mill operator 551.365-010
STRAINER TENDER 551.365-010
SUPERVISOR 559.132-058
Tire Debeader 690.685-386
trimming-machine operator 690.685-386
tube depatcher 559.687-066
tuber operator 551.365-010
TUBE SORTER 559.687-066
turner-splitter-machine operator 690.685-386
vulcanizer operator 553.665-038
washing-machine operator 559.685-138
weigh and charge worker 558.666-010

rubber tire—RUBBER TIRE AND TUBE INDUSTRY: This designation includes occupations concerned with manufacturing and repairing pneumatic tires, solid and cushion rubber tires, and inner tubes; and the retreading of special-purpose tires that cannot be accommodated by tire-retreading establishments. Tire-retreading occupations found in tire-retreading establishments and automotive equipment dealers are included here.

AIR-BAG CURER 556.685-010
Band-Bias-Machine Operator 690.682-022
BAND BUILDER 750.684-010
Batch Trucker 929.687-030
BEAD BUILDER 750.684-014
Bead Filler 750.684-014
Bead Flipper 750.684-014
BEAD-FORMING-MACHINE OPERATOR 692.682-014
Bead Supervisor 750.130-010
Bead Wrapper 750.684-014
bias-cutting-machine operator 690.682-022
Bias-Cutting-Machine Operator, Vertical 690.682-022
BIAS-MACHINE OPERATOR 690.682-022
BIAS-MACHINE-OPERATOR HELPER 690.686-014
Bladder Changer 629.684-010
BOOKER 599.687-014
BUFFER 759.684-022
calender helper 554.665-010
CALENDER-LET-OFF HELPER 554.686-014
CALENDER-LET-OFF OPERATOR 554.682-010
CALENDER OPERATOR 554.362-010
Calender Operator, Fabric 554.362-010
CALENDER OPERATOR, FOUR-ROLL 554.662-010
Calender Operator, Gum Stock 554.362-010
CALENDER OPERATOR HELPER 554.686-018
CALENDER-WIND-UP HELPER 554.686-022
CALENDER-WIND-UP TENDER 554.665-010
CEMENT MIXER 550.685-026
cord splicer 759.684-058
curer 553.665-038
curing finisher 553.685-102
CURING-PRESS MAINTAINER 629.684-010
CURING-PRESS OPERATOR 553.686-018
Curing Supervisor 750.130-010
Dip-Unit Operator 554.682-010
extruder operator 690.662-014
final inspector 750.684-030
FORCE-VARIATION EQUIPMENT TENDER 690.685-182
forming-press operator 556.685-066
GREEN-TIRE INSPECTOR 750.684-018
HEATER TENDER 553.665-038
hydraulic-steam-press operator 556.685-066
Inner-Tube Cutter 690.685-446
INNER-TUBE INSERTER 750.687-010
Inner-Tube Tester 759.684-074
Inner-Tube Tuber-Machine Operator 690.662-014
LABORER, GENERAL 559.686-026
LINER REROLL TENDER 554.685-022
liner-roll changer 554.686-018
MILLED-RUBBER TENDER 553.685-078
Millroom Supervisor 750.130-010
Mill Tender, Break-Down 550.685-102
Mill Tender, Warm-Up 550.685-102
Mill Tender, Washing 550.685-102
Mix-Mill Tender 550.685-102
Mold Changer 629.684-010
mold dresser 709.381-026
molding-press operator 556.685-066
MOLD STAMPER AND REPAIRER 709.381-026
Painter, Blackwall Tire 741.687-018
Passenger-Tire Inspector 750.684-030
ply cutter 690.682-022
ply splicer 759.684-058
pocket builder 750.684-010
PRESS TENDER 556.685-066
QUALITY-CONTROL INSPECTOR 750.367-010
reroll tender 554.685-022
retread-mold operator 553.685-102
RETREAD SUPERVISOR 750.132-010
Rim-Strip Tuber-Machine Operator 690.662-014
roll changer 554.665-010
rubber-calender helper 554.686-018
Rubber Compounder 929.687-062
Rubber-Compounder Supervisor 750.130-010
rubber curer 553.665-038
RUBBER CUTTER 559.685-158
Rubber-Flap Cutter 690.685-446
Rubber-Flap Tuber-Machine Operator 690.662-014
Rubber-Goods Inspector-Trimmer 759.684-074
Rubber-Goods Tester, Water 759.684-074
RUBBER-MILL TENDER 550.685-102
RUBBER TESTER 559.381-014
Slab-Off Mill Tender 550.685-102
Solid-Tire Finisher 750.684-034
Solid-Tire Tuber-Machine Operator 690.662-014
SPLICER 759.684-058
spreader machine tender 554.362-010
SQUEEGEE TENDER 750.685-010
Stock-Preparation Supervisor 750.130-010
stock roller 759.684-058
SUPERVISOR 750.130-010
TIRE BALANCER 750.687-014
TIRE-BLADDER MAKER 750.684-042
Tire Buffer 759.684-022
TIRE BUILDER ..... term
TIRE BUILDER, AUTOMOBILE 750.384-010
Tire Builder, Heavy Service 750.384-010
Tire-Building Supervisor 750.130-010
TIRE CLASSIFIER 750.387-010
Tire-Finishing Supervisor 750.130-010
TIRE INSPECTOR 750.684-030
TIRE MOLDER 553.685-102
TIRE REPAIRER 750.681-010
Tire-Room Supervisor 750.130-010
TIRE SORTER 750.687-022
tire spotter 750.687-014
TIRE TECHNICIAN 750.382-010
TIRE TRIMMER, HAND 750.684-034
Tire Trucker 929.687-030

Tire Wrapper 920.685-078
Tread-Tuber-Machine Operator 690.662-014
Truck-Tire Inspector 750.684-030
TUBE BALANCER 750.684-046
TUBE BUILDER, AIRPLANE 750.384-014
Tube Packer 920.587-018
tuber 750.687-010
TUBE REPAIRER 750.684-050
TUBER-MACHINE CUTTER 690.685-446
TUBER-MACHINE OPERATOR 690.662-014
TUBER-MACHINE-OPERATOR HELPER 690.686-070
Tube-Room Supervisor 750.130-010
TUBE SPLICER 690.685-442
vulcanizer operator 553.665-038
White-Sidewall-Tire Buffer 759.684-022
wind-up operator 554.686-018
wrapper rewinder 554.685-022

sanitary ser.—SANITARY SERVICES: This designation includes occupations concerned with the disposal of garbage, ashes, rubbish, and sewage, including the operation and maintenance of establishments that destroy or process such wastes. Occupations concerned with collecting and carting such wastes are included in the MOTOR VEHICLE TRANSPORTATION INDUSTRY (motor trans.). Occupations concerned with the purifying and distribution of water for domestic and industrial use are included in the WATERWORKS INDUSTRY (waterworks).

Activated-Sludge Attendant 955.585-010
Activated-Sludge Operator 955.362-010
Catch-Basin Cleaner 955.687-010
disposal-plant operator 955.362-010
Grit-Removal Operator 955.362-010
Grit Station Attendant 955.585-010
HYDRAULIC-RUBBISH-COMPACTOR MECHANIC 638.281-030
INCINERATOR OPERATOR I 955.685-010
INCINERATOR OPERATOR II 955.362-014
INCINERATOR-PLANT-GENERAL SUPERVISOR 184.167-046
INCINERATOR PLANT LABORER 955.667-010
INSTRUCTOR, WASTEWATER-TREATMENT PLANT 955.222-010
Pump-And-Blower Attendant 955.585-010
Pump-And-Blower Operator 955.362-010
SANITARY LANDFILL OPERATOR 955.463-010
SANITARY-LANDFILL SUPERVISOR 955.133-010
SEWAGE-DISPOSAL WORKER 955.687-010
sewage-plant attendant 955.585-010
sewage-plant operator 955.362-010
sewage plant supervisor 955.130-010
SEWER-LINE PHOTO-INSPECTOR 851.362-010
SEWER-LINE REPAIRER 869.664-018
SEWER-LINE REPAIRER, TELE-GROUT 851.262-010
Sludge-Control Attendant 955.585-010
Sludge-Control Operator 955.362-010
Sludge-Filtration Attendant 955.585-010
Sludge-Filtration Operator 955.362-010
solid waste facility operator 955.463-010
solid waste facility supervisor 955.133-010
SUPERVISOR, INCINERATOR PLANT 955.131-010
SUPERVISORY WASTEWATER-TREATMENT-PLANT OPERATOR 955.130-010
utilities operator 955.362-010
WASTEWATER-TREATMENT-PLANT ATTENDANT 955.585-010
WASTEWATER-TREATMENT-PLANT OPERATOR 955.362-010

saw. & plan.—SAWMILL AND PLANING MILL INDUSTRY: This designation includes occupations concerned with milling wood to produce products and byproducts, such as cooperage stock, laths, rough lumber, and shingles. The industry also includes occupations concerned with surfacing and sizing lumber and manufacturing wood excelsior and wood excelsior products. Occupations concerned with plywood production are included in the MILLWORK, VENEER, PLYWOOD, AND STRUCTURAL WOOD MEMBERS INDUSTRY (millwork-plywood).

ARTIFICIAL-LOG-MACHINE OPERATOR 569.685-010
AUTOMATIC-NAILING-MACHINE FEEDER 669.686-010
backer board 663.685-030
Band-Head-Saw Operator 667.662-010
band-log-mill-and-carriage operator 667.662-010
Band-Resaw Operator 667.682-058
band-sawmill operator 667.662-010
bill cutter 667.482-018
BLIND-SLAT-STAPLING-MACHINE OPERATOR 669.685-018
Boat Worker 921.686-022
BOLTER 667.685-022
BOLT LOADER 922.687-022
bolt sawyer 667.685-022
BOTTOM-SAW OPERATOR 667.682-014
BREAKER-MACHINE OPERATOR 564.685-010
BULL-CHAIN OPERATOR 921.685-014
BUNDLE TIER AND LABELER 920.685-110
butt sawyer 667.685-034
car loader 922.687-022
CHAIN OFFBEARER 669.686-018
CHIPPER 564.685-014
chute feeder 921.686-022
Circular-Gang-Saw Operator 667.682-030
Circular-Head-Saw Operator 667.662-010
Circular-Resaw Operator 667.682-058
Construction Millwright 860.381-042
cut-off-saw operator 667.682-078
CUT-OFF SAWYER, LOG 667.685-034
Cut-Off Sawyer, Shingle Mill 667.685-022
deck sawyer 667.685-034
Deck Scaler 455.487-010
deck worker 921.685-014
Door-Clamp Operator 669.685-030
Door-Glass Installer 865.684-014
Door Maker 669.380-014
double-cut sawyer 667.682-034
DOWEL-INSERTING-MACHINE OPERATOR 669.682-042
Drum-Saw Operator 667.682-022
Dry-Chain Offbearer 669.686-018
EDGER, AUTOMATIC 667.682-026
equalizer 667.682-074
equalizer operator 667.682-074
excelsior-machine feeder 663.685-014
EXCELSIOR-MACHINE TENDER 663.685-014
Fire Chief 373.167-018
FLATCAR WHACKER 807.667-010
Flooring Grader 669.687-030
Flooring-Machine Feeder 669.686-030
frame-gate-mortiser operator 667.482-014
Frame Maker 669.380-014
frame-pulley-mortising-machine operator 666.482-010
FUEL-HOUSE ATTENDANT 951.686-010
GANG SAWYER 667.682-030
gate cutter 667.482-014
gate-mortiser operator 667.482-014
Green-Chain Marker 669.687-030
Green-Chain Offbearer 669.686-018
HEADING-SAW OPERATOR 667.682-038
HEAD SAWYER 667.662-010
HEAD SAWYER, AUTOMATIC 667.682-034
Horizontal-Resaw Operator 667.682-058
Hydraulic-Barker Operator 669.485-010
jacker feeder 921.686-022
jump-roll operator 921.682-022
knee bolter 667.685-022
Knife And Spur Grinder 603.664-010
KNIFE SETTER 663.380-010
laborer, sawmill 669.687-018
log-chain feeder 921.686-022
log culler 667.687-014
LOG-CUT-OFF SAWYER, AUTOMATIC 667.682-090
log-deck tender 921.685-014
LOGGING-TRACTOR OPERATOR 929.663-010
LOG GRADER 455.367-010
log handler 677.687-010
LOG-HAUL CHAIN FEEDER 921.686-018
Log Hooker 921.667-022
LOG INSPECTOR 667.687-014
LOG PEELER 569.684-010
Log Rider 921.686-022
LOG ROLLER 677.687-010
LOG SCALER 455.487-010
Log-Stacker Operator 929.663-010
LOG WASHER 569.687-014
LOG-YARD CRANE OPERATOR ..... term
Log-Yard Derrick Operator 921.663-022
Louver-Mortiser Operator 665.482-014
Lumber-Carrier Driver 921.683-070
lumber guider 669.687-018
lumber sorter, machine 921.685-054
LUMBER STRAIGHTENER 669.687-018
PACKAGER, HEAD 667.687-046
PAD-MACHINE FEEDER 920.686-034
PAD-MACHINE OFFBEARER 569.686-030
Panel-Raiser Operator 665.682-034
PICKER 669.687-022
Planer-Chain Offbearer 669.686-018

planer feeder 665.686-014
Planer-Mill Grader 669.687-030
planer operator 665.482-018
PLOW-AND-BORING-MACHINE TENDER 665.685-018
Pocket-And-Pulley-Machine Operator 667.482-014
POCKET CUTTER 667.482-014
pole peeler 663.682-014
POLE-PEELING-MACHINE OPERATOR 663.682-014
poler 921.686-022
pole shaver 663.682-014
pondsaw operator 667.685-034
Pond Scaler 455.487-010
POND WORKER 921.686-022
PONY EDGER 667.682-050
POWER-BARKER OPERATOR 669.485-010
PULLEY-MORTISER OPERATOR 666.482-010
Puncher 669.687-030
Racker 922.687-074
rail-doweling-machine operator 669.682-042
rebut-machine tail offbearer 667.686-018
Ring-Barker Operator 669.485-010
Sash-Clamp Operator 669.685-030
Sash-Gang-Saw Operator 667.682-030
Sash Maker 669.380-014
Sawmill-Relief Worker 667.687-018
SAWMILL WORKER 667.687-018
Scrap Sawyer 667.685-022
SCREEN TACKER 762.687-058
separator 921.682-022
SHAKE BACKBOARD NOTCHER 663.685-030
Shake Feeder 669.686-030
Shake Packer 920.687-158
SHAKE SAWYER 667.682-070
SHINGLE PACKER 920.687-158
SHINGLE SAWYER 667.485-010
SHINGLE TRIMMER 667.685-050
shingle weaver 920.687-158
short-log-bolter operator 667.685-022
shredding-machine tender 663.685-014
sinker puller 921.686-022
Slab Picker 929.687-030
SLASHEr OPERATOR 667.685-054
slasher sawyer 667.685-054
slip feeder 921.686-022
Sorter-Lumber Straightener 669.687-018
SORTER OPERATOR 921.685-054
SPLITTER TENDER 663.685-038
STACKER-AND-SORTER OPERATOR 921.682-018
Stacker-Straightener 669.687-018
STAVE-BOLT EQUALIZER 667.682-074
STAVE-LOG-CUT-OFF SAW OPERATOR 667.682-078
STAVE-LOG-RIPSAW OPERATOR 667.685-058
STAVE-PLANER TENDER 665.686-014
STEAM-TUNNEL FEEDER 562.686-010
STICKER 563.686-010
STOCK CUTTER 667.482-018
stock-saw operator 667.482-018
supervisor, chipping 564.132-010
SUPERVISOR, SAWMILL 669.130-026
SUPERVISOR, WOOD-CREW 669.137-010
swamper 667.687-018
TIE INSPECTOR 669.687-026
TIMBER PACKER 922.687 794
TIMBER-SIZER OPERATOR 665.482-018
timber trimmer 667.685-034
TIPPLE OPERATOR 921.662-026
TRANSFER CONTROLLER 921.682-022
TRIMMER HELPER 667.686-018
Trimmer Loader 669.687-018
TRIMMER SAWYER 667.682-094
Trimmer Tailer 669.687-018
trim sawyer 667.482-018
TRUSS ASSEMBLER 762.684-062
UTILITY OPERATOR 669.682-070
Window Assembler 865.684-014
WOOD-CREW SUPERVISOR 564.132-010

ship-boat mfg.—SHIP AND BOAT MANUFACTURING AND REPAIRING INDUSTRY: This designation includes occupations concerned with constructing and repairing all types of ships, boats (except rubber boats), barges, and lighters, whether propelled by sail, motor, or manual power, or towed by other craft. This designation includes occupations concerned with the manufacture of plastic or fiberglass pleasure craft. Occupations concerned with the manufacture of rubber boats are included in the RUBBER GOODS INDUSTRY (rubber goods).

ASSEMBLER, ALUMINUM BOATS 806.481-010
ASSEMBLER, DECK AND HULL 806.684-022
ASSEMBLER, INSULATION AND FLOORING 806.684-026
assembler, plastic boat 806.684-146
assembly detailer 807.684-014
ballaster 809.684-022
boat accessories installer 806.464-010
boat bottomer 806.684-106
BOAT BUFFER, PLASTIC 849.684-010
BOATBUILDER APPRENTICE, WOOD 860.381-014
BOATBUILDER, WOOD 860.361-010
boat garnisher 806.684-146
boat joiner 860.381-050
boat mechanic 623.281-038
BOAT OUTFITTER 806.684-146
BOAT PATCHER, PLASTIC 807.684-014
boat puller 809.667-010
BOAT REPAIRER 807.361-014
BOAT RIGGER 806.464-010
boat wrapper 869.684-078
Bulkhead Carpenter 860.361-010
Bulwark Carpenter 860.361-010
CANOE INSPECTOR, FINAL 769.687-018
CANVAS WORKER 739.381-010
CANVAS-WORKER APPRENTICE 739.381-014
carpenter apprentice, ship 860.381-062
Carpenter, Cradle And Dolly 860.381-042
carpenter helper 860.664-018
CARPENTER, PROTOTYPE 806.281-058
CARPENTER, SHIP 860.281-014
carpenter, ship 860.381-058
carpenter supervisor, wooden ship 860.131-014
CAULKER ..... term
Cementer 844.364-010
COPPERSMITH 862.281-010
COPPERSMITH APPRENTICE 862.281-014
CUTTER, ALUMINUM SHEET 804.684-010
deck and hull assembler 806.684-022
Deck Molder 806.684-054
Diesel-Engine Mechanic, Marine 625.281-010
DOCK HAND 891.684-010
DOCK SUPERVISOR 891.131-010
ELECTRICIAN 825.381-030
ELECTRICIAN APPRENTICE 825.381-034
ELECTRICIAN HELPER 829.684-026
electrician, marine 825.381-030
electrician, outside 825.381-030
Electrician, Ship 825.381-030
Electrician, Shop 825.381-030
ELECTRICIAN SUPERVISOR 825.131-010
Electrician, Yard 825.381-030
engineer, steam 623.281-030
erector 806.261-014
erector appentice 806.261-018
EXTRUSION BENDER 804.684-014
FIBERGLASS LAMINATOR 806.684-054
final assembler, boat 806.684-146
FINISHER, FIBERGLASS BOAT PARTS 809.684-022
fitter 806.381-046
Gel-Coat Sprayer 741.684-026
grinder 809.684-022
HULL AND DECK REMOVER 809.667-010
Hull Builder 860.361-010
HULL INSPECTOR 806.264-010
Hull Molder 806.684-054
INSPECTOR, ALUMINUM BOAT 806.687-026
INSTALLER, ELECTRICAL, PLUMBING, MECHANICAL 806.381-062
JOINER 860.381-050
JOINER APPRENTICE 860.381-054
JOINER HELPER 860.664-014
Keel Assembler 860.361-010
LABORER, SHIPYARD 809.687-022
laminator 806.684-054
loft rigger 806.261-014
LOFT WORKER 661.281-010
LOFT WORKER APPRENTICE 661.281-014
LOFT WORKER, HEAD 661.131-010
Machinery Erector 921.260-010
MACHINIST APPRENTICE, MARINE ENGINE 623.281-018
MACHINIST APPRENTICE, OUTSIDE 623.281-022
machinist helper, marine 623.687-010
MACHINIST HELPER, OUTSIDE 623.687-010
machinist, installation 623.281-030
MACHINIST, MARINE ENGINE 623.281-026
MACHINIST, OUTSIDE 623.281-030

MACHINIST SUPERVISOR, OUTSIDE 623.131-010
MANAGER, MARINE SERVICE 187.167-130
marine-electrician apprentice 825.381-034
marine-engine-installation-and-repairer apprentice 623.281-018
marine-engine mechanic 623.281-026
marine erector 623.281-030
marine machinist 623.281-030
marine-machinist apprentice 623.281-022
MARINE RAILWAY OPERATOR 921.662-022
MARINE-SERVICES TECHNICIAN 806.261-026
mold finisher 809.687-026
MOLD LAMINATOR 806.684-086
mold loft worker 661.281-010
MOLD PREPARER 809.687-026
MOTORBOAT MECHANIC 623.281-038
MOTORBOAT-MECHANIC HELPER 623.684-010
Motorboat Mechanic, Inboard 623.281-038
Motorboat Mechanic, Inboard/Outboard 623.281-038
outboard-motorboat rigger 806.464-010
OUTBOARD-MOTOR MECHANIC 623.281-042
OUTFITTER, CABIN 806.684-102
outfitter 623.281-030
outside-installation machinist 623.281-030
outside-installer apprentice 623.281-022
outside rigger 806.261-014
OVERLAY PLASTICIAN 806.684-106
PAINTER APPRENTICE, SHIPYARD 840.381-014
PAINTER HELPER, SHIPYARD 840.687-010
PAINTER, SHIPYARD 840.381-018
patcher, plastic boat 807.684-014
PIPE COVERER AND INSULATOR 863.381-014
PIPE FITTER 862.261-010
PIPE-FITTER HELPER 862.684-018
pipe fitter, marine 862.261-010
PIPE-FITTER SUPERVISOR 862.131-014
Plastic Outfitter 806.684-146
plug-and-mold finisher 806.684-086
Plug Builder 661.281-010
PNEUMATIC-TOOL OPERATOR 809.381-030
PORT ENGINEER 014.167-014
PREFORM PLATE MAKER 751.684-026
Propeller Inspector 609.361-010
RIGGER 806.261-014
RIGGER APPRENTICE 806.261-018
RIGGER HELPER 806.684-122
Rigging-Loft Repairer 806.684-122
ROLLER 806.687-046
RUNNING RIGGER 806.684-142
Sailmaker 739.381-010
sail, tent, and awning-maker apprentice 739.381-014
Scaffold Builder 860.381-042
SHIPFITTER 806.381-046
SHIPFITTER APPRENTICE 806.381-050
SHIPFITTER HELPER 806.687-050
SHIPWRIGHT 860.381-058
SHIPWRIGHT APPRENTICE 860.381-062
SHIPWRIGHT HELPER 860.664-018
Shipwright Supervisor 891.131-010
STOCK-PARTS FABRICATOR 769.684-050
SUPERVISOR, ALUMINUM BOAT ASSEMBLY 806.131-010
SUPERVISOR, ALUMINUM FABRICATION 619.130-014
SUPERVISOR, BOATBUILDERS, WOOD 860.131-014
SUPERVISOR, BOAT OUTFITTING 806.131-018
SUPERVISOR, FIBERGLASS BOAT ASSEMBLY 806.134-014
Supervisor, Fiberglass-Ship-Component Assembly 806.134-014
SUPERVISOR, JOINERS 860.131-022
SUPERVISOR, PAINTING, SHIPYARD 840.131-014
SUPERVISOR, RIGGER 806.131-030
SUPERVISOR, SANDBLASTER 503.137-010
SUPERVISOR, SHIPFITTERS 806.131-034
supervisor, ship maintenance services 891.131-010
Trim Installer 806.684-146
UTILITY SUPERVISOR, BOAT AND PLANT 899.131-022
VENEER STAPLER 869.684-078
ways operator 921.662-022
Weight Calculator 216.482-022
Window Installer 806.684-146
Windshield Installer 806.684-146
Wood And Hardware Outfitter 806.684-146
WOOD CAULKER 843.384-010
woodworker 860.381-058
woodworker helper 860.664-018
YARD INSPECTOR 869.281-018
YARD WORKER 921.683-086

smelt. & refin.—SMELTING AND REFINING INDUSTRY: This designation includes occupations concerned with the dressing, smelting, and refining of nonferrous metal ores, including the entire treatment of materials from crude ore to finished metals or minerals. It includes (1) crushing to reduce ore to workable size; (2) fine grinding to further reduce ore to a size amenable to the extraction of gold and silver or to the concentration of minerals containing valuable metals or ore; (3) concentration to separate valuable metal or metal-bearing minerals from waste minerals; (4) roasting to drive off sulfur and other volatile constituents of ore; (5) reduction of ore to its metallic and nonmetallic constituents by melting in a furnace; and (6) refining of recovered metal by further heat treatment, electrolytic methods, or both. This industry also includes occupations concerned with the recovery of nonferrous metals from scrap and dross.

Acid Conditioner 511.687-014
additive-plant operator 939.362-014
Adobe-Ball Mixer 570.685-070
ALUMINA-PLANT SUPERVISOR 511.130-010
AMALGAMATOR 511.685-010
Anode-Assembly Cleaner I 515.685-014
Anode-Assembly Cleaner II 519.664-010
ANODE-CREW SUPERVISOR 630.134-010
ANODE REBUILDER 630.684-010
ASSEMBLY CLEANER 519.664-010
billet header 514.584-010
BLANKET WASHER 511.687-010
BOTTOM-PRECIPITATOR OPERATOR 511.664-010
BRIQUETTING-MACHINE OPERATOR 519.685-010
calcination helper 513.587-010
CALCINER OPERATOR 513.362-010
CALCINER-OPERATOR HELPER 513.667-010
CARBON-FURNACE OPERATOR 543.562-010
CARBON-FURNACE-OPERATOR HELPER 543.664-010
Carbon-Paste-Mixer Operator, Panelboard 540.585-010
CARBON SETTER 519.667-010
CARNALLITE-PLANT OPERATOR 519.484-010
CASTER 514.684-010
casting header 514.584-010
CASTING-WHEEL OPERATOR 514.682-010
CASTING-WHEEL-OPERATOR HELPER 514.667-010
CELL-FEED-DEPARTMENT SUPERVISOR 519.130-010
CELL PLASTERER 519.687-010
Channel Rebuilder 630.684-010
chemical operator 511.382-010
chute blaster 933.687-010
chute tapper 933.687-010
CLARIFIER OPERATOR 511.662-010
CLARIFIER-OPERATOR HELPER 511.667-010
CLASSIFIER OPERATOR 511.562-010
CLASSIFIER TENDER 511.685-014
COLOR TESTER 511.667-014
CONCENTRATOR OPERATOR 511.462-010
CONDENSER SETTER 512.687-010
CONDENSER-TUBE TENDER 511.685-018
Cone-Classifier Tender 511.685-014
CONTROL OPERATOR 511.482-010
CONVERTER SUPERVISOR 513.132-010
conveyor attendant 939.362-014
Copper-Flotation Operator 511.685-026
Cottrell Blower 511.687-014
crusher operator 939.362-014
CRUSHER SUPERVISOR 515.132-010
CRUSHER TENDER 515.685-014
CRYOLITE-RECOVERY OPERATOR 511.482-014
Desilverizer 519.685-022
DEWATERER OPERATOR 511.565-010
Dewatering-Filtering Supervisor 511.135-010
DIGESTION OPERATOR 519.565-010
Dinkey Operator, Slag 919.663-014
drier-and-evaporator operator 559.685-074
drier operator 511.565-014
DRIER TENDER 511.565-014
DROSS SKIMMER 519.683-010
DUST-COLLECTOR OPERATOR 511.482-018
DUST COLLECTOR, ORE CRUSHING 511.682-010
DUST COLLECTOR-TREATER 511.687-014
DUST MIXER 510.685-010
dust operator 511.482-018
DUST PULLER 519.687-014
Electric-Arc-Furnace Operator 512.362-018
Electro-Winning Operator 519.362-014
EQUIPMENT CLEANER-AND-TESTER 630.584-010
fettler 512.684-014
FILTER-PLANT SUPERVISOR 511.135-010

finishing-pan operator 559.685-074
FLAKER OPERATOR 559.685-074
flaking-machine operator 559.685-074
Flotation Supervisor 511.135-010
FLOTATION TENDER 511.685-026
FLOTATION-TENDER HELPER 511.687-018
flue-dust laborer 519.687-014
FLUX-TUBE ATTENDANT 519.687-018
FURNACE CHARGER 512.684-014
FURNACE HELPER 512.666-010
FURNACE OPERATOR 512.362-014
FURNACE OPERATOR 513.462-010
GENERAL-HANDLING SUPERVISOR 929.137-010
Grease-Machine Worker 519.565-014
GRINDER, CARBON PLANT 544.565-010
GRINDER-MILL OPERATOR 519.485-010
grinding-mill operator 939.362-014
GRINDING-MILL OPERATOR 515.382-010
GRIZZLY WORKER 933.687-010
GROUT-MACHINE TENDER 519.685-014
HAMMER-MILL OPERATOR 515.687-010
header 514.584-010
Hot-Billet-Shear Operator 615.685-034
Hot-Metal-Crane Operator II 921.663-042
HYDRATE-CONTROL TENDER 511.585-010
hydrate-thickener operator 511.562-010
HYDRAULIC-BOOM OPERATOR 921.683-046
INGOT HEADER 514.584-010
ION-EXCHANGE OPERATOR 558.685-030
IRON-LAUNDER OPERATOR 511.565-018
KETTLE OPERATOR 519.685-018
KETTLE TENDER I 519.685-022
KETTLE TENDER II 511.685-030
KETTLE TENDER, PLATINUM AND PALLADIUM 511.685-034
kiln-head house operator 511.565-010
KILN OPERATOR 513.565-010
KILN-OPERATOR HELPER 513.587-010
LABORER, GENERAL 519.687-026
ladle cleaner 519.684-010
LADLE LINER 519.684-010
ladle patcher 519.684-010
LADLE POURER 514.684-014
LEACHER 511.582-010
Lead Loader 921.683-050
LEAD OPERATOR 630.381-018
LEAF COVERER 519.684-014
LINER REPLACER 801.664-010
line supervisor 511.130-010
Looper 519.565-014
MANOMETER TECHNICIAN 519.387-010
metal pourer 514.684-010
mill attendant 939.362-014
MILL-LABOR SUPERVISOR 519.131-014
MILL SUPERVISOR 515.130-010
mixer operator 570.685-070
MIXER OPERATOR, CARBON PASTE 540.585-010
mixer tender 510.685-022
MIX-HOUSE TENDER 510.685-014
Mixing-Pan Tender 510.685-014
MOLD MAKER 518.664-010
MOLD-MAKER HELPER 518.687-018
Molybdenum-Flotation Operator 511.685-026
Molybdenum-Leaching-Plant Operator 511.582-010
MOLYBDENUM-STEAMER OPERATOR 511.485-010
MUD BOSS 519.585-014
mud grinder 570.685-070
mud-mill operator 570.685-070
MUD-MILL TENDER 519.685-026
MUD-MIXER OPERATOR 570.685-070
NICKEL-PLANT OPERATOR 519.362-010
ore crusher 515.685-014
PANELBOARD OPERATOR 939.362-014
pan operator 559.685-074
pellet-press operator 519.685-010
Pin Puller 630.684-010
POTLINE MONITOR 512.467-010
POT LINER 519.664-014
POT-LINING SUPERVISOR 519.134-010
pot puncher 512.685-018
POT-ROOM SUPERVISOR 512.135-010
POT TENDER 512.685-018
pourer 514.682-010
PRECIPITATOR I 511.685-038
PRECIPITATOR II 511.685-042
PRECIPITATOR OPERATOR ..... term
PRECIPITATOR SUPERVISOR 511.132-010
PRESS OPERATOR, CARBON BLOCKS 514.682-014
PUG-MILL OPERATOR 510.685-022
Quantometer Operator 519.387-010
rapper 511.687-014
RAW SAMPLER 519.484-014
Reactor Operator 513.362-010
REAGENT TENDER 511.685-046
REAGENT TENDER HELPER 511.686-010
RECLAMATION KETTLE TENDER, METAL 512.685-022
RECOVERY OPERATOR 519.582-010
RECOVERY-OPERATOR HELPER 519.485-014
Red-Mud Thickener Operator 511.485-014
REDUCTION-PLANT SUPERVISOR 512.130-010
regrind mill operator 519.685-030
REPAIRER 630.281-026
REPAIRER HELPER 630.664-010
Roaster Supervisor 513.132-010
RODDING-ANODE WORKER 519.687-034
ROD-MILL TENDER 519.685-030
Roll Repairer 630.281-026
rotary-drier operator 511.565-014
ROTARY-KILN OPERATOR 513.682-010
sample carrier 519.484-014
SAMPLER, FIRST 619.682-038
SAMPLER, HEAD 519.130-014
SCALE-RECLAMATION TENDER 515.585-010
SCREEN OPERATOR 511.685-050
Screen Supervisor 511.135-010
Selenium-Plant Operator 511.685-054
service-crew supervisor 630.134-010
SETTLEMENT CLERK 214.382-030
Sheet Hanger 519.565-014
shift adjuster 511.130-010
shredder operator 515.687-010
SILICA-SPRAY MIXER 570.685-090
SINTER-MACHINE OPERATOR 510.685-026
SKIMMER, REVERBERATORY 511.687-022
SLIME-PLANT-OPERATOR HELPER 511.685-058
SLIME-PLANT OPERATOR I 510.685-030
SLIME-PLANT OPERATOR II 511.685-054
SLURRY-CONTROL TENDER 510.465-014
slurry-plant operator 570.685-090
SMELTERY WORKER ..... term
SMOKE TESTER 012.281-010
sorter 933.687-010
SPOUT WORKER 514.667-018
SPRAYER OPERATOR 505.682-010
Stack Supervisor 511.132-010
STAMPING MILL TENDER 515.685-018
Starting-Sheet-Tank Operator 519.362-014
Strap Setter 630.684-010
Stripper 519.565-014
Stripper Truck Operator 921.683-050
Stud Driver 630.684-010
SUPERVISOR, BLAST FURNACE 512.132-022
Supervisor, Calcining 519.130-026
Supervisor, Cell Maintenance 630.134-010
SUPERVISOR, CELL OPERATION 519.132-018
SUPERVISOR, DIE CASTING 514.130-014
supervisor, grinding 515.130-010
SUPERVISOR, LEAD REFINERY 519.130-018
supervisor, ore dressing 515.130-010
SUPERVISOR, PUMPING 914.131-010
SUPERVISOR, REVERBERATORY FURNACE 519.130-022
SUPERVISOR, SHEET MANUFACTURING 500.132-010
SUPERVISOR, SINTERING PLANT 519.130-026
SUPERVISOR, URANIUM PROCESSING 519.130-030
switch-house operator 939.362-014
TABLE TENDER 511.685-062
Table Tender, Sludge 511.685-062
TAILINGS-DAM LABORER 511.687-026
Tailings-Dam Pumper 914.682-010
TAILINGS MACHINERY TENDER ..... term
Tailing-Thickener Operator 511.485-014
TANK-HOUSE OPERATOR 519.362-014
TANK-HOUSE-OPERATOR HELPER 519.565-014
TANK TENDER 509.685-054
TAPPER 514.664-014
TAPPER SUPERVISOR 514.134-010
THICKENER OPERATOR 511.485-014
Thimble-Press Operator 519.664-010
TIN RECOVERY WORKER 512.382-018
TOOL REPAIRER 519.684-026
TOP-PRECIPITATOR OPERATOR 511.465-010

TOP-PRECIPITATOR-OPERATOR HELPER 511.586-010
tray thickener operator 511.562-010
TROMMEL TENDER 511.685-066
TUNGSTEN REFINER 511.382-010
wash-box operator 939.362-014
WEIGHER-AND-CRUSHER 515.567-010
Wet-Pan Mixer 570.685-070
WET-PLANT OPERATOR 519.665-018
YARD SUPERVISOR 929.137-026
ZINC-CHLORIDE OPERATOR 511.385-010

soap & rel.—SOAP, CLEANING, AND TOILET PREPARATION INDUSTRY: This designation includes occupations concerned with manufacturing soap, soap base products, and glycerin. The principal soap products are bar, liquid, powdered, and paste soaps, soap chips, and soaps blended with perfume, cold cream, lanolin, and other cosmetic ingredients for use as toilet products. Occupations concerned with the manufacture of such toilet articles as shaving cream, lotions, and toothpaste are included here.

BATCH MIXER 550.685-010
BLEACHER OPERATOR 558.685-018
blender 550.685-010
BOILER 553.382-014
CENTRIFUGE OPERATOR 551.685-030
COMPOUNDER 550.685-046
COPRA PROCESSOR 555.685-018
cp bleacher operator 558.685-018
CRUTCHER 550.685-054
CRUTCHER HELPER 550.686-018
cutter and presser 559.685-142
cutter, first 559.686-042
cutting-table operator, first 559.686-042
drier-machine hand 553.685-098
drier tender 553.585-018
DRYING-ROOM ATTENDANT 553.585-018
DUST-COLLECTOR OPERATOR 551.685-050
Fats And Oils Loader 914.667-010
flake drier 553.685-098
FRAME STRIPPER 559.685-086
frame stripper and crusher 555.685-062
Glycerin Operator 552.685-014
KETTLE WORKER 553.685-070
LYE TREATER 551.685-094
NEUTRALIZER 558.585-034
perfume compounder 550.685-046
PLODDER OPERATOR 556.682-018
plodding-machine operator 556.682-018
PRESSER 559.685-142
roll-machine attendant 553.685-098
salt operator 551.685-030
SCREENER-PERFUMER 559.685-162
SLABBER 559.686-042
Slabber, Light 559.686-042
slabbing-machine operator 559.686-042
soap boiler 559.382-054
SOAP CHIPPER 555.686-014
SOAP-DRIER OPERATOR 553.685-098
SOAP GRINDER 555.685-062
SOAP INSPECTOR 559.687-058
SOAP MAKER 559.382-054
soap-press feeder 559.685-142
soap slabber 559.686-042
SUPERVISOR, GLYCERIN 559.132-098
SUPERVISOR, TOILET-AND-LAUNDRY SOAP 559.132-130
TOWER OPERATOR 559.362-034

social ser.—SOCIAL SERVICES: This designation includes occupations concerned with providing social and rehabilitative services to those persons with social or personal problems requiring special services and to the handicapped and the disadvantaged. Also included are occupations concerned with soliciting funds to be used directly for these and related services. Occupations concerned with providing instruction or vocational training are included under EDUCATION AND INSTRUCTION (education). Occupations which provide health care are included under MEDICAL SERVICES (medical ser.).

CASE AIDE 195.367-010
case supervisor 195.137-010
CASEWORKER 195.107-010
Caseworker, Child Placement 195.107-014
CASEWORKER, CHILD WELFARE 195.107-014
CASEWORKER, FAMILY 195.107-018
Caseworker, Intake 195.107-014
Caseworker, Protective Services 195.107-014
CASEWORK SUPERVISOR 195.137-010
child development specialist 195.227-018
COMMUNITY ORGANIZATION WORKER 195.167-010
community placement worker 195.107-010
COMMUNITY-RELATIONS-AND-SERVICES ADVISOR, PUBLIC HOUSING 195.167-014
community service consultant 195.167-010
COORDINATOR, VOLUNTEER SERVICES 187.167-022
CORRECTIONAL-TREATMENT SPECIALIST 195.107-042
development disability specialist 195.227-018
DIRECTOR, CAMP 195.167-018
DIRECTOR, FIELD 195.167-022
DIRECTOR, RECREATION CENTER 195.167-026
DIRECTOR, VOLUNTEER SERVICES 187.167-038
family counselor 195.107-018
field director 195.167-022
group leader 195.227-010
GROUP WORKER 195.164-010
HOMEMAKER 309.354-010
infant educator 195.227-018
information and referral director 195.167-010
intake worker 195.107-010
MANAGEMENT AIDE 195.367-014
parent trainer 195.227-018
PROGRAM AIDE, GROUP WORK 195.227-010
program consultant 195.167-010
RECREATION AIDE 195.367-030
RECREATION LEADER 195.227-014
Senior Service Aide 195.367-010
SOCIAL GROUP WORKER 195.107-022
SOCIAL-SERVICES AIDE 195.367-034
social service worker 195.107-010
Social-Work Consultant, Casework 195.107-010
SOCIAL WORKER, DELINQUENCY PREVENTION 195.107-026
social work unit supervisor 195.137-010
TEACHER, HOME THERAPY 195.227-018
tenant relations coordinator 195.167-014
volunteer coordinator 187.167-022
Youth Nutritional Monitor 195.367-010

steel & rel.—BLAST FURNACE, STEEL WORK, AND ROLLING AND FINISHING MILL INDUSTRY: This designation includes occupations concerned with manufacturing hot metal, pig iron, silvery pig iron, and ferro alloys from iron ore and iron and steel scrap; converting pig iron, scrap iron, and scrap steel into steel; rolling iron and steel into basic shapes, such as plates, sheets, strips, rods, bars, and tubing; and manufacturing coke. Also included are occupations concerned with manufacturing ferro and nonferrous additive alloys by electrometallurgical or metallothermic processes; drawing wire from such products as nails, spikes, and staples; cold rolling steel sheets and strip, cold drawing steel bars and steel shapes, and producing other cold finished steel; and producing welded or seamless steel pipe and tubes and heavy riveted steel pipe.

Acid-Crane Operator 921.663-042
ACID EXTRACTOR 558.382-010
acid-wash operator 551.682-010
agitator operator 551.682-010
air-furnace operator 512.362-018
AMMONIA-STILL OPERATOR 559.382-010
ammonium-sulfate operator 558.362-018
Approach-Table Operator 613.682-026
ASSORTER 703.687-010
Axle Inspector 619.381-010
BATCH MAKER 515.685-010
BED OPERATOR 613.685-034
belling machine operator 617.685-022
Belt Cleaner 911.687-014
benzene operator 551.682-010
BENZENE-WASHER OPERATOR 551.682-010
benzol operator 551.682-010
Bessemer-Bottom Maker 861.381-026
Billet Inspector 619.381-010
BIN TRIPPER OPERATOR 922.665-014
BLAST-FURNACE KEEPER 502.664-010
BLAST-FURNACE-KEEPER HELPER 502.687-010
blender 510.685-018
blower, blast furnace 519.132-010
Boat Cleaner 911.687-014
BOTTOM MAKER 509.687-010
BREAKER TENDER 544.685-010
briquette-press operator 617.685-038
bulldogger 613.362-018
CAR PINCHER 922.687-034
car shifter 922.687-034
caster 502.664-014
caster, investment casting 512.362-018

CATCHER 613.686-010
charger 504.665-014
charger 512.683-010
charger-car operator 519.683-014
CHARGER-OPERATOR HELPER 504.686-010
CHARGER OPERATOR 504.665-014
charging-car operator 519.683-014
Charging-Crane Operator I 921.663-010
Charging-Crane Operator II 921.663-042
CHARGING-MACHINE OPERATOR 512.683-010
CHASER, TAR 549.687-010
Cinder-Crane Operator I 921.663-010
Cinder-Crane Operator II 921.663-042
Clay Mixer 570.685-070
COILER 613.685-010
coiler operator 613.685-010
COILER OPERATOR 613.382-010
Coil Strapper 920.587-018
coining-press operator 617.685-038
COKE BURNER 543.682-010
COKE-CRUSHER OPERATOR 544.662-010
COKE DRAWER, HAND 543.687-010
COKE INSPECTOR 542.567-010
COKE LOADER 921.563-010
Coke-Oven Mason 861.381-026
Cold-Mill Inspector 619.381-010
COLD-MILL OPERATOR 613.662-018
Cold-Roll Packer, Sheet Iron 921.663-042
compact-press operator 617.685-038
Conveyor Feeder 509.687-026
COUPLING-MACHINE OPERATOR 619.682-014
Crane Operator-Hooker 921.663-010
CRUSHER-AND-BLENDER OPERATOR 544.582-010
Crusher Feeder 509.687-026
CUT-OFF-MACHINE OPERATOR 619.685-094
dauber 543.687-014
Delivery-Table Operator 613.682-026
DESULFURIZER OPERATOR 541.362-010
Dock Cleaner 911.687-014
DOOR-MACHINE OPERATOR 519.663-010
Door Repairer 861.381-026
draw-bench operator 614.685-022
DRAW-BENCH OPERATOR 614.482-010
DRAW-BENCH-OPERATOR HELPER 614.686-010
Drier Tender, Naphthalene 551.665-010
DRIFTER 503.685-018
drifting-machine operator 503.685-018
EDDY-CURRENT INSPECTOR 619.381-014
Electric-Arc-Furnace Operator 512.362-018
engineer, byproduct 950.362-010
ENGINEER, EXHAUSTER 950.362-010
EXPANDING MACHINE OPERATOR 617.685-022
fettler 512.684-014
FINISHER 613.382-014
Finisher, Cold Rolling 613.382-014
Finisher, Hot Strip 613.382-014
Finisher, Merchant Products 613.382-014
Finisher, Plate 613.382-014
finisher, screwdown 613.382-018
Finishing Inspector 619.381-010
finishing supervisor, weld-pipe continuous 619.130-038
FIRST HELPER 512.362-010
FLYING-SHEAR OPERATOR 615.682-010
FURNACE CHARGER 512.684-014
furnace-charging-machine operator 512.683-010
FURNACE OPERATOR 512.362-018
Gag-Press Straightener 617.482-026
gas desulfurizer 541.362-010
gas tender 519.683-014
GRANULATOR TENDER 519.665-010
graphite-mill operator 549.685-026
GUIDE SETTER 613.361-010
HEATER HELPER 613.685-014
heater helper 542.665-010
HEATER I 613.362-010
HEATER II 542.362-010
helper, patcher 861.687-014
HELPER, SHEAR OPERATOR 615.687-010
hotbed operator 613.685-034
hotbed transfer operator 613.685-034
Hot-Billet-Shear Operator 615.685-034
hot blaster 512.382-014
HOT-CAR OPERATOR 519.663-014
Hot-Metal Charger 512.683-010
Hot-Metal Crane Operator I 921.663-010
Hot-Metal-Crane Operator II 921.663-042
Hot-Roll Inspector 619.381-010
Hot-Strip-Mill Inspector 619.381-010
HOT-TOP LINER 709.684-046
HOT-TOP-LINER HELPER 709.687-018
IMPREGNATOR 509.685-030
ingot buggy operator 919.683-018
Ingot Stripper I 921.663-010
Ingot Stripper II 921.663-042
Ingot Weigher 221.587-030
INSPECTOR 619.381-010
KILN OPERATOR 509.565-010
LABORATORY ASSISTANT, LIAISON INSPECTION 169.167-026
LABORATORY ASSISTANT, METALLURGICAL 011.261-022
laboratory coordinator 169.167-026
LABORER, GENERAL 509.687-026
LARRY OPERATOR 519.683-014
light-oil operator 549.382-018
LIME MIXER TENDER 514.685-022
Loading Checker 509.687-026
LUBRICATOR-GRANULATOR 509.685-042
luter 543.687-014
Magnet Placer 921.667-022
MANIPULATOR 613.682-010
Marker 509.687-026
melter assistant 512.362-010
MELTER SUPERVISOR 512.132-010
Melter Supervisor, Electric-Arc Furnace 512.132-010
Melter Supervisor, Open-Hearth Furnace 512.132-010
Melter Supervisor, Oxygen Furnace 512.132-010
metallurgical analyst 011.261-022
metallurgical inspector 011.261-022
MILL HAND, PLATE MILL 613.667-014
MILL RECORDER, COMPUTERIZED MILL 221.367-046
MILL STENCILER 659.685-026
MIXER 510.685-018
mixer operator 570.685-070
MIXER OPERATOR HELPER, HOT METAL 509.566-010
MIXER OPERATOR, HOT METAL 509.362-010
mold-car operator 514.362-010
MOLD WORKER 514.567-010
mud grinder 570.685-070
mud-mill operator 570.685-070
MUD-MIXER HELPER 549.687-022
MUD-MIXER OPERATOR 570.685-070
Mud Trucker 902.683-010
NAIL-ASSEMBLY-MACHINE OPERATOR 616.682-030
nail-machine operator 616.460-010
NAIL-MAKING-MACHINE SETTER 616.460-010
NAIL-MAKING-MACHINE TENDER 617.665-010
NAPHTHALENE OPERATOR 551.665-010
NAPHTHALENE-OPERATOR HELPER 551.687-026
Oiling-Machine Operator 599.685-074
Open-Hearth Door-Liner 861.381-026
open-hearth-furnace laborer 512.687-014
open-hearth-furnace operator 512.362-010
open-hearth-furnace-operator helper 512.684-010
OVEN DAUBER 543.687-014
OVEN-EQUIPMENT REPAIRER 630.261-014
OVEN-HEATER HELPER 542.665-010
OXYGEN-FURNACE OPERATOR 512.382-010
paster 543.687-014
PATCHER 861.684-014
PATCHER HELPER 861.687-014
PIERCING-MILL OPERATOR 613.685-018
PIG-MACHINE OPERATOR 514.362-010
PIG-MACHINE-OPERATOR HELPER 514.667-014
Pipe Coater 740.684-022
pipe processor 619.662-014
pit-furnace melter 512.362-018
PLATE CONDITIONER 819.664-010
Plate Inspector 619.381-010
PLUGGER 613.687-010
poker-in 512.683-010
PRECIPITATOR SUPERVISOR 511.132-010
PRESS SETTER 617.480-014
product inspector 619.381-010
Provider 221.387-046
pulverizer operator 544.582-010
pump-and-still operator 559.382-010
PUMP OPERATOR, BYPRODUCTS 541.362-014
pump tender 541.362-014
push-bench-operator helper 614.686-010
pusher 504.665-014
PUSHER OPERATOR 519.663-018

pusher runner 512.683-010
PYRIDINE OPERATOR 552.382-010
pyridine-recovery operator 552.382-010
Racker 509.687-026
Rail Inspector 619.381-010
RAIL-TRACTOR OPERATOR 919.683-018
RECORDER 221.367-050
reeler operator 613.682-014
REELING-MACHINE OPERATOR 613.682-014
REFRACTORY MIXER 570.685-078
Reversing-Mill Roller 613.662-018
Rod-Drawing Supervisor 614.132-010
ROLL BUILDER 801.664-018
Roller, Billet Mill 613.362-014
Roller, Blooming Mill 613.362-014
ROLLER-LEVELER OPERATOR 613.685-022
roller, merchant mill 613.130-014
Roller, Plate Mill 613.130-018
ROLLER, PRIMARY MILL 613.362-014
Roller, Slabbing Mill 613.362-014
roller, structural mill 613.130-018
ROLLING ATTENDANT 613.662-010
rolling-mill plugger 613.687-010
rolling supervisor, continuous-pipe mill 619.130-022
roll setter 613.360-014
roll setter, pipe mill 613.360-014
ROLL-TUBE SETTER 613.360-014
rotary-bar operater 619.682-042
Rotary-Dump Operator 921.685-038
rotary-furnace operator 512.362-018
ROUGHER 613.362-018
Rougher, Bar Mill 613.362-018
Rougher, Hot-Strip Mill 613.362-018
Rougher, Merchant Mill 613.362-018
ROUGHER OPERATOR 613.662-014
sampler 509.584-010
SAMPLER 599.684-014
Sampler, Ovens 599.684-014
SATURATOR OPERATOR 558.362-018
scale-and-skip-car operator 921.683-062
SCARFING MACHINE OPERATOR 816.682-010
Scrap Baler 920.685-010
SCRAP BALLER 509.685-046
Scrap Breaker 509.687-026
Scrap-Crane Operator I 921.663-010
Scrap-Crane Operator II 921.663-042
SCREENER-AND-BLENDER OPERATOR 549.685-026
SCREWDOWN OPERATOR 613.382-018
seamless-tube drawer 614.685-022
seamless-tube-mill operator 619.682-042
SEAMLESS-TUBE ROLLER 619.682-042
SECOND HELPER 512.684-010
shaker operator 541.665-010
SHAKER TENDER 541.665-010
Sheet Tester 011.361-010
sidehand 615.687-010
SINTER FEEDER 513.685-010
SINTERING-PRESS OPERATOR 617.685-038
SINTER-MACHINE OPERATOR 510.685-026
SKELP PROCESSOR 619.662-014
SKIP OPERATOR 921.683-062
SLAB-DEPILER OPERATOR 504.665-010
slag expander 519.665-010
slitting-machine coiler 613.685-010
SPEED OPERATOR 613.362-022
SPIKE-MACHINE FEEDER 612.666-010
SPIKE-MACHINE HEATER 619.686-026
SPIKE-MACHINE OPERATOR 612.662-010
SPIKEMAKING SUPERVISOR 612.130-010
STANDPIPE TENDER 519.665-014
Staple-Shear Operator 615.682-018
steel inspector 619.381-010
STEEL POURER 502.664-014
STEEL-POURER HELPER 502.664-018
steel sampler 509.584-010
Stock-Crane Operator 921.663-042
STOPPER MAKER 519.684-022
STOPPER-MAKER HELPER 519.687-038
stopper-rod maker 519.684-022
STOVE TENDER 512.382-014
strander 613.686-010
SULFATE DRIER-MACHINE OPERATOR 551.685-142
sulfate operator 558.362-018
Supervisor, Baking 549.137-010
SUPERVISOR, BLAST FURNACE 519.132-010
SUPERVISOR, BLAST-FURNACE-AUXILIARIES 519.132-014
SUPERVISOR, BLOOMING MILL 613.130-010
SUPERVISOR, BYPRODUCTS 542.132-010
SUPERVISOR, CARBON ELECTRODES 549.137-010
Supervisor, Cleaning And Annealing 619.130-018
SUPERVISOR, COAL HANDLING 549.132-018
SUPERVISOR, COKE HANDLING 549.132-022
SUPERVISOR, COLD ROLLING 619.130-018
SUPERVISOR, CONDITIONING YARD 619.134-010
SUPERVISOR, CONTINUOUS-WELD-PIPE MILL 619.130-022
Supervisor, Dock 921.137-010
SUPERVISOR, DRAWING 614.132-010
Supervisor, Extrusion 549.137-010
SUPERVISOR, FINISHING-AND-SHIPPING 619.132-026
SUPERVISOR, FLAME CUTTING 819.132-010
Supervisor, Graphite 549.137-010
SUPERVISOR, HOT-DIP-TINNING 501.130-010
SUPERVISOR, HOT-STRIP MILL 613.132-010
SUPERVISOR, MERCHANT-MILL ROLLING AND FINISHING 613.130-014
SUPERVISOR, MOLD YARD 519.137-010
SUPERVISOR, OPEN-HEARTH STOCKYARD 922.137-022
SUPERVISOR, OVENS 542.132-014
SUPERVISOR, PASTE PLANT 549.132-026
SUPERVISOR, PIG-MACHINE 514.137-010
SUPERVISOR, PIPE FINISHING 619.130-038
SUPERVISOR, PIT-AND-AUXILIARIES 514.137-014
SUPERVISOR, PLATE HEATING, ROLLING, AND FINISHING 619.132-030
SUPERVISOR, POWDERED METAL 509.130-010
SUPERVISOR, ROLL SHOP 604.130-010
SUPERVISOR, SCRAP PREPARATION 519.137-014
SUPERVISOR, SMOKE CONTROL 861.134-010
SUPERVISOR, SOAKING PITS 509.132-010
SUPERVISOR, SPECIALTY MANUFACTURING 616.130-014
SUPERVISOR, STRUCTURAL ROLLING-AND-FINISHING 613.130-018
table and slab depiler 504.665-010
TABLE OPERATOR 613.682-026
Table Operator 919.683-018
Tandem-Mill Roller 613.662-018
tar-and-ammonia pump operator 541.362-014
tar chaser 549.687-010
tar runner 549.687-010
Temper-Mill Roller 613.662-018
test assembler 509.584-010
test carrier 509.584-010
TEST PREPARER 509.584-010
THAW-SHED HEATER TENDER 543.685-022
THIRD HELPER 512.687-014
Tilting-Table Operator 613.682-026
TIN ROLLER, HOT MILL 613.360-018
Transfer-Table Operator 613.682-026
TUBE DRAWER 614.685-022
tube-draw helper 614.686-010
Tube-Drawing Supervisor 614.132-010
tube roller 619.682-042
Tubing Inspector 619.381-010
TUBING-MACHINE OPERATOR 613.685-030
Tuyere Fitter 862.281-022
UTILITY WORKER, MERCHANT MILL 801.664-014
Vessel Liner 861.381-026
wash-oil-cooler operator 549.382-018
WASH-OIL-PUMP OPERATOR 549.382-018
WASH-OIL-PUMP OPERATOR HELPER 549.685-034
Welder, Pipe Making 616.360-026
Wet-Pan Mixer 570.685-070
WHARF TENDER 542.667-010
Wheel Inspector 619.381-010
Wire-Drawing Supervisor 614.132-010

stonework—STONEWORK INDUSTRY: This designation includes occupations concerned with cutting, finishing, and shaping granite, limestone, marble, sandstone, slate, and other stones for building, monumental, ornamental, and miscellaneous purposes. Occupations concerned with processing grindstones, pulpstones, hones, and whetstones for abrasive uses are included in the ABRASIVE, ASBESTOS, AND MISCELLANEOUS NONMETALLIC MINERAL PRODUCTS INDUSTRY (nonmet. min.). Occupations concerned with quarrying stone are included in the COAL, METAL, AND NONMETAL MINING AND QUARRYING INDUSTRY (mine & quarry).

banker 679.664-010
BED RUBBER 673.685-014
BED SETTER 679.664-010

BELT SANDER, STONE 673.666-010
BEVELER 771.484-019
blaster 771.281-010
block maker 771.684-010
buffer 775.664-010
buffer 673.382-018
Building Stonecutter 771.381-014
checker 670.384-010
chisel worker 771.381-014
CIRCULAR-SAWYER HELPER 677.486-010
CIRCULAR SAWYER, STONE 677.462-010
CONTOUR GRINDER 675.682-010
Contour Wire Sawyer 677.462-014
COPER, HAND 771.384-010
CULTURED-MARBLE-PRODUCTS MAKER 575.684-050
Curbing Stonecutter 771.381-014
cut-off-saw operator 677.462-010
cutter 771.384-010
decorator 779.381-022
Diamond Sander 673.682-030
Diamond-Saw Operator 677.462-010
driller 771.684-010
driller 676.682-014
Drill Operator, Pneumatic 676.682-014
dry sander 673.666-010
EDGER-MACHINE HELPER 673.686-018
EDGER-MACHINE OPERATOR 673.682-018
finisher 673.382-018
finishing wire sawyer 677.462-014
gang-saw operator 670.362-010
GANG SAWYER, STONE 670.362-010
Granite Carver 771.281-014
granite cutter apprentice 771.381-010
granite polisher apprentice 673.382-022
Granite Polisher, Hand 775.664-010
Granite Polisher, Machine 673.382-018
granite sandblaster apprentice 673.382-014
guillotine cutter 677.685-046
hand carver 771.281-014
inspector 670.384-010
INSPECTOR-REPAIRER, SANDSTONE 779.684-030
jackhammer-splitter operator 677.685-042
lathe operator 674.662-010
lumper 679.664-010
Marble Carver 771.281-014
marble coper 771.384-010
Marble-Cutter Operator 677.462-010
Marble Polisher, Hand 775.664-010
Marble Polisher, Machine 673.382-018
MEMORIAL DESIGNER 142.061-030
Monument Carver 771.281-014
Monument Stonecutter 771.381-014
Multiple-Wire Sawyer 677.462-014
PATCH SANDER 775.684-054
PATTERNMAKER 703.381-010
Paving-Block Cutter I 677.685-046
Paving-Block Cutter II 771.684-010
PLANER, STONE 675.682-018
planing-machine operator 675.682-018
polisher, hand 775.664-010
polishing-machine operator 673.382-018
profile grinder 675.682-010
Radial-Drill Operator 676.682-014
ROCK BREAKER 770.687-034
ROCK SPLITTER 771.684-010
rotary-saw operator 677.462-010
ROUTER OPERATOR 676.462-010
rubber cutter 771.281-010
rubber cutter and shape carver 673.382-010
rubbing-bed operator 673.685-014
SANDBLASTER, STONE 673.382-010
SANDBLASTER, STONE APPRENTICE 673.382-014
sandblast operator 673.382-010
saw maker 701.684-022
SAW SETTER 701.684-022
SAWYER ..... term
sculptor 771.281-014
setter 679.664-010
shape carver 771.281-010
shaper 673.382-010
single-wire-saw operator 677.462-014
SINK CUTTER 677.682-018
SLAB GRINDER 673.682-030
Slab Polisher 673.682-030
Slate Cutter 676.682-014
Slate-Cutter Operator 677.462-010
Slate Splitter 771.684-010
slate trimmer 670.685-010
SPLITTER OPERATOR 677.685-042
SPLITTING-MACHINE OPERATOR 677.685-046
SPLITTING-MACHINE-OPERATOR HELPER 677.666-010
STENCIL CUTTER 771.281-010
sticker 779.684-058
stone banker 679.664-010
STONE CARVER 771.281-014
STONECUTTER APPRENTICE, HAND 771.381-010
STONECUTTER, HAND 771.381-014
STONECUTTER, MACHINE 677.682-022
stone dresser 771.381-014
STONE DRILLER 676.682-014
STONE-DRILLER HELPER 676.686-010
stone finisher 775.664-010
stone finisher 673.382-018
stone finisher see STONE MECHANIC
STONE GRADER 670.384-010
STONE-LATHE OPERATOR 674.662-010
Stone-Lathe Polisher 674.662-010
STONE LAYOUT MARKER 670.587-010
STONE MECHANIC ..... term
STONE POLISHER, HAND 775.664-010
STONE POLISHER, MACHINE 673.382-018
STONE POLISHER, MACHINE APPRENTICE 673.382-022
STONE REPAIRER 779.684-058
stone rubber 775.664-010
stone sawyer 670.362-010
stone splitter 677.685-042
STONE TRIMMER 670.685-010
stoneworker 771.381-014
STRIP POLISHER 673.685-082
SUPERVISOR 679.130-010
SUPERVISOR, SLATE SPLITTING 771.137-010
SURFACE-PLATE FINISHER 775.281-010
surfacer operator 677.682-022
surfacing-machine operator 677.682-022
THERMAL-SURFACING-MACHINE OPERATOR 679.685-018
TOP POLISHER 673.662-010
TRACER 779.381-022
turner 674.662-010
wire-saw operator 677.462-014
WIRE SAWYER 677.462-014

struct. metal—STRUCTURAL AND ORNAMENTAL METAL PRODUCTS INDUSTRY: This designation includes occupations concerned with fabricating and repairing architectural, structural, and ornamental metalwork. The primary products are structural steel for buildings and bridges; solid-metal, hollow-metal, and metal-covered doors, window sashes, window and door frames, store fronts, and molding and trim; storm and screen doors and windows, and weather strip; structural and ornamental metal for balconies, bank fixtures, elevator enclosures, fire escapes, gratings, portable buildings, and stairs and staircases; power and marine boilers, pressure and nonpressure tanks, and processing and storage vessels; sheet metalwork; and metal bars used to reinforce concrete products. Occupations concerned with the manufacture of wire screening are included under FABRICATED METAL PRODUCTS, NOT ELSEWHERE CLASSIFIED (metal prod., nec).

art-metal designer 142.061-034
assembler-fitter 809.684-010
ASSEMBLER, PRODUCTION LINE 809.684-010
ASSEMBLER, UNIT 809.684-010
BOILERMAKER APPRENTICE 805.261-010
boilermaker, assembly and erection 805.261-014
Boilermaker, Central Steam Plant 805.381-010
BOILERMAKER FITTER 805.361-014
BOILERMAKER HELPER I 805.687-010
BOILERMAKER HELPER II 805.664-010
BOILERMAKER I 805.261-014
BOILERMAKER II 805.381-010
Boilermaker, Industrial Boilers 805.381-010
boilermaker mechanic 805.381-010
Boilermaker, Ship 805.381-010
Channel Installer 809.684-010
crimper-assembler 809.684-010
Door-Lock Installer 809.684-010
FABRICATOR, SHOWER DOORS AND PANELS 739.381-030
Fireproof-Door Assembler 809.681-010
Frame Assembler 809.684-010
Hardware Installer 809.684-010
INSPECTOR AND TESTER 809.687-018
Kick-Plate Installer 809.684-010

MEASURER 869.487-010
Metal-Door Assembler 809.681-010
Metal Screen, Storm Door, And Window Builder 809.381-010
Metal-Window-Screen Assembler 809.681-010
ORNAMENTAL-METALWORK DESIGNER 142.061-034
PANEL LAMINATOR 809.684-042
Screen-Frame Enameler 599.685-026
Screen Installer 809.684-010
SCROLL-MACHINE OPERATOR 616.685-062
SHOP SUPERVISOR 619.131-014
Spliner 809.684-010
SUPERVISOR 617.130-010
SUPERVISOR, ASSEMBLY DEPARTMENT 809.130-010
SUPERVISOR, BOILERMAKING 805.131-010
Supervisor, Boilermaking Shop 805.131-010
Supervisor, Field Assembly-And-Erection 805.131-010
SUPERVISOR, GRINDING AND SPRAYING 809.134-010
Supervisor Mechanic, Boilermaking 805.131-010
Welder, Boilermaker 810.384-014

sugar & conf.—SUGAR AND CONFECTIONERY PRODUCTS INDUSTRY: This designation includes occupations concerned with (1) manufacturing and refining sugar and molasses from sugar beets and sugarcane; (2) manufacturing candy and confectionery products; (3) shelling, roasting, and grinding cocoa beans for chocolate liquor, cocoa powder and butter, and chocolate bars and coatings; (4) manufacturing chewing gum. Occupations concerned with manufacturing principal sugar byproducts, such as monosodium glutamate, beet pulp for cattle feed, and soil conditioners, are included here. Occupations concerned with manufacturing and selling confectionery products in the same establishment are included here. However, sales occupations found in establishments with no manufacturing are included in the RETAIL TRADE INDUSTRY (retail trade).

Almond-Pan Finisher 524.382-010
ALMOND-PASTE MIXER 529.361-010
ALMOND-PASTE MOLDER 520.684-010
BALL-MACHINE OPERATOR 520.686-010
ball-rolling-machine operator 520.686-010
batch maker 529.361-014
batch-roller operator 520.682-030
bean dumper 521.685-066
beet flumer 521.686-042
beet flumer 922.665-010
BLOW-UP OPERATOR 529.485-014
boiler 529.361-014
BOILER-OPERATOR HELPER 950.585-014
Bonbon-Cream Warmer 526.382-014
Bonbon Dipper 524.684-010
breaker operator 521.685-034
BREAKING-MACHINE OPERATOR 521.685-034
BULK-PLANT OPERATOR 520.362-010
Candy-Bar-Core Inspector 529.686-034
Candy Catcher 529.686-034
candy-cooker helper 520.685-050
CANDY CUTTER, HAND 790.687-010
candy cutter, machine 521.685-102
Candy Decorator 524.684-014
CANDY DIPPER, HAND 524.684-010
candy feeder 524.686-010
CANDY MAKER 529.361-014
Candy Maker, Bar 520.687-022
candy-maker helper 520.687-022
CANDY-MAKER HELPER 520.685-050
candy mixer 520.684-014
CANDY MOLDER, HAND 520.687-018
Candy Packer 920.587-018
candy polisher 524.382-010
CANDY PULLER 520.685-046
candy roller 520.686-010
candy roller 520.684-014
candy-rolling-machine operator 520.685-198
candy separator, enrobing 524.686-010
Candy Separator, Hard 529.686-034
CANDY SPREADER 520.687-022
Candy-Spreader Helper 529.686-034
candy-starch-mold printer 526.687-014
Candy-Waffle Assembler 529.686-034
Candy-Wrapping-Machine Operator 920.685-078
Caramel-Candy Maker 529.361-014
Caramel-Candy-Maker Helper 520.685-050
Caramel Cutter, Hand 790.687-010
Caramel-Cutter Helper 529.686-034
Caramel Cutter, Machine 521.685-102
CARBONATION EQUIPMENT OPERATOR 529.582-010
carrier operator 521.685-090
casting-machine operator 520.682-014
CASTING-MACHINE OPERATOR 520.685-062
CENTER-MACHINE OPERATOR 520.682-014
center maker, hand 520.684-014
CENTRIFUGAL OPERATOR 521.682-010
Centrifugal Separator 521.685-070
CENTRIFUGAL-STATION OPERATOR, AUTOMATIC 521.585-010
centrifugal supervisor 529.130-042
CENTRIFUGE OPERATOR 529.682-010
CHAR-CONVEYOR TENDER 529.685-050
Char Conveyor Tender, Cellar 529.685-050
CHAR-DUST CLEANER AND SALVAGER 529.687-038
CHAR-FILTER OPERATOR 521.365-010
CHAR-FILTER-OPERATOR HELPER 521.687-034
CHAR PULLER 521.687-030
CHEESE SPRAYER 524.685-014
Cherry Dipper 524.684-010
CHICLE-GRINDER FEEDER 521.686-018
Chocolate Coater 524.684-010
Chocolate-Drops-Machine Operator 520.685-078
chocolate finisher 521.682-034
chocolate-finisher operator 521.682-034
Chocolate-Machine Operator 524.382-014
Chocolate Molder 520.687-018
CHOCOLATE MOLDER, MACHINE 529.685-054
Chocolate-Peanut Coating Machine Operator 524.382-010
CHOCOLATE-PRODUCTION-MACHINE OPERATOR 529.382-014
chocolate refiner 521.682-034
chocolate-refining roller 521.682-034
CHOCOLATE TEMPERER 523.682-010
coater 524.382-010
Coating-Machine Helper 529.686-034
COATING-MACHINE OPERATOR 524.382-010
COCOA-BEAN CLEANER 521.685-066
COCOA-BEAN-ROASTER HELPER 523.666-010
COCOA-BEAN ROASTER I 523.362-010
COCOA-BEAN ROASTER II 523.380-010
COCOA-BUTTER-FILTER OPERATOR 521.685-070
cocoa-milling-machine operator 521.685-202
cocoa-mill operator 521.685-074
COCOA-POWDER-MIXER OPERATOR 520.685-074
COCOA-PRESS OPERATOR 521.682-014
COCOA-ROOM OPERATOR 521.685-074
Coconut-Candy Maker 529.361-014
Coconut Cooker 526.382-014
Coconut-Jelly Roller 520.682-030
conche loader and unloader 526.382-010
CONCHE OPERATOR 526.382-010
confectioner 529.361-014
CONFECTIONERY COOKER 526.382-014
CONFECTIONERY-DROPS-MACHINE OPERATOR 520.685-078
CONTINUOUS-ABSORPTION-PROCESS OPERATOR 521.362-010
cook, candy 529.361-014
COOLER TENDER 520.585-018
CORN POPPER 526.685-026
cracker-fanner operator 521.385-010
CRACKING-AND-FANNING-MACHINE OPERATOR 521.385-010
Cream Dipper 524.684-010
CRUSHER OPERATOR 521.685-080
CRYSTALLIZER OPERATOR 523.585-018
Crystal-Syrup Maker 526.382-014
Cubelet-Centrifugal Operator 521.682-010
Cut-Roll-Machine Offbearer 529.686-034
cut-roll-machine operator 520.685-198
cutter, machine 521.685-102
CUTTING-MACHINE OPERATOR 521.685-102
cutting-machine operator 521.685-034
Cutting-Machine-Operator Helper 529.686-034
Dairy-Powder-Mixer Operator 520.685-074
Date Puller 521.687-066
DECORATOR 524.684-014
decorator, hand 524.684-014
decorator, hand 524.684-018
DEPOSITING-MACHINE OPERATOR 529.682-018
DIFFUSER OPERATOR 523.562-010
DORR OPERATOR 522.685-050
drier operator 529.682-010
DRIER OPERATOR 529.682-022
enrober tender 524.686-010
ENROBING-MACHINE CORDER 524.684-018
ENROBING-MACHINE FEEDER 524.686-010
ENROBING-MACHINE OPERATOR 524.382-014
EVAPORATOR OPERATOR 521.382-010
extruding-machine operator 520.682-014

FACTORY HELPER 529.686-034
FILTER OPERATOR 521.685-126
finisher 524.382-010
FIRER, KILN 523.685-078
first helper 529.682-018
five-roll-refiner batch mixer 520.685-150
FLOOR WORKER 920.687-090
FLUMER I 922.665-010
FLUMER II 521.686-042
Fondant Cooker 526.382-014
Fondant-Machine Operator 521.585-018
Fondant-Puff Maker 520.682-014
FRUIT-BAR MAKER 529.685-134
FRUIT CUTTER 521.687-066
Fruit Stuffer 524.687-014
Fudge-Candy Maker 529.361-014
GARNISHER 524.687-014
GENERAL HELPER 529.686-046
general utility helper 529.686-034
general utility machine operator 529.382-014
glazer 524.382-010
glosser 524.382-010
GLUCOSE-AND-SYRUP WEIGHER 520.686-026
GRANULATOR OPERATOR 523.685-098
Gum Coater 524.382-010
Gum Maker 526.382-014
GUM PULLER 520.687-038
gum-rolling-machine tender 520.682-022
GUM-SCORING-MACHINE OPERATOR 520.682-022
hard-candy batch-mixer 520.685-046
Hard-Candy Maker 529.361-014
hard-candy spinner 520.682-030
High-Raw-Sugar Boiler 522.382-034
HOPPER ATTENDANT 521.685-182
Icing Coater 524.684-010
Icing Maker 526.382-014
INSPECTOR 529.687-114
INSPECTOR, PROCESSING 529.687-226
KETTLE TENDER 520.685-118
Kieselguhr-Regenerator Operator 573.685-034
King Maker 526.382-014
Kiss Mixer 520.685-122
KISS SETTER, HAND 529.687-122
KNIFE SETTER 638.684-014
LIQUID-SUGAR FORTIFIER 520.585-022
LIQUID-SUGAR MELTER 520.382-014
LIQUOR-BRIDGE OPERATOR 521.565 010
LIQUOR-BRIDGE-OPERATOR HELPER 521.687-078
liquor-gallery operator 521.565-010
LIQUOR-GRINDING-MILL OPERATOR 521.685-202
liquor runner 521.565-010
lollypop-machine operator 529.685-234
lollypop maker 529.685-234
Low-Raw-Sugar Cutter 521.682-010
LOZENGE-DOUGH MIXER 520.685-122
LOZENGE MAKER 529.682-026
Lozenge-Maker Helper 529.686-034
Marshmallow Maker 526.382-014
Marshmallow Packer 529.686-034
Marshmallow Runner 520.682-014
marzipan maker 529.361-010
marzipan molder 520.684-010
Melangeur Operator 520.685-150
MELTER OPERATOR 523.382-018
Melt-House Centrifugal Operator 521.682-010
MELT-HOUSE DRAG OPERATOR 529.687-158
MILL PLATFORM SUPERVISOR 521.132-010
MINGLER OPERATOR 520.665-010
Mint-Lozenge Mixer 520.685-122
Mint-Machine Operator 521.685-102
Mint-Wafer Depositor 529.682-018
MIXER OPERATOR 520.685-150
mogul feeder 520.686-030
mogul operator 520.682-026
molder, hand 520.687-018
MOLDING-MACHINE OPERATOR 520.682-026
MOLDING-MACHINE-OPERATOR HELPER 520.686-030
Nougat-Candy Maker 529.361-014
Nougat-Candy-Maker Helper 520.685-050
Nougat Cutter, Machine 521.685-102
novelty-candy maker 520.687-018
NUT CHOPPER 521.686-046
ornamenter 524.684-014
pan operator 524.382-010
PANTRY WORKER 520.487-018
Pan Washer, Hand 529.686-034
paste worker 520.687-018
Pecan-Mallow Dipper 524.684-010
PICKING-TABLE WORKER 521.687-102
polisher 524.382-010
POPCORN-CANDY MAKER 526.685-042
popcorn maker 526.685-026
popped-corn oven attendant 526.685-026
Powdered-Sugar-Pulverizer Operator 521.585-018
POWDER-MILL OPERATOR 521.585-018
printer 526.687-014
PULP-DRIER FIRER 523.585-030
PULP-PRESS TENDER 521.685-258
QUALITY CONTROL INSPECTOR 529.367-034
Quick-Mixer Operator 520.685-074
Raisin-Separator Operator 529.686-034
RAW-JUICE WEIGHER 529.685-194
Receiving-Tank Operator 529.585-014
REFINED-SYRUP OPERATOR 520.485-022
REFINING-MACHINE OPERATOR 521.682-034
REGENERATOR OPERATOR 573.685-034
Remelt-Centrifugal Operator 521.682-010
Remelt-Pan-Tank Operator 529.585-014
Remelt-Sugar Boiler 522.382-034
Remelt-Sugar Cutter 521.682-010
roaster helper 523.666-010
ROLLER I 520.684-014
Roller II 524.687-014
roller operator 520.685-198
ROLLING MACHINE OPERATOR 520.685-198
Salvage Grinder 521.686-018
SANDING-MACHINE OPERATOR 524.665-010
Sanding-Machine Operator Helper 529.686-034
Scrapper 529.686-034
SCREEN-ROOM OPERATOR 521.685-282
sea-foam-kiss maker 529.687-122
slab worker 520.684-014
slicing-machine feeder 521.685-102
Soft-Sugar Boiler 522.382-034
Soft-Sugar Cutter 521.682-010
SOFT-SUGAR OPERATOR, HEAD 521.565-018
SPINNER 520.682-030
Spinner Helper 529.686-034
stack puller 520.686-030
starch crab 529.682-018
Starch Dumper 520.686-030
STARCHMAKER 526.687-014
Steamer, Gum Candy 529.686-034
stick-candy puller 520.682-030
stick roller 520.684-014
stick spinner 520.682-030
streaker 524.684-018
stringer 524.684-018
stripper-machine operator 521.685-102
stroker 524.684-018
SUCKER-MACHINE OPERATOR 529.685-234
SUGAR BOILER 522.382-034
Sugar-Coating Hand 529.686-034
SUGAR CONTROLLER 529.565-010
sugar drier 523.685-098
sugar-end supervisor 529.130-034
SUGAR GRINDER 521.685-346
SUGAR-REPROCESS OPERATOR, HEAD 529.137-018
SUPERVISOR 920.137-018
SUPERVISOR, BEET END 529.132-018
SUPERVISOR, CANDY 529.130-010
SUPERVISOR, CHAR HOUSE 523.132-010
SUPERVISOR, CHOCOLATE-AND-COCOA PROCESSING 529.130-014
Supervisor, Enrobing 529.130-010
SUPERVISOR, FILTRATION 529.130-022
Supervisor, Hard Candy 529.130-010
SUPERVISOR, INSPECTION 529.137-074
Supervisor, Inspection Room 920.137-018
SUPERVISOR, MELT HOUSE 522.130-010
SUPERVISOR, PACKING 920.130-010
SUPERVISOR, POWDERED SUGAR 521.130-014
SUPERVISOR, PROCESSING 529.137-082
SUPERVISOR, PULP HOUSE 529.130-030
SUPERVISOR, REFINING 529.130-034
Supervisor, Remelt 522.130-010
SUPERVISOR, SOFT SUGAR 529.130-038
SUPERVISOR, STEFFEN HOUSE 529.132-086
SUPERVISOR, SYRUP SHED 529.137-058
Supervisor, Unwrapping Room 920.137-018

SUPERVISOR, WHITE SUGAR 529.130-042
Supervisor, Wrapping Room 920.137-018
Syrup Crystallizer 529.686-034
SYRUP MAKER 529.482-022
Table Filler 529.686-034
Taffy-Candy Maker 529.361-014
Taffy Puller 520.685-046
TANK TENDER 529.585-014
TARE WEIGHER 221.587-034
tempering-machine operator 523.682-010
Toy Sorter 529.686-034
UTILITY WORKER 529.686-086
Vacuum-Cooker Operator 526.382-014
Vanilla-Chocolate-Coin Counter 529.686-034
Vortex Operator 520.585-018
WASHER, AGRICULTURAL PRODUCE 529.685-258
WASHROOM CLEANER 529.687-214
WASHROOM OPERATOR 529.665-014
WET-AND-DRY-SUGAR-BIN OPERATOR 529.665-018
Wet-Char Conveyor Tender 529.685-050
whipper-beater 520.685-050
White-Sugar Boiler 522.382-034
White-Sugar Centrifugal Operator 521.682-010
White-Sugar-Pan-Tank Operator 529.585-014
White-Sugar-Syrup Operator 529.585-014

svc. ind. mach.—REFRIGERATION AND SERVICE INDUSTRY MACHINERY INDUSTRY: This designation includes occupations concerned with manufacturing and repairing automatic (vending and coin-operated) merchandising equipment; industrial and commercial laundry, dry cleaning, and pressing machines; commercial, industrial, and residential air-conditioning, warm-air heating equipment, and refrigeration equipment; soda fountains; beer dispensing equipment; gasoline and oil measuring and dispensing pumps; and service industry machines, not elsewhere classified. Occupations concerned with manufacturing electric warm-air furnaces and comfort heating equipment are included in the ELECTRICAL EQUIPMENT INDUSTRY (elec. equip.). Occupations concerned with manufacturing household refrigerators and freezers are included in the HOUSEHOLD APPLIANCES INDUSTRY (house. appl.).

AIR-CONDITIONING-COIL ASSEMBLER 706.684-010
Air-Conditioning-Unit Assembler 827.684-010
AIR-CONDITIONING-UNIT TESTER 827.361-010
APPLIANCE ASSEMBLER, LINE 827.684-010
ASSEMBLER 731.687-010
Assembler, Coolers 827.684-010
Automobile Air-Conditioner Assembler 827.684-010
Carpenter, Refrigerator 860.381-022
charging-board operator 827.485-010
coil fin assembler 706.684-010
COIN-MACHINE ASSEMBLER 731.684-010
COIN-MACHINE-SERVICE REPAIRER 639.281-014
FOAM CHARGER 827.585-010
GAS CHARGER 827.485-010
GAS-LEAK TESTER 827.584-014
manager, vending department 637.131-010
METAL-WASHING-MACHINE OPERATOR 503.685-034
PIN-GAME-MACHINE INSPECTOR 729.381-014
plate fin assembler 706.684-010
QUALITY-CONTROL TECHNICIAN 637.684-014
REFRIGERATION MECHANIC 827.361-014
REFRIGERATION UNIT REPAIRER 637.381-014
Refrigerator Cabinetmaker 660.280-010
Refrigerator Crater 920.684-010
REFRIGERATOR GLAZIER 865.684-022
REFRIGERATOR TESTER 827.384-010
SUPERVISOR, COIN-MACHINE 706.130-010
SUPERVISOR, COOLER SERVICE 637.131-010
switchpanel mounter 731.684-010
VENDING-MACHINE ASSEMBLER 706.684-102
vending-machine repairer 639.281-014
WIRE CUTTER 731.687-038

tel. & tel.—TELEPHONE AND TELEGRAPH INDUSTRY: This designation includes occupations concerned with the maintenance and operation of communications systems for wire and radio transmission of messages, including local and long-distance telephone and telegraph systems, stock ticker, time-signal, teletype, television cable, and other special communications services. Excluded are occupations concerned with creating and broadcasting radio and television programs, which are included in the RADIO AND TELEVISION BROADCASTING INDUSTRY (radio-tv broad.).

Adjustment Clerk 219.362-010
adjustment clerk 239.362-014
application clerk 239.362-014
ASSEMBLER 722.381-010
assembler, equipment 722.381-010
ASSIGNMENT CLERK 219.387-010
AUTOMATIC EQUIPMENT TECHNICIAN 822.281-010
automatic maintainer 822.261-026
cable dispatcher 239.167-014
CABLE ENGINEER, OUTSIDE PLANT 003.167-010
CABLESHIP WORKER ..... term
CABLE SPLICER 829.361-010
CABLE-SPLICER APPRENTICE 829.361-014
CABLE-SPLICER HELPER 829.667-010
cable-splicing supervisor 829.131-010
CABLE SUPERVISOR 829.131-010
CABLE SUPERVISOR 184.161-010
CABLE TESTER 822.361-010
Call-Box Wirer 822.381-010
CENTRAL-OFFICE EQUIPMENT ENGINEER 003.187-010
CENTRAL-OFFICE INSTALLER 822.361-014
central-office maintainer 822.281-014
CENTRAL-OFFICE OPERATOR 235.462-010
CENTRAL-OFFICE-OPERATOR SUPERVISOR 235.132-010
CENTRAL-OFFICE REPAIRER 822.281-014
CENTRAL-OFFICE-REPAIRER SUPERVISOR 822.131-010
Central-Office Supervisor 822.131-010
City-Plant Supervisor 822.131-010
clerk, cable transfer 219.387-010
clerk-operator 239.362-010
clerk, personal service bureau 219.362-022
clerk, private wire-billing and control 219.362-022
clerk, rating 214.587-010
CLERK, ROUTE 235.562-010
CLERK, TELEGRAPH SERVICE 219.362-022
coin-box collector 292.687-010
COIN-MACHINE COLLECTOR 292.687-010
COMMERCIAL-INSTRUCTOR SUPERVISOR 239.137-010
commercial representative 253.257-010
commercial service representative 253.357-010
COMMUNICATIONS CONSULTANT 253.157-010
Communications Consultant, Commercial Services 253.157-010
Communications Consultant, Industrial Services 253.157-010
Communications Consultant, Residential Services 253.157-010
Communications-Equipment Supervisor 722.131-010
COUNTER CLERK 249.362-010
CUSTOMER-EQUIPMENT ENGINEER 003.187-018
CUSTOMER-FACILITIES SUPERVISOR 822.131-014
CUSTOMER-SERVICE REPRESENTATIVE 239.362-014
CUSTOMER-SERVICE-REPRESENTATIVE INSTR. 239.227-010
CUSTOMER-SERVICE REPRESENTATIVE SUPERVISOR 239.137-014
cw operator 193.262-030
DIRECTORY-ASSISTANCE OPERATOR 235.662-018
DISPATCHER 239.167-014
dispatcher 822.361-030
District-Plant Supervisor 822.131-010
electrician, cable-splicing 829.361-010
ELECTRICIAN, OFFICE 822.261-010
electrician, station, assistant 822.261-010
EQUIPMENT INSPECTOR 822.261-014
equipment installer 822.361-014
EQUIPMENT INSTALLER 822.381-010
equipment installer 822.381-022
EQUIPMENT MECHANIC ..... term
FACILITY EXAMINER 959.367-014
facsimile operator 193.362-010
force dispatcher 215.137-018
FRAME WIRER 822.684-010
Ground Helper 821.684-014
Hole-Digger-Truck Driver 905.663-014
Inside-Plant Supervisor 822.131-010
inspector, line 822.267-010
Installation Supervisor 822.131-014
installation supervisor 822.131-010
INSTRUMENT REPAIRER 722.281-010
INSTRUMENT-SHOP SUPERVISOR 722.131-010
Jointer, Submarine Cable 829.361-010
LINE INSPECTOR 822.267-010
LINE INSTALLER-REPAIRER 822.381-014
Line Installer-Repairer, City 822.381-014
Line Maintainer, Section 822.381-014
LINE SUPERVISOR 822.131-018
Long-Distance Operator 235.462-010
maintainer, central office 822.381-022
maintainer, equipment 822.381-022
maintainer, plant 822.381-022
maintenance chief 822.131-010
MAINTENANCE INSPECTOR 822.261-018

maintenance supervisor 822.131-014
MANAGER, COMMUNICATIONS STATION 184.167-062
MANAGER, CUSTOMER SERVICE 168.167-058
Manager, Prorate 822.131-014
manager, service 822.131-014
MANAGER, TELEGRAPH OFFICE 184.167-086
MANAGER, TRAFFIC I 184.167-098
MANAGER, TRAFFIC II 184.167-106
Money-Order Clerk 249.362-010
monitor 239.367-026
monitor chief 239.137-022
Multiplex-Machine Operator 203.582-050
observer 239.367-026
operations chief 822.131-010
OPERATIONS MANAGER 184.117-070
Operations Technician 822.281-010
order clerk 239.362-014
outside contact clerk 239.362-014
OUTSIDE-PLANT ENGINEER 003.167-042
Outside-Plant Supervisor 822.131-010
PAY-STATION ATTENDANT 237.367-034
pay-station collector 292.687-010
pbx installer 822.381-018
pbx repairer 822.281-022
PHOTORADIO OPERATOR 193.362-010
PLANNING ENGINEER, CENTRAL OFFICE FACILITIES 003.061-050
plant chief 184.117-082
Pole-Truck Driver 904.383-010
POWER OPERATOR 952.382-014
Printer Maintainer 822.281-010
PRIVATE-BRANCH-EXCHANGE INSTALLER 822.381-018
Private-Branch-Exchange Installer, Mobile Radio 822.381-018
PRIVATE-BRANCH-EXCHANGE REPAIRER 822.281-022
PRIVATE-BRANCH-EXCHANGE SERVICE ADVISER 235.222-010
Private-Branch-Exchange Teletypewriter 822.381-018
Radio Installer 822.381-018
RADIO-MESSAGE ROUTER 235.387-010
radio-photo technician 193.362-010
radiotelegraphist 193.262-030
RADIOTELEGRAPH OPERATOR 193.262-030
rate marker 214.587-010
REGULATORY ADMINISTRATOR 168.167-070
repeater attendant 822.261-026
REPRESENTATIVE, PERSONAL SERVICE 236.252-010
REVENUE-SETTLEMENTS ADMINISTRATOR 184.117-074
rigger, chief 823.131-014
RIGGER SUPERVISOR 823.131-014
ROUTE AIDE 239.687-010
ROUTE SUPERVISOR 239.137-018
SALES REPRESENTATIVE, PUBLIC UTILITIES 253.357-010
Sales Representative, Telephone And Telegraph Services 253.357-010
SALES REPRESENTATIVE, TELEPHONE SERVICES 253.257-010
Section Maintainer 822.261-022
service-center supervisor 822.131-014
Service Investigator 241.367-014
SERVICE OBSERVER 239.367-026
SERVICE OBSERVER, CHIEF 239.137-022
service representative 239.362-014
services engineer 003.187-018
shop repairer 722.281-010
special-service representative 253.157-010
splicer 829.361-010
splicer apprentice 829.361-014
Station Installer 822.261-022
STATION INSTALLER-AND-REPAIRER 822.261-022
Station Repairer 822.261-022
SUPERINTENDENT, COMMUNICATIONS 184.117-082
SUPERVISOR, DELIVERY DEPARTMENT 230.137-014
SUPERVISOR, FORCE ADJUSTMENT 215.137-018
SUPERVISOR, PUBLIC MESSAGE SERVICE 239.137-026
SUPERVISOR, TELEPHONE CLERKS 239.132-010
switchboard operator 235.462-010
technician, automatic 822.281-010
TECHNICIAN, SUBMARINE CABLE EQUIPMENT 822.281-034
technician, terminal and repeater 822.261-026
Telegram Messenger 230.663-010
telegraph-equipment maintainer 822.281-010
Telegraphic-Instrument Supervisor 722.131-010
Telegraphic-Service Dispatcher 959.167-010
Telegraphic-Typewriter Installer 822.381-010
Telegraphic-Typewriter Repairer 822.281-010
TELEGRAPH-PLANT MAINTAINER 822.381-022
Telegraph-Repeater Installer 822.381-010
Telegraph-Repeater Technician 822.261-026
TELEGRAPH-SERVICE RATER 214.587-010
TELEPHONE CLERK, TELEGRAPH OFFICE 239.362-010
Telephone Coin-Box Collector 292.687-010
Telephone-Instrument Supervisor 722.131-010
telephone operator 235.462-010
telephone-plant power operator 952.382-014
telephone repairer 822.281-022
telephone supervisor 239.132-010
telephoto engineer 193.362-010
Telephoto Installer 822.381-018
Teleprinter Installer 822.381-018
Teletype Installer 822.381-010
TEST-DESK SUPERVISOR 822.131-030
tester, equipment 822.261-026
TESTING-AND-REGULATING CHIEF 184.167-258
TESTING-AND-REGULATING TECHNICIAN 822.261-026
Ticker Installer 822.381-010
Time-Signal Wirer 822.381-010
Toll-Line Repairer 822.381-014
Toll Repairer, Central Office 822.281-014
Tower-Truck Driver 905.663-014
traffic chief 184.167-106
traffic controller, cable 239.137-026
traffic superintendent 184.167-106
TRANSMISSION-AND-PROTECTION ENGINEER 003.167-066
transmission engineer 003.167-066
Transmission-Maintenance Supervisor 822.131-014
TRANSMISSION TESTER 822.361-026
TREE TRIMMER 408.664-010
tree trimmer, line clearance 408.664-010
tree-trimming-line technician 408.664-010
TROUBLE LOCATOR, TEST DESK 822.361-030
Video Installer 822.381-018
Watch Electrician 829.261-018
wire-and-repeater technician 822.261-026
wire chief 822.131-010
wirer 722.381-010

tex. prod., nec—TEXTILE PRODUCTS INDUSTRY, NOT ELSEWHERE CLASSIFIED: This designation includes occupations concerned with manufacturing textile products not elsewhere classified, such as lace, banners, flags, pennants, parachutes, automobile seat covers, felt, processed waste, recovered fibers, flock, padding, batting, upholstery filling, coated (non-rubberized) fabrics, cordage, twine, rope, tire cord, canvas, pleating, automotive trimmings, apparel findings, embroidery, and textile bags. Included are occupations concerned with manufacturing household furnishings, such as bedspreads, pillowcases, sheets, towels, curtains, draperies, pillows, and quilts. Also included are occupations concerned with hand-knitting and hand-weaving textile products. Occupations concerned with assembling and installing awnings are included here. Occupations that are concerned with manufacturing felt used in hats are included in the HAT AND CAP INDUSTRY (hat & cap). Occupations concerned with impregnating fabrics with rubber are included in the RUBBER GOODS INDUSTRY (rubber goods).

Air Tucker 787.682-082
Air-Turning-Machine Feeder 689.685-146
Applique Cutter, Hand 781.684-074
ASSEMBLER 734.687-014
ASSEMBLER, FINGER BUFFS 739.685-010
automatic embroidery machine tender 689.685-150
AUTOMATIC-PAD-MAKING-MACHINE OPERATOR 689.382-010
AUTOMATIC-PAD-MAKING-MACHINE OPERATOR HELPER 689.686-010
automatic-splicing-machine operator 689.685-122
Awning Assembler 787.682-058
awning erector 869.484-010
Awning Finisher 789.484-014
AWNING-FRAME MAKER 809.484-010
AWNING HANGER 869.484-010
AWNING-HANGER HELPER 869.687-010
awning installer 869.484-010
Awning Maker 739.381-010
Awning Spreader 789.687-090
Back-Pad Inspector 789.687-086
back winder 681.685-154
Bag-And-Sack Sewer 787.682-058
BAG CUTTER 789.687-010
Bag Inspector 789.587-014
BAG LINER 789.687-014
Bag-Making-Machine Tender 787.685-014
BALL-FRINGE-MACHINE OPERATOR 689.685-010
Ball-Mill Mixer 550.382-014
band cutter 689.687-018
BAND-SAW OPERATOR 686.682-010
Bat Carrier 586.686-022

BATTING-MACHINE OPERATOR 680.585-010
BEATER-AND-PULPER FEEDER 530.686-010
BEATER ENGINEER 530.662-010
BEATER-ENGINEER HELPER 530.665-010
Beater, Lead 530.662-010
beater operator 530.662-010
beater-operator helper 530.665-010
Bedspread Cutter, Hand 781.684-074
Bedspread Folder 589.687-014
Bedspread Inspector 789.587-014
Bedspread Seamer 787.682-066
Bias-Binding Cutter 686.685-066
bias-binding folder 689.685-134
BIAS-CUTTING-MACHINE OPERATOR 686.682-014
BINDING CUTTER, SYNTHETIC CLOTH 699.682-010
Blanket Binder 787.682-010
Blanket Cutter, Hand 781.684-074
BLANKET-CUTTING-MACHINE OPERATOR 689.585-010
Blanket Folder 589.687-014
Blanket Inspector 789.587-014
BLOCKER 920.685-022
BOAT-CANVAS MAKER-INSTALLER 789.261-010
bobbin fixer 681.687-026
BOBBIN PRESSER 689.685-018
BOBBIN STRIPPER 689.685-022
BOBBIN WINDER, MACHINE 681.585-014
book folder 589.687-014
border-machine operator 689.382-010
BOUFFANT-CURTAIN-MACHINE TENDER 689.685-026
BOW-MAKER-MACHINE TENDER, AUTOMATIC 689.685-030
Box Feeder 586.686-022
Brass-Bobbin Winder 681.685-154
breaker-wheel operator 582.685-050
brim cutter 585.685-086
brushing operator 585.685-070
Buckram Sewer 787.682-066
BUFFING TURNER-AND-COUNTER 789.687-022
BUFFING-WHEEL FORMER, AUTOMATIC 689.685-034
BUFFING-WHEEL FORMER, HAND 789.684-014
BUFFING-WHEEL INSPECTOR 789.687-026
BUNDLE BREAKER 689.687-018
bundle cutter 689.687-018
Burlap-Bag Sewer 787.682-058
Burlap-Sizing-Machine Operator 582.665-026
BURLAP SPREADER 581.687-010
BURN-OUT TENDER, LACE 589.685-018
BUTTON MAKER AND INSTALLER 734.685-014
CALENDER OPERATOR 583.685-026
CALENDER OPERATOR, ARTIFICIAL LEATHER 584.685-010
Calender-Operator Helper 589.687-026
Calender Supervisor 589.130-014
calender tender 583.685-026
Canopy Inspector 789.687-114
CANOPY STRINGER 789.684-018
Canvas-Bag Maker 787.682-058
Canvas Cutter, Hand 781.684-074
Canvas Cutter, Machine 781.684-014
Canvas Marker 781.384-014
CANVAS WORKER 739.381-010
CANVAS-WORKER APPRENTICE 739.381-014
CARDING-MACHINE OPERATOR 681.685-030
Charge-Bag Sewer 787.682-058
CARTOON DESIGNER 781.381-010
chenille-machine operator 687.682-014
clipping, stringing, and turning machine tender 689.585-018
CLOTH FOLDER, HAND 589.687-014
Cloth Joiner, Tents 787.682-058
Cloth Numberer 787.682-022
Cloth-Printer Helper 586.686-022
Cloth-Printing-Machine-Operator Helper 589.687-026
CLOTH-STOCK SORTER 789.687-034
Coated Fabric Cutter 699.682-026
Coater Helper 586.686-022
COATING-AND-EMBOSSING-UNIT OPERATOR 583.682-010
COATING-MACHINE OPERATOR 584.562-010
Coating-Machine-Operator Helper 589.687-026
COATING-MACHINE OPERATOR I 584.382-010
COATING-MACHINE OPERATOR II 584.685-018
Coating Supervisor 589.130-014
COILER 681.685-034
COLOR MAKER 550.382-014
COLOR MATCHER 550.381-010
color mixer 550.381-010
combing-machine tender 680.685-034
continuous-drier helper 581.687-018
continuous-drier operator 581.685-034
CONTINUOUS PILLOWCASE CUTTER 686.685-014
Corder 787.682-022
Core-Covering Sewer 787.682-058
Core Inserter 739.685-010
Cotton-Bag Clipper 789.687-030
Cotton-Bag-Cutting-Machine Offbearer 689.686-018
Cotton-Bag-Cutting-Machine Operator 686.585-010
Cotton-Bag Sewer 787.682-058
Cover Assembler 787.682-066
Cover Cutter, Machine 781.684-014
CRUSHER-AND-BINDER OPERATOR 689.685-054
crushing-mill operator 589.686-018
Curtain Cutter, Hand 781.684-074
Curtain Hemmer, Automatic 787.685-018
Curtain Inspector 789.587-014
Curtain Supervisor 787.132-010
Cushion Closer 780.682-018
Cushion-Cover Inspector 789.687-038
Cushion Filler 780.684-066
cushion sweeper 789.687-122
CUTTER 699.682-014
cutter 789.687-134
CUTTER 686.685-022
CUTTER, BARREL DRUM 690.682-026
cutter operator 530.666-010
CUTTER, ROTARY SHEAR 781.684-018
CUTTING-AND-PRINTING-MACHINE OPERATOR 652.685-022
Cutting-And-Sewing Supervisor 789.132-010
Cutting-Department Supervisor 789.132-014
CUTTING INSPECTOR 781.684-022
CUTTING-MACHINE OFFBEARER 689.686-018
cutting-machine operator 585.685-086
CUTTING-MACHINE OPERATOR 686.585-010
Daub-Color Matcher 550.382-014
Daub-Color Mixer 550.382-014
decorator, hand 782.684-018
Depth-Stretching-Machine Operator 580.685-058
die cutter 686.462-010
DIE-CUTTING-MACHINE OPERATOR, AUTOMATIC 686.462-010
Die-Cutting-Machine-Operator Helper, Automatic 586.686-022
Dishcloth Folder 589.687-014
Dish-Cloth Inspector 789.587-014
Down Filler 780.684-066
Drapery Cutter, Hand 781.684-074
Drapery Cutter, Machine 781.684-014
Drapery Hemmer, Automatic 787.685-018
Drapery Inspector 789.587-014
Drapery Room Supervisor 789.132-010
Drapery Sewer, Hand 782.684-058
Drapery Supervisor 787.132-010
DRAW-FRAME TENDER 680.685-034
DRAWSTRING KNOTTER 689.685-058
dries 581.685-034
DRUM ATTENDANT 582.685-050
drum-reel cutter 690.682-026
DRYING-UNIT-FELTING-MACHINE OPERATOR 581.685-034
DRYING-UNIT-FELTING-MACHINE-OPERATOR HELPER 581.687-018
dry-mop maker 739.687-078
Dull-Coat-Mill Operator 584.382-010
DUST-MILL OPERATOR 581.686-030
DUST-MOP MAKER 739.687-078
dye-house supervisor 582.131-014
dye-machine-tender helper 582.686-030
DYER, SUPERVISOR 582.131-014
DYE-TANK TENDER 582.685-054
Elastic Sewer 787.682-066
ELECTRIC BLANKET WIRER 789.684-054
EMBLEM DRAWER-IN 689.380-010
EMBOSSING-MACHINE OPERATOR 583.685-034
Embossing-Machine-Operator Helper 589.687-026
EMBROIDERER, HAND 782.684-018
Embroidery Supervisor 787.132-010
EMBROIDERY SUPERVISOR 689.130-010
examiner 789.687-050
Examiner-Mender 787.682-030
extractor operator 589.685-098
EXTRACTOR OPERATOR 582.685-062
extract wringer 589.685-098
EXTRUDING-MACHINE OPERATOR 557.565-010
FABRIC-COATING SUPERVISOR 589.130-014
Facer, Buffing Wheel 585.685-086
Feather Baler 920.685-010
feather-crushing-machine operator 589.686-018

FEATHER-CURLING-MACHINE OPERATOR 589.686-018
FEATHER-CUTTING-MACHINE FEEDER 585.686-010
FEATHER-DRYING-MACHINE OPERATOR 581.686-034
FEATHER-DUSTER WINDER 734.684-014
Feather Grader 929.687-062
FEATHER MIXER 589.685-050
feather renovator 589.685-082
FEATHER SEPARATOR 589.685-054
FEATHER WASHER 582.685-066
feeder tender 680.686-018
FELT CARBONIZER 586.687-010
felt-coating-and-mixing supervisor 589.130-014
FELT-CUTTING-MACHINE OPERATOR 686.682-018
Felt-Dyeing-Machine Tender 582.685-070
felter 680.685-054
felt finisher 586.685-038
Felt-Finishing Supervisor 589.130-014
FELT-GOODS SUPERVISOR, NEEDLE PROCESS 689.130-014
felting-machine operator 680.685-054
FELTING-MACHINE OPERATOR 586.662-010
FELTING-MACHINE-OPERATOR HELPER 586.686-014
FELTMAKER AND WEIGHER 586.685-022
Felt-Pad Cutter 585.687-014
FELT-STRIP FINISHER 586.685-018
FELT-WASHING-MACHINE TENDER 582.685-070
FILLER 780.684-066
filler 789.687-130
filling inspector 681.687-026
Filter-Cloth Maker 787.682-058
Finger-Buff Sewer 787.682-058
Finish-Coat-Mill Operator 584.382-010
FINISHER 789.687-050
FINISHER, HAND 789.484-014
FIRST-BREAKER FEEDER 680.686-014
First-Coat Operator 584.382-010
FISHING-LINE-WINDING-MACHINE OPERATOR 689.685-066
FISH-NET STRINGER 782.684-026
Fitted-Sheet Binder 787.682-010
flange cutter 585.685-086
FLAT DRIER 581.685-078
flexigraphic printer 651.382-026
FLOCKER 789.687-054
flower cheniller 687.682-010
FLOWER-MACHINE OPERATOR 687.682-010
FOLDER 789.687-058
folder, hand 589.687-014
FOLDING-MACHINE FEEDER 920.686-018
Formula Checker 221.387-046
frame bender 809.484-010
FRAME HAND 689.687-046
FRINGER 789.687-062
Fringer 787.682-066
fringer, hand 782.684-050
FULLING-MACHINE OPERATOR 586.382-010
Gang-Hemstitching-Machine Operator 787.685-018
GARNETTER 680.685-054
Garnett Feeder 680.686-018
Garnett Fixer 689.260-010
Garnett-Machine-Operator Helper 586.686-022
general worker 586.686-022
Gill-Net Stringer 782.684-026
Gray Mixing Operator 680.850-010
Grinding Operator 550.382-014
guillotine operator 680.686-018
Hair-Picking-Machine Operator 680.685-082
hand-booked folder and stitcher 589.687-014
handle maker 739.687-122
hands parter 689.687-018
hardening-machine operator 586.662-010
hardening-machine-operator helper 586.686-014
HARNESS-AND-BAG INSPECTOR 789.687-086
Harness Inspector 789.687-086
HARNESS RIGGER 789.687-082
HASSOCK MAKER 780.687-018
Header 787.682-026
Hem Inspector 789.687-114
Hem Marker 781.687-042
HEMMER, AUTOMATIC 787.685-018
Hemstitching-Machine Operator 787.682-058
HOOD MAKER 804.481-010
hopper feeder 680.686-018
Horizontal-Stick-Turning-Machine Operator 689.685-146
House-Furnishings Cutter, Machine 781.684-014
HYDRAULIC-PRESS OPERATOR 583.685-058
inspector and mender 782.487-010
Inspector, Canvas Products 789.587-014
Inspector, Coated Fabrics 689.685-038
INSPECTOR, FINISHING 589.387-022
installation helper 869.687-010
jacquard-lace weaver 683.682-026
JACQUARD-TWINE-POLISHER OPERATOR 583.685-062
joiner 787.682-066
Jute-Bag Clipper 789.687-030
Jute-Bag-Cutting-Machine Operator 686.585-010
Jute-Bag Sewer 787.682-058
KAPOK-AND-COTTON-MACHINE OPERATOR 689.685-082
kersey-department supervisor 689.130-014
kettle-tender helper 582.686-030
KNITTER, HAND 782.684-034
KNITTING-MACHINE OPERATOR 685.685-010
knotter 789.684-030
knotter, hand 789.684-030
Label Tacker 787.685-042
LABORER, CANVAS SHOP 789.687-090
LABORER, GENERAL 589.687-026
Lace Breaker 689.665-014
lace-machine operator 683.682-026
Lace Pinner 782.687-026
Lace Separator 689.665-014
Lace Stripper 689.665-014
LACE WINDER 685.687-018
Lacing Presser 739.685-010
LAMINATOR 584.685-034
LAUNDRY-MACHINE TENDER 589.685-066
LAY-OUT-MACHINE OPERATOR 781.684-034
lay-up presser 586.662-010
LEVERS-LACE MACHINE OPERATOR 683.682-026
Lining Sewer 787.682-066
loom operator 685.685-010
l-tacker 787.685-026
MACHINE FEEDER, RAW STOCK 680.686-018
MACHINE HELPER 586.686-022
maker-up, folding 589.687-014
MARKER 781.687-042
MARKING-MACHINE OPERATOR 652.685-050
Mender 787.682-058
mender 782.487-010
mender 789.684-038
microgrinder operator 586.685-018
mill attendant 582.685-050
MIXER I 550.685-074
MIXER II 789.687-098
mixer, pigment 550.381-010
Mixing Supervisor 589.130-014
molder 692.685-286
MOLDER, AUTOMOBILE CARPETS 692.685-286
molder-trimmer 692.685-286
MONOGRAM-AND-LETTER PASTER 789.687-102
MOP-HANDLE ASSEMBLER 739.687-122
Mophead Sewer 787.682-066
MOPHEAD TRIMMER-AND-WRAPPER 789.687-106
mop-machine operator 739.685-026
MOP MAKER 739.685-026
nailhead puncher 789.685-010
Nailhead Setter 789.685-010
napper 585.685-070
napper operator 585.685-070
NAPPER TENDER 585.685-070
NEEDLE-BOARD REPAIRER 739.684-134
NEEDLE-CONTROL CHENILLER 687.685-010
NEEDLE-FELT-MAKING-MACHINE OPERATOR 689.362-010
NEEDLE-LOOM OPERATOR 689.662-010
Needle-Loom-Operator Helper 586.686-022
NEEDLE LOOM SETTER 689.360-010
NEEDLE-LOOM TENDER 689.685-090
needle-punch operator 687.682-014
needle setter 739.684-134
net finisher 582.685-054
net hanger 782.684-026
NET MAKER 789.684-030
NETTING INSPECTOR 782.487-010
netting machine operator 685.685-010
NYLON-HOT-WIRE CUTTER 781.684-038
OIL BOILER 543.362-010
Oiling-Machine Operator 582.685-050
OIL-SPOT WASHER 689.687-050
ORNAMENT SETTER 789.685-010
overlay operator 687.682-014
package winder 681.685-154
Padding-Machine Operator 584.685-018

PAIRER 789.687-110
Panel Sewer 787.682-066
paper twister 681.685-134
Parachute-Accessories Attache 787.682-058
Parachute-Crown Sewer 787.682-058
Parachute-Cushion Installer 787.682-058
PARACHUTE FOLDER 789.684-034
parachute-harness rigger 789.687-082
PARACHUTE INSPECTOR 789.687-114
PARACHUTE-LINE TIER 789.687-118
PARACHUTE MARKER 789.587-018
PARACHUTE MENDER 789.684-038
Parachute-Panel Joiner 787.682-058
Parachute Taper 787.682-010
PASSEMENTERIE WORKER 782.684-050
paster 789.687-102
PATTERNMAKER 781.361-014
pattern-perforating-machine operator 781.684-042
PATTERN RULER 794.687-038
PERFORATOR 781.684-042
Picker Feeder 680.686-018
Picking-Machine-Operator Helper 586.686-022
Pillow-And-Cushion-Department Supervisor 789.132-010
Pillowcase Cleaner 689.687-050
pillowcase cutter 686.685-014
Pillowcase Folder 589.687-014
Pillowcase Sewer 787.682-026
Pillowcase Sewer, Automatic 787.685-014
PILLOWCASE TURNER 583.685-078
PILLOW CLEANER 789.687-122
Pillow Filler 760.684-066
Pin-Feather-Machine Operator 589.685-054
PINNER 782.687-026
PINNER 782.684-054
PLEATER 787.685-026
PLEATER, HAND 583.684-010
PLEAT PATTERNMAKER 781.484-010
PLEAT TAPER 789.487-010
Pot-Holder Binder 787.682-010
power-cutting-machine operator 686.682-018
prehemmer 781.684-034
PREPLEATER 686.685-046
PRESSER, BUFFING WHEEL 583.685-090
Print-Color Matcher 550.382-014
Print-Color Mixer 550.382-014
print-color operator 550.382-014
printer 652.685-022
PRINTER, PLASTIC 651.382-026
Printing Supervisor 589.130-014
Production Clerk, Lace Tearing 221.382-018
PUNCHER 689.582-010
putter-out, machine 589.685-098
QUILL-BUNCHER-AND-SORTER 734.687-066
Quill-Picking-Machine Operator 589.685-054
QUILTER FIXER 689.260-014
quilting-machine helper 689.686-010
QUILTING-MACHINE OPERATOR 689.685-106
QUILTING-MACHINE OPERATOR 584.382-014
Quilt Sewer 787.682-066
Quilt Sewer, Hand 782.684-018
QUILT STUFFER 789.687-130
QUILT STUFFER, MACHINE 689.685-102
RAG-CUTTING-MACHINE FEEDER 530.666-010
RAG-CUTTING-MACHINE TENDER 530.665-014
RAG SORTER AND CUTTER 789.687-134
RAKER, BUFFING WHEEL 589.684-010
Raw-Calender Operator 584.685-010
reeler 681.685-034
reel slitter 690.682-026
RENOVATOR-MACHINE OPERATOR 589.685-082
repairer 681.687-026
Returned-Goods Inspector 789.587-014
Reverser 789.687-182
rewinder 681.685-154
...inestone Setter 789.685-010
RIGGER 789.684-046
Ring Attacher 787.685-026
Ring Sewer 789.687-090
RIPPER 782.687-038
roll-calender tender 583.685-026
roll-coating-machine operator 584.562-010
roll-press operator 589.685-098
ROLL-SHEETING CUTTER 699.682-026
rope-coiling-machine operator 681.685-086
ROPE-LAYING-MACHINE OPERATOR 681.685-086
ROPE-MACHINE SETTER 681.380-010
ROPE-MAKER, ROPEWALK 681.682-014
rope-twisting-machine operator 681.685-086
round-cutter operator 585.685-086
rounder 585.685-086
ROUNDING-MACHINE OPERATOR 585.685-086
ruffler 787.685-038
Ruffling Hemmer, Automatic 787.685-018
RUG INSPECTOR 585.685-090
RUG-INSPECTOR HELPER 589.686-038
Safety-Net Maker 789.684-030
SAIL CUTTER 781.384-018
Sail Finisher, Hand 789.484-014
Sail Finisher, Machine 787.682-058
SAIL-LAY-OUT WORKER 781.381-030
Sailmaker 739.381-010
sail, tent, and awning-maker apprentice 739.381-014
SAMPLE SELECTOR 789.387-014
saturator 584.382-010
SCALLOP CUTTER, MACHINE 686.685-058
SCREEN-MACHINE OPERATOR 559.682-070
SCRUBBING-MACHINE OPERATOR 582.685-122
seamer 787.682-066
Seat-Pack Inspector 789.687-086
Second-Calender Operator 584.685-010
setter, machine 589.685-098
Sewer-And-Cutter, Finger-Buff Material 787.685-014
sewer, hand 782.684-050
SEWING MACHINE OPERATOR I 787.682-066
SEWING-MACHINE OPERATOR II 787.682-058
Sheet Cleaner 689.687-050
Sheet Cutter I 699.685-014
Sheet Cutter II 787.685-014
sheet-cutting operator 686.585-010
Sheet Folder 589.687-014
Sheet Inspector 789.587-014
Sheet Sewer 787.682-026
SHIRRING-MACHINE OPERATOR, AUTOMATIC 787.685-038
shredder picker 680.686-018
Shroud-Line Tier 789.687-118
Shroud-Web Inspector 789.687-114
SHUTTLER 689.687-070
shuttler 789.684-054
side hemmer 787.685-018
SIZING-MACHINE-AND-DRIER OPERATOR 582.665-026
Sizing-Machine-And-Drier-Operator Helper 586.686-022
Sleeping-Bag Filler 780.684-066
SLIPCOVER CUTTER 780.381-034
SLIP-COVER SEWER 780.682-014
slugger 782.684-026
softener 582.685-050
Sorter 789.687-146
SPANNER 689.687-074
SPINNING-MACHINE TENDER 681.685-110
splicer 689.682-018
SPLICING-MACHINE OPERATOR 689.682-018
SPLICING-MACHINE OPERATOR, AUTOMATIC 689.685-122
spooler 681.685-154
Spooler 689.685-014
spooler 681.685-114
SPOOLING-MACHINE OPERATOR 681.685-114
spot washer 689.687-050
STAINING-MACHINE OPERATOR 582.685-142
STAMPER I 781.687-062
STAMPER II 652.685-082
STEAMER 789.687-170
STENCILER 781.687-066
sterilizer 589.685-082
stitcher 689.685-106
STITCHER 689.682-022
Straight Cutter, Machine 699.682-030
STRAND-FORMING-MACHINE OPERATOR 681.685-118
STRETCHING-MACHINE OPERATOR 580.685-058
striker-out, machine 589.685-098
string-glue-and-printing-machine operator 689.685-138
STRINGING-MACHINE TENDER 689.585-018
stud setter 789.685-010
STUFFER 780.687-046
stuffer 780.684-066
stuffer, machine 582.685-050
superintendent, dyeing 582.131-014
Supervisor, Camp Department 787.132-010
Supervisor, Canvas Products 789.132-018
SUPERVISOR, CLOTH WINDING 689.130-022
Supervisor, Felting 586.130-010

SUPERVISOR, FOAM CUTTING 690.130-022
Supervisor, Fulling 586.130-010
SUPERVISOR I 789.132-014
SUPERVISOR II 789.134-010
SUPERVISOR III 789.132-018
SUPERVISOR IV 789.132-010
SUPERVISOR, LACE TEARING 689.134-014
SUPERVISOR, MILL 589.130-026
SUPERVISOR, MIXING 680.135-010
SUPERVISOR, PARACHUTE MANUFACTURING 789.132-026
SUPERVISOR, PLEATING 583.137-010
SUPERVISOR, PRODUCTION 589.135-010
supervisor, production 689.130-010
Supervisor, Sleeping-Bag Department 787.132-010
SUPERVISOR, STITCHING DEPARTMENT 787.132-018
SUPERVISOR V 586.130-010
SUPERVISOR VI 589.132-010
SUPERVISOR, WEBBING 789.137-014
Suspension-Cord Tier 789.687-118
TABLE-COVER FOLDER 920.687-186
table draper 782.687-026
tabler 781.684-034
table worker 734.687-014
taker-off 589.686-046
Taker-Off, Braker Machine 589.686-046
Taker-Off, Drying Kiln 589.686-046
TAKER-OFF, HEMP FIBER 589.686-046
Taker-Off, Scutcher Machine 589.686-046
tangled-yarn-spool straightener 681.687-026
Tape-Cutting-Machine Operator 686.685-066
TAPE-FOLDING-MACHINE OPERATOR 689.685-134
TAPE-MAKING-MACHINE OPERATOR 689.685-138
Taping Machine Operator 787.682-066
TARRING-MACHINE OPERATOR 584.685-046
TASSEL-MAKING-MACHINE OPERATOR 689.685-142
temperer 582.685-050
Tennis-Net Maker 789.684-030
Tent Assembler 787.682-058
Tent Finisher 789.484-014
Tentmaker 739.381-010
Terry-Cloth Cutter, Hand 781.684-074
Terry Cloth Cutter, Machine 781.684-014
TESTING-MACHINE OPERATOR 586.685-038
textile-scrap salvager 789.687-010
Thermoelectric-Heat-Sealing-Machine Operator 754.684-010
Third-Calender Operator 584.685-010
THREAD-CUTTER TENDER 689.665-014
thread drawer 789.687-174
THREADER 689.687-078
THREAD SEPARATOR 789.687-174
Tie-Back Sewer, Automatic 787.685-014
Tire-Fabric-Impregnating-Range Back-Tender 589.686-010
TIRE-FABRIC-IMPREGNATING-RANGE OPERATOR, CHIEF 589.662-014
Tire-Fabric-Impregnating-Range Tender 589.685-026
Tire-Fabric Inspector 689.685-038
TOBACCO-CLOTH RECLAIMER 589.686-050
TOP-DYEING-MACHINE LOADER 582.686-030
Towel Folder 589.687-014
Towel Inspector 789.587-014
Towel Sewer 787.682-026
Tow Feeder 680.686-014
transfer-iron operator 659.685-022
TRANSFER-MACHINE OPERATOR 659.685-022
TRAWL NET MAKER 789.381-018
trimmer 789.687-050
Trimmer, Buffing Wheel 585.685-086
TRIMMING SEWER, AUTOMATIC 787.685-050
Trimming Supervisor 589.130-014
trim operator 699.682-026
TUFT-MACHINE OPERATOR 687.682-014
tumbler-machine operator 582.685-066
turner 689.685-146
TURNING-MACHINE OPERATOR 689.685-146
twine operator 689.685-138
Twine-Reeling-Machine Operator 681.685-078
Twine Winder 681.685-154
TWISTER 681.685-126
TWISTER TENDER, PAPER 681.685-134
twisthand 683.682-026
TYING-MACHINE OPERATOR 929.685-014
VACUUM-DRIER OPERATOR 581.685-066
Valance Shirrer 787.685-038
Vertical-Stretching-Machine Operator 580.685-058
WAIST PLEATER 583.684-014
Washcloth Folder 589.687-014
WASTE CHOPPER 689.686-054
waste-cotton cleaner 680.685-114
waste duster 680.685-114
WASTE-MACHINE OFFBEARER 680.686-022
WASTE-MACHINE TENDER 680.685-114
WATCHER, AUTOMAT 689.685-150
Watcher, Automat, Frame Goods 689.685-150
Watcher, Automat, Long Goods 689.685-150
WATCHER, PANTOGRAPH 689.685-154
Waterproof-Bag-Cutting-Machine Operator 686.585-010
Waterproof-Bag Sewer 787.682-058
waterproof-material folder 789.687-058
WEAVER, TIRE CORD 683.682-050
Webbing Seamer, Pound Net 782.684-026
wet-milling-wheel operator 582.685-050
White Mixing Operator 680.685-010
willow-machine operator 680.685-114
willow-machine tender 680.685-114
winder 681.685-154
winder 681.685-114
winding-machine operator 681.685-154
winding-machine operator 681.685-114
WINDING-RACK OPERATOR 581.685-074
Winding-Rack-Operator Helper 589.687-026
Wiping-Rag Washer 361.685-018
wool-batting worker 789.687-130
wrapper 689.380-010
wringer and setter 589.685-098
WRINGER-MACHINE OPERATOR 589.685-098
YARN CLEANER 681.687-026
yarn salvager 681.687-026
YARN WINDER 681.685-154

textile—TEXTILE INDUSTRY: This designation includes occupations concerned with preparing natural fibers for processing into thread and yarn; spinning, throwing, twisting, dyeing, and finishing thread and yarn from synthetic or natural fibers; weaving natural, synthetic, or mixed yarn into fabrics; and dyeing and finishing such fabrics. Included also are all other functions performed preparatory to and incidental to such processes. The finishing processes include bleaching, drying, dyeing, mercerizing, printing, shrinking, starching, texturizing, and waterproofing. This designation covers these processes wherever they occur. Occupations concerned with the manufacture of glass fibers are included in the GLASS MANUFACTURING INDUSTRY (glass mfg.); occupations concerned with the manufacture of rubber fibers are included in the RUBBER GOODS INDUSTRY (rubber goods); and occupations concerned with the manufacture of other synthetic fibers are included in the PLASTIC AND SYNTHETIC MATERIALS INDUSTRY (plastic-synth.). Occupations concerned with processes that are considered peculiar to the manufacture of narrow fabrics are included in the NARROW FABRICS INDUSTRY (narrow fabrics).

Acid-Bath Mixer 550.585-018
Acid-Strength Inspector 582.587-010
Acid-Washer Operator 582.685-030
AGER OPERATOR 582.585-010
AGING-DEPARTMENT SUPERVISOR 582.132-010
Alley Cleaner 381.687-018
alley tender 680.665-018
alley tender 680.685-018
Ammonia-Solution Preparer 550.585-018
attenuator 680.585-014
AUTOCLAVE OPERATOR 587.682-010
automatic-silk-screen printer 652.682-018
backer and bander, cloth 920.587-010
backfiller 589.665-014
Back-Gray-Cloth Washer 582.685-030
Back Sizer 589.665-014
BACK TENDER 589.686-010
BACK TENDER, CLOTH PRINTING 652.685-010
BACK WASHER 582.685-010
back winder 681.685-154
BAGGING SALVAGER 689.687-010
bale-breaker operator 680.685-070
bale coverer 782.687-018
Bale Piler 929.687-030
baller tender 681.685-010
BALLING-MACHINE OPERATOR 681.685-014
ball-thread-machine tender 681.685-010
BALL-WARPER TENDER 681.685-010
ball winder 681.685-014
ball winder 681.685-010
battery filler 683.686-010
battery hand 683.686-010

BATTERY LOADER 683.686-010
BATTING-MACHINE OPERATOR 680.585-010
beam doffer 681.686-010
beam dyer 582.685-102
BEAM-DYER OPERATOR 582.685-014
Beam Dyer, Recessed Vat 582.685-014
BEAMER 681.585-010
beamer hand 681.685-058
BEAMER HELPER 681.686-014
beaming-machine operator 681.685-058
BEAM RACKER 681.686-010
beam warper 681.685-018
BEAM-WARPER TENDER, AUTOMATIC 681.685-018
beck tender 582.665-014
BINDER AND BOX PUILDER 628.684-010
binder fixer 628.684-010
Binding Cutter 686.685-066
BINDING PRINTER 652.685-014
bin piler 589.685-074
bleacher 582.685-102
BLEACH-RANGE OPERATOR 582.685-018
BLENDING-MACHINE OPERATOR 680.685-010
BLOWER FEEDER, DYED RAW STOCK 581.686-010
Blow-Machine Tender, Stock Spraying 582.685-138
Blunger Loader 929.687-030
BOBBIN CLEANER, HAND 689.687-014
BOBBIN-CLEANING-MACHINE OPERATOR 689.686-014
bobbin fixer 681.687-026
Bobbin Handler 929.687-030
bobbin salvager 922.687-018
BOBBIN SORTER 922.687-018
bobbin-stripper 689.686-014
Bobbin Winder 681.685-154
BOBBIN WINDER, MACHINE 681.585-014
BOBBIN WINDER, SEWING MACHINE 681.685-026
Boiling-Off Winder 689.685-046
BOIL-OFF-MACHINE OPERATOR, CLOTH 582.685-022
BONDING-MACHINE SETTER 589.360-010
BONDING-MACHINE TENDER 589.665-010
book folder 589.687-014
BREAKER-MACHINE TENDER 583.685-010
breaker operator 680.685-070
brusher and shearer 585.685-102
brushing operator 585.685-070
BRUSH OPERATOR 587.685-010
Brush Washer 599.687-030
bulking-machine operator 689.685-158
burlapper 929.687-042
burlapper 782.687-018
BURLER 689.684-010
button-breaker operator 583.685-010
Cake Winder 681.685-154
CALENDER OPERATOR 583.685-026
calender tender 583.685-026
CAN DOFFER 680.686-010
can-drier operator 581.685-022
can pusher 680.686-010
cans operator 581.685-022
can tender 581.685-022
CANVAS SHRINKER 587.687-010
CARBONIZER 581.585-010
CARD CHANGER, JACQUARD LOOM 683.685-014
Card Cleaner 699.687-014
CARD CLOTHIER 628.381-010
card-cutter helper 689.587-010
CARD CUTTER, JACQUARD 683.582-010
Card Doffer 680.686-010
carder 680.685-050
card fixer 680.380-010
Card Fixer 689.260-010
card-gill tender 680.685-058
CARD GRINDER 680.380-010
CARD GRINDER HELPER 680.684-010
card hand 680.685-018
card hanger 683.685-014
carding doubler 680.685-086
carding doubler 680.685-094
Carding-Machine Feeder 680.686-018
CARD LACER, JACQUARD 683.685-018
card operator 680.685-018
CARDROOM WORKER ..... term
card setter 680.380-010
CARD STRIPPER 680.685-014
CARD TENDER 680.685-018
carrier loader 589.687-062
Caustic Mixer 550.585-018
Caustic-Strength Inspector 582.587-010
CHAIN BUILDER, LOOM CONTROL 683.381-010
chainer 683.381-010
chain maker, loom control 683.381-010
chain pegger 683.381-010
chain splitter 683.381-010
CHECKER 221.587-010
chemical checker 582.587-010
CHEMICAL MIXER 550.585-018
CHEMICAL-STRENGTH TESTER 582.587-010
chenille-machine operator 687.685-018
CHINCHILLA-MACHINE OPERATOR 585.685-022
CHOPPED-STRAND OPERATOR 680.685-022
chopper feeder 680.685-102
CLARIFYING-PLANT OPERATOR 955.382-010
CLOTH-BALE HEADER 782.687-018
Cloth Baler 920.685-010
cloth beamer 689.685-046
Cloth-Bin Packer 922.687-058
Cloth-Bleaching-Range Back-Tender 589.686-010
Cloth-Bleaching-Range Operator, Chief 589.562-010
Cloth-Bleaching-Range Tender 589.685-026
Cloth-Bleaching Supervisor 589.130-010
CLOTH-BOLT BANDER 920.587-010
Cloth-Brushing-And-Sueding Supervisor 589.130-010
cloth classer 689.387-010
Cloth-Colors Examiner 781.687-014
Cloth-Cutting Inspector 781.687-014
Cloth-Desizing-Range Operator, Chief 589.562-010
Cloth-Desizing-Range Tender 589.685-026
CLOTH DOFFER 689.686-058
CLOTH-DOUBLING-AND-WINDING-MACHINE OPERATOR 689.685-050
cloth drier 589.686-010
cloth-dry-can operator 581.685-022
Cloth-Dyeing-Range Operator, Chief 589.562-010
Cloth-Dyeing-Range Tender 589.685-026
cloth dyer 582.665-014
cloth dyer 582.582-010
CLOTH-EDGE SINGER 585.687-018
CLOTH EXAMINER, HAND 781.687-014
CLOTH EXAMINER, MACHINE 689.685-038
CLOTH FEEDER 589.686-014
CLOTH FINISHER 589.130-010
Cloth-Finishing-Range Back-Tender 589.686-010
CLOTH-FINISHING-RANGE OPERATOR 589.665-014
CLOTH-FINISHING-RANGE OPERATOR, CHIEF 589.562-010
CLOTH-FINISHING-RANGE TENDER 589.685-026
CLOTH FOLDER ..... term
CLOTH FOLDER, HAND 589.687-014
cloth folder, machine 689.585-014
cloth folder, machine 689.685-078
CLOTH FRAMER 689.687-026
CLOTH GRADER 689.387-010
CLOTH-GRADER SUPERVISOR 689.134-010
cloth handler 689.686-058
Cloth Hauler 929.687-030
cloth inspector 683.684-034
cloth inspector 689.685-038
Cloth-Laminating Supervisor 589.130-010
cloth layer-out 781.687-038
CLOTH MEASURER, MACHINE 589.685-022
Cloth-Mercerizer Back-Tender 589.686-010
CLOTH-MERCERIZER OPERATOR 584.685-014
Cloth-Mercerizing Supervisor 589.130-010
Cloth-Napping Supervisor 589.130-010
Cloth Neutralizer 582.685-030
cloth opener, hand 589.685-090
cloth picker 689.684-010
cloth presser 584.685-042
CLOTH-PRINTING INSPECTOR 652.567-010
CLOTH REELER 689.685-042
cloth-roll winder 689.685-046
CLOTH SANDER 581.685-010
Cloth-Seconds Sorter 789.687-146
CLOTH SHADER 582.685-026
cloth shearer 585.685-102
Cloth-Shearing Supervisor 589.130-010
cloth shrinker 587.685-018
CLOTH-SHRINKING-MACHINE OPERATOR 587.685-018
CLOTH-SHRINKING-MACHINE-OPERATOR HELPER 587.686-010
Cloth-Shrinking Supervisor 589.130-010
CLOTH-SHRINKING TESTER 587.384-010
cloth sponger 587.685-018

CLOTH SPREADER, SCREEN PRINTING 652.687-010
CLOTH-STOCK SORTER 789.687-034
cloth stretcher 580.685-066
CLOTH TESTER 029.381-010
CLOTH TESTER, QUALITY 689.384-010
Cloth Trimmer, Hand 781.687-070
CLOTH TRIMMER, MACHINE 585.685-026
Cloth-Washer Back-Tender 589.686-010
CLOTH-WASHER OPERATOR 582.685-030
CLOTH WINDER 689.685-046
COATER 584.682-010
COATER HELPER 584.665-010
COATING-AND-EMBOSSING-UNIT OPERATOR 583.682-010
cold-water machine operator 587.685-018
COLOR CHECKER, ROVING OR YARN 582.387-010
COLOR DIPPER 652.687-014
COLOR MIXER ..... term
color-mixer assistant 550.687-014
COLOR-PASTE MIXER 550.685-038
COLOR STRAINER 550.687-014
Color-Straining-Bag Washer 361.685-018
Comber Fixer 689.260-010
COMBER TENDER 680.685-118
combining-machine operator 584.682-014
compounder 550.585-018
CONDITIONER TENDER 587.685-022
conditioning-room worker 587.685-022
cone inspector 681.687-030
coner 681.685-098
Cone Winder 681.685-154
CONTINUOUS-CRUSHER OPERATOR 586.685-014
continuous-yarn dyeing-machine operator 582.685-158
cop breaker 689.686-014
copper-roller handler, printing 652.385-010
Cop Winder 681.685-154
CORDUROY-BRUSHER OPERATOR 585.685-034
CORDUROY-CUTTER OPERATOR 585.565-010
COTTON CLASSER 429.387-010
cotton grader 429.387-010
COTTON SAMPLER 922.687-042
COVERING-MACHINE OPERATOR 681.685-038
COVERING-MACHINE-OPERATOR HELPER 681.685-042
CRABBER 582.685-038
Creel Cleaner 699.687-014
crimping-machine operator 589.686-034
CRIMPING-MACHINE OPERATOR 680.685-030
CRIMP SETTER 680.685-026
curing oven tender 581.685-030
curling-machine operator 585.685-022
CUTTING-MACHINE FIXER 585.380-010
cutting-machine operator 585.565-010
CYLINDER BATCHER 582.665-010
cylinder dyer 582.685-014
DECATING-MACHINE OPERATOR 582.685-042
Desizing-Machine Back-Tender 589.686-010
desizing-machine offbearer 589.686-010
DESIZING-MACHINE OPERATOR, HEAD-END 582.685-046
desizing-pad operator 582.685-046
DETACHER 589.685-030
devil tender 680.685-050
die cutter 686.462-010
DIE-CUTTING-MACHINE OPERATOR, AUTOMATIC 686.462-010
DIPPER 589.687-018
dobby-loom chain-pegger 689.687-054
Dobby-Loom Fixer 683.260-018
DOFFER 689.686-022
doubler 681.685-046
doubling-and-rolling-machine operator 689.685-050
doubling-machine operator 689.685-050
DOUBLING-MACHINE OPERATOR 681.685-046
draft-roller picker 680.687-014
drawer 683.684-014
drawer 680.685-038
Drawer-In, Dobby Loom 683.684-014
DRAWER-IN, HAND 683.684-014
DRAWER-IN HELPER, HAND 683.687-010
Drawer-In, Jacquard Loom 683.684-014
Drawer-In, Plain Loom 683.684-014
DRAWER-IN, STITCH-BONDING MACHINE 689.684-014
DRAWING-FRAME TENDER 680.685-038
drawing-in hand 683.684-014
DRAWING-IN-MACHINE TENDER 683.682-018
DRAWING-IN-MACHINE-TENDER HELPER 683.685-022
drawing tender 680.685-038
draw-in hand 683.684-014

DRESSER TENDER 681.682-010
drier operator 581.685-026
drier tender 581.685-022
drier tender 580.685-066
DROP-WIRE ALIGNER 689.685-062
DROP-WIRE BUILDER 689.687-034
DROP-WIRE HANGER 683.687-014
drop-wire stringer 689.687-034
Dry-Cans Back-Tender 589.686-010
DRY-CANS OPERATOR 581.685-022
dry folder, cloth 589.685-058
Drying-Machine Back-Tender 589.686-010
drying-machine operator 581.685-054
DRYING-MACHINE OPERATOR, PACKAGE YARNS 581.685-026
drying-machine receiver 589.686-010
drying machine tender 581.685-022
drying-machine tender 589.686-010
drying-machine tender 580.685-066
DRYING-MACHINE TENDER 581.685-030
dry-slasher tender 681.585-010
DYE AUTOMATION OPERATOR 582.362-014
dye-beck-reel operator 582.665-014
DYED-YARN OPERATOR 582.685-058
dye feeder 582.582-010
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tentering-machine off-bearer 589.686-010
tentering-machine operator 580.685-066
TEXTURING-MACHINE FIXER 628.684-046
thread dresser 681.682-010
thread puller 689.687-058
thread singer 585.685-050
THREAD WINDER, AUTOMATIC 681.685-122
TICKETER 229.587-018
ticket stamper 229.587-018
tiger-machine operator 587.685-030
TIN-WHIZ-MACHINE OPERATOR 582.685-154
titrator 582.587-010
top cleaner 680.687-014
TOP-DYEING-MACHINE LOADER 582.686-030
Top-Dyeing-Machine Tender 582.685-102
TOWEL INSPECTOR 652.686-042
TRAVELER CHANGER 682.687-010
traveling cleaner, maintenance 628.684-022
treater 589.665-014
tricot-warper tender 681.685-018
TUBE CLEANER 589.687-042
TUBE COVERER 589.687-046
TUBE HANDLER 582.686-034
tuber 689.685-046
tubing drier 581.685-030
Tub Washer 599.687-030
TUFTING-MACHINE OPERATOR 687.685-018
Twister Doffer 689.686-022
TWISTER TENDER 681.685-130
twisting-frame changer 689.686-026
Twisting-Frame Fixer 689.260-010
twisting-tube selector 689.687-042
tying-in-machine operator 683.685-034
UPTWISTER TENDER 681.685-138
uptwist spinner 681.685-138
UTILITY TENDER, CARDING 689.685-166
UTILITY WORKER, CLOTH PRINTING 652.586-010
UTILITY WORKER, ROLLER SHOP 628.684-034
UTILITY WORKER, WOOLEN MILL 689.686-050
vacuum-extractor operator 581.685-042
VACUUM-TANK TENDER 689.665-018
vat tender 582.665-014
Warp-Bleaching-Vat Tender 582.685-158
warp changer 683.360-010
warp clamper 681.686-010
WARP COILER 582.686-038
warp drawer 683.684-014
warp dresser 681.682-010
WARP-DYEING-VAT TENDER 582.685-158
warper tender 681.685-018
warper tender 681.682-010
warp hanger 681.686-010
warp hanger 683.680-010
warping-mill operator 681.682-010
warp placer 681.686-010
Warp-Scouring-Vat Tender 582.685-158
WARP SPOOLER 681.685-142
warp starter 683.360-014
warp starter 683.684-018
WARP-TENSION TESTER 683.687-034
warp tier 683.680-010
warp trucker 681.686-010
warp-tying-machine knotter 683.685-034
WARP-TYING-MACHINE TENDER 683.685-034
WARP-YARN SORTER 681.687-022
washing-machine operator 582.685-030
wash-test checker 587.384-010
waste chopper 680.685-102
waste-cotton cleaner 680.685-114
waste duster 680.685-114
waste filling remover 689.685-094
WASTE HAND ..... term
waste-machine operator 680.685-050
WASTE-MACHINE TENDER 680.685-114
Water-Jet Loom Fixer 683.260-018
Water-Mangle Tender 584.685-042
Waterproofing-Machine Operator 589.665-014
Waterproofing Mixer 550.585-018
water sponger 587.685-018
WAX-MACHINE OPERATOR 584.685-050
WEAVE-DEFECT-CHARTING CLERK 221.587-042
WEAVER 683.682-038
WEAVER APPRENTICE 683.682-042
weaver, broadloom 683.682-038
Weaver, Dobby Loom 683.682-038
WEAVER, HAND 782.684-062
WEAVER, HAND LOOM 683.684-030
Weaver, Rapier-Insertion Loom 683.682-030
Weaver, Wire Loom 683.682-030
WEAVING INSPECTOR 683.684-034
WEAVING SUPERVISOR 683.130-022
Web Sizer 680.687-018
WEFT STRAIGHTENER 580.682-010
WEIGHT-YARDAGE CHECKER 589.487-010
WET-COTTON FEEDER 581.686-042
wet finisher, wool 586.682-010
whirling-machine operator 585.685-022
White-Washer Piler 589.686-010
wide-cloth folder 689.685-050
willow-machine operator 680.685-114
willow-machine tender 680.685-114
winder 681.685-154
Winder Fixer 689.260-010
WINDER OPERATOR, AUTOMATIC 681.685-150
winding-machine operator 681.685-154
winding-machine operator 689.685-046
wire dropper 683.687-014
Woolens Examiner 689.685-038
woolen-suiting shrinker 587.685-018
Wool-Picker Operator 680.685-082
WOOL SORTER 589.387-014
WOOL-WASHING-MACHINE OPERATOR 582.685-166
working second hand 652.260-010
Worsted Winder 681.685-154
wrapper-and-bagger, sheeting 929.687-042
Yardage Caller 209.667-014
yardage-machine operator 689.685-078
yardage-tufting-machine operator 687.685-018
yarding-and-folding-machine operator 689.685-078
Yarn-Bleaching-Machine Operator 582.685-102
YARN CLEANER 681.687-026
yarn conditioner 587.685-022
yarn-dry-room worker 581.685-054
yarn dyer 582.685-130
YARN EXAMINER 681.687-030
YARN EXAMINER, SKEINS 689.687-082
yarn inspector 681.687-030
yarn inspector 689.687-082
YARN-MERCERIZER-OPERATOR HELPER 584.686-010
YARN-MERCERIZER OPERATOR I 584.685-054
YARN-MERCERIZER OPERATOR II 584.685-058
YARN-POLISHING-MACHINE OPERATOR 583.685-126
yarn salvager 681.687-026
YARN SORTER 689.687-086
yarn tester 689.384-014
Yarn-Texturing Machine Fixer 689.260-010
YARN-TEXTURING-MACHINE OPERATOR I 681.685-158
YARN-TEXTURING-MACHINE OPERATOR II 689.685-158
Yarn-Weight-And-Strength Tester 689.384-014
YARN WINDER 681.685-154

tinware—TINWARE AND OTHER METAL CANS AND CONTAINERS INDUSTRY: This designation includes occupations concerned with manufacturing and repairing metal cans, such as tin cans and aluminum cans; and metal shipping containers, such as barrels, drums, kegs, and pails, except pressed tinware.

AUTOMATIC STACKER 619.686-010
Bag Sealer 709.686-010
bail attacher 703.685-010
Body Maker 616.685-042
BODY-MAKER-MACHINE SETTER 616.360-010
can-line examiner 709.367-010
Can-Reforming-Machine Operator 709.686-010
can-repairer 709.587-014
Can Stacker 709.686-010
can technician 709.367-010
can tester 703.685-014
Cleaner 709.686-010
coating mixer 509.485-010
COMPOUND-COATING-MACHINE OFFBEARER 509.666-010
COMPOUND MIXER 509.485-010
Doper Operator 741.687-018
end packer 509.666-010
INSPECTOR, METAL CAN 709.367-010
kinker 703.685-010
LABORER, TIN CAN 709.686-010
LITHOGRAPHED-PLATE INSPECTOR 651.687-010
LITHOGRAPH-PRESS OPERATOR, TINWARE 651.382-014
NAILER 739.687-126
PAIL BAILER 703.685-010
pail tester 703.685-014
PRESS FEEDER 652.685-058
Production Mechanic, Tin Cans 616.260-014
Seaming-Machine Operator 619.685-046
SLITTER SERVICE AND SETTER 615.280-010
snapper-on 703.685-010
SPOILAGE WORKER 709.587-014
SPRAY-MACHINE TENDER 599.685-090
SUPERVISOR, METAL CANS 703.132-010
TESTING-MACHINE OPERATOR 703.685-014
TIN STACKER 922.687-098

tobacco—TOBACCO INDUSTRY: This designation includes occupations concerned with stemming tobacco and manufacturing cigarettes, cigars, chewing tobacco, smoking tobacco, and snuff. Occupations concerned with the manufacture of cigarettes from vegetable substances are also included in this designation.

AUTOMATIC LUMP MAKING MACHINE TENDER 529.685-014
AUTO ROLLER 529.685-010
Bag-Filler-Machine Operator 920.685-098
BANDER-AND-CELLOPHANER HELPER, MACHINE 920.686-010
BANDER-AND-CELLOPHANER, MACHINE 920.685-014
BANDER, HAND 920.687-030
banding-and-cellophane-wrapping-machine-operator helper 920.686-010
binder 790.684-010
BINDER-AND-WRAPPER PACKER 922.687-014
Binder Caser 522.687-026
BINDER CUTTER, HAND 521.687-014
BINDER LAYER 529.685-018
binder roller 790.684-010
BINDER SELECTOR 521.687-018
binder sorter 521.687-018
Binder Stripper, Hand 521.687-134
Binder Stripper, Machine 521.685-334
BIN FILLER 922.687-010
bin packer 922.687-010
BLENDER 520.387-010
BLENDER LABORER 520.687-010
BLENDER, SNUFF 520.685-022
BLENDING-LINE ATTENDANT 520.685-026
BLENDING SUPERVISOR 520.136-010
BOOKING PRIZER 216.462-010
BULKER 522.687-018
BULKER, CUT TOBACCO 529.685-034
Bull-Gang Supervisor 922.137-018
BULL-GANG WORKER 922.687-026
bunch breaker 790.684-010
bunch-breaker-machine operator 529.685-038
buncher, hand 790.684-010
buncher, machine 529.685-038
BUNCH MAKER, HAND 790.684-010
BUNCH MAKER, MACHINE 529.685-038
BUNCH TRIMMER, MOLD 521.687-026
bundle shaker 521.687-110
BUNDLES HANGER 529.686-010
BUTT MAKER 529.685-042
can feeder 920.686-030
CAN FILLER 922.687-030
Can-Filling-Machine Operator 920.685-098
carrier blower 529.687-194
carrier washer 529.687-194
CARTON-COUNTER FEEDER 921.686-010
carton filler 920.687-130
CARTON INSPECTOR 920.687-070
CARTON-PACKAGING-MACHINE OPERATOR 920.665-010
carton searcher 920.687-070
case packer 920.687-130
CASE PACKER AND SEALER 920.685-038
caser helper 522.687-030
case sealer 920.687-130
CASING-FLUID TENDER 520.685-054
CASING-MACHINE OPERATOR 522.685-030
CASING-MATERIAL WEIGHER 520.687-026
casing mixer 520.687-026
casing wetter 522.687-026
casing-wringer operator 522.685-106
CATCHER, FILTER TIP 529.666-010
catcher, plug 529.666-010
catching inspector 529.567-010
cellophane-wrapping examiner 920.667-010
cheese cutter 521.685-298
chute feeder 529.686-038
cigar bander, hand 920.687-030
CIGAR BRANDER 920.685-046
cigarette and assembly-machine inspector 529.666-014
cigarette and assembly machine operator 529.685-066
CIGARETTE-AND-FILTER CHIEF INSPECTOR 529.367-010
Cigarette-Boxing-Machine Operator 920.665-010
Cigarette-Carton Sealer 920.685-074
cigarette examiner 529.567-010
CIGARETTE-FILTER-MAKING-MACHINE OPERATOR 529.685-062
CIGARETTE INSPECTOR 529.567-010
cigarette-making examiner 529.567-010
CIGARETTE-MAKING-MACHINE CATCHER 529.666-014
CIGARETTE-MAKING-MACHINE-HOPPER FEEDER 529.686-018
CIGARETTE-MAKING-MACHINE OPERATOR 529.685-066
CIGARETTE-PACKAGE EXAMINER 920.667-010
CIGARETTE-PACKING-MACHINE OPERATOR 920.685-050
CIGARETTE TESTER 529.387-014
cigar-head holer 529.685-058
cigar-head pegger 529.685-058
cigar-head perforator 529.685-058
CIGAR-HEAD PIERCER 529.685-058
cigar-head puncher 529.685-058
cigar-head stringer 529.687-042
CIGAR INSPECTOR 790.684-014
CIGAR MAKER ..... term
CIGAR MAKER, LONG-FILLER MACHINE 790.687-014
CIGAR PACKER 790.687-014
cigar packer and grader 790.687-014
cigar packer and picker 790.687-014
cigar packer and shader 790.687-014
cigar packer and sorter 529.687-042
cigar-packing examiner 790.684-018
cigar patcher 790.684-022
cigar roller 790.687-014
cigar sorter 522.687-026
Cigar-Tobacco Rehandler 529.685-286
CIGAR-WRAPPER TENDER, AUTOMATIC 522.682-014
conditioning-machine operator 920.685-038
container-packer operator 529.686-038
conveyor feeder 520.685-082
COOKER, CASING 529.135-010
COOKING, CASING, AND DRYING SUPERVISOR 521.685-330
crusher operator 920.687-130
Cut-Plug Packer 529.685-090
DEFECTIVE-CIGARETTE SLITTER 529.687-070
DISTRIBUTOR-CLEANER 523.685-118
drying-oven tender 523.587-014
DRYING-ROOM ATTENDANT 529.567-014
embossing clerk 529.686-038
FEEDER-CATCHER, TOBACCO 520.687-030
filler blender 529.686-042
FILLER FEEDER 521.687-014
filler-leaf cutter, long 520.687-030
FILLER MIXER 521.687-110
filler opener 521.687-098
Filler Picker 522.687-022
FILLER ROOM ATTENDANT 521.687-110
filler shaker 529.687-078
FILLER-SHREDDER HELPER 529.685-110
FILLER SHREDDER, MACHINE 529.687-078
filler-shredding-machine loader 529.687-078

filler-sifter helper 529.687-078
filler sifter, machine 529.685-110
FILLER SPREADER 521.687-046
filler stemmer, hand 521.687-134
Filter-Cigarette-Making-Machine Operator 529.685-066
final cigar and box examiner 529.687-042
finished-cigar maker 790.684-014
flavoring-machine operator 522.685-030
flavoring maker 520.685-054
flavor maker 520.685-082
floor hand 529.687-070
FLOOR-SPACE ALLOCATOR 222.367-030
fluoroscope operator 529.685-274
FRESH-WORK INSPECTOR 529.687-090
fresh-work wrapper-layer 529.685-266
Frog Shaker 521.687-110
Granulated-Tobacco Screener 521.685-270
granulating blender 520.387-010
GRANULATING-MACHINE OPERATOR 521.685-158
granulator operator 521.685-158
Green-Prize Packer 920.687-142
hand roller 790.687-030
hand shaker 521.687-110
hands hanger 529.686-010
hands-size sorter 529.687-142
head-out worker 920.687-110
Hogshead Dumper 929.687-030
hogshead filler 920.687-142
hogshead hand 920.687-102
HOGSHEAD INSPECTOR 529.367-014
hogshead liner 920.687-110
HOGSHEAD OPENER 920.687-102
hogshead packer 920.687-142
hogshead-press operator 920.685-062
hogshead roller 922.687-026
Hogshead-Stock Clerk 222.387-058
hogshead stripper 920.687-102
hogshead unpacker 920.687-102
hogshead wrecker 920.687-102
hopper feeder 529.686-038
HUMIDIFIER ATTENDANT 950.485-010
humidifier-maintenance worker 950.485-010
humid-system operator 950.485-010
HYDRAULIC-PRESS OPERATOR 920.685-062
INSPECTOR, FILTER TIP 529.667-010
inspector, plug seam 529.667-010
KNIFE CHANGER 638.684-010
kn. e setter 638.684-010
lamina searcher 521.687-098
leaf binner 922.687-010
leaf blender 520.387-010
LEAF CONDITIONER 522.687-026
LEAF-CONDITIONER HELPER 522.687-030
LEAF-SIZE PICKER 529.687-142
LEAF SORTER 529.687-134
leaf stemmer, hand 521.687-134
LEAF TIER 529.687-138
leaf tinner 922.687-010
LINE-OUT WORKER I 920.687-110
LINE-OUT WORKER II 920.687-114
LINER INSERTER 929.687-026
load-out worker 922.687-026
long-filler-cigar roller, machine 529.685-266
loose-hand packer 920.687-142
LUMP INSPECTOR 790.687-018
lump receiver 790.687-018
Machine Adjuster 638.281-014
making-machine catcher 529.666-014
making-machine operator, filter 529.685-066
MARKER, COMPANY 529.567-014
MOISTURE-MACHINE TENDER 529.685-170
MOISTURE-METER OPERATOR 529.687-162
moisture-test puller 529.587-022
mold carrier 790.687-022
MOLD PRESSER 790.687-022
ODD BUNDLE WORKER 529.687-166
ordering-box operator 522.682-014
ORDERING-MACHINE OPERATOR 522.682-014
out-and-out cigar maker, hand 790.684-014
overshot operator 522.685-030
package reinspector 920.667-010
Packaging-Machine-Supplies Distributor 929.687-030
packaging operator 920.685-050
PACKER 920.687-130
packer 920.687-142
PACKER OPERATOR, AUTOMATIC 920.685-082
packing-and-stamping machine operator 920.685-098
PACKING-FLOOR WORKER 920.686-026
PACKING-MACHINE CAN FEEDER 920.686-030
Packing-Machine Feeder 529.686-038
packing-machine inspector 920.665-010
packing-machine inspector 920.667-010
PACKING-MACHINE-PILOT CAN ROUTER 920.685-086
packing-machine relief-operator-and-salvager see RELIEF WORKER
packing presser 920.686-050
patcher 790.684-018
PATCH WORKER 790.684-018
PICKER 521.687-098
pilot-can router 920.685-086
plug-cutter 529.685-182
plug-cutting-and-wrapping-machine operator 529.685-182
PLUG-CUTTING-MACHINE OPERATOR 529.685-182
plug-making operator 529.685-062
PLUG-OVERWRAP-MACHINE TENDER 529.685-186
PLUG SHAPER, HAND 520.687-050
PLUG SHAPER, MACHINE 520.686-034
Pouch-Making-Machine Operator 920.685-098
PRESS MACHINE FEEDER 529.686-066
press operator, automatic 920.685-082
prize jacker 920.685-062
PRIZER 920.687-142
racker 529.687-090
RACK LOADER I 529.686-074
Rack Loader II 529.686-038
REDRYING-MACHINE OPERATOR 522.662-014
REJECT OPENER 790.687-026
reject opener and filler 790.687-026
RELIEF WORKER ..... term
reroller, hand 790.684-018
RESERVE OPERATOR 529.685-206
RIDDLER OPERATOR 521.685-270
ripper operator 529.685-090
roller 922.687-026
ROLLER, HAND 790.684-022
roller operator 521.685-330
Sample Driller 529.587-022
sample puller 529.587-022
Scrap-Bunch Maker 529.685-038
scrap cutter, machine 529.685-110
scrap-filler-cigar roller, machine 529.685-270
scrap picker 521.687-098
scrap preparer 520.687-030
Scrap Sorter 521.687-098
Scrap Stripper, Hand 521.687-134
searcher 521.687-098
Seed And Havana-Scrap Preparer 520.687-030
selector 529.687-134
selector 529.687-090
SHAKER 521.687-110
shape hand 520.687-050
short-filler-bunch-machine operator 529.685-038
Shorts Sifter 521.685-270
shredded-filler cigar-maker, machine 529.685-270
shredded-filler-cutter operator 529.685-110
SHREDDED-FILLER HOPPER-FEEDER 529.687-182
shredded-filler-machine wrapper-layer 529.685-270
shredding-machine-knife changer 638.684-010
shredding-machine operator 521.685-338
SILO OPERATOR 529.682-030
slice-cutting-machine operator 521.685-298
slice-cutting-machine-operator helper 521.686-054
SLICE-PLUG-CUTTER OPERATOR 521.685-298
SLICE-PLUG-CUTTER-OPERATOR HELPER 521.686-054
slitting-machine feeder 529.685-090
SMOKING-TOBACCO-CUTTER OPERATOR 521.685-310
Smoking-Tobacco Packer, Hand 920.687-130
Smoking-Tobacco-Packing-Machine Hand 920.685-098
SNUFF-BOX FINISHER 920.687-174
SNUFF-CONTAINER INSPECTOR 920.667-014
Snuff Drier 523.685-118
SNUFF GRINDER AND SCREENER 521.685-314
SNUFF-PACKING-MACHINE OPERATOR 920.685-094
soft-work-cigar-machine operator 529.685-270
SPECIAL TESTER 529.487-010
SPREADER OPERATOR, AUTOMATIC 529.685-222
sprigger 521.687-134
steam-box tender 522.682-014
STEAM-CONDITIONER OPERATOR 522.685-094
steamer 522.682-014

steam-pressure-chamber operator 522.685-102
stem-cleaning-machine feeder 521.685-362
STEM-DRYER MAINTAINER 529.685-230
STEMMER, HAND 521.687-134
STEMMER, MACHINE 521.685-334
STEM-ROLLER-OR-CRUSHER OPERATOR 521.685-330
stem-threshing-machine operator 521.685-362
stick feeder 529.686-074
stogie maker, hand 790.684-014
Stogie Packer 790.687-014
STRIP-CUTTING-MACHINE OPERATOR 521.685-338
strip feeder 529.685-222
stripping-and-booking-machine operator 521.685-334
SUCTION-PLATE-CARRIER CLEANER 529.687-194
suction-plate roller, hand 790.684-022
suction roller 790.684-022
SUMATRA OPENER 529.687-198
SUPERVISOR 529.137-026
Supervisor, Cigarette-Filter Making Department 529.137-026
Supervisor, Cigarette-Making Department 529.137-026
Supervisor, Cigarette-Packing Department 529.137-026
SUPERVISOR, CIGAR MAKING, HAND 790.134-010
SUPERVISOR, CIGAR-MAKING MACHINE 529.132-034
Supervisor, Cigar Processing 529.137-026
SUPERVISOR, CIGAR TOBACCO PROCESSING 529.137-034
SUPERVISOR, CURING ROOM 529.137-038
SUPERVISOR, LUMP ROOM 520.137-010
SUPERVISOR, PICKING 521.137-010
supervisor, rolling room 520.137-010
SUPERVISOR, THRESHING DEPARTMENT 521.132-014
TABLE HAND 521.687-138
table inspector 529.687-090
tag-meter operator 529.687-162
TARE WEIGHER 221.587-034
tester operator 529.387-014
test puller 529.587-022
THRESHING-MACHINE OPERATOR 521.685-362
TICKET PULLER 221.687-014
TICKET WORKER 221.482-018
tin-can feeder 920.686-030
TIN-CONTAINER STRIAGHTENER 709.687-046
TIP-LENGTH CHECKER 529.467-010
tip tester 529.467-010
Toaster Operator 523.685-118
Tobacco Baler 920.685-010
tobacco cleaner 521.685-270
tobacco conditioner 522.687-026
tobacco curer 522.687-026
tobacco cutter 521.685-338
tobacco cutter 521.685-310
tobacco cutter 521.685-298
tobacco dipper 522.687-026
TOBACCO-DRIER OPERATOR 523.685-118
tobacco drying-machine operator 522.662-014
tobacco flavorer 522.685-030
TOBACCO-PACKING-MACHINE OPERATOR 920.685-098
tobacco roller 790.687-030
TOBACCO-SAMPLE PULLER 529.587-022
Tobacco-Scrap Sifter 521.685-270
tobacco shaker 521.687-110
tobacco-sieve operator 521.685-270
tobacco sprayer 522.687-042
Tobacco-Stem-Drier Operator 523.685-118
tobacco stemmer, machine 521.685-334
tobacco stripper, hand 521.687-134
tobacco-stripping-machine operator 521.685-334
top flavor attendant 520.687-026
TRAY FILLER 920.686-050
tray packer 920.686-050
Turkish-Line Attendant 520.685-026
TWISTER, HAND 790.687-030
twist maker 790.687-030
Twist Packer 920.687-130
utility hand see RELIEF WORKER
VACUUM-CONDITIONER OPERATOR 522.685-102
Virginia-Line Attendant 520.685-026
Wrapper Caser 522.687-026
WRAPPER COUNTER 929.687-050
wrapper dipper 522.685-106
wrapper, hand 790.684-022
WRAPPER-HANDS SPRAYER 522.687-042
WRAPPER LAYER 529.685-266
WRAPPER-LAYER-AND-EXAMINER, SOFT WORK 529.685-270
wrapper-leaf inspector 529.687-134
Wrapper Opener 521.687-110
WRAPPER SELECTOR 529.687-218
wrapper sizer 529.687-218
wrapper sorter 529.687-218
wrapper stemmer, hand 521.687-134
wrapper-stemmer operator 521.685-334
Wrapper Stripper 521.685-334
Wrapper Stripper, Hand 521.687-134
WRAPPING MACHINE HELPER 529.687-222
WRINGER OPERATOR 522.685-106
X-RAY INSPECTOR 529.685-274

toy-sport equip.—TOYS, GAMES, AND SPORTS EQUIPMENT INDUSTRY. This designation includes occupations concerned with manufacturing and repairing apparatus for games, toys of all kinds, children's vehicles, baby carriages, related products, and sporting and athletic goods, not elsewhere classified. Other typical products include dolls, golf and tennis goods, baseball, football, basketball, and boxing equipment, roller and ice skates, gymnasium and playground equipment, billiard and pool tables, and fishing equipment. Occupations concerned with manufacturing rubber dolls are included in the RUBBER GOODS INDUSTRY (rubber goods). Occupations concerned with manufacturing sports apparel are included in the GARMENT INDUSTRY (garment).

ADHESIVE PRIMER 732.687-010
Air-Tank Assembler 732.684-014
Arrow-Point Attacher 795.687-014
ARROWSMITH 732.684-010
artificial-fly tier 732.684-074
ASSEMBLER 732.684-014
ASSEMBLER, BILLIARD-TABLE 732.384-010
ASSEMBLER, FISHING FLOATS 732.687-014
Assembler, Golf-Wood Head 732.381-022
ASSEMBLER, LAY-UPS 677.685-014
ASSEMBLER, LIQUID CENTER 732.684-018
ASSEMBLER, PING-PONG TABLE 732.684-022
Assembler, Toy Voices 731.687-034
Assembly Supervisor 732.130-010
Bait Painter 741.684-018
bait tier 732.684-074
balancer 732.687-086
BALL ASSEMBLER 732.684-026
BALL-TRUING-MACHINE OPERATOR 690.682-014
baseball-glove stuffer 732.687-042
BASEBALL INSPECTOR AND REPAIRER 732.684-030
BASEBALL SEWER, HAND 732.684-034
Baseball Winder 692.685-246
BASE FILLER 732.687-018
BASE-FILLER OPERATOR 732.685-010
Basketball Assembler 732.684-026
Bender 569.685-014
Billiard-Table Repairer 732.384-010
blower 731.685-014
BLOW-MOLDING-MACHINE TENDER 556.685-086
Bottom Stitcher 732.684-050
BOWLING-BALL ENGRAVER 732.584-010
BOWLING-BALL FINISHER 690.685-038
BOWLING-BALL GRADER AND MARKER 732.381-014
BOWLING-BALL-MOLD ASSEMBLER 556.687-010
BOWLING-BALL MOLDER 556.685-018
BOWLING-BALL WEIGHER AND PACKER 732.487-010
BOW MAKER, CUSTOM 732.381-010
BOW MAKER, PRODUCTION 732.684-038
Bow Repairer, Custom 732.381-010
BOW-STRING MAKER 732.684-042
breaker 732.687-050
Carcass Assembler 732.684-026
CASTING-PLUG ASSEMBLER 732.687-022
CELLULOID TRIMMER 732.684-046
Closer 787.682-054
club former 732.381-018
CORE SHAPER 692.685-058
Core Shaper, Sides 692.685-058
Core Shaper, Top 692.685-058
CORK GRINDER 662.685-010
cover treater 559.685-102
Crester 732.684-010
Crossbow Maker 732.684-038
Cushion Former 732.384-010
Cushion Installer 732.384-010
CUSTOM SKI MAKER 732.281-010
cutter 732.685-014
DECORATOR 749.684-014
DICE MAKER 731.381-010
Dice Spotter 740.687-018
Diving-Board Assembler 732.684-014

toy-sport equip.

Doll-Eye-Setter 731.687-034
Door Closer 732.684-026
Fabrication Supervisor 732.130-010
facer 761.684-010
FEATHER SAWYER 732.685-014
FEATHER STITCHER 732.684-050
felt cementer 795.687-030
felt coverer 795.687-026
felter, tennis balls 795.687-026
FINISHER 732.584-014
FINISHER, HAND 731.587-010
FISHING ACCESSORIES MAKER 619.682-018
FISHING-LURE ASSEMBLER 732.684-058
FISHING-REEL ASSEMBLER 732.684-062
FISHING-ROD ASSEMBLER 732.684-066
FISHING-ROD MARKER 732.684-070
fishing-rod trimmer 732.684-066
FISH-STRINGER ASSEMBLER 732.684-054
FIXING-MACHINE OPERATOR 732.685-018
Fletcher 732.684-010
FLY TIER 732.684-074
fly winder 732.684-074
forming-press operator 556.685-066
Frame Assembler 732.384-010
Gel-Coat Sprayer 741.684-026
GOLF-BALL-COVER TREATER 559.685-102
Golf Ball Molder 556.685-066
GOLF-BALL TRIMMER 732.587-010
Golf-Ball Winder 692.685-246
GOLF-CLUB ASSEMBLER 732.684-078
GOLF-CLUB FACER 761.684-010
Golf-Club Finisher 732.381-022
GOLF-CLUB HEAD FORMER 732.381-018
Golf-Club Maker 732.381-022
golf-club matcher 732.587-014
GOLF-CLUB REPAIRER 732.381-022
GOLF-CLUB WEIGHER 732.587-014
GOLF-CLUB WEIGHTER 732.687-026
grade and center marker 732.381-014
grinder operator 662.685-010
gripper 732.684-082
GRIP WRAPPER 732.684-082
GUIDE-BASE WINDER, MACHINE 732.685-022
guide winder 732.685-022
GUIDE WINDER 732.684-086
HACKLER, DOLL WIGS 731.687-018
Hand Finisher, Bowling Balls 690.685-038
hand lacer 732.687-034
hand stitcher 732.684-034
HAY SORTER 732.686-010
Hook Loader 599.686-014
hydraulic-steam-press operator 556.685-066
inserter 732.687-042
INSPECTOR 732.684-130
INSPECTOR AND ADJUSTER, GOLF CLUB HEAD 732.384-014
INSPECTOR, GOLF BALL 732.567-010
INSPECTOR, TOYS 731.687-022
LABORER 732.687-030
LACER 732.687-034
leader assembler 732.687-038
LEADER TIER 732.687-038
Leather Coverer 732.684-026
Leg Assembler 732.384-010
LINING INSERTER 732.687-042
lining stuffer 732.687-042
loft and lie inspector and adjuster 732.384-014
MACHINE SNELLER 732.685-026
Middle Stitcher 732.684-050
MODEL MAKER 731.280-010
MOLD CLEANER 732.687-046
molder 732.687-070
MOLDER, INFLATED BALL 732.687-054
MOLDER, WAX BALL 732.687-058
MOLD FILLER 556.687-030
MOLD FILLER, PLASTIC DOLLS 731.687-026
MOLDING-MACHINE OPERATOR 575.682-014
molding-press operator 556.685-066
Mold Mover 929.687-030
MOLD STRIPPER 732.687-050
Nock Applier 795.687-014
PAINTER AND GRADER, CORK 732.687-062
PAINTER, SKI EDGE 749.687-022
PAINT-LINE OPERATOR 599.685-066
PATCHER, BOWLING BALL 759.684-046
PELOTA MAKER 732.684-090
PINSETTER ADJUSTER, AUTOMATIC 829.381-010
plastic ball buffer 690.685-038
Pocket Assembler 732.384-010
press operator, carcass 732.687-054
press operator, wax ball 732.687-058
PRESS TENDER 556.685-066
process inspector 732.684-130
PUZZLE ASSEMBLER 731.687-030
RACKER 749.587-010
RACKET STRINGER 732.684-094
Rail Assembler 732.384-010
reel assembler 732.684-062
Repair Supervisor 732.130-010
REVERSER 732.687-066
ROLLER OPERATOR 652.685-078
ROLLER-SKATE ASSEMBLER 732.684-098
ROUGH-AND-TRUEING-MACHINE OPERATOR 690.685-330
Rubber Attacher 795.687-014
rubber ball finisher 690.685-038
RUBBER-THREAD SPOOLER 681.685-090
SANDER 690.685-346
SEWING-MACHINE OPERATOR 787.682-054
Shadowgraph-Weight Operator 929.687-062
SHAPER, BASEBALL GLOVE 732.684-106
shuttlecock assembler 732.685-018
Shuttlecock-Feather Trimmer 699.685-014
SINKER WINDER 732.685-030
SKI BASE TRIMMER 732.684-110
SKI-BINDING FITTER-AND-REPAIRER 732.364-014
SKI MAKER, WOOD 761.381-026
SKI MOLDER 732.684-114
SKI REPAIRER, PRODUCTION 732.684-118
SKI TOPPER 692.685-170
Sneller, Hand 732.687-038
Soccer Ball Assembler 732.684-026
SOFTBALL CORE MOLDER 732.687-070
Softball Winder 692.685-246
solid center winder 692.685-246
SPIN-TABLE OPERATOR 732.687-074
Spoke Maker 617.665-010
steamer and shaper 732.684-106
stitcher, hand 732.684-050
Stuffed-Toy Joiner 731.687-034
STUFFER 731.685-014
STUFFING-MACHINE OPERATOR 732.685-034
SUPERVISOR 732.130-010
Supervisor, Core Shop 692.132-018
SUPERVISOR, FABRICATION AND ASSEMBLY 809.131-010
Supervisor, Finishing 692.132-018
SUPERVISOR, FISH BAIT PROCESSING 550.132-014
Supervisor, Model Making 731.131-010
SUPERVISOR, NET MAKING 789.132-022
SUPERVISOR, PLASTICS 556.130-014
Supervisor, Sanding 692.132-018
SUPERVISOR, SKI PRODUCTION 692.132-018
Supervisor, Stuffed-Toy Shells 787.132-010
SUPERVISOR, TOY ASSEMBLY 731.131-010
SUPERVISOR, TOY PARTS FORMER 692.130-034
SURFBOARD MAKER 732.684-126
Target-Face Maker 979.684-034
TARGET TRIMMER 732.687-078
TENNIS-BALL-COVER CEMENTER 795.687-030
TENNIS-BALL COVERER, HAND 795.687-026
TESTER, REGULATOR 710.387-010
thread spooler 681.685-090
TIRE SETTER 731.685-018
Top Stitcher 732.684-050
TOY ASSEMBLER 731.687-034
Toy Assembler, Plastic 731.687-034
Toy Assembler, Wood 731.687-034
toy stuffer 731.685-014
trimmer, machine 732.685-038
TRIMMING-MACHINE OPERATOR 732.685-038
Trim Mounter 732.384-010
turner 732.687-066
Two-Stage, Steel-Bender Annealer 617.685-010
Volleyball Assembler 732.684-026
Water-Ski Assembler 732.684-014
WAX-BALL KNOCK-OUT WORKER 732.687-082
WEIGHER 732.687-086
weighter 732.687-026
weight tester 732.687-086
Wheel Assembler, Baby Carriage 731.687-034
Wig Comber 731.687-018
WINDER 692.685-246

winder, gammeter 692.685-246
Wood-Club-Neck Whipper 732.684-082

utilities—UTILITIES (LIGHT, HEAT, AND POWER) INDUSTRY: This designation includes occupations concerned with generating electricity in steam and hydroelectric power plants; transmitting and distributing electricity; distributing manufactured and natural heating and illuminating gas; producing and distributing steam heat and power; and the activities related to such functions. Occupations concerned with transporting petroleum and gas products are included in the PIPE LINES INDUSTRY (pipe lines).

ACCOUNT-INFORMATION CLERK 210.367-010
adjustment clerk 239.362-014
APPLIANCE-SERVICE SUPERVISOR 187.167-010
application clerk 239.362-014
arc trimmer 952.667-010
area-development consultant 184.117-030
AUXILIARY-EQUIPMENT OPERATOR 952.362-010
BATTERY MAINTAINER, LARGE EMERGENCY STORAGE 820.381-010
BILLING-CONTROL CLERK 214.387-010
billing supervisor 214.137-022
Bill Recapitulation Clerk 216.482-010
boulevard-glassware cleaner 952.667-010
boulevard-glassware replacer 952.667-010
BUILDING-EQUIPMENT INSPECTOR 959.387-010
CABLE INSTALLER-REPAIRER 821.361-010
Cable Installer-Repairer Helper 821.667-010
CABLE MAINTAINER 952.464-010
cable placer 829.684-018
CABLE PULLER 829.684-018
cable rigger 829.684-018
CABLE SPLICER 829.361-010
CABLE-SPLICER APPRENTICE 829.361-014
CABLE-SPLICER HELPER 829.667-010
cable-splicing supervisor 829.131-010
CABLE SUPERVISOR 829.131-010
carbon-lamp cleaner 952.667-010
Central-Control-Room Operator 952.362-042
CHART CALCULATOR 214.487-010
chart clerk 216.685-010
chief dispatcher 952.137-010
CHIEF LOAD DISPATCHER 952.137-010
chief-maintenance supervisor 862.137-014
chief operating engineer 184.167-166
chief power dispatcher 184.167-150
chief, relay tester 729.131-014
Circuit-Breaker Mechanic 829.261-018
Circuit-Breaker Supervisor 829.131-014
COAL-EQUIPMENT OPERATOR 921.683-022
COAL SAMPLER 922.687-038
coal-transport-and-mill operator 544.665-010
COMMERCIAL-INSTRUCTOR SUPERVISOR 239.137-010
commercial service representative 253.357-010
COMPLAINT INSPECTOR 829.261-010
complaint supervisor 953.137-018
compressor-house operator 953.382-010
CONDUIT MECHANIC 869.361-010
CONSTRUCTION CHECKER 821.367-010
Construction-Records Clerk 219.362-010
CONTACT CLERK 209.387-018
CORROSION-CONTROL FITTER 820.361-010
COST-AND-SALES-RECORD SUPERVISOR 216.137-010
Cost-Estimating Clerk 216.382-034
CUSTOMER-SERVICE REPRESENTATIVE 239.362-014
CUSTOMER SERVICE REPRESENTATIVE 959.361-010
customer-service representative 241.267-034
CUSTOMER-SERVICE-REPRESENTATIVE INSTR 239.227-010
CUSTOMER-SERVICE REPRESENTATIVE SUPERVISOR 239.137-014
Demand Equipment Repairer 715.281-010
demand inspector 952.367-010
DEMONSTRATOR, ELECTRIC-GAS APPLIANCES 297.357-010
DEPOSIT CLERK 241.267-026
DEPOSIT-REFUND CLERK 214.482-014
detail and lay-out drafter 019.261-014
development-and-planning engineer 003.167-026
DIESEL-PLANT OPERATOR 952.382-010
Diesel-Powerplant Mechanic 631.261-014
Diesel-Powerplant-Mechanic Helper 631.684-010
Diesel-Powerplant Supervisor 631.131-010
DISPATCHER, CHIEF, SERVICE OR WORK 959.137-010
dispatcher, electric power 952.167-014
DISPATCHER, SERVICE 959.167-010
DISPATCHER, SERVICE, CHIEF 959.137-014
DISPATCHER, SERVICE OR WORK 952.167-010
DISTRIBUTION-ACCOUNTING CLERK 210.362-010
distribution district supervisor 952.137-018
distribution estimator 019.261-014
DISTRIBUTION-FIELD ENGINEER 003.167-014
district manager 184.167-150
Division Field Inspector 168.264-018
DRAFTER, CHIEF, DESIGN 017.161-010
DRIER OPERATOR 543.382-010
DRIP PUMPER 953.583-010
duct layer 869.361-010
Duct-Layer Helper 821.667-010
Duct-Layer Supervisor 899.131-010
dynamo operator see GENERATOR OPERATOR .....
earth-auger operator 859.682-010
EARTH-BORING-MACHINE OPERATOR 859.682-010
electrical-appliance service supervisor 187.167-010
ELECTRICAL ENGINEER, POWER SYSTEM 003.167-018
ELECTRICAL-INSTALLATION SUPERVISOR 821.131-010
ELECTRICAL TESTER ..... term
Electrical-Tests Supervisor 184.167-218
electrical-transmission engineer 003.167-050
ELECTRIC-DISTRIBUTION CHECKER 824.281-014
electric-distribution engineer 003.167-046
ELECTRICIAN APPRENTICE, POWERHOUSE 820.261-010
electrician, cable-splicing 829.361-010
electrician-constructor supervisor 821.131-026
electrician helper 821.667-010
Electrician Helper, Powerhouse 821.667-010
ELECTRICIAN, POWERHOUSE 820.261-014
Electrician, Rectifier Maintenance 829.261-018
ELECTRICIAN, SUBSTATION 820.261-018
ELECTRICIAN SUPERVISOR, SUBSTATION 820.131-010
electrician, underground 821.361-010
electric-meter inspector 821.364-010
Electric-Meter-Installer Helper 821.667-010
ELECTRIC-METER INSTALLER I 821.361-014
ELECTRIC-METER INSTALLER II 821.684-010
Electric-Meter Reader 209.567-010
ELECTRIC-METER REPAIRER 729.281-014
ELECTRIC-METER-REPAIRER APPRENTICE 729.281-018
Electric-Meter-Repairer Helper 821.564-010
ELECTRIC-METER TESTER 821.381-010
Electric-Meter-Tester Helper 821.564-010
electric-meter tester, shop 729.281-034
ELECTRIC POWERLINE EXAMINER 959.367-010
electric-repair supervisor 820.131-010
Emergency-Crew Supervisor 821.131-014
ENERGY-CONSERVATION REPRESENTATIVE 959.367-018
engineer, booster and exhauster 953.382-010
Engineer, Design-And-Construction 003.167-018
engineer, gas-pumping station 953.382-010
ENGINEER OF SYSTEM DEVELOPMENT 003.167-026
Engineer, Operations-And-Maintenance 003.167-018
ESTIMATOR AND DRAFTER 019.261-014
Expenditure-Requisition Clerk 216.382-022
EXTENSION CLERK 219.362-030
FEEDER-SWITCHBOARD OPERATOR 952.362-014
field clerk 229.367-010
field inspector 869.387-010
field inspector 959.361-010
FIELD-MECHANICAL-METER TESTER 953.281-010
FIELD RECORDER 229.367-010
FIXED-CAPITAL CLERK 210.382-042
FURNACE INSTALLER 862.361-010
Furnace Installer Helper 862.684-022
GAS DISPATCHER 953.167-010
GAS-DISTRIBUTION-AND-EMERGENCY CLERK 249.367-042
gas-distribution supervisor 862.137-010
gas fitter 953.364-010
GAS INSPECTOR 168.264-018
GAS-LEAK INSPECTOR 953.367-010
GAS-LEAK INSPECTOR HELPER 953.667-010
GAS-MAIN FITTER 862.361-014
gas-meter adjuster 710.281-022
GAS-METER CHECKER 953.367-014
GAS-METER INSTALLER 953.364-010
GAS-METER-INSTALLER HELPER 953.687-010
GAS-METER MECHANIC I 710.381-022
GAS-METER MECHANIC II 710.684-026
GAS-METER PROVER 710.281-022
Gas-Meter Reader 209.567-010
gas-meter repairer 710.684-026
GAS-METER TESTER ..... term
GAS-PUMPING-STATION HELPER 953.684-010

GAS-PUMPING-STATION OPERATOR 953.382-010
GAS-PUMPING-STATION SUPERVISOR 953.137-010
GAS-REGULATOR REPAIRER 710.381-026
GAS-REGULATOR-REPAIRER HELPER 710.384-010
gas-substation operator 953.382-010
Gas-Turbine-Powerplant Mechanic 631.261-014
Gas-Turbine-Powerplant-Mechanic Helper 631.684-010
GAS USAGE METER CLERK 216.685-010
general superintendent, power sales and service 163.167-022
general utility worker 952.687-010
generating-substation-operator assistant 952.367-014
generation-mechanic helper 631.684-010
GENERATOR OPERATOR ..... term
generator-switchboard operator 952.362-034
Geothermal-Powerplant Mechanic 631.261-014
Geothermal-Powerplant-Mechanic Helper 631.684-010
Geothermal-Powerplant Supervisor 631.131-010
Ground Helper 821.684-014
Grounding Engineer 003.167-054
HELPER, ELECTRICAL 821.667-010
HELPER, LIQUEFACTION-AND-REGASIFICATION 953.584-010
hiker 821.361-026
HISTORY-CARD CLERK 209.587-022
hole-digger operator 859.682-010
Hole-Digger-Truck Driver 905.663-014
HOUSE-PIPING INSPECTOR 953.367-018
HYDROELECTRIC-MACHINERY MECHANIC 631.261-010
HYDROELECTRIC-MACHINERY-MECHANIC HELPER 631.364-010
HYDROELECTRIC-PLANT MAINTAINER 952.687-010
Hydroelectric-Powerplant Supervisor 631.131-010
HYDROELECTRIC-STATION OPERATOR 952.362-018
HYDROELECTRIC-STATION OPERATOR, CHIEF 952.137-014
INDUCTION-COORDINATION POWER ENGINEER 003.167-038
INDUSTRIAL-GAS FITTER 862.381-014
INDUSTRIAL-GAS SERVICER 637.261-022
INDUSTRIAL-GAS-SERVICER HELPER 637.384-010
Industrial-Gas-Servicer Supervisor 953.137-018
industrial servicer 862.381-014
INSIDE-METER TESTER 729.281-034
inside tester 729.281-034
inspector and clerk 821.367-010
INSPECTOR, CHIEF 956.267-010
inspector, outside steam-distribution 862.361-022
Instrument Repairer, Steam Plant 710.281-030
INSTRUMENT TECHNICIAN 710.281-030
INSTRUMENT-TECHNICIAN APPRENTICE 710.281-042
INSTRUMENT-TECHNICIAN HELPER 710.684-030
INSULATOR TESTER 729.387-026
INVESTIGATOR 376.367-022
INVESTIGATOR, UTILITY-BILL COMPLAINTS 241.267-034
Jointer, Submarine Cable 829.361-010
LABORATORY ASSISTANT 029.361-018
LABORATORY HELPER 821.564-010
laboratory technician 579.384-014
LABOR-CREW SUPERVISOR 899.131-010
LABORER, CONSTRUCTION OR LEAK GANG 862.684-014
Laborer, Electric Power And Transmission Line 869.687-026
laborer, pole crew 821.687-010
LABORER, POWERHOUSE 952.665-010
lamp cleaner, street-light 952.667-010
lay-out and detail drafter 019.261-014
lead-relay tester 729.131-014
Leak-Gang Supervisor 862.137-010
leak locator 953.367-010
line-and-frame poler 959.684-010
Line-Construction Supervisor 821.131-014
LINE ERECTOR 821.361-018
LINE-ERECTOR APPRENTICE 821.361-030
line inspector 003.167-014
LINE REPAIRER 821.361-026
Line Repairer, Tower 821.361-026
line servicer 821.361-026
LINE SUPERVISOR 821.131-014
Line Supervisor, Tower 821.131-014
LIQUEFACTION-AND-REGASIFICATION-PLANT OPERATOR 953.362-014
LOAD CHECKER 952.367-010
LOAD DISPATCHER 952.167-014
Load Dispatcher, Local 952.167-014
machinist apprentice 631.261-018
MAINS-AND-SERVICE SUPERVISOR 862.137-010
maintenance inspector 953.367-010
MAINTENANCE SUPERVISOR 184.167-050
Maintenance Supervisor, Electrical 184.167-050
Maintenance Supervisor, Mechanical 184.167-050
MANAGER, AREA DEVELOPMENT 184.117-030
Manager, Commerical Sales 163.167-022
manager, electric distribution department 184.167-150
Manager, Industrial Sales 163.167-022
manager, public utility, rural 184.167-162
Manager, Residential Sales 163.167-022
MANAGER, UTILITY SALES AND SERVICE 163.167-022
manhole-and-underground-steam-line inspector 862.361-022
mechanical-meter tester 953.281-010
merchandise supervisor 187.167-010
meter-and-service-line inspector 953.367-014
meter-changes records clerk 209.587-022
meter inspector 953.281-010
METER INSPECTOR 710.384-022
meter installer 953.364-010
Meter Installer-And-Remover 821.361-014
METER READER 209.567-010
METER READER, CHIEF 209.137-014
meter-record clerk 209.587-022
meter repairer 729.281-014
meter-repairer apprentice 729.281-018
meter shop superintendent 184.167-194
meter tester 710.381-022
meter tester 821.381-010
Meter Tester, Demand Meters 821.381-010
Meter Tester, Polyphase 821.381-010
Meter Tester, Primary 821.381-010
Meter Tester, Single Phase 821.381-010
MILL-AND-COAL-TRANSPORT OPERATOR 544.665-010
mill operator 544.665-010
MOTOR-ROOM CONTROLLER 820.662-010
network-relay tester 729.281-038
nuclear plant control operator 952.362-022
Nuclear-Plant-Instrument Technician 710.281-030
NUCLEAR-PLANT TECHNICAL ADVISOR 015.167-010
Nuclear-Powerplant Mechanic 631.261-014
Nuclear-Powerplant-Mechanic Helper 631.684-010
Nuclear-Powerplant Supervisor 631.131-010
OPERATIONS SUPERVISOR, NUCLEAR POWER PLANT 952.132-010
order clerk 239.362-014
Order Clerk 203.362-010
ORDER DISPATCHER, CHIEF 959.137-018
oscillograph technician 710.281-030
outside contact clerk 239.362-014
Overhead-Distribution Engineer 003.167-046
pipe fitter 862.361-014
Pipe Fitter, Street Service 862.361-014
PIPE INSTALLER 869.381-018
planning-division superintendent 184.167-210
planning engineer 003.167-026
plant machinist 631.261-010
POLE FRAMER 959.684-010
POLE INSPECTOR 869.387-010
pole setter 821.687-010
pole tester 869.387-010
Pole-Truck Driver 904.383-010
POLEYARD SUPERVISOR 929.137-014
post-hole digger 859.682-010
power dispatcher 952.167-014
POWER-DISTRIBUTION ENGINEER 003.167-046
power engineer 952.382-018
power engineer 003.167-018
powerhouse engineer 952.382-018
POWERHOUSE MECHANIC 631.261-014
POWERHOUSE-MECHANIC APPRENTICE 631.261-018
POWERHOUSE-MECHANIC HELPER 631.684-010
POWERHOUSE-MECHANIC SUPERVISOR 631.131-010
power-line inspector 821.367-010
power-plant assistant 952.367-014
power-plant engineer 952.382-018
POWER-PLANT OPERATOR 952.382-018
POWER-REACTOR OPERATOR 952.362-022
power-switchboard operator 952.362-026
POWER-TRANSFORMER REPAIRER 821.361-034
Power-Transformer-Repair Supervisor 829.131-014
POWER-TRANSMISSION ENGINEER 003.167-050
PRESSURE CONTROLLER 953.362-018
pressure-control supervisor 953.137-014
PRESSURE SUPERVISOR 953.137-014
production superintendent, hydro 952.137-014
PROTECTION ENGINEER 003.167-054
public improvement inspector 859.267-010
pump-room operator 952.362-010
rate-and-cost analyst 216.137-010
RATE REVIEWER 214.387-014

reactor operator 952.362-022
receiving-distribution-station operator 952.362-026
regulation supervisor 953.137-014
REGULATOR INSPECTOR 820.361-018
Relay Engineer 003.167-054
RELAY-RECORD CLERK 221.367-054
RELAY-SHOP SUPERVISOR 729.131-014
relay-shop tester 729.281-038
RELAY TECHNICIAN 821.261-018
RELAY TESTER 729.281-038
Relay-Tester Helper 821.564-010
remittance clerk 211.462-034
RUBBER-GOODS TESTER 759.381-010
Rural-Service Engineer 003.167-046
safety-equipment tester 759.381-010
SAFETY INSPECTOR 821.367-014
SALES ENGINEER, MECHANICAL EQUIPMENT 007.151-010
Sales Representative, Electric Service 253.357-010
Sales Representative, Gas Service 253.357-010
SALES REPRESENTATIVE, PUBLIC UTILITIES 253.357-010
Sales Representative, Rural Power 253.357-010
SALVAGER 729.687-030
Salvage Repairer I 829.261-018
SALVAGE REPAIRER II 729.384-018
schedule clerk 959.167-010
Service-Crew Supervisor 862.137-010
service inspector 821.131-010
Service Investigator 241.367-014
service-order dispatcher, chief 959.137-014
service representative 239.362-014
SERVICE REPRESENTATIVE 959.574-010
SERVICE SUPERVISOR I 953.137-018
SERVICE SUPERVISOR II 821.131-018
SERVICE SUPERVISOR III 184.167-126
service tester 821.381-014
Service-Transformer-Repair Supervisor 829.131-014
special-gas-and-electric service investigator 959.361-010
special inspecting-and-testing supervisor 820.131-010
splicer 829.361-010
splicer apprentice 829.361-014
station mechanic 631.261-014
station-mechanic apprentice 631.261-018
station mechanic helper 631.684-010
statistician 216.137-010
STEAM-DISTRIBUTION SUPERVISOR 862.137-014
Steam-Generating-Powerplant Mechanic 631.261-014
Steam-Generating-Powerplant-Mechanic Helper 631.684-010
Steam-Meter Reader 209.567-010
Steam-Plant Records Clerk 216.382-062
Steam-Powerplant Supervisor 631.131-010
STEAM SERVICE INSPECTOR 862.361-022
STEEL-POST INSTALLER 821.687-010
STEEL-POST-INSTALLER SUPERVISOR 821.131-022
street-light changer-and-renewer 952.667-010
STREET-LIGHT CLEANER 952.667-010
street-light inspector 952.667-010
street-light repairer 824.381-010
STREET-LIGHT REPAIRER 729.381-018
STREET-LIGHT-REPAIRER HELPER 729.684-050
STREET-LIGHT SERVICER 824.381-010
STREET-LIGHT-SERVICER HELPER 824.664-010
STREET-LIGHT-SERVICER SUPERVISOR 824.137-014
STREET-OPENINGS INSPECTOR 859.267-010
Substation Engineer 003.167-046
SUBSTATION INSPECTOR 952.261-010
Substation Inspector, Automatic 952.261-010
SUBSTATION OPERATOR 952.362-026
SUBSTATION OPERATOR APPRENTICE 952.362-030
Substation Operator, Automatic 952.362-026
SUBSTATION OPERATOR, CHIEF 952.131-010
Substation Operator, Conversion 952.362-026
Substation Operator, Distribution 952.362-026
Substation Operator, Generation 952.362-026
SUBSTATION-OPERATOR HELPER 952.687-014
Substation Operator Helper, Generator 952.367-014
Substation Operator, Transforming 952.362-026
superintendent, city plant 184.167-154
SUPERINTENDENT, DISTRIBUTION I 184.167-150
SUPERINTENDENT, DISTRIBUTION II 184.167-154
SUPERINTENDENT, ELECTRIC POWER 184.167-162
superintendent, gas distribution 184.167-154
SUPERINTENDENT, GENERATING PLANT 184.167-166
SUPERINTENDENT, LOCAL 952.137-018
Superintendent, Materials-And-Apparatus Tests 184.167-218
SUPERINTENDENT, METERS 184.167-194
Superintendent, Meter Tests 184.167-218
SUPERINTENDENT OF GENERATION 184.167-138
superintendent, operations 184.167-138
superintendent, operations division 184.167-154
Superintendent, Overhead Distribution 184.167-150
Superintendent, Research-And-Fault-Analysis Tests 184.167-218
superintendent, service 953.137-018
Superintendent, Station-And-Protection-System Tests 184.167-218
SUPERINTENDENT, SYSTEM OPERATION 184.167-210
SUPERINTENDENT, TESTS 184.167-218
SUPERINTENDENT, TRANSMISSION 184.167-222
Superintendent, Underground Distribution 184.167-150
SUPERVISOR, ACCOUNTS RECEIVABLE 214.137-022
SUPERVISOR, CONTACT AND SERVICE CLERKS 249.137-014
SUPERVISOR, CUSTOMER RECORDS DIVISION 249.137-022
SUPERVISOR, ELECTRICAL REPAIR AND TELEPHONE LINE MAINTENANCE 829.131-022
supervisor, energy conservation representative 959.137-022
SUPERVISOR, ESTIMATOR AND DRAFTER 019.161-010
SUPERVISOR, GAS METER REPAIR 710.131-010
SUPERVISOR, HOME-ENERGY CONSULTANT 959.137-022
SUPERVISOR, INSTRUMENT MECHANICS 710.131-018
SUPERVISOR, LIQUEFACTION-AND-REGASIFICATION 953.132-010
SUPERVISOR, METER-AND-REGULATOR SHOP 710.137-014
SUPERVISOR, METER REPAIR SHOP 710.131-026
SUPERVISOR, OPERATIONS 952.137-026
SUPERVISOR, RIGHT-OF-WAY MAINTENANCE 859.133-010
SUPERVISOR, TELLERS 211.137-022
SUPERVISOR, TREE-TRIMMING 408.137-014
SWITCHBOARD OPERATOR 952.362-034
SWITCHBOARD OPERATOR ASSISTANT 952.367-014
switchboard-operator helper 952.367-014
SWITCH INSPECTOR 952.381-010
system dispatcher 952.167-014
system operator, chief 952.137-010
system operator 952.167-014
system-planning engineer 003.167-026
Tax-Record Clerk 216.482-010
TELLER 211.462-034
TOWER ERECTOR 821.361-038
TOWER ERECTOR HELPER 821.684-014
Tower-Truck Driver 905.663-014
Traffic-Signal Repairer 824.381-010
transformer assembler 821.361-034
Transformer-Coil Winder 829.261-018
TRANSFORMER-STOCK CLERK 222.587-054
TRANSFORMER TESTER 724.281-010
transmission-and-coordination engineer 003.167-050
transmission-line engineer 003.167-050
TREE TRIMMER 408.664-010
TREE-TRIMMER HELPER 408.667-010
tree trimmer helper, line clearance 408.667-010
tree trimmer, line clearance 408.664-010
tree-trimming-line technician 408.664-010
trouble dispatcher 959.167-010
trouble dispatcher 952.167-010
TROUBLE SHOOTER I 952.364-010
TROUBLE SHOOTER II 821.261-026
TURBINE ATTENDANT 952.567-010
TURBINE OPERATOR 952.362-042
TURBINE OPERATOR, HEAD 952.137-022
turbogenerator operator 952.362-042
Underground-Distribution Engineer 003.167-046
Underground Repairer 829.261-018
Underground Supervisor 829.131-010
UTILITIES SERVICE INVESTIGATOR 821.364-010
Utility-Bill-Collection Clerk 241.357-010
UTILITY CLERK 239.367-034
Utility Inspector 953.367-018
UTILIZATION ENGINEER 007.061-034
utilization supervisor 187.167-010
VOLTAGE TESTER 821.381-014
WIND-GENERATING-ELECTRIC-POWER INSTALLER 821.381-018
Wirer Helper 821.667-010
Wirer, Maintenance 829.261-018
WIRER, STREET LIGHT 821.684-018
WIREWORKER SUPERVISOR 821.131-026
WORK-ORDER-SORTING CLERK 221.367-082

vehicles, nec—MISCELLANEOUS VEHICLES AND TRANSPORTATION EQUIPMENT INDUSTRY, NOT ELSEWHERE CLASSIFIED: This designation includes occupations concerned with manufacturing transportation equipment not elsewhere classified, such as motorized travel trailers, travel trailers for attachment to passenger cars, horse-drawn vehicles (carriages,

water trans.

sleighs, and sleds), all-terrain vehicles (golf carts and snowmobiles), wheelbarrows, handcarts, and pushcarts. Occupations concerned with the manufacture of parts for these vehicles are included here unless the occupation is peculiar to another industry, such as AUTOMOBILE MANUFACTURING INDUSTRY (auto. mfg.); RUBBER TIRE AND TUBE INDUSTRY (rubber tire); ELECTRICAL EQUIPMENT INDUSTRY (elec. equip.); LIGHTING FIXTURES INDUSTRY (light. fix.); or INSTRUMENTS AND APPARATUS INDUSTRY (inst. & app.). Occupations concerned exclusively with the manufacture of mobile homes are included in the MANUFACTURED BUILDINGS INDUSTRY (mfd. bldgs.). Occupations concerned with the manufacture of military tanks are included in the ORDNANCE AND ACCESSORIES (EXCEPT VEHICLES AND GUIDED MISSILES) INDUSTRY (ordnance).

Appliance Installer 869.684-026
Appliance Installer 806.684-018
ASSEMBLER 869.684-010
ASSEMBLER, CAMPER 806.684-018
ASSEMBLER, COMPONENT 762.684-014
ASSEMBLER, SUBASSEMBLY 869.684-018
Assembly Supervisor 869.131-030
BODY WIRER 829.684-014
Cabinet-And-Trim Installer 869.684-026
Cabinet-And-Trim Installer 806.684-018
Cabinet Assembler 762.684-014
coach wirer 829.684-014
Counter Top Assembler 762.684-014
DOOR ASSEMBLER 806.684-050
Door Installer I 809.684-030
Door Installer II 869.684-026
electrician, wiring 829.684-014
FIBERGLASS LAMINATOR 806.684-054
final finisher 869.684-026
Final-Finish Supervisor 869.131-030
Floor Finisher 869.684-010
Floor Finisher 806.684-018
Floor Framer 869.684-010
Floor Framer 806.684-018
framer 869.684-010
Hardware Installer 869.684-026
INSTALLER 869.684-026
INSTALLER-INSPECTOR, FINAL 806.684-066
laminator 806.684-054
METAL HANGER 809.684-030
Millroom Supervisor 869.131-030
mock-up assembler 693.381-018
MOCK-UP BUILDER 693.381-018
Partition Assembler 762.684-014
REPAIRER, MANUFACTURED BUILDINGS 869.384-010
REPAIRER, RECREATIONAL VEHICLE 869.261-022
Roof Framer 869.684-010
Roof-Panel Hanger 809.684-030
Servicer, Travel Trailers 869.384-010
Sheller 869.684-010
Side Framer 869.684-010
Side Framer 806.684-018
Side-Panel Hanger 809.684-030
Subassembly Supervisor 869.131-030
SUPERVISOR, MANUFACTURED BUILDINGS 869.131-030
Supervisor, Travel Trailer 869.131-030
Tile Installer 869.684-026
UTILITY WORKER 869.684-074
WHEEL ASSEMBLER 809.684-038
Wheel Installer 869.684-010
Window Installer 809.684-030
wirer 829.684-014

water trans.—WATER TRANSPORTATION INDUSTRY: This designation includes occupations concerned with operating ships, barges, ferries, tugboats, and other vessels engaged in transporting freight and passengers, and such supporting services as loading and unloading cargo and booking steamship passage. Occupations concerned with the regulation of port traffic, collection of customs and duties, and inspection and certification of vessels by public authorities are included under GOVERNMENT SERVICES (government ser.).

able-bodied seaman 911.364-010
ABLE SEAMAN 911.364-010
Baker Scullion 318.687-014
barge captain 197.163-014
BARGE CAPTAIN 911.137-010
barge-crane operator 921.683-034
Barge Engineer 197.130-010
Barge Hand 911.687-022
Barge Loader 911.364-014
Barge-Loader Helper 911.687-010
BOAT DISPATCHER 184.167-010
BOAT-LOADER HELPER 911.687-010
BOAT LOADER I 911.364-014
BOAT LOADER II 921.685-010
boat puller 911.687-018
BOATSWAIN 911.131-010
BOOKING CLERK 248.367-014
BOOKING SUPERVISOR 248.137-010
Bulk-Loader Operator 921.662-018
Butcher Scullion 318.687-014
CADET, DECK 911.133-010
Cadet Engineer 197.130-010
canal-lock tender, chief operator 911.131-014
canal-structure operator 911.362-010
Cannery-Tender Engineer 197.130-010
CANTILEVER-CRANE OPERATOR 921.683-018
captain see MASTER .....
CARGO CHECKER 222.367-010
cargo-gear mechanic 222.387-062
CHEF, PASSENGER VESSEL 315.137-010
chief lock-operator 911.131-014
coal-tower operator 921.683-074
COAL TRIMMER 911.687-018
Container-Cargo Clerk 248.367-014
CONTAINER COORDINATOR 248.367-022
container crane operator 921.683-018
cook, boat 315.371-010
COOK, CHIEF 315.131-010
COOK, LARDER 315.381-014
COOK, MESS 315.371-010
Cook, Ship 315.361-010
cook, ship 315.371-010
COOK, STATION 315.361-022
Cook, Station, Breakfast 315.361-022
Cook, Station, Grill 315.361-022
Cook, Station, Roast 315.361-022
Cook, Station, Soup And Fish 315.361-022
COOK, THIRD 315.381-022
cost-report clerk 216.382-054
Cotton Header 911.137-018
DECK ENGINEER 623.281-010
deck-engine operator 921.683-034
Deck Guard 372.667-034
DECKHAND 911.687-022
Deckhand, Maintenance 911.364-010
derrick-barge operator 921.683-034
DERRICK-BOAT CAPTAIN 911.137-014
DERRICK-BOAT OPERATOR 921.683-034
derrick-boat runner 911.137-014
director, recreation 352.167-010
DIRECTOR, SOCIAL 352.167-010
DISPATCHER, SHIP PILOT 248.367-026
DISPATCHER, TUGBOAT 911.167-010
dock boss 911.137-018
dock hand 911.364-014
dock helper 911.687-010
DOCUMENTATION-BILLING CLERK 214.362-014
DOCUMENTATION SUPERVISOR 214.137-010
DREDGE CAPTAIN 197.161-010
Dredge Deckhand 911.687-022
DREDGE MATE 197.137-010
dredge operator 197.161-010
dredge runner 197.161-010
ELECTRICIAN 825.281-014
Electrician, Chief 825.281-014
Electrician, Deck 825.281-014
Electrician, Second 825.281-014
Electrician, Sound 825.281-014
Electrician, Third 825.281-014
ENGINEER 197.130-010
Engineer, Chief 197.130-010
Engineer, First Assistant 197.130-010
Engineer, Fishing Vessel 197.130-010
Engineer, Second Assistant 197.130-010
Engineer, Third Assistant 197.130-010
FERRYBOAT CAPTAIN 197.163-010
Ferryboat Deckhand 911.687-022
ferryboat helper 911.667-010
FERRYBOAT OPERATOR 911.363-010
FERRYBOAT OPERATOR, CABLE 911.664-010
FERRYBOAT-OPERATOR HELPER 911.667-010
ferry operator 911.664-010
ferry operator 911.363-010
ferry-terminal agent 911.137-026
FIRER, MARINE 951.685-018

Firer-Watertender 951.685-018
floating-derrick operator 921.683-034
floor runner 222.567-014
freight checker 222.367-010
freight clerk 248.167-010
Freight-Traffic Agent 252.257-010
gang boss 911.137-018
garde manger 315.381-014
GEAR REPAIRER 623.381-010
General-Cargo Clerk 248.367-014
GENERAL CLAIMS AGENT 186.117-030
Glass Scullion 318.687-014
hatch supervisor 911.137-018
HATCH TENDER 911.667-014
HEADER 911.137-018
Header, Dock 911.137-018
Header, Ship 911.137-018
HEADWAITER/HEADWAITRESS 350.137-010
INCOMING-FREIGHT CLERK 248.362-010
INFORMATION CLERK 237.367-018
INSPECTOR OF DREDGING 850.387-010
laborer, marine terminal 911.687-026
Lift-Truck Operator 911.663-014
LINES TENDER 911.687-026
Lock-And-Dam Equipment Repairer 899.281-010
LOCK OPERATOR 911.362-010
LOCK TENDER, CHIEF OPERATOR 911.131-014
Main-Galley Scullion 318.687-014
MAINTENANCE MECHANIC, ENGINE 623.281-034
MANAGER, HARBOR DEPARTMENT 184.117-042
MANAGER, MARINA DRY DOCK 187.167-226
MANAGER, OPERATIONS 184.117-050
manager, rates and schedules 184.117-066
MANAGER, TRAFFIC 184.117-066
Manifest Clerk 214.362-014
marine clerk 222.367-010
marine engineer 197.130-010
MARINE OILER 911.584-010
Marine-Service-Station Attendant 915.477-010
MASTER ..... term
Master, Bays, Sounds, And Lakes 197.167-010
Master, Coastal Waters 197.167-010
Master, Coastwise Yacht 197.133-014
Master, Great Lakes 197.167-010
Master, Ocean 197.167-010
Master, Ocean Yacht 197.133-014
MASTER, PASSENGER BARGE 197.163-014
MASTER, RIVERBOAT 197.163-018
MASTER, SHIP 197.167-010
Master, Steam Yacht 197.133-014
MASTER, YACHT 197.133-014
Mate, Chief 197.133-022
Mate, First 197.133-022
Mate, Fourth 197.133-022
Mate, Relief 197.133-022
Mate, Second 197.133-022
MATE, SHIP 197.133-022
Mate, Third 197.133-022
mechanic, marine engine 197.130-010
MESS ATTENDANT 350.677-010
Mess Attendant, Crew 350.677-010
Mess Attendant, Officers' Room 350.677-010
Mess Attendant, Officers' Salon 350.677-010
oiler 911.584-010
operations manager 184.117-050
ORDINARY SEAMAN 911.687-030
PAPER-CONTROL CLERK 219.367-022
PASSENGER ATTENDANT 350.677-014
Passenger Traffic Agent 252.257-010
PASTRY CHEF 315.131-014
pier hand 911.364-014
pier hand helper 911.687-010
Pilot-Boat Deckhand 911.687-022
PILOT, SHIP 197.133-026
Pilot, Steam Yacht 197.133-026
Pilot, Tank Vessel 197.133-026
Port Captain 184.167-182
PORT ENGINEER 014.167-014
PORTER, MARINA 329.677-010
PORT PURSER 166.167-038
PORT-TRAFFIC MANAGER 184.167-122
PURCHASING-AND-CLAIMS SUPERVISOR 248.137-014
PURSER 197.167-014
QUARTERMASTER 911.363-014
RADIO OFFICER 193.262-022
radio operator 193.262-022
RATE ANALYST, FREIGHT 214.267-010
RECEIPT-AND-REPORT CLERK 216.382-054
Reefer Engineer 950.362-014
Refrigerated-Cargo Clerk 248.367-014
riverboat captain 197.163-018
Run-Boat Operator 911.663-010
runner 222.567-014
SAILOR ..... term
sailor-merchant mariner see SAILOR .....
SAILOR, PLEASURE CRAFT 911.664-014
SALAD MAKER 317.384-010
sales representative 252.257-010
scow captain 911.137-010
Scow Deckhand 911.687-022
scow-derrick operator 921.683-034
SCULLION 318.687-014
Scullion Chief 318.687-014
second assistant engineer 623.281-034
SECOND COOK AND BAKER 315.381-026
Second Steward/Stewardess, Night 350.137-022
SERVICES CLERK 214.387-018
ship boss 911.137-018
ship officer 197.133-022
ship purser 197.167-014
SHIP RUNNER 222.567-014
ship's captain 197.167-010
Sightseeing-Boat Operator 911.663-010
Silverware Washer 318.687-014
skipper see MASTER .....
SOUS CHEF 315.137-014
Stevedore, Dock 922.687-090
Stevedore, Front 922.687-090
Stevedore, Hold 922.687-090
STEVEDORE I 911.663-014
STEVEDORE II 922.687-090
Stevedoring Superintendent, Container Handling 911.137-022
stevedoring supervisor 911.137-018
STEWARD/STEWARDESS 350.677-022
STEWARD/STEWARDESS, BATH 350.677-018
STEWARD/STEWARDESS, CHIEF, CARGO VESSEL 350.137-014
STEWARD/STEWARDESS, CHIEF, PASSENGER SHIP 350.137-018
Steward/Stewardess, Deck 350.677-022
steward/stewardess, dining room 350.677-030
Steward/Stewardess, Economy Class 350.137-022
Steward/Stewardess, Lounge 350.677-022
Steward/Stewardess, Night 350.677-022
Steward/Stewardess, Room 350.677-022
STEWARD/STEWARDESS, SECOND 350.137-022
Steward/Stewardess, Second Class 350.137-022
Steward/Stewardess, Smoke Room 350.677-022
STEWARD/STEWARDESS, THIRD 350.137-026
Steward/Stewardess, Third Class 350.137-022
Steward/Stewardess, Tourist Class 350.137-022
STEWARD/STEWARDESS, WINE 350.677-026
storage-wharfage clerk 248.362-010
STOREKEEPER 222.387-062
Storekeeper, Deck 222.387-062
Storekeeper, Engineering 222.387-062
Storekeeper, Steward 222.387-062
striker 911.584-010
SUPERCARGO 248.167-010
SUPERINTENDENT, COMMISSARY 184.117-078
Superintendent, Container Terminal 184.167-214
SUPERINTENDENT, MARINE 184.167-182
SUPERINTENDENT, MARINE OIL TERMINAL 184.167-186
Superintendent, Pier 184.167-214
SUPERINTENDENT, STEVEDORING 911.137-022
SUPERINTENDENT, TERMINAL 184.167-214
SUPERVISOR, FERRY TERMINAL 911.137-026
SUPERVISOR, GEAR REPAIR 623.131-014
SUPERVISOR, TANK CLEANING 891.137-018
third assistant engineer 623.281-034
TICKET TAKER, FERRYBOAT 911.677-010
TONNAGE-COMPILATION CLERK 248.387-014
TOWER-LOADER OPERATOR 921.683-074
Tractor Operator 911.663-014
TRAFFIC AGENT 252.257-010
travel clerk 237.367-018
Traveling-Freight-And-Passenger Agent 252.257-010
TUGBOAT CAPTAIN 197.133-030
Tugboat Deckhand 911.687-022
Tugboat Engineer 197.130-010
TUGBOAT MATE 197.133-034
Turnstile Collector 211.462-038

Utility Hand 318.687-014
Vegetable Scullion 318.687-014
Vehicle-Fare Collector 211.462-038
WAITER/WAITRESS 350.677-030
Waiter/Waitress, Cabin Class 350.677-030
Waiter/Waitress, Economy Class 350.677-030
Waiter/Waitress, First Class 350.677-030
Waiter/Waitress, Second Class 350.677-030
Waiter/Waitress, Third Class 350.677-030
Waiter/Waitress, Tourist Class 350.677-030
Watchstander 911.364-010
Water-Taxi Driver 911.663-010
WATERWAY TRAFFIC CHECKER 248.367-030
Waybill Clerk 214.362-014
wharf hand 911.364-014
wharf helper 911.687-010
WHARFINGER 184.387-010
WHARFINGER, CHIEF 184.167-274
wharf operator 911.364-014
wharf tender 911.364-014
wharf-tender helper 911.687-010
WHARF WORKER 921.667-026
WINCH DRIVER 921.683-082
Winch Operator 911.663-014
YEOMAN ..... term

waterworks—WATERWORKS INDUSTRY: This designation includes occupations concerned with storing, filtering, purifying, and distributing water for domestic and industrial use; and operating water-supply systems for the purpose of irrigation. Occupations concerned with treating waste water are included under SANITARY SERVICES (sanitary ser.).

adjustment clerk 239.362-014
application clerk 239.362-014
aqueduct-and-reservoir keeper 954.382-018
BASIN OPERATOR 954.385-010
billing supervisor 214.137-022
CANAL-EQUIPMENT MECHANIC 899.281-010
canal tender 954.362-010
CHEMIST, WATER PURIFICATION 022.281-014
CHIEF ENGINEER, WATERWORKS 005.167-010
COMMERCIAL-INSTRUCTOR SUPERVISOR 239.137-010
CUSTOMER-SERVICE REPRESENTATIVE 239.362-014
CUSTOMER-SERVICE-REPRESENTATIVE INSTR. 239.227-010
CUSTOMER-SERVICE REPRESENTATIVE SUPERVISOR 239.137-014
dam tender 954.382-018
DITCH RIDER 954.362-010
ditch tender 954.362-010
DRAINAGE-DESIGN COORDINATOR 005.167-014
filter operator 954.382-014
filtration-plant mechanic 630.281-038
HYDROGRAPHER 025.264-010
laborer, filter plant 954.587-010
maintenance supervisor 899.130-010
MANAGER, IRRIGATION DISTRICT 184.117-046
manager, water department 184.117-046
METER READER 209.567-010
METER READER, CHIEF 209.137-014
needle-valve operator 954.382-018
order clerk 239.362-014
outside contact clerk 239.362-014
pumping-plant operator 954.382-010
PUMP-STATION OPERATOR, WATERWORKS 954.382-010
purifying-plant operator 954.382-014
reservoir caretaker 954.382-018
sand-cleaning-machine operator 954.587-010
service representative 239.362-014
SERVICE REPRESENTATIVE 959.574-010
SUPERINTENDENT, WATER-AND-SEWER SYSTEMS 184.161-014
SUPERVISOR, ACCOUNTS RECEIVABLE 214.137-022
SUPERVISOR, CANAL-EQUIPMENT MAINTENANCE 899.130-010
SUPERVISOR, LANDSCAPE 406.134-014
SUPERVISOR, METER SHOP 710.131-030
SUPERVISOR, PUMPING STATION 954.130-010
SUPERVISOR, SEWER SYSTEM 184.167-238
SUPERVISOR, WATER TREATMENT PLANT 954.132-010
SUPERVISOR, WATERWORKS 184.167-246
TREATMENT-PLANT MECHANIC 630.281-038
WATER-AND-SEWER-SYSTEMS SUPERVISOR 862.137-018
water-control-station engineer 954.382-014
WATER CONTROL SUPERVISOR 184.167-270
WATER-FILTER CLEANER 954.587-010
water filterer 954.382-014
water-filterer helper 954.587-010
water-maintenance supervisor 862.137-018
WATER-METER INSTALLER 954.564-010
Water-Meter Reader 209.567-010
water-plant-pump operator 954.382-010
water-plant-pump-operator supervisor 954.130-010
water purifier 954.382-014
WATER REGULATOR AND VALVE REPAIRER 862.684-030
WATER-SERVICE DISPATCHER 954.367-010
water-service supervisor 862.137-018
WATERSHED TENDER 954.382-018
water supervisor 862.137-018
water tender 954.362-010
water-treatment-plant mechanic 630.281-038
WATER-TREATMENT-PLANT OPERATOR 954.382-014
zanjero 954.362-010

welding—WELDING AND RELATED PROCESSES: This designation includes occupations concerned with fusing and bonding parts by welding, brazing, and soldering to join, assemble, and repair metal articles, and all occupations concerned with cutting metal by oxidation or melting, using gas flame or electric arc. The designation covers all welding processes wherever they occur, except assembly or repair occupations in which welding, brazing, soldering, and flame or arc cutting are only incidental tasks. Such occupations are included under the industries covering those assembly or repair processes.

arc-air operator 816.364-010
ARC CUTTER 816.364-010
Arc Cutter, Gas-Tungsten Arc 816.364-010
Arc Cutter, Plasma Arc 816.364-010
brazer 813.684-010
BRAZER, ASSEMBLER 813.684-010
BRAZER, CONTROLLED ATMOSPHERIC FURNACE 813.685-010
Brazer, Crawler Torch 813.684-010
brazer, electronic 813.382-010
BRAZER, FURNACE 813.482-010
Brazer Helper, Furnace 819.666-010
Brazer Helper, Induction 819.666-010
BRAZER, INDUCTION 813.382-010
Brazer, Production Line 819.684-010
Brazer, Repair And Salvage 813.684-010
BRAZER, RESISTANCE 813.682-010
Brazing-Furnace Feeder 819.686-010
Brazing-Machine Feeder 819.686-010
BRAZING-MACHINE OPERATOR 813.382-014
brazing-machine operator, automatic 813.382-014
Brazing-Machine-Operator Helper 819.666-010
BRAZING-MACHINE SETTER 813.360-010
burner, hand 816.464-010
burning-machine operator 816.482-010
burn-out-scarfing operator 816.364-010
certified welder see WELDER- CERTIFIED
cutter, gas 816.464-010
Electronic-Eye-Thermal-Cutting-Machine Operator 816.482-010
flame-brazing-machine operator 813.382-014
flame-cutting-machine operator 816.482-010
Flame-Cutting-Machine-Operator Helper 819.666-010
flame gouger 816.464-010
flame planer 816.482-010
Flame Scarfer 816.464-010
Flash-Welding-Machine Operator 812.682-010
Flux Brusher 819.666-010
gas-cutting-machine operator 816.482-010
hydrogen braze-furnace operator 813.685-010
Laser-Beam Cutter 815.682-010
LASER-BEAM-MACHINE OPERATOR 815.682-010
LEAD BURNER 819.281-010
LEAD-BURNER APPRENTICE 819.281-014
LEAD-BURNER SUPERVISOR 819.131-010
lead welder 819.281-010
MACHINE FEEDER 819.686-010
MACHINE HELPER 819.666-010
machine helper 819.686-010
Magnetic-Thermal-Cutting-Machine Operator 816.482-010
Percussion-Welding-Machine Operator 812.682-010
Performance-Test Inspector 819.281-018
Plasma-Cutting-Machine Operator 816.482-010
production solderer 813.684-014
Projection-Welding-Machine Operator 812.682-010
radiograph operator 816.482-010
Repairer, Cylinder Heads 819.384-010
Repairer, Resistance-Welding Machines 626.361-010
REPAIRER, WELDING, BRAZING, AND BURNING MACHINES 626.361-010
REPAIRER, WELDING EQUIPMENT 626.384-010

REPAIRER, WELDING SYSTEMS AND EQUIPMENT 626.261-014
returned-goods repairer 813.684-014
salvage cutter 816.684-010
scrap burner 816.684-010
scrap cutter 816.684-010
SETTER, INDUCTION-HEATING EQUIPMENT 813.360-014
Side-Seam Tender 819.685-010
Slag Scraper 819.666-010
SOLDERER-ASSEMBLER 813.684-014
Solderer, Assembly Repair 813.684-014
SOLDERER-DIPPER 813.684-018
solderer, electronic 813.382-010
solderer, furnace 813.482-010
Solderer, Induction 813.382-010
SOLDERER, PRODUCTION LINE 813.684-022
SOLDERER, SILVER ..... term
SOLDERER, TORCH I 813.684-026
Solderer, Torch II 813.684-010
SOLDERER, ULTRASONIC, HAND 813.684-030
Soldering-Machine Feeder 819.686-010
Soldering-Machine Operator 813.382-014
soldering-machine operator, automatic 813.382-014
Soldering-Machine-Operator Helper 819.666-010
Spot Welder 819.685-010
spot welder, body assembly 810.664-010
spot welder, line 810.664-010
SUPERVISOR, WELDING EQUIPMENT REPAIRER 626.137-010
tacker 810.684-010
THERMAL CUTTER, HAND I 816.464-010
THERMAL CUTTER, HAND II 816.684-010
Thermal-Cutter Helper 819.687-014
THERMAL-CUTTING-MACHINE OPERATOR 816.482-010
Thermal-Cutting-Tracer-Machine Operator 816.482-010
torch brazer 813.684-010
torch cutter 816.464-010
Track-Template-Thermal-Cutting-Machine Operator 816.482-010
Upset-Welding-Machine Operator 812.682-010
Welder, Acetylene 811.684-014
WELDER APPRENTICE, ARC 810.384-010
WELDER APPRENTICE, COMBINATION 819.384-008
WELDER APPRENTICE, GAS 811.684-010
WELDER, ARC 810.384-014
Welder, Carbon Arc 810.384-014
WELDER, CERTIFIED ..... term
WELDER, COMBINATION 819.384-010
WELDER, EXPERIMENTAL 819.281-022
WELDER, EXPLOSION 814.684-010
WELDER-FITTER 819.361-010
WELDER-FITTER APPRENTICE 819.361-014
Welder-Fitter, Arc 819.361-010
Welder-Fitter, Gas 819.361-010
Welder, Flux-Cored Arc 810.384-014
WELDER, GAS 811.684-014
welder, gas, automatic 811.482-010
Welder, Gas-Metal Arc 810.384-014
Welder, Gas-Tungsten Arc 810.384-014
WELDER, GUN 819.664-010
Welder, Hand, Submerged Arc 810.384-014
WELDER HELPER 819.687-014
Welder, Oxyacetylene 811.684-014
Welder, Oxyhydrogen 811.684-014
Welder, Plasma Arc 810.384-014
WELDER, PRODUCTION LINE 819.684-010
Welder, Production Line, Arc 819.684-010
Welder, Production Line, Combination 819.684-010
Welder, Production Line, Gas 819.684-010
Welder, Repair 819.384-010
WELDER SETTER, ELECTRON-BEAM MACHINE 815.380-010
WELDER SETTER, RESISTANCE MACHINE 812.360-010
Welder, Shielded-Metal Arc 810.384-014
Welder, Structural Repair 819.361-010
WELDER, TACK 810.684-010
Welder, Tool And Die 819.361-010
Welding-Machine Feeder 819.686-010
WELDING-MACHINE OPERATOR, ARC 810.382-010
Welding-Machine Operator, Electro-Gas 810.382-010
WELDING-MACHINE OPERATOR, ELECTRON BEAM 815.382-010
WELDING-MACHINE OPERATOR, ELECTROSLAG 815.382-014
WELDING-MACHINE OPERATOR, FRICTION 814.382-010
WELDING-MACHINE OPERATOR, GAS 811.482-010
Welding-Machine Operator, Gas-Metal Arc 810.382-010
Welding-Machine Operator, Gas-Tungsten Arc 810.382-010
Welding-Machine-Operator Helper, Arc 819.666-010
Welding-Machine-Operator Helper, Gas 819.666-010
Welding-Machine Operator, Plasma Arc 810.382-010
WELDING-MACHINE OPERATOR, RESISTANCE 812.682-010
Welding-Machine Operator, Submerged Arc 810.382-010
WELDING-MACHINE OPERATOR, THERMIT 815.682-014
WELDING-MACHINE OPERATOR, ULTRASONIC 814.682-010
WELDING-MACHINE TENDER 819.685-010
WELDING SUPERVISOR 819.131-014
Welding Supervisor, Electric-Weld Pipe Mill 819.131-014
welding tester 819.281-018
WELD INSPECTOR I 819.281-018
WELD INSPECTOR II 819.687-010
Wire-Drawing-Machine Tender 819.685-010

wholesale tr.—WHOLESALE TRADE INDUSTRY: This designation includes occupations concerned with selling to retailers, institutions, industrial consumers, and other wholesale organizations for resale or other processing rather than for personal or home consumption. The designation covers sales activities, whether by wholesale organizations or by manufacturing concerns. In addition to the sale of commodities at wholesale, the designation includes occupations concerned with the related processes normally carried on by wholesale establishments, and also the functions of agents and brokers who operate in the wholesale market in effecting purchases and sales between other parties. The principal types of wholesale activities are full-service and limited-function wholesales, manufacturers' sales branches and offices, functional middlemen, such as agents and brokers, and assemblers of agricultural commodities.

Apple Packer 920.687-134
Apple Sorter 529.687-186
Apple Washer 529.685-258
Apricot Packer 920.687-134
Asparagus Sorter 529.687-186
AUCTION ASSISTANT 294.667-010
AUCTION CLERK 294.567-010
AUCTIONEER 294.257-010
Auctioneer, Art 294.257-010
Auctioneer, Automobile 294.257-010
Auctioneer, Furniture 294.257-010
Auctioneer, Livestock 294.257-010
Auctioneer, Real Estate 294.257-010
Auctioneer, Tobacco 294.257-010
AUTOMOBILE WRECKER 620.684-010
Avocado Packer 920.687-134
Banana Grader 529.687-186
Banana-Ripening-Room Supervisor 920.137-010
BLOWER INSULATOR 863.664-010
BOOKING CLERK 216.587-010
broker, agricultural produce 260.357-010
BROKER-AND-MARKET OPERATOR, GRAIN 162.157-010
BUILDING CONSULTANT 250.357-010
butcher 316.684-018
butcher apprentice 316.684-022
BUYER, GRAIN 162.167-010
Buyer, Grain 162.157-010
buyer, head 162.167-014
BUYER, TOBACCO, HEAD 162.167-014
Capper Picker 529.687-186
car cleaner 915.687-022
car porter 915.687-022
Carrot Washer 529.685-258
Cherry Packer 920.687-134
Cherry Sorter 529.687-186
circuit rider 162.167-014
circuit walker 162.167-014
Citrus-Fruit Packer 920.687-134
Citrus-Fruit-Packing Grader 529.687-186
COLORER, CITRUS FRUIT 529.685-070
COMMISSION AGENT, AGRICULTURAL PRODUCE 260.357-010
COMMISSION AGENT, LIVESTOCK 162.157-026
COMPARISON SHOPPER 296.367-014
counter clerk 279.357-062
Counter Clerk, Appliance Parts 279.357-062
Counter Clerk, Automotive Parts 279.357-062
Counter Clerk, Farm Equipment Parts 279.357-062
Counter Clerk, Industrial Machinery And Equipment Parts 279.357-062
Counter Clerk, Radio, Television, And Electronics Parts 279.357-062
Counter Clerk, Tractor Parts 279.357-062
Counter Clerk, Truck Parts 279.357-062
Cranberry Sorter 529.687-186
Crate Tier 920.687-134
Cull Grader 529.687-186
CUTTER, BANANA ROOM 929.687-010
DEALER-COMPLIANCE REPRESENTATIVE 168.267-026
DECAY-CONTROL OPERATOR 529.685-086
delivery-route truck driver 292.353-010
DEMONSTRATOR 297.354-010

wholesale tr.

Demonstrator, Construction Equipment 859.683-010
DENTAL-EQUIPMENT INSTALLER AND SERVICER 829.261-014
detailer, pharmaceuticals 262.157-010
director, merchandise 185.167-034
dispatcher, route sales-delivery drivers 292.137-014
distribution manager 163.267-010
DISTRIBUTION SUPERVISOR 914.137-010
distributor, motor vehicles and supplies 273.357-022
distributor, publications 277.357-022
DRIVER HELPER, SALES ROUTE 292.667-010
DRIVER, SALES ROUTE 292.353-010
DUMPING-MACHINE OPERATOR 529.685-102
Egg Packer 920.687-134
egg room supervisor 529.137-042
EGG WASHER, MACHINE 529.686-030
electric-motor-repair clerk 271.354-010
EMBROIDERY PATTERNMAKER 782.361-014
Exporter 185.157-018
Fancy Packer 920.587-018
fashion model 297.667-014
feeder worker power-unit operator 863.685-010
FIELD REPRESENTATIVE 163.267-010
field representative 168.267-026
Fig Sorter 529.687-186
Fish Icer 922.687-046
Floor-Coverings Estimator 270.357-026
FLOOR-SPACE ALLOCATOR 222.367-030
Food Demonstrator 297.354-010
FRUIT-BUYING GRADER 529.387-018
FRUIT-GRADER OPERATOR 529.665-010
fruit inspector 529.387-018
Fruit Packer, Face-And-Fill 920.687-134
Fruit Packer, Wrap-And-Place 920.687-134
Fruit Sorter 529.687-186
Fuel-Oil-Delivery Driver 903.683-018
fur beater 369.685-014
FUR CLEANER, MACHINE 369.685-014
fur drummer 369.685-014
fur dry-cleaner 369.685-014
Gas-Delivery Driver 903.683-018
GENERAL MANAGER, FARM 180.167-018
grain-elevator agent 162.167-010
grain trader 162.157-010
GREENS TIER 920.687-094
Header 920.687-134
hose handler 863.664-010
house model 297.667-014
house supervisor 920.137-010
Housewares Demonstrator 297.354-010
ICER 922.687-046
Importer 185.157-018
INSULATION-POWER-UNIT TENDER 863.685-010
Lidder 920.687-134
LOCKER-PLANT ATTENDANT 922.684-010
lot caller 294.667-010
Magazine-Delivery Driver 292.363-010
Mail-Order Biller 214.382-014
MANAGER, DISTRIBUTION WAREHOUSE 185.167-018
MANAGER, FAST FOOD SERVICES 185.137-010
manager, grain elevator 162.167-010
MANAGER, MARKET 186.167-042
MANAGER, MEAT SALES AND STORAGE 185.167-030
MANAGER, MERCHANDISE 185.167-034
MANAGER, NURSERY 180.167-042
MANAGER, PARTS 185.167-038
manager, service 187.167-142
MANAGER, SERVICE DEPARTMENT 187.167-142
manager, stockroom 185.167-038
MANAGER, TEXTILE CONVERSION 185.167-050
MANAGER, TOBACCO WAREHOUSE 185.167-054
manufacturers' agent 279.157-010
MANUFACTURERS' REPRESENTATIVE 279.157-010
MARKER 209.587-034
marking clerk 209.587-034
MEAT CUTTER 316.684-018
MEAT-CUTTER APPRENTICE 316.684-022
Meat Inspector 316.684-018
merchandise marker 209.587-034
MODEL 297.667-014
NEWSPAPER-DELIVERY DRIVER 292.363-010
Orange Washer 529.685-258
ORDER FILLER 222.487-014
PACKING-HOUSE SUPERVISOR 920.137-010
packing-shed supervisor 920.137-010
parts clerk 279.357-062
Peach Sorter 529.687-186
Pear Packer 920.687-134
PERISHABLE-FRUIT INSPECTOR 910.387-010
PHARMACEUTICAL DETAILER 262.157-010
platform inspector 529.387-018
Plum Packer 920.687-134
PORTER, SAMPLE CASE 299.687-010
PORTER, USED-CAR LOT 915.687-022
Potato Grader 529.687-186
Potato Sorter 529.687-186
price marker 209.587-034
ranch manager 180.167-018
RECLAMATION WORKER 621.684-014
Ring Packer 920.687-134
route driver 292.353-010
route driver helper 292.667-010
route supervisor 292.137-014
SAFE-AND-VAULT SERVICE MECHANIC 869.381-022
safe repairer 869.381-022
sales agent see SALES REPRESENTATIVE .....
Sales Agent, Food-Vending Service 251.357-010
sales associate see SALES REPRESENTATIVE .....
SALESPERSON ..... master
salesperson apprentice, meats 316.684-022
SALESPERSON, AUTOMOBILE ACCESSORIES 273.357-030
Salesperson, China And Glassware 270.357-018
SALESPERSON, CHINA AND SILVERWARE 270.357-018
SALESPERSON, ELECTRIC MOTORS 271.354-010
SALESPERSON, FLOOR COVERINGS 270.357-026
SALESPERSON, FLORIST SUPPLIES 275.357-054
SALESPERSON, GENERAL HARDWARE 279.357-050
SALESPERSON, GENERAL MERCHANDISE 279.357-054
SALESPERSON, HORTICULTURAL AND NURSERY PRODUCTS 272.357-022
salesperson, meats 316.684-018
Salesperson, Paint 279.357-050
SALESPERSON, PARTS 279.357-062
SALESPERSON, PHOTOGRAPHIC SUPPLIES AND EQUIPMENT 277.357-050
SALESPERSON, STAMPS OR COINS 277.357-062
Salesperson, Terrazzo Tiles 270.357-026
Salesperson, Wall Coverings 279.357-050
SALES-PROMOTION REPRESENTATIVE 269.357-018
SALES REPRESENTATIVE ..... master
SALES REPRESENTATIVE, ABRASIVES 274.357-010
Sales Representative, Adding Machines 275.357-034
Sales Representative, Addressing Machines 275.357-034
SALES REPRESENTATIVE, AIRCRAFT 273.253-010
SALES REPRESENTATIVE, AIRCRAFT EQUIPMENT AND PARTS 273.357-010
SALES REPRESENTATIVE, ANIMAL-FEED PRODUCTS 272.357-010
SALES REPRESENTATIVE, APPAREL TRIMMINGS 261.357-010
SALES REPRESENTATIVE, ARCHITECTURAL AND ENGINEERING SUPPLIES 276.357-010
Sales Representative, Automobile Parts And Supplies 273.357-022
SALES REPRESENTATIVE, BARBER AND BEAUTY EQUIPMENT AND SUPPLIES 275.357-010
SALES REPRESENTATIVE, BOATS AND MARINE SUPPLIES 273.357-018
Sales Representative, Bookkeeping-And-Accounting Machines 275.357-034
SALES REPRESENTATIVE, BOTTLES AND BOTTLING EQUIPMENT 274.357-014
Sales Representative, Bottles And Jars 274.357-014
Sales Representative, Bottling Equipment 274.357-014
SALES REPRESENTATIVE, BUILDING EQUIPMENT AND SUPPLIES 274.357-018
Sales Representative, Calculating Machines 275.357-034
SALES REPRESENTATIVE, CANVAS PRODUCTS 261.357-014
Sales Representative, Cash Registers 275.357-034
Sales Representative, Cattle-And-Poultry Feed Supplements 272.357-010
Sales Representative, Check-Endorsing-And-Signing Machines 275.357-034
SALES REPRESENTATIVE, CHEMICALS AND DRUGS 262.357-010
Sales Representative, Church Furniture 275.357-014
SALES REPRESENTATIVE, CHURCH FURNITURE AND RELIGIOUS SUPPLIES 275.357-014
SALES REPRESENTATIVE, COMMERCIAL EQUIPMENT AND SUPPLIES 275.357-018
SALES REPRESENTATIVE, COMMUNICATION EQUIPMENT 271.257-010
SALES REPRESENTATIVE, COMPUTERS AND EDP SYSTEMS 275.257-010
SALES REPRESENTATIVE, CONSTRUCTION MACHINERY 274.357-022

SALES REPRESENTATIVE, CONTAINERS 274.357-026
SALES REPRESENTATIVE, CORDAGE 275.357-022
SALES REPRESENTATIVE, DAIRY SUPPLIES 274.357-030
SALES REPRESENTATIVE, DENTAL AND MEDICAL EQUIPMENT AND SUPPLIES 276.257-010
Sales Representative, Dental Equipment And Supplies 276.257-010
Sales Representative, Dental Prosthetics 276.257-010
Sales Representative, Dictating Machines 275.357-034
Sales Representative, Duplicating Machines 275.357-034
SALES REPRESENTATIVE, ELECTRONICS PARTS 271.357-010
SALES REPRESENTATIVE, ELECTROPLATING 259.257-014
SALES REPRESENTATIVE, ELEVATORS, ESCALATORS, AND DUMBWAITERS 274.157-010
Sales Representative, Envelope 279.357-026
SALES REPRESENTATIVE, FARM AND GARDEN EQUIPMENT AND SUPPLIES 272.357-014
Sales Representative, Flour And Cereals 260.357-014
SALES REPRESENTATIVE, FOOD PRODUCTS 260.357-014
SALES REPRESENTATIVE, FOOTWEAR 261.357-018
SALES REPRESENTATIVE, FOUNDRY AND MACHINE SHOP PRODUCTS 274.257-010
SALES REPRESENTATIVE, FUELS 269.357-010
sales representative, funeral equipment 275.357-030
SALES REPRESENTATIVE, GENERAL MERCHANDISE 279.357-014
Sales Representative, Girls' Apparel 261.357-038
Sales Representative, Groceries 260.357-014
SALES REPRESENTATIVE, HARDWARE SUPPLIES 274.357-034
sales representative, heavy equipment 274.357-022
SALES REPRESENTATIVE, HOBBIES AND CRAFTS 277.357-010
SALES REPRESENTATIVE, HOME FURNISHINGS 270.357-010
SALES REPRESENTATIVE, HOTEL AND RESTAURANT EQUIPMENT AND SUPPLIES 275.357-026
SALES REPRESENTATIVE, HOUSEHOLD APPLIANCES 270.357-014
Sales Representative, Industrial Lubricants 269.357-014
SALES REPRESENTATIVE, INDUSTRIAL MACHINERY 274.357-038
SALES REPRESENTATIVE, INDUSTRIAL RUBBER GOODS 274.357-042
SALES REPRESENTATIVE, JEWELRY 279.357-018
SALES REPRESENTATIVE, LEATHER GOODS 279.357-022
SALES REPRESENTATIVE, LIVESTOCK 260.257-010
SALES REPRESENTATIVE, LUBRICATING EQUIP. 274.357-046
SALES REPRESENTATIVE, MALT LIQUORS 260.357-018
Sales Representative, Marine Supplies 273.357-018
SALES REPRESENTATIVE, MATERIAL-HANDLING EQUIPMENT 274.357-050
Sales Representative, Meats 260.357-014
SALES REPRESENTATIVE, MEN'S AND BOYS' APPAREL 261.357-022
SALES REPRESENTATIVE, METALS 274.357-054
SALES REPRESENTATIVE, MORTICIAN SUPPLIES 275.357-030
SALES REPRESENTATIVE, MOTOR VEHICLES AND SUPPLIES 273.357-022
SALES REPRESENTATIVE, MUSICAL INSTRUMENTS AND ACCESSORIES 277.357-014
SALES REPRESENTATIVE, NOVELTIES 277.357-018
SALES REPRESENTATIVE, OFFICE MACHINES 275.357-034
Sales Representative, Oilfield Supplies 274.357-058
SALES REPRESENTATIVE, OILFIELD SUPPLIES AND EQUIPMENT 274.357-058
Sales Representative, Oil-Well Equipment Rentals 274.357-058
Sales Representative, Oil-Well Services 274.357-058
SALES REPRESENTATIVE, PAPER AND PAPER PRODUCTS 279.357-026
SALES REPRESENTATIVE, PETROLEUM PRODUCTS 269.357-014
SALES REPRESENTATIVE, PLASTIC PRODUCTS 279.357-030
Sales Representative, Playground Equipment 277.357-026
SALES REPRESENTATIVE, POULTRY EQUIPMENT AND SUPPLIES 272.357-018
SALES REPRESENTATIVE, PRECISION INSTRUMENTS 276.357-014
SALES REPRESENTATIVE, PRESSURE-SENSITIVE TAPE 275.357-038
SALES REPRESENTATIVE, PRINTING 254.357-018
Sales Representative, Printing Paper 279.357-026
SALES REPRESENTATIVE, PRINTING SUPPLIES 274.357-062
Sales Representative, Prosthetic And Orthotic Appliances 276.257-010
SALES REPRESENTATIVE, PUBLICATIONS 277.357-022
SALES REPRESENTATIVE, RADIOGRAPHIC-INSPECTION EQUIPMENT AND SERVICES 271.352-010
SALES REPRESENTATIVE, RAILROAD EQUIPMENT AND SUPPLIES 273.357-026
Sales Representative, Raw Fibers 261.357-030
SALES REPRESENTATIVE, RECREATION AND SPORTING GOODS 277.357-026
Sales Representative, Religious Supplies 275.357-014
SALES REPRESENTATIVE, SAFETY APPAREL AND EQUIPMENT 261.357-026
SALES REPRESENTATIVE, SCHOOL EQUIPMENT AND SUPPLIES 275.357-042
SALES REPRESENTATIVE, SHOE LEATHER AND FINDINGS 275.357-046
Sales Representative, Sporting Goods 277.357-026
Sales Representative, Stenographic Machines 275.357-034
SALES REPRESENTATIVE, TEXTILE DESIGNS 274.357-066
SALES REPRESENTATIVE, TEXTILE MACHINERY 274.357-070
SALES REPRESENTATIVE, TEXTILES 261.357-030
SALES REPRESENTATIVE, TOBACCO PRODUCTS AND SMOKING SUPPLIES 260.357-022
SALES REPRESENTATIVE, TOILET PREPARATIONS 262.357-014
Sales Representative, Toys And Games 277.357-026
Sales Representative, Typewriters 275.357-034
SALES REPRESENTATIVE, ULTRASONIC EQUIPMENT 271.352-014
sales representative, undertaker supplies 275.357-030
SALES REPRESENTATIVE, UNIFORMS 261.357-034
SALES REPRESENTATIVE, VENDING AND COIN MACHINES 275.357-050
SALES REPRESENTATIVE, VETERINARIAN SUPPLIES 276.357-018
SALES REPRESENTATIVE, VIDEOTAPE 271.357-014
SALES REPRESENTATIVE, WATER-SOFTENING EQUIPMENT 279.357-034
SALES REPRESENTATIVE, WATER-TREATMENT CHEMICALS 262.357-022
SALES REPRESENTATIVE, WEIGHING AND FORCE-MEASUREMENT INSTRUMENTS 276.257-014
SALES REPRESENTATIVE, WELDING EQUIPMENT 274.357-074
SALES REPRESENTATIVE, WIRE ROPE 274.357-078
SALES REPRESENTATIVE, WOMEN'S AND GIRLS' APPAREL 261.357-038
Sales Representative, Women's Apparel 261.357-038
SALES REPRESENTATIVE, WRITING AND MARKING PENS 277.357-030
SALES SUPERVISOR, MALT LIQUORS 299.137-014
SAMPLER, WOOL 222.587-042
saw-dust machine operator 369.685-014
Segregator 929.687-030
SERVICE REPRESENTATIVE, ELEVATORS, ESCALATORS, AND DUMBWAITERS 259.257-018
service supervisor 187.167-142
SORTER, AGRICULTURAL PRODUCE 529.687-186
sorter, food products 529.687-186
SPONGE CLIPPER 447.687-026
Sponge Packer 920.587-018
SUPERVISOR, EGG PROCESSING 529.137-042
SUPERVISOR, FRUIT GRADING 529.137-046
Supervisor, Newspaper Deliveries 292.137-014
SUPERVISOR, RECLAMATION 621.137-010
SUPERVISOR, ROUTE SALES-DELIVERY DRIVERS 292.137-014
TANK-TRUCK DRIVER 903.683-018
ticket maker 209.587-034
TICKET MARKER 216.567-010
Tobacco-Checkout Clerk 222.687-030
Tomato Grader 529.687-186
top icer 922.687-046
Trailer-Tank-Truck Driver 903.683-018
truck driver, sales route 292.353-010
used-car-lot attendant 915.687-022
vault mechanic 869.381-022
Vegetable Sorter 529.687-186
WAREHOUSE TRAFFIC SUPERVISOR 922.137-026
WASHER, AGRICULTURAL PRODUCE 529.685-258
Washing-And-Waxing-Machine Operator 529.685-258
WHOLESALER I 185.167-070
WHOLESALER II 185.157-018
wrecking mechanic 620.684-010
YARD SUPERVISOR, BUILDING MATERIALS OR LUMBER 929.137-030

wood, container—WOODEN CONTAINER INDUSTRY: This designation includes occupations concerned with manufacturing and repairing box shooks; cases for eggs and canned goods; carrier trays; crates for berries, butter, fruits, and vegetables; and wooden boxes. Occupations concerned with manufacturing and repairing baskets and nonfurniture articles from rattan, reed, and willow are included here. Also included are occupations concerned with manufacturing and repairing tight and slack barrels, buckets, casks, hogsheads, kegs, tanks, and tubs made of staves.

AIR-AND-WATER FILLER 764.687-010
air-and-water-tester 764.687-010
Air Filler 764.687-010
air tester 764.687-022
ASSEMBLER 762.684-010

wood, container

ASSEMBLER, FAUCETS 764.687-014
assembling inspector 762.687-014
Back-Roll-Lathe Operator 664.662-010
BANDER 762.687-010
Band-Resaw Operator 667.682-058
BAND-SAW OPERATOR 667.685-010
BARREL ASSEMBLER 669.682-014
BARREL-ASSEMBLER HELPER 669.685-010
BARREL BRANDER 764.684-010
barrel-bung-remover and dumper 764.687-018
barrel burner 764.684-014
BARREL CHARRER 764.684-014
BARREL-CHARRER HELPER 764.687-034
barrel coater 764.687-026
BARREL DRAINER 764.687-018
BARREL INSPECTOR, TIGHT 764.687-022
BARREL-LATHE OPERATOR, INSIDE 664.682-010
BARREL-LATHE OPERATOR, OUTSIDE 664.662-014
barrel leveler 764.687-094
BARREL LINER 764.687-026
barrel maker 764.684-018
BARREL MARKER 764.687-030
barrel planer 664.682-014
BARREL RAISER 764.684-018
BARREL-RAISER HELPER 764.687-038
barrel repairer 764.684-022
barrel-repairer helper 764.687-050
barrel roller 764.687-030
barrel-stave inspector 764.687-054
barrel tester and drainer 764.687-022
Barrel Waterer 764.687-010
BASKET ASSEMBLER I 669.685-014
BASKET ASSEMBLER II 769.684-010
Basket-Bottom-Machine Operator 669.685-014
Basket-Bottom-Rounding-Machine Operator 667.685-066
basket-factory machine hand 669.685-074
BASKET GRADER 769.687-010
basket-machine operator 669.685-074
basket maker 769.684-054
basket maker 669.685-014
BASKET MENDER 762.684-022
BASKET PATCHER 769.684-014
Board Layer 669.686-014
BOARD-LINER OPERATOR 641.685-014
bolt sawyer 667.685-062
BOTTOM-HOOP DRIVER 669.685-022
Bottom Maker 669.685-014
Bottom Nailer 669.682-058
bottom turner 669.685-026
BOTTOM-TURNING-LATHE TENDER 665.885-010
BOX-BLANK-MACHINE OPERATOR 669.662-010
BOX-BLANK-MACHINE-OPERATOR HELPER 669.686-014
Box Gluer 762.687-034
box-hinge and lock attacher 762.687-046
BOX INSPECTOR 762.687-014
BOX MAKER, WOOD 760.684-014
Box Nailer 762.687-046
Box Repairer I 760.684-014
BOX REPAIRER II 762.687-018
box-shook patcher 762.687-018
box strapper 692.682-058
Box-Top-Stitching-Machine Operator 669.685-042
Braider 669.685-014
BUCKET CHUCKER 664.685-014
BUCKET TURNER 669.682-018
bumper operator 669.685-046
BUNG DRIVER 764.687-042
Bunghole Borer 666.382-010
carpenter, box 760.684-014
case maker 760.684-014
cask maker 764.684-026
CHANNEL INSTALLER 764.687-046
charrer 764.684-014
charrer helper 764.687-034
charring-room worker, barrel 764.684-014
charring-room-worker helper, barrel 764.687-034
CIRCLE-CUTTING-SAW OPERATOR 669.685-026
Circular-Resaw Operator 667.682-058
Circular-Tank Cooper 764.684-030
CLEAT FEEDER 669.687-010
Cleat Layer 669.686-014
Cleat Nailer 669.682-058
Cleat Notcher 669.382-010
cleat thrower 669.687-010
coiler 619.682-034
COOPER 764.684-022
COOPER HELPER 764.687-050
CORNER FORMER 617.685-014
CORNER-TRIMMER OPERATOR 667.682-018
Cover-Machine Operator 669.685-014
Cover-Mat-Machine Operator 669.685-014
crate builder 760.684-014
Croze Cutter 669.682-014
Croze-Cutter Helper 669.685-010
CROZE-MACHINE OPERATOR 669.682-034
crozer 669.682-034
CULLER 764.687-054
DOVETAIL-MACHINE OPERATOR 669.685-046
doweler 764.687-062
edger 795.684-014
EDGE STRIPPER 795.684-014
end operator 669.685-054
END STAPLER 669.685-054
estimator, lumber 221.482-014
EXPERIMENTAL-BOX TESTER 761.281-014
final inspector 764.687-022
final tester 764.687-022
FINISHER 749.684-026
flarer 619.682-034
forming operator 669.685-046
Frame Nailer 669.682-058
Hamper Maker 769.684-054
Hamper Maker, Machine 669.685-014
hand-cooper helper 764.687-050
Handhole-Machine Operator 665.682-030
Handle Bender 669.685-014
Handle-Machine Operator 669.685-014
HARDWARE ASSEMBLER 762.687-046
Hardware Press Operator 762.687-046
Head Charrer 764.684-014
HEADER 764.687-058
header-up 764.687-058
HEADING MATCHER AND ASSEMBLER 764.687-062
heading pinner 764.687-062
HEADING REPAIRER 764.687-066
HEAD INSPECTOR 764.387-010
Head-Inspector-And-Center Marker 764.387-010
head setter 764.687-058
Head-Turning-Machine Operator 667.685-066
Head-Up Operator 669.682-014
Head-Up-Operator Helper 669.685-010
Heater Operator 669.682-014
Heater Operator Helper 669.685-010
hogshead builder 764.687-074
HOGSHEAD COOPER I 764.684-026
HOGSHEAD COOPER II 764.687-070
HOGSHEAD COOPER III 764.687-074
hogshead head-matcher 667.685-010
HOGSHEAD HOOPER 764.687-078
HOGSHEAD MAT ASSEMBLER 764.687-082
HOGSHEAD MAT INSPECTOR 764.687-086
HOOP BENDER, TANK 619.682-026
hoop-bending-machine operator 619.682-026
HOOP COILER 617.686-010
Hoop-Coiling-Machine Operator 669.685-014
Hoop-Driving-Machine Operator 669.682-014
Hoop-Driving-Machine-Operator Helper 669.685-010
hooper 764.687-078
HOOP-FLARING-AND-COILING-MACHINE OPERATOR 619.682-034
Hoop-Flaring-Machine Operator 619.682-030
Hoop-Flaring-Machine-Operator Helper 619.686-014
HOOP-MAKER HELPER, MACHINE 619.686-014
HOOP MAKER, MACHINE 619.682-030
Hoop-Punch-And-Coiler Operator 619.682-030
Hoop-Punch-And-Coiler-Operator Helper 619.686-014
Hoop-Punch-Operator Helper 619.687-014
Hoop-Riveting-Machine Operator 619.682-030
Hoop-Riveting-Machine-Operator Helper 619.686-014
hoop-rolls operator 617.686-010
JIG BUILDER 761.381-014
keg inspector 764.687-022
keg-lathe-operator, inside 664.682-010
keg raiser 764.684-018
KEG VARNISHER 749.687-014
lathe operator 664.682-014
Leveler Helper 669.685-010
LEVELER I 764.687-094
Leveler II 669.682-014
LOG COOKER 562.665-010
looper 692.685-258

Loop-Machine Operator 669.685-014
LUMBER ESTIMATOR 221.482-014
MACHINE-TANK OPERATOR 667.662-014
Market-Basket Maker I 669.685-014
Market-Basket Maker II 769.684-054
MATERIAL INSPECTOR 764.387-014
Mat-Machine Tender 669.685-014
Multiple-Cut-Off-Saw Operator 667.682-022
Multiple-Resaw Operator 667.682-058
PARTITION ASSEMBLER 762.687-054
Partition Notcher 669.382-010
patented-hogshead assembler 764.687-070
PIPE-AND-TANK FABRICATOR 669.380-018
PLUGGER 764.687-098
power-saw operator 667.662-014
PUTTY MIXER AND APPLIER 769.687-038
quality-control-inspector, heading 764.387-010
raiser 764.684-018
raiser helper 764.687-038
Rattan Worker 769.684-054
Rectangular-Tank Cooper 764.684-030
rounding-machine operator 667.685-066
Sander 669.682-014
Sander Helper 669.685-010
setter 761.381-014
setter-up 764.684-018
setting-up-and-windlass-machine operator 764.684-018
setting-up-and-windlass-machine-operator helper 764.687-038
shop cooper 764.684-022
Slack Cooper 764.684-022
SLAT-BASKET MAKER HELPER, MACHINE 669.686-026
SLAT-BASKET MAKER, MACHINE 669.685-074
Slat-Basket-Top Maker 669.685-014
SQUEEZER OPERATOR 669.685-082
stave grader 764.387-014
stave inspector 764.387-014
stave inspector and culler 764.687-054
STAVE JOINTER 665.685-030
STAVE-MACHINE TENDER 663.685-046
stave matcher 764.687-054
STAVE-SAW OPERATOR 667.685-062
steam-vat tender 562.665-010
STEEL-BARREL REAMER 703.687-022
Stitcher Feeder 669.686-030
Stitcher Operator 669.685-014
stitching-machine operator 669.662-010
STITCHING-MACHINE OPERATOR 669.685-086
Strap Nailer 669.682-058
strapper 692.682-058
STRAPPING-MACHINE OPERATOR 692.682-058
Strap Recesser 669.382-010
STRIP-METAL-PUNCH-AND-STRAIGHTENER OPERATOR 615.685-038
Supervisor, Barrel Assembly 764.134-010
SUPERVISOR, COOPERAGE SHOP 764.134-010
Supervisor, Heading 764.134-010
SUPERVISOR, STAVE CUTTING 667.137-010
Supervisor, Stave Finishing 764.134-010
TANK ASSEMBLER 764.684-030
Tank-Bottom Assembler 764.684-030
tank cooper 764.684-030
Tank-Stave Assembler 764.684-030
Tap-Out Operator 669.682-014
Tight Cooper 764.684-022
Truss Driver 669.682-014
Truss-Driver Helper 669.685-010
Truss Puller 669.682-014
Truss-Puller Helper 669.685-010
tub chucker 664.685-014
tub turner 669.682-018
turner-machine operator 667.685-066
TURNING-MACHINE OPERATOR 667.685-066
TURNING-MACHINE-OPERATOR HELPER 667.686-022
VENEER-STOCK GRADER 769.687-050
WEAVER 769.684-054
Webb Layer 669.685-014
wicker worker 769.684-054
Willow Worker 769.684-054
Wire Bender 669.686-014
Wire-Bound-Box-Machine Helper 669.686-014
Wire-Bound-Box-Machine Operator 669.662-010
WIRE-TURNING-MACHINE OPERATOR 692.685-258
WIRE-WINDING-MACHINE OPERATOR 619.685-090
wood cooker 562.665-010

wood prod., nec—WOOD PRODUCTS INDUSTRY, NOT ELSEWHERE CLASSIFIED: This designation includes occupations which are not included in other industries concerned with manufacturing, repairing, and preserving wood products. Typical occupations include those concerned with (1) treating wood with creosote or other preservatives to prevent decay and to protect against fire and insects; (2) manufacturing wood panel products from small wood particles; and (3) manufacturing and repairing cork products, hardboard, lasts and related products, and wood and metal mirror and picture frames.

Adzing-And-Boring-Machine Feeder 669.686-030
Adzing-And-Boring-Machine Helper 561.686-010
ADZING-AND-BORING-MACHINE OPERATOR 669.682-010
ANTICHECKING-IRON WORKER 563.687-010
BACK TENDER, INSULATION BOARD 532.685-010
Beegle-Iron Worker 563.687-010
board handler 569.686-042
BREAKER-MACHINE OPERATOR 564.685-010
Broke-Beater Tender 530.685-014
burnisher 742.684-010
CALENDER OPERATOR, INSULATION BOARD 539.482-010
chip mixer 560.465-010
CHIP-MIXING-MACHINE OPERATOR 560.465-010
CHIPPING-MACHINE OPERATOR 564.682-010
C-Iron Worker 563.687-010
coater, hand 562.687-014
COATER OPERATOR, INSULATION BOARD 539.685-010
Coating-Line Checker 539.667-010
COATING-MACHINE OPERATOR, HARDBOARD 534.682-022
COMPO CASTER 769.381-010
COMPOUNDER, CORK 560.587-010
CONTROL INSPECTOR 539.667-010
core feeder 569.685-042
cork coater 562.687-014
cork mixer 560.585-010
cork mixer 560.587-010
CORK MOLDER 569.685-030
CORK-PRESSING-MACHINE OPERATOR 569.686-018
cork sorter 769.687-042
Cross-Tie-Tram Loader 561.686-010
Cross-Tie Turner 669.687-018
CYLINDER-MACHINE OPERATOR 539.362-010
dip tanker 561.665-010
DRIER TENDER 563.585-010
DRILL-PRESS OPERATOR, ACOUSTICAL TILE 649.682-018
EMBOSSING-MACHINE OPERATOR 669.682-046
END-TOUCHING-MACHINE OPERATOR 662.686-010
EXTRUDER OPERATOR 569.685-038
Extruder Operator, Horizontal 569.685-038
Extruder Operator, Multiple 569.685-038
Extruder Operator, Vertical 569.685-038
filler and sander 769.687-022
finisher 742.684-010
fitter 739.684-146
FLAKE-CUTTER OPERATOR 564.682-014
FLOOR WORKER 739.687-098
FOOT-MITER OPERATOR 739.684-066
FRAMER 739.684-078
framer 669.662-014
FRAMER 666.684-010
FRAME-TABLE OPERATOR 669.662-014
FRAME-TABLE-OPERATOR HELPER 669.685-058
FRAME TRIMMER I 749.684-030
FRAME TRIMMER II 769.687-022
framing-mill operator 669.662-014
framing-mill-operator helper 669.685-058
GASKET SUPERVISOR 569.130-010
glue-mixer operator 560.465-010
glue-plant operator 560.465-010
glue-spreader operator 569.685-042
GLUE SPREADER, VENEER 569.685-042
GRINDER, HARDBOARD 569.682-010
grinding operator 662.685-026
GROOVER-AND-STRIPER OPERATOR 669.685-102
hand-miter operator 739.684-066
hardboard panel printer 652.662-018
HEADER 665.682-014
HEAD-SAW OPERATOR, INSULATION BOARD 677.682-010
Heel Grinder 669.682-054
HIGH-DENSITY FINISHING OPERATOR 539.562-010
High-Density-Talc-Coater Operator 534.682-022
Hollow-Core Door-Frame Assembler 762.687-022
HUMIDIFIER OPERATOR 562.682-010
Hydropulper 530.685-014
INCISING-MACHINE OPERATOR 569.662-010

INSPECTOR, FIBROUS WALLBOARD 539.487-010
INSPECTOR, PICTURE FRAMES 769.687-030
ironer 739.684-098
LABORER, WOOD-PRESERVING PLANT 561.686-010
LAMINATING-MACHINE FEEDER 569.686-042
LAMINATING-MACHINE OFFBEARER 569.686-046
LAMINATOR 554.685-030
laminator grader 569.686-046
Last-Code Striper 740.684-022
last grinder 662.685-018
LAST IRONER 739.684-098
LAST MARKER 739.684-102
LAST-MODEL MAKER 761.381-018
LAST-PATTERN GRADER 693.382-010
Last Polisher 761.684-026
LAST REMODELER-REPAIRER 739.684-106
LAST REPAIRER 739.684-110
LAST SAWYER 690.685-262
LAST SCOURER 662.685-018
LAST TRIMMER 669.682-054
Last Turner 664.685-018
line-and-frame poler 959.684-010
LINE TENDER, FLAKEBOARD 569.382-010
load tallier 221.167-022
Louver-Door Assembler 762.687-022
MAT CUTTER 739.684-126
MIRROR SPECIALIST 779.684-038
MIXING-MACHINE TENDER 560.585-010
Mixing-Machine Tender, Cork Gasket 560.585-010
Mixing-Machine Tender, Cork Rod 560.585-010
model maker 761.381-018
Mold Filler 569.685-030
Mold Hoister 569.685-030
Mold Sprayer 569.685-030
ORNAMENTAL-MACHINE OPERATOR 690.682-054
ornamenter, hand 769.381-010
paint-coating-machine operator 534.682-022
PATTERN-GRADER SUPERVISOR 693.132-010
PATTERNMAKER, ACOUSTICAL TILE 649.685-086
perforating-machine operator 569.662-010
PICTURE FRAMER 739.684-146
platform worker 561.665-010
pole classifier 561.587-010
POLE FRAMER 959.684-010
Pole Framer, Machine 669.662-014
Pole-Incisor Operator 569.662-010
POLE INSPECTOR 561.587-010
pole peeler 663.682-014
pole-peeler helper 665.686-010
POLE-PEELING-MACHINE OPERATOR 663.682-014
POLE-PEELING-MACHINE-OPERATOR HELPER 665.686-010
pole shaver 663.682-014
pole-shaver helper 665.686-010
polisher and sander 662.685-026
Powder Gilder 763.381-010
PRESS BREAKER 569.686-050
PRESS OPERATOR, HARDBOARD 569.682-014
PRINT-LINE OPERATOR 652.662-018
print-line supervisor 652.662-018
pulp drier 532.685-010
PULPER 530.685-014
PULP GRINDER AND BLENDER 530.682-010
PUNCH PRESS OPERATOR 669.685-106
QUALITY-CONTROL TESTER 569.384-010
REED-PRESS FEEDER 669.686-022
remodeler 739.684-106
Repairer, Mirror And Picture Frame 769.684-038
Repairer, Sash And Door 769.684-038
RESIN COATER 562.687-014
retort engineer 561.362-010
RETORT-LOAD EXPEDITER 221.167-022
RUBBER 742.684-010
SANDING-MACHINE BUFFER 662.685-022
SANDING-MACHINE TENDER 662.685-026
Satin Finisher 742.684-010
SAWYER, CORK SLABS 667.685-046
scaffold worker 561.665-010
SCREEN CLEANER 569.687-018
SCREEN TENDER 534.665-010
shader and toner 749.684-030
Siding-Coreboard Inspector 539.667-010
S-Iron Worker 563.687-010
SLICING-MACHINE TENDER 663.686-026
slusher operator 530.685-014
SORTER I 569.687-022
SORTER II 769.687-042
SPAR-MACHINE OPERATOR 664.682-022
SPAR-MACHINE-OPERATOR HELPER 664.685-030
SPLITTING-MACHINE TENDER 663.685-042
Spray-Painter, Machine 599.685-074
STAIN APPLICATOR 561.585-010
STAINER 742.684-014
Stiff-Leg Derrick Operator 921.663-022
SUPERVISOR, FABRICATION 769.130-010
SUPERVISOR, FRAMING MILL 669.130-018
SUPERVISOR, HARDBOARD 539.130-010
Supervisor, Incising 561.131-010
SUPERVISOR, LAST-MODEL DEPARTMENT 761.131-010
SUPERVISOR, PARTICLEBOARD 569.132-010
Supervisor, Pole Yard 669.130-018
Supervisor, Tie Yard 669.130-018
SUPERVISOR, WET END 539.131-010
TANKER 561.665-010
TENONER OPERATOR 677.682-026
Tie Handler 561.686-010
tie-mill operator 669.682-010
Tile-Machine Operator 539.562-010
Timber-Incisor Operator 569.662-010
timber-treating-tank operator 561.362-010
Toe Stripper 669.682-054
TREATING ENGINEER 561.362-010
TREATING-ENGINEER HELPER 561.685-010
TREATING INSPECTOR 569.367-010
TREATING-PLANT OPERATOR 563.662-010
treating-plant operator 561.362-010
TREATING-PLANT SUPERVISOR 561.131-010
veneer gluer 569.685-042
WET-END HELPER 534.685-034
Whitener 763.381-010
WHITING-MACHINE OPERATOR 562.485-010
Wincher 561.686-010
WOOD-POLE TREATER 561.687-010

woodworking—WOODWORKING: This designation includes occupations concerned with various phases of woodworking and related processes wherever found. Typical of the processes included are fabricating, grading, planing, sawing, and shaping lumber and wooden articles. Occupations concerned with the manufacture of metal doors and screens are included in the STRUCTURAL AND ORNAMENTAL METAL PRODUCTS INDUSTRY (struct. metal).

ASSEMBLY OPERATOR 762.684-018
automatic-lathe operator 664.382-010
Automatic-Lathe Setter 669.280-010
automatic-mold sander 662.682-010
Band-Ripsaw Operator 667.682-066
band-saw marker 761.684-022
BAND-SAW OPERATOR 667.685-014
BAND-SCROLL-SAW OPERATOR 667.682-010
Bat-Lathe Operator 664.382-010
Belt Sander 761.682-014
BENCH CARPENTER 760.684-010
BENDER, HAND 769.684-018
BENDER, MACHINE 569.685-014
bending-press operator 569.685-014
binder 929.685-018
BOAT-OAR MAKER 761.381-010
BOBBIN INSPECTOR 769.687-014
Boring-Machine Feeder 669.686-030
BORING-MACHINE OPERATOR 666.382-010
Boring-Machine Operator, Double End 666.382-010
Boring-Machine Operator, Horizontal 666.382-010
Boring-Machine Operator, Vertical 666.382-010
Box-Blank-Machine Feeder 669.686-030
Brush Sander 761.682-014
bundler 929.685-018
CABINETMAKER 660.280-010
CABINETMAKER APPRENTICE 660.280-014
Cabinetmaker, Maintenance 660.280-010
CABINETMAKER, SUPERVISOR 660.130-010
CARVER, HAND 761.281-010
carver, machine 761.682-018
carving-machine operator 761.682-018
Chain-Mortiser Operator 665.482-014
Check Grader 669.687-030
Chisel-Mortiser Operator 665.482-014
CHUCKING-AND-SAWING-MACHINE OPERATOR 669.682-026
CHUCKING-MACHINE OPERATOR 665.382-010
Circular-Ripsaw Operator 667.682-066
Clamp-Carrier Operator 762.687-034

CLAMPER 669.685-030
CLAMP-JIG ASSEMBLER 762.687-022
CLOTHESPIN-DRIER OPERATOR 563.685-014
CLOTHESPIN-MACHINE OPERATOR 667.686-010
Cluster-Bore Operator 666.382-010
coater 763.381-010
COAT-HANGER-SHAPER-MACHINE OPERATOR 669.685-034
combination-saw operator 667.682-086
contour sander 662.682-010
COPY-LATHE TENDER 664.685-018
CORRUGATED-FASTENER DRIVER 669.685-042
corrugator operator 669.685-042
cross-cut-saw operator 667.682-022
CURTAIN-STRETCHER ASSEMBLER 762.684-030
Cut-Off-Saw Grader 667.382-010
CUT-OFF-SAW OPERATOR I 667.682-022
CUT-OFF-SAW OPERATOR II 667.685-074
CYLINDER-SANDER OPERATOR 662.685-014
DADO OPERATOR 669.382-010
defect cutter 667.682-082
DIPPER AND DRIER 749.687-010
Disk Sander 761.682-014
Dock Grader 669.687-030
DOOR ASSEMBLER I 762.684-034
Door Assembler II 762.687-050
DOOR CORE ASSEMBLER 762.687-030
Door-Frame Assembler, Machine 669.685-042
Door Patcher 769.684-030
Double-Cut-Off-Saw Operator 667.682-022
Double-End-Chucking-Machine Operator 665.382-010
Double-End-Tenoner Operator 669.382-018
Double-End-Tenoner Setter 669.280-010
Double-Spindle-Shaper Operator 665.682-034
Dovetail-Machine Operator 665.382-014
doweler 669.685-050
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AIR-CONDITIONING-UNIT TESTER (svc. ind. mach.) 827.361-010
air-control tender (any industry) 950.585-010
aircraft and engine electrician, field and hangar (aircraft mfg.; air trans.) 825.261-018
Aircraft-And-Engine Mechanic, Field-And-Hangar (aircraft mfg.) 621.281-014
AIRCRAFT-ARMAMENT MECHANIC (government ser.) 632.261-010
aircraft armorer (government ser.) 632.261-010
AIRCRAFT BODY REPAIRER (air trans.) 807.261-010
aircraft charter dispatcher (air trans.) 295.367-010
aircraft-delivery checker (aircraft mfg.) 222.387-010
Aircraft-Engine Assembler (air trans.) 621.281-014
Aircraft-Engine-Cylinder Mechanic (air trans.) 621.281-014
Aircraft-Engine Dismantler (air trans.) 621.281-014
Aircraft-Engine Installer (air trans.) 621.281-014
Aircraft-Engine Mechanic (air trans.) 621.281-014
Aircraft-Engine Mechanic, Overhaul (air trans.) 621.281-014
aircraft-inspection-record clerk (air trans.) 221.362-010
Aircraft Instrument Repairer (air trans.) 710.281-026
AIRCRAFT LAUNCH AND RECOVERY TECHNICIAN (military ser.) 912.682-010
AIRCRAFT-LOG CLERK (air trans.) 221.362-010
aircraft mechanic (aircraft mfg.; air trans.) 621.281-014
AIRCRAFT MECHANIC, ARMAMENT (aircraft mfg.) 806.361-030
aircraft mechanic, electrical (aircraft mfg.; air trans.) 825.261-018
AIRCRAFT MECHANIC, ELECTRICAL AND RADIO (aircraft mfg.) 825.381-010
AIRCRAFT MECHANIC, ENVIRONMENTAL CONTROL SYSTEM (aircraft mfg.) 806.381-014
AIRCRAFT MECHANIC, PLUMBING AND HYDRAULICS (aircraft mfg.) 806.381-066
aircraft mechanic, rigger (aircraft mfg.) 806.381-018
AIRCRAFT MECHANIC, RIGGING AND CONTROLS (aircraft mfg.) 806.381-018
aircraft mechanic, structures (aircraft mfg.) 806.381-026
AIRCRAFT-PHOTOGRAPHIC-EQUIPMENT MECHANIC (photo. appar.) 714.281-010
aircraft pilot (agriculture) 196.263-010
AIRCRAFT-SHIPPING CHECKER (aircraft mfg.) 222.387-010
AIRCRAFT SKIN BURNISHER (aircraft mfg.) 807.684-018
aircraft-time clerk (air trans.) 221.362-010
air deodorizer servicer (business ser.) 389.687-010
Airdox Fitter (mine & quarry) 862.281-022
AIR-DRIER-MACHINE OPERATOR (paper & pulp) 534.682-010
air-drill operator (mine & quarry) 930.684-018
Air Filler (wood. container) 764.687-010
AIRFRAME-AND-POWER-PLANT MECHANIC (aircraft mfg.; air trans.) 621.281-014
AIRFRAME-AND-POWER-PLANT-MECHANIC APPRENTICE (air trans.) 621.281-018
AIRFRAME-AND-POWER-PLANT-MECHANIC HELPER (aircraft mfg.; air trans.) 621.684-010
Airframe-And-Power-Plant Mechanic, Line Service (air trans.) 621.281-014
air-freight agent (air trans.) 248.367-018
air-furnace operator (foundry; steel & rel.) 512.362-018
Air-Hammer Operator (construction) 869.687-026
air-hammer operator (mine & quarry) 930.684-018
air-hammer operator (pen & pencil) 733.687-014
air-hammer stripper (paper goods) 794.687-050
AIR-HOLE DRILLER (fabrication, nec) 692.685-018
Air Intelligence Specialist (profess. & kin.) 059.167-010
AIRLINE-RADIO OPERATOR (air trans.; business ser.) 193.262-010
AIRLINE-RADIO OPERATOR, CHIEF (air trans.; business ser.) 193.162-022
AIRLINE SECURITY REPRESENTATIVE (air trans.) 372.667-010
air-motor repairer (any industry) 630.281-010
airplane-and-engine inspector (air trans.) 621.261-010
airplane-cabin attendant (air trans.) 352.367-010
Airplane Captain (air trans.) 196.263-014
AIRPLANE-CHARTER CLERK (air trans.) 295.367-010

Airplane Cleaner (air trans.) 919.687-014
AIRPLANE COVERER (aircraft mfg.; air trans.) 849.381-010
AIRPLANE-DISPATCH CLERK (air trans.) 248.367-010
airplane dispatcher (air trans.) 912.167-010
Airplane First-Officer (air trans.) 196.263-014
AIRPLANE-FLIGHT ATTENDANT (air trans.) 352.367-010
AIRPLANE-GAS-TANK-LINER ASSEMBLER (rubber goods) 759.684-010
AIRPLANE INSPECTOR (air trans.) 621.261-010
airplane mechanic (aircraft mfg.; air trans.) 621.281-014
airplane-mechanic apprentice (air trans.) 621.281-018
airplane-mechanic helper (aircraft mfg.; air trans.) 621.684-010
airplane navigator (air trans.) 196.167-014
Airplane-Patrol Pilot (business ser.) 196.263-014
AIRPLANE PILOT (agriculture) 196.263-010
Airplane Pilot (air trans.) 196.263-014
airplane pilot, chief (air trans.) 196.167-010
AIRPLANE PILOT, COMMERCIAL (air trans.) 196.263-014
airplane pilot, crop dusting (agriculture) 196.263-010
AIRPLANE-PILOT HELPER (agriculture) 409.667-010
AIRPLANE PILOT, PHOTOGRAMMETRY (business ser.) 196.263-018
airplane-rental clerk (air trans.) 295.367-010
Air Pollution Analyst (profess. & kin.) 029.081-010
Air-Pollution Engineer (profess. & kin.) 019.081-018
AIRPORT ATTENDANT (air trans.) 912.364-010
Airport Clerk (air trans.) 219.362-010
airport-control operator (government ser.) 193.162-018
AIRPORT ELECTRICIAN (air trans.) 824.281-010
AIRPORT ENGINEER (profess. & kin.) 005.061-010
Airport Guide (air trans.) 353.367-014
AIRPORT-MAINTENANCE CHIEF (air trans.) 899.137-010
Airport Safety And Security Duty Officer (government ser.) 375.133-010
Airport Safety And Security Officer (government ser.) 375.263-014
AIRPORT UTILITY WORKER (air trans.) 912.663-010
AIR-PRESS OPERATOR (any industry) term
AIR PURIFIER SERVICER (business ser.) 389.687-010
AIR-TABLE OPERATOR (mine & quarry) 549.685-010
Air-Tank Assembler (toy-sport equip.) 732.684-014
air tester (profess. & kin.) 012.261-010
air tester (wood. container) 764.687-022
AIR-TOOL OPERATOR (construction) term
Air-Traffic-Control Specialist, Center (government ser.) 193.162-018
AIR-TRAFFIC-CONTROL SPECIALIST, STATION (government ser.) 193.162-014
AIR-TRAFFIC-CONTROL SPECIALIST, TOWER (government ser.) 193.162-018
air-traffic-control supervisor (government ser.) 193.167-010
AIR-TRAFFIC COORDINATOR (government ser.) 193.162-010
Air Tucker (tex. prod., nec) 787.682-082
Air-Turning-Machine Feeder (tex. prod., nec) 689.685-146
AIR-VALVE REPAIRER (railroad equip.) 622.381-010
Aitchbone Breaker (meat products) 525.684-018
ALARM INVESTIGATOR (business ser.) 376.367-010
ALARM OPERATOR (government ser.) 379.162-010
alarm-signal operator (any industry) 379.362-014
Alberene-Stone Setter (construction) 861.381-038
ALCOHOL-AND-DRUG-ABUSE-ASSISTANCE PROGRAM ADMINISTRATOR (government ser.) 195.167-042
alcohol rubber (personal ser.) 335.677-010
Alcohol-Still Operator (chemical) 552.362-022
aligner (electron. comp.) 976.382-030
aligner (ordnance) 736.684-042
ALIGNER, BARREL AND RECEIVER (ordnance) 736.684-010
ALIGNER, TYPEWRITER (office machines) 706.381-010
alignment mechanic (automotive ser.) 620.281-038
aligning checker (office machines) 706.687-022
Alkylation Operator (chemical; petrol. refin.) 559.382-018
all-around-gear-machine operator (machine shop) 602.380-010
allergist (medical ser.) 070.101-102
ALLERGIST-IMMUNOLOGIST (medical ser.) 070.101-102
allergy specialist (medical ser.) 070.101-102
Alley Cleaner (textile) 381.687-018
alley tender (nonmet. min.; textile) 680.665-018
alley tender (nonmet. min.; textile) 680.685-018
Alligator-Shear Operator (any industry) 615.685-034
Allocations Clerk (electron. comp.) 221.387-046
ALMOND BLANCHER, HAND (can. & preserv.) 521.687-010
ALMOND-BLANCHER OPERATOR (can. & preserv.) 521.685-014
ALMOND-CUTTING-MACHINE TENDER (can. & preserv.) 521.685-018
Almond Grinder (can. & preserv.) 521.685-234
ALMOND HULLER (can. & preserv.) 521.685-010
Almond-Pan Finisher (sugar & conf.) 524.382-010
ALMOND-PASTE MIXER (sugar & conf.) 529.361-010
ALMOND-PASTE MOLDER (sugar & conf.) 520.684-010
Almond Roaster (can. & preserv.) 529.685-174
Almond Sorter (can. & preserv.) 521.687-086
ALODIZE-MACHINE HELPER (nonfer. metal) 509.685-010
ALODIZE-MACHINE OPERATOR (nonfer. metal) 509.462-010
alteration inspector (retail trade) 789.687-078
ALTERATIONS WORKROOM CLERK (retail trade) 221.367-010
ALTERATION TAILOR (garment; personal ser.; retail trade) 785.261-010
alterer (garment; personal ser.; retail trade) 785.261-010
alterer apprentice (garment; personal ser.; retail trade) 785.261-018
ALUMINA-PLANT SUPERVISOR (smelt. & refin.) 511.130-010
Aluminizer (electron. comp.) 725.684-022
ALUMINUM-CONTAINER TESTER (elec. equip.) 727.687-018
Aluminum-Foil-Spooling-Machine Operator (nonfer. metal) 699.682-030
ALUMINUM-HYDROXIDE-PROCESS OPERATOR (chemical; pharmaceut.) 559.685-014
ALUMINUM-POOL INSTALLER (construction) 809.664-010
Aluminum-Shingle Roofer (construction) 866.381-010
Aluminum-Siding Installer (construction; retail trade) 863.684-014
alum mixer (chemical) 559.362-010
ALUMNI SECRETARY (education) 090.117-014
ALUM-PLANT OPERATOR (chemical) 559.362-010
AMALGAMATOR (smelt. & refin.) 511.685-010
AMBULANCE ATTENDANT (medical ser.) 355.374-010
Ambulance Driver (government ser.) 375.263-014
AMBULANCE DRIVER (medical ser.) 913.683-010
ammonia operator (chemical) 558.382-014
ammonia-print operator (any industry) 979.682-014
Ammonia-Solution Preparer (textile) 550.585-018
Ammonia-Still Operator (chemical) 552.685-014
AMMONIA-STILL OPERATOR (steel & rel.) 559.382-010
Ammonium-Hydroxide Operator (chemical) 551.382-010
AMMONIUM-NITRATE CRYSTALLIZER (chemical) 553.685-010
Ammonium-Nitrate Neutralizer (chemical) 550.585-030
ammonium-sulfate operator (chemical; steel & rel.) 558.362-018
ammunition storekeeper (chemical; ordnance) 222.137-018
ammunition supervisor (chemical; ordnance) 222.137-018
amortization-schedule clerk (clerical) 216.362-026
AMPHIBIAN CREWMEMBER (military ser.) 378.683-010
AMPOULE EXAMINER (pharmaceut.) 559.687-010
AMPOULE FILLER (pharmaceut.) 559.685-018
ampoule filler and sealer (pharmaceut.) 559.685-018
AMPOULE SEALER (pharmaceut.) 559.687-014
AMPOULE-WASHING-MACHINE OPERATOR (pharmaceut.) 559.685-022
amusement-equipment operator (amuse. & rec.) 342.663-010
Amusement-Game Machine Coin Collector (business ser.) 292.483-010
AMUSEMENT PARK ENTERTAINER (amuse. & rec.) 159.647-010
AMUSEMENT PARK WORKER (amuse. & rec.) 349.664-010
ANALYST, FOOD AND BEVERAGE (hotel & rest.) 310.267-010
analyst, geochemical prospecting (petrol. & gas) 024.381-010
ANATOMIST (profess. & kin.) 041.061-010
Anchorperson (radio-tv broad.) 131.262-010
anchor tacker (boot & shoe) 690.685-162
anchor-tack puller (boot & shoe) 788.687-146
ANESTHESIOLOGIST (medical ser.) 070.101-010
Anesthesiologist Assistant (medical ser.) 079.364-018
angiographer (medical ser.) 078.362-046
Angledozer Operator (any industry) 850.683-010
Angle-Roll Operator (any industry) 619.362-014
ANGLE SHEAR OPERATOR (any industry) 615.482-010
animal attendant (any industry) 410.674-010
ANIMAL BREEDER (agriculture) 410.161-010
ANIMAL BREEDER (profess. & kin.) 041.061-014
animal caretaker (amuse. & rec.) 412.674-010
ANIMAL CARETAKER (any industry) 410.674-010
animal control officer (nonprofit org.) 379.263-010
Animal Cytologist (profess. & kin.) 041.061-042
Animal Ecologist (profess. & kin.) 041.061-090
ANIMAL EVISCERATOR (meat products) 525.687-010
animal health technician (medical ser.) 079.361-014
ANIMAL-HOSPITAL CLERK (medical ser.) 245.367-010
animal humane agent supervisor (nonprofit org.) 379.137-010
Animal Impersonator (amuse. & rec.) 159.047-018
ANIMAL KEEPER (amuse. & rec.) 412.674-010
ANIMAL KEEPER, HEAD (amuse. & rec.) 412.137-010
ANIMAL-NURSERY WORKER (amuse. & rec.; museums) 412.674-014
Animal Nutritionist (profess. & kin.) 040.061-014
Animal Physiologist (profess. & kin.) 041.061-078
ANIMAL-RIDE ATTENDANT (amuse. & rec.) 349.674-010
ANIMAL-RIDE MANAGER (amuse. & rec.) 349.224-010
ANIMAL SCIENTIST (profess. & kin.) 040.061-014
ANIMAL-SHELTER CLERK (nonprofit org.) 249.367-010
animal shelter supervisor (nonprofit org.) 410.134-018
Animal Taxonomist (profess. & kin.) 041.061-090
animal technician (medical ser.) 079.361-014
ANIMAL TRAINER (amuse. & rec.) 159.224-010
ANIMAL TREATMENT INVESTIGATOR (nonprofit org.) 379.263-010
animated-cartoon artist (motion picture; radio-tv broad.) 141.081-010

animator (motion picture; radio-tv broad.) 141.081-010
ANKLE-PATCH MOLDER (boot & shoe) 692.682-010
ANNEALER (glass products) 573.685-010
ANNEALER (heat treating) 504.682-010
ANNEALER (jewelry-silver.) 504.687-010
ANNOUNCER (amuse. & rec.) 159.347-010
ANNOUNCER (radio-tv broad.) 159.147-010
Announcer, International Broadcast (radio-tv broad.) 159.147-010
anode adjuster (chemical) 558.584-010
Anode-Assembly Cleaner I (smelt. & refin.) 515.685-014
Anode-Assembly Cleaner II (smelt. & refin.) 519.664-010
ANODE BUILDER (chemical) 826.684-010
ANODE-CREW SUPERVISOR (smelt. & refin.) 630.134-010
ANODE REBUILDER (smelt. & refin.) 630.684-010
ANODIZER (any industry) 500.682-010
ANTENNA INSTALLER (any industry) 823.684-010
ANTENNA INSTALLER, SATELLITE COMMUNICATIONS (any industry) 823.261-022
Anthracene Operator (chemical) 551.685-122
Anthropological Linguist (profess. & kin.) 055.067-010
ANTHROPOLOGIST (profess. & kin.) 055.067-010
ANTHROPOLOGIST, PHYSICAL (profess. & kin.) 055.067-014
Anthropometrist (profess. & kin.) 055.067-014
ANTICHECKING-IRON WORKER (wood prod., nec) 563.687-010
Antique-Auto-Museum-Maintenance Worker (museums) 899.384-010
Antiquer (boot & shoe) 788.684-066
Antiquer (furniture) 763.381-010
antisqueak applier (boot & shoe) 788.687-010
antisqueak chalker (boot & shoe) 788.687-010
ANTISQUEAK FILLER (boot & shoe) 788.687-010
ANTITANK ASSAULT GUNNER (military ser.) 378.464-010
ANVIL-SEATING-PRESS OPERATOR (ordnance) 694.685-010
anvil smith (forging) 610.381-010
Aperture-Mask Etcher (electron. comp.) 725.685-010
apex trimmer (boot & shoe) 690.685-150
apiarist (agriculture) 413.161-010
APICULTURIST (profess. & kin.) 041.061-018
apparatus-repair mechanic (any industry) 626.381-014
APPAREL-RENTAL CLERK (retail trade) 295.357-010
appeals board referee (government ser.) 119.107-010
APPEALS REFEREE (government ser.) 119.267-014
APPEALS REVIEWER, VETERAN (government ser.) 119.117-010
Appellate Conferee (government ser.) 160.167-050
Appellate-Court Judge (government ser.) 111.107-010
Appetizer Packer (hotel & rest.) 319.484-010
Apple Checker (agriculture) 221.587-030
Apple Grower (agriculture) 403.161-010
Apple Packer (agriculture; wholesale tr.) 920.687-134
APPLE-PACKING HEADER (agriculture) 920.687-010
Apple-Picking Supervisor (agriculture) 409.131-010
Apple Sorter (agriculture; can. & preserv.; wholesale tr.) 529.687-186
Apple Washer (agriculture; can. & preserv.; wholesale tr.) 529.685-258
APPLIANCE ASSEMBLER, LINE (house. appl.; svc. ind. mach.) 827.684-010
Appliance Inspector (house. appl.) 729.387-022
Appliance Installer (mfd. bldgs.; vehicles, nec) 869.684-026
Appliance Installer (vehicles, nec) 806.684-018
appliance painter-and-refinisher (any industry) 741.684-030
APPLIANCE REPAIRER (any industry) term
APPLIANCE REPAIRER (house. appl.) 723.584-010
appliance servicer (any industry) 637.261-018
appliance-service representative (any industry) 827.261-010
appliance-service representative (any industry) 723.381-010
APPLIANCE-SERVICE SUPERVISOR (utilities) 187.167-010
Appliance Tester (house. appl.) 729.387-022
application clerk (radio-tv broad.; tel. & tel.; utilities; waterworks) 239.362-014
Application-Register Clerk (insurance) 203.582-066
APPLICATIONS ENGINEER (profess. & kin.) term
APPLICATIONS ENGINEER, MANUFACTURING (profess. & kin.) 007.061-038
applications programmer (profess. & kin.) 030.162-010
applications programmer-analyst (profess. & kin.) 030.162-014
applicator (any industry) 582.687-030
Applied Anthropologist (profess. & kin.) 055.067-010
applier (any industry) 582.687-030
applier (leather prod.) 589.687-034
Applique Cutter, Hand (tex. prod., nec) 781.684-074
APPLIQUER, ZIGZAG (garment) 786.682-010
Applique Sewer (leather prod.) 783.682-014
APPOINTMENT CLERK (clerical) 237.367-010
appointment clerk (government ser.) 205.362-010
APPRAISER (any industry) 191.287-010
APPRAISER (government ser.) 188.167-010
Appraiser, Aircraft (government ser.) 188.167-010
APPRAISER, ART (profess. & kin.) 191.287-014
Appraiser, Auditor (government ser.) 188.167-010
APPRAISER, AUTOMOBILE DAMAGE (business ser.; insurance) 241.267-014
Appraiser, Boats And Marine (government ser.) 188.167-010
Appraiser, Buildings (government ser.) 188.167-010
appraiser, irrigation tax (government ser.) 188.167-014
Appraiser, Land (government ser.) 188.167-010
Appraiser, Oil And Water (government ser.) 188.167-010
Appraiser, Personal Property (government ser.) 188.167-010
Appraiser, Real Estate (government ser.) 188.167-010
APPRAISER, REAL ESTATE (real estate) 191.267-010
Appraiser, Timber (government ser.) 188.167-010
APPRENTICE (any industry) master
APPRENTICESHIP CONSULTANT (government ser.) 188.117-010
Approach-Table Operator (nonfer. metal; steel & rel.) 613.682-026
Apricot Packer (agriculture; wholesale tr.) 920.687-134
Apricot Washer (food prep., nec) 521.685-110
APRON CLEANER (nonmet. min.) 680.687-010
apron operator (paper & pulp) 539.587-010
apron scratcher (nonmet. min.) 680.687-010
Apron Trimmer (boot & shoe) 690.685-434
Aqua-Ammonia Operator (chemical) 551.382-010
Aquaculturist (profess. & kin.) 041.061-022
AQUARIST (amuse. & rec.) 449.674-010
aquarium tank attendant (amuse. & rec.) 449.674-010
AQUATIC BIOLOGIST (profess. & kin.) 041.061-022
aquatic ecologist (profess. & kin.) 041.061-022
AQUATIC PERFORMER (amuse. & rec.) 159.347-014
aqueduct-and-reservoir keeper (waterworks) 954.382-018
ARBITRATOR (profess. & kin.) 169.107-010
ARBORER (jewelry-silver.) 700.684-010
Arbor Inspector (clock & watch) 715.384-022
ARBOR-PRESS OPERATOR I (any industry) 616.682-010
Arbor-Press Operator II (any industry) 690.685-014
arc-air operator (welding) 816.364-010
ARC CUTTER (welding) 816.364-010
Arc Cutter, Gas-Tungsten Arc (welding) 816.364-010
Arc Cutter, Plasma Arc (welding) 816.364-010
ARCH-CUSHION-PRESS OPERATOR (rubber goods) 556.362-010
ARCH-CUSHION-SKIVING-MACHINE OPERATOR (rubber goods) 690.682-010
ARCHEOLOGIST (profess. & kin.) 055.067-018
Archeologist, Classical (profess. & kin.) 055.067-018
archer (boot & shoe) 690.682-070
Archery-Equipment Repairer (any industry) 732.684-122
ARCHITECT (profess. & kin.) 001.061-010
ARCHITECT, MARINE (profess. & kin.) 001.061-014
architect, naval (profess. & kin.) 001.061-014
Architectural Renderer (profess. & kin.) 970.281-014
ARCHIVIST (profess. & kin.) 101.167-010
Archivist, Economic History (profess. & kin.) 101.167-010
Archivist, Military History (profess. & kin.) 101.167-010
Archivist, Nonprofit Foundation (nonprofit org.) 101.167-010
Archivist, Political History (profess. & kin.) 101.167-010
Arch-Pad Cementer (boot & shoe) 788.687-030
ARCH-SUPPORT TECHNICIAN (protective dev.) 712.381-010
arc trimmer (utilities) 952.667-010
area coordinator (clerical) 205.137-014
area-development consultant (utilities) 184.117-030
AREA ENGINEER (profess. & kin.) term
area representative (government ser.) 188.117-010
area specialist (government ser.) 188.117-014
area supervisor (profess. & kin.) 187.167-238
AREA SUPERVISOR, RETAIL CHAIN STORE (retail trade) 185.117-014
armament assembler (aircraft mfg.) 806.361-030
armament installer (aircraft mfg.) 806.361-030
armature-and-field-assembly supervisor (elec. equip.) 724.131-010
armature-and-rotor winder (elec. equip.) 721.484-010
Armature Balancer (elec. equip.) 724.384-014
ARMATURE BANDER (any industry) 724.684-010
Armature Coil Winder (electron. comp.) 724.684-026
Armature Connector I (elec. equip.) 721.684-018
ARMATURE CONNECTOR II (elec. equip.) 724.684-014
armature repairer (any industry) 724.684-018
Armature Straightener (elec. equip.) 721.281-018
ARMATURE TESTER I (elec. equip.) 724.384-010
Armature Tester II (elec. equip.) 729.684-058
Armature Tester III (elec. equip.) 724.364-010
Armature Varnisher (any industry) 599.685-030
Armature Winder (elec. equip.) 721.484-010
Armature Winder, Automotive (automotive ser.) 724.684-018
ARMATURE-WINDER HELPER, REPAIR (any industry) 721.684-010
ARMATURE WINDER, REPAIR (any industry) 724.684-018
armed guard (business ser.) 376.367-010
Armed Guard (r.r. trans.) 372.667-034
Armhole-And-Shoulder Off-Presser (garment) 363.682-018

Armhole Baster, Hand (garment) 782.684-058
ARMHOLE BASTER, JUMPBASTING (garment) 786.682-014
ARMHOLE FELLER, HANDSTITCHING MACHINE (garment) 786.682-018
Armhole Raiser, Lockstitch (garment) 786.682-238
ARMHOLE-SEW-AND-TRIM OPERATOR, LOCKSTITCH (garment) 786.682-022
Arm Maker (furniture) 780.684-134
armored-cable-machine operator (nonfer. metal) 691.685-010
ARMORED-CAR GUARD (business ser.) 372.567-010
ARMORED-CAR GUARD AND DRIVER (business ser.) 372.563-010
armored-car messenger (business ser.) 372.567-010
armored-car messenger (business ser.) 372.563-010
Armorer (government ser.) 632.261-018
ARMORER TECHNICIAN (museums) 109.281-010
ARMORING-MACHINE OPERATOR (nonfer. metal) 691.685-010
ARMOR RECONNAISSANCE SPECIALIST (military ser.) 378.363-010
ARRANGER (profess. & kin.) 152.067-010
arranger-assembler (fabrication, nec) 739.587-010
Arrow-Point Attacher (toy-sport equip.) 795.687-014
ARROWSMITH (toy-sport equip.) 732.684-010
ART CONSERVATOR (museums) 102.167-010
Art Critic (print. & pub.; radio-tv broad.) 131.067-018
ART DIRECTOR (motion picture; radio-tv broad.) 142.061-062
ART DIRECTOR (profess. & kin.) 141.031-010
ARTIFICIAL-BREEDING DISTRIBUTOR (agriculture) 180.167-010
ARTIFICIAL-BREEDING TECHNICIAN (agriculture) 418.384-014
ARTIFICIAL-CANDY MAKER (fabrication, nec) 739.684-010
ARTIFICIAL-FLOWER MAKER (button & notion) 739.684-014
artificial-fly tier (toy-sport equip.) 732.684-074
ARTIFICIAL-FOLIAGE ARRANGER (retail trade) 899.364-014
ARTIFICIAL-GLASS-EYE MAKER (optical goods) 713.261-010
artificial-insemination technician (agriculture) 411.384-010
ARTIFICIAL INSEMINATOR (agriculture) 418.384-010
ARTIFICIAL-LOG-MACHINE OPERATOR (fabrication, nec; saw. & plan.) 569.685-010
artificial-marble worker (construction) 861.381-046
ARTIFICIAL-PEARL MAKER (jewelry-silver.) 770.687-010
ARTIFICIAL-PLASTIC-EYE MAKER (optical goods) 713.261-014
Artificial-Stone Setter (construction) 861.381-038
ARTILLERY-MAINTENANCE SUPERVISOR (ordnance) 632.131-010
ARTILLERY OR NAVAL GUNFIRE OBSERVER (military ser.) 378.367-010
art instructor (education) 149.021-010
artist (any industry) 970.381-022
artist (profess. & kin.) 141.061-022
artist (profess. & kin.) 144.061-010
ARTIST AND REPERTOIRE MANAGER (amuse. & rec.) 159.167-010
artist, color separation (print. & pub.) 970.281-026
artist consultant (amuse. & rec.) 191.117-010
ARTIST, MANNEQUIN COLORING (fabrication, nec) 741.684-010
Artists' Booking Representative (amuse. & rec.) 191.117-014
artist, scientific (profess. & kin.) 141.061-026
ARTIST'S MANAGER (amuse. & rec.) 191.117-010
artist's representative (amuse. & rec.) 191.117-010
ARTIST, SUSPECT (government ser.) 970.361-018
artist, woodblock (print. & pub.) 979.281-014
Art Librarian (library) 100.167-026
Art Metal-Chair Assembler (furniture) 709.684-014
art-metal designer (struct. metal) 142.061-034
art-metal worker (metal prod., nec) 619.260-014
art-metal-worker apprentice (metal prod., nec) 619.260-010
art-metal-worker helper (metal prod., nec) 619.484-010
art preparator (museums) 102.367-010
ART THERAPIST (medical ser.) 076.127-010
Asbestos-Cloth Inspector (nonmet. min.) 689.685-038
ASBESTOS REMOVAL WORKER (construction) 869.684-082
ASBESTOS-SHINGLE INSPECTOR (nonmet. min.) 679.687-010
Asbestos-Shingle Roofer (construction) 866.381-010
ASBESTOS-SHINGLE SHEARING-MACHINE OPERATOR (nonmet. min.) 679.686-010
Asbestos-Siding Installer (construction; retail trade) 863.684-014
ASBESTOS-WIRE FINISHER (nonfer. metal) 691.682-010
Asparagus Grader And Buncher (agriculture) 529.687-186
Asparagus Sorter (agriculture; can. & preserv.; wholesale tr.) 529.687-186
Asphalt Blender (petrol. refin.) 540.462-010
Asphalt Coater (elec. equip.) 599.685-026
ASPHALT-DISTRIBUTOR TENDER (construction) 853.665-010
ASPHALT-HEATER TENDER (construction) 853.685-010
asphalt-machine operator (metal prod., nec) 590.362-014
ASPHALT-PAVING-MACHINE OPERATOR (construction) 853.663-010
Asphalt-Plant Operator (construction) 570.682-014
Asphalt-Plant Worker (construction) 869.687-026
Asphalt Raker (construction) 869.687-026
asphalt-spreader operator (construction) 853.663-010
asphalt-surface-heater operator (construction) 853.683-014
asphalt-tamping-machine operator (construction) 869.683-018
Asphalt, Tar, And Gravel Roofer (construction) 866.381-010
Asphalt-Tile-Floor Layer (construction; retail trade) 864.481-010
ASSAYER (profess. & kin.) 022.281-010
assembler (any industry) 782.684-058
assembler (any industry) 780.684-062
ASSEMBLER (clock & watch) 715.381-010
ASSEMBLER (cutlery-hrdwr.) 701.687-010
assembler (elec. equip.; light. fix.) 729.687-010
assembler (elec. equip.) 721.684-022
ASSEMBLER (garment; glove & mit.) 781.687-010
ASSEMBLER (glove & mit.) 781.667-010
ASSEMBLER (house. appl.) 723.684-010
ASSEMBLER (jewelry-silver.) 700.684-014
assembler (knitting) 685.687-010
ASSEMBLER (laundry & rel.) 369.687-010
assembler (machine shop) 706.684-018
ASSEMBLER (machinery mfg.) 706.361-010
ASSEMBLER (mfd. bldgs.; vehicles, nec) 869.684-010
assembler (musical inst.) 730.381-018
ASSEMBLER (ordnance) 737.687-010
ASSEMBLER (pen & pencil) 733.685-010
ASSEMBLER (plastic prod.) 754.684-010
ASSEMBLER (svc. ind. mach.) 731.687-010
ASSEMBLER (tel. & tel.) 722.381-010
ASSEMBLER (tex. prod., nec) 734.687-014
ASSEMBLER (toy-sport equip.) 732.684-014
ASSEMBLER (wood. container) 762.684-010
assembler-adjuster (office machines) 706.684-014
assembler, aircraft, plumbing and hydraulics (aircraft mfg.) 806.381-066
ASSEMBLER, AIRCRAFT POWER PLANT (aircraft mfg.) 806.381-022
ASSEMBLER, AIRCRAFT, STRUCTURES AND SURFACES (aircraft mfg.) 806.381-026
ASSEMBLER, ALUMINUM BOATS (ship-boat mfg.) 806.481-010
ASSEMBLER-AND-GLUER, LAMINATED PLASTICS (plastic prod.) 754.684-014
ASSEMBLER AND TESTER, ELECTRONICS (office machines) 710.281-010
ASSEMBLER AND WIRER, INDUSTRIAL EQUIPMENT (elec. equip.; machinery mfg.) 826.361-010
ASSEMBLER-ARRANGER (fabrication, nec) 739.687-010
ASSEMBLER, AUTOMOBILE (auto. mfg.) 806.684-010
ASSEMBLER, BICYCLE I (motor-bicycles) 806.684-014
ASSEMBLER, BICYCLE II (motor-bicycles) 806.687-010
ASSEMBLER, BILLIARD-TABLE (toy-sport equip.) 732.684-010
Assembler, Body (auto. mfg.) 806.684-010
assembler, bonding (aircraft mfg.) 806.384-030
ASSEMBLER (button & notion) 734.687-018
ASSEMBLER, CAMPER (vehicles, nec) 806.684-018
ASSEMBLER, CARBON BRUSHES (elec. equip.) 721.684-014
Assembler, Cards And Announcements (print. & pub.) 794.687-010
assembler, caterpillar spider (elec. equip.) 721.684-026
Assembler, Chassis (auto. mfg.) 806.684-010
ASSEMBLER, CLIP-ON SUNGLASSES (optical goods) 713.684-010
Assembler, Communications Equipment (comm. equip.; elec. equip.) 729.684-026
ASSEMBLER, COMPONENT (mfd. bldgs.; vehicles, nec) 762.684-014
assembler, convertible top (automotive ser.) 807.684-026
Assembler, Coolers (svc. ind. mach.) 827.684-010
ASSEMBLER, CORNCOB PIPES (fabrication, nec) 739.687-014
assembler-crimper (rubber goods) 759.687-014
assembler dc field ring (elec. equip.) 721.484-014
assembler dc field yoke (elec. equip.) 721.484-014
ASSEMBLER, DECK AND HULL (ship-boat mfg.) 806.684-022
Assembler, Dielectric Heater (elec. equip.) 826.361-010
ASSEMBLER, DRY CELL AND BATTERY (elec. equip.) 727.687-022
ASSEMBLER, ELECTRICAL ACCESSORIES I (elec. equip.; light. fix.) 729.687-010
ASSEMBLER, ELECTRICAL ACCESSORIES II (elec. equip.) 729.384-010
ASSEMBLER, ELECTROMECHANICAL (aircraft mfg.; electron. comp.; inst. & app.) 828.381-018
Assembler, Engine (auto. mfg.) 806.684-010
assembler, equipment (tel. & tel.) 722.381-010
assembler-erector (elec. equip.) 820.361-014
ASSEMBLER, FAUCETS (wood. container) 764.687-014
ASSEMBLER, FILTERS (auto. mfg.) 739.687-026
ASSEMBLER, FILTERS (glass products) 739.687-018
Assembler, Final (auto. mfg.) 806.684-010
ASSEMBLER, FINGER BUFFS (tex. prod., nec) 739.685-010
ASSEMBLER, FISHING FLOATS (toy-sport equip.) 732.687-014
assembler-fitter (struct. metal) 809.684-010
assembler, flexible leads (elec. equip.) 691.685-018
Assembler, Fluorescent Lights (light. fix.) 723.684-014
ASSEMBLER FOR PULLER-OVER, HAND (boot & shoe) 788.684-010
ASSEMBLER FOR PULLER-OVER, MACHINE (boot & shoe) 690.685-010
ASSEMBLER, GARMENT FORM (fabrication, nec) 739.687-022
ASSEMBLER, GOLD FRAME (optical goods) 713.384-010

Assembler, Golf-Wood Head (toy-sport equip.) 732.381-022
ASSEMBLER, GROUND SUPPORT EQUIPMENT (aircraft mfg.) 809.261-010
Assembler, Handbags (leather prod.) 783.684-010
ASSEMBLER HELPER, INTERNAL COMBUSTION ENGINE (engine-turbine) 801.687-010
assembler, hydraulic backhoe (machinery mfg.) 801.261-010
ASSEMBLER I (light. fix.) 723.684-014
ASSEMBLER I (office machines) 706.684-014
ASSEMBLER I (ordnance) 736.381-010
ASSEMBLER, IGNITER (ordnance) 737.381-010
ASSEMBLER II (light. fix.) 723.684-018
ASSEMBLER II (office machines) 710.381-010
ASSEMBLER II (ordnance) 736.684-014
Assembler, Incandescent Lights (light. fix.) 723.684-014
assembler-installer, cable controlled systems (aircraft mfg.) 806.381-018
ASSEMBLER-INSTALLER, GENERAL (aircraft mfg.) 806.361-014
assembler-installer, structures (aircraft mfg.) 806.381-026
Assembler-Installer, Wing Structures (aircraft mfg.) 806.381-026
Assembler, Instrument Motors (elec. equip.) 721.684-022
ASSEMBLER, INSULATION AND FLOORING (ship-boat mfg.) 806.684-026
assembler-insulator (elec. equip.) 729.684-030
ASSEMBLER, INTERNAL COMBUSTION ENGINE (engine-turbine) 806.481-014
Assembler, Knife (cutlery-hrdwr.) 701.687-010
assembler, latches and springs (house. appl.) 706.587-030
assembler, lawn-and-garden machinery (agric. equip.) 801.684-022
ASSEMBLER, LAY-UPS (toy-sport equip.) 677.685-014
ASSEMBLER, LEATHER GOODS I (leather prod.) 783.684-010
ASSEMBLER, LEATHER GOODS II (leather prod.) 783.687-010
ASSEMBLER, LIQUID CENTER (toy-sport equip.) 732.684-018
ASSEMBLER, MARKING DEVICES (pen & pencil) 733.687-010
ASSEMBLER, MECHANICAL ORDNANCE (ordnance) 737.684-010
ASSEMBLER, MECHANICAL PENCILS AND BALLPOINT PENS (pen & pencil) 733.687-014
ASSEMBLER, METAL BONDING (aircraft mfg.) 806.384-030
ASSEMBLER, METAL BUILDING (construction) 801.381-010
ASSEMBLER, METAL FURNITURE (furniture) 709.684-014
ASSEMBLER, MINING MACHINERY (machinery mfg.) 801.261-010
ASSEMBLER, MOLDED FRAMES (optical goods) 713.684-014
ASSEMBLER, MOVEMENT (clock & watch) 715.684-014
ASSEMBLER, MUSICAL INSTRUMENTS (musical inst.) 730.684-010
Assembler, Patient Lifting Device (protective dev.) 706.684-018
ASSEMBLER, PHOTOGRAPHIC EQUIPMENT (photo. appar.) 714.381-010
ASSEMBLER, PIANO (musical inst.) 730.384-010
ASSEMBLER, PING-PONG TABLE (toy-sport equip.) 732.684-022
assembler, plastic boat (ship-boat mfg.) 806.684-146
ASSEMBLER, PLASTIC HOSPITAL PRODUCTS (inst. & app.) 712.687-010
assembler (plumbing-heat.) 706.684-086
assembler, portable oil-well drilling rig (machinery mfg.) 801.261-010
assembler, precision-mechanical (photo. appar.) 714.381-010
assembler, press operator (any industry) 616.682-026
ASSEMBLER, PRINTED PRODUCTS (print. & pub.) 794.687-010
ASSEMBLER, PRODUCT (machine shop) 706.684-018
ASSEMBLER, PRODUCTION (any industry) 706.687-010
ASSEMBLER, PRODUCTION LINE (photo. appar.) 714.684-010
ASSEMBLER, PRODUCTION LINE (struct. metal) 809.684-010
assembler, radio and electrical (aircraft mfg.) 729.384-026
assembler, rubber footwear (boot & shoe) 753.687-026
ASSEMBLER, SANDAL PARTS (boot & shoe) 788.684-014
Assembler, Seat (auto. mfg.) 806.684-010
ASSEMBLER, SEMICONDUCTOR (electron. comp.) 726.684-034
Assembler, Show Motor (engine-turbine) 806.481-014
ASSEMBLER, SKYLIGHTS (plastic prod.) 869.684-014
assembler, slide fastener stringers (button & notion) 734.687-074
ASSEMBLER, SMALL PRODUCTS I (any industry) 706.684-022
ASSEMBLER, SMALL PRODUCTS II (any industry) 739.687-030
assembler, special machine (machinery mfg.; machine tools) 600.281-022
ASSEMBLER, STEAM-AND-GAS TURBINE (engine-turbine) 600.261-010
ASSEMBLER, SUBASSEMBLY (aircraft mfg.) 806.384-034
ASSEMBLER, SUBASSEMBLY (mfd. bldgs.; vehicles, nec) 869.684-018
ASSEMBLER, SURGICAL GARMENT (protective dev.) 712.684-010
Assembler, Toy Voices (toy-sport equip.) 731.687-034
assembler, tractor (agric. equip.) 801.684-022
Assembler, Trim (auto. mfg.) 806.684-010
assembler, truck-trailer (auto. mfg.) 806.381-058
ASSEMBLER, TUBING (aircraft mfg.) 806.381-034
ASSEMBLER, TYPE-BAR-AND-SEGMENT (office machines) 706.684-026
ASSEMBLER, UNIT (struct. metal) 809.681-010
Assembler, Utility Buildings (mfd. bldgs.) 869.684-010
ASSEMBLER, WATCH TRAIN (clock & watch) 715.381-014
ASSEMBLER, WET WASH (laundry & rel.) 361.687-010
assembler, wire group (aircraft mfg.) 729.384-026
ASSEMBLER, WIRE-MESH GATE (metal prod., nec) 801.384-010
assembling inspector (wood. container) 762.687-014
ASSEMBLY ADJUSTER (comm. equip.) 720.684-010
ASSEMBLY CLEANER (smelt. & refin.) 519.664-010
Assembly-Department Supervisor (leather prod.) 783.132-010
assembly detailer (ship-boat mfg.) 807.684-014
assembly hand (elec. equip.) 721.684-022
assembly inspector (agric. equip.) 801.381-018
ASSEMBLY INSPECTOR (agric. equip.) 706.361-014
ASSEMBLY INSPECTOR (furniture) 763.684-010
Assembly Inspector (paper goods) 649.367-010
ASSEMBLY-INSPECTOR HELPER (agric. equip.) 801.663-010
ASSEMBLY-LINE INSPECTOR (furniture) 709.684-018
Assembly Line Robot Operator (aircraft mfg.) 606.382-026
ASSEMBLY LOADER (inst. & app.) 711.684-010
Assembly-Machine Feeder (pen & pencil) 692.686-010
Assembly-Machine Offbearer (pen & pencil) 692.686-010
ASSEMBLY-MACHINE OPERATOR (pen & pencil) 692.686-010
ASSEMBLY-MACHINE-SET-UP MECHANIC (elec. equip.) 692.360-010
ASSEMBLY-MACHINE TENDER (plastic prod.) 754.685-014
assembly-machine tool setter (ordnance) 616.360-034
assembly-machine tool setter (ordnance) 616.360-030
ASSEMBLY OPERATOR (woodworking) 762.684-018
ASSEMBLY-PRESS OPERATOR (any industry) 690.685-014
ASSEMBLY REPAIRER (agric. equip.) 624.381-010
ASSEMBLY SUPERVISOR (any industry) 739.137-010
Assembly Supervisor (mfd. bldgs.; vehicles, nec) 869.131-030
Assembly Supervisor (toy-sport equip.) 732.130-010
ASSEMBLY TECHNICIAN (office machines) 633.261-010
ASSESSOR-COLLECTOR, IRRIGATION TAX (government ser.) 188.167-014
Asset-Card Clerk (clerical) 209.687-010
assignment agent (motor trans.) 215.367-010
ASSIGNMENT CLERK (clerical) 249.367-090
ASSIGNMENT CLERK (motor trans.) 215.367-010
ASSIGNMENT CLERK (tel. & tel.) 219.387-010
ASSIGNMENT EDITOR (radio-tv broad.) 132.132-010
assignment officer (government ser.) 188.167-026
ASSISTANT (any industry) term
ASSISTANT BRANCH MANAGER, FINANCIAL INSTITUTION (financia') 186.167-070
assistant camera operator (motion picture) 962.361-010
assistant camera operator (radio-tv broad.) 962.687-010
ASSISTANT CONSTRUCTION SUPERINTENDENT (construction) 869.367-010
ASSISTANT DESIGNER (garment) 781.361-010
assistant editor (print. & pub.) 132.267-014
assistant engineer (r.r. trans.) 910.363-010
ASSISTANT-PRESS OPERATOR (print. & pub.) 651.585-010
ASSISTANT PRESS OPERATOR, OFFSET (print. & pub.) 651.685-026
ASSISTANT PRINCIPAL (education) 091.107-010
Assistant Professor (education) 090.227-010
assistant signal maintainer (r.r. trans.) 822.684-018
assistant superintendent (any industry) see ASSISTANT
assistant superintendent, special education (education) 094.167-014
assistant superintendent, transportation (r.r. trans.) 184.167 254
assistant supervisor (any industry) see ASSISTANT
assistant therapy aide (medical ser.) 355.377-014
associate director (radio-tv broad.) 962.167-014
associate editor (print. & pub.) 132.267-014
associate producer (radio-tv broad.) 159.117-010
Associate Professor (education) 090.227-010
ASSOCIATION EXECUTIVE (profess. & kin.) 189.117-010
assorter (garment; glove & mit.) 781.687-010
assorter (leather mfg.) 589.387-010
ASSORTER (steel & rel.) 703.687-010
assorter, laundry (laundry & rel.) 361.687-014
ASTROLOGER (amuse. & rec.) 159.207-010
ASTRONOMER (profess. & kin.) 021.067-010
astro-technician (museums) 962.261-010
asylum attendant (medical ser.) 355.377-014
athletic coach (amuse. & rec.; education) 153.227-018
ATHLETIC TRAINER (amuse. & rec.; education) 153.224-010
Athletic Turf Worker (amuse. & rec.) 408.684-010
atmospheric-drier tender (chemical) 553.665-026
ATOMIC-FUEL ASSEMBLER (chemical) 709.381-010
ATOMIZER ASSEMBLER (fabrication, nec) 706.684-030
attacher (boot & shoe) 690.685-074
ATTENDANCE CLERK (education) 219.362-014
ATTENDANCE OFFICER (education) 168.367-010
ATTENDANT, ARCADE (amuse. & rec.) 342.667-014
ATTENDANT, CAMPGROUND (amuse. & rec.) 329.683-010
ATTENDANT, CHILDREN'S INSTITUTION (any industry) 359.677-010
attendant, coin-operated laundry (laundry & rel.) 369.677-010
attendant, laundry-and-dry-cleaning service (laundry & rel.) 369.677-010
ATTENDANT, LODGING FACILITIES (hotel & rest.) 329.467-010
attendant, self-service store (retail trade) 299.677-010
attenuator (textile) 680.585-014

attorney (profess. & kin.) 110.107-010
AUCTION ASSISTANT (retail trade; wholesale tr.) 294.667-010
Auction Clerk (clerical) 219.362-010
AUCTION CLERK (retail trade; wholesale tr.) 294.567-010
AUCTIONEER (retail trade; wholesale tr.) 294.257-010
Auctioneer, Art (retail trade; wholesale tr.) 294.257-010
Auctioneer, Automobile (wholesale tr.) 294.257-010
Auctioneer, Furniture (retail trade; wholesale tr.) 294.257-010
Auctioneer, Livestock (retail trade; wholesale tr.) 294.257-010
Auctioneer, Real Estate (retail trade; wholesale tr.) 294.257-010
Auctioneer, Tobacco (wholesale tr.) 294.257-010
Audio-Coil Winder (electron. comp.) 724.684-026
audio engineer (radio-tv broad.) 194.262-010
AUDIOLOGIST (medical ser.) 076.101-010
audiometric technician (profess. & kin.) 078.362-010
AUDIOMETRIST (profess. & kin.) 078.362-010
AUDIO OPERATOR (radio-tv broad.) 194.262-010
Audio-Tape Librarian (clerical) 222.367-026
audio technician (radio-tv broad.) 194.262-010
AUDIO-VIDEO REPAIRER (any industry) 729.281-010
audiovisual-aids technician (any industry) 729.281-010
audiovisual equipment operator (amuse. & rec.; motion picture) 960.362-010
audiovisual-equipment operator (any industry) 960.382-010
audio-visual-equipment-rental clerk (business ser.; retail trade) 295.367-018
AUDIOVISUAL LIBRARIAN (library) 100.167-010
AUDIOVISUAL PRODUCTION SPECIALIST (profess. & kin.) 149.061-010
audiovisual specialist (education) 099.167-018
AUDIOVISUAL TECHNICIAN (any industry) 960.382-010
AUDIT CLERK (clerical) 210.382-010
AUDIT-MACHINE OPERATOR (clerical) 216.482-018
AUDITOR (profess. & kin.) 160.167-054
AUDITOR, COUNTY OR CITY (government ser.) 160.167-030
AUDITOR, DATA PROCESSING (financial) 160.162-030
auditor, information systems (financial) 160.162-030
AUDITOR, INTERNAL (profess. & kin.) 160.167-034
AUDITOR, TAX (profess. & kin.) 160.167-038
auger-machine offbearer (brick & tile) 579.686-026
Auger-Press Operator (brick & tile) 575.382-010
AUGER PRESS OPERATOR, MANUAL CONTROL (brick & tile) 575.462-010
Auger Supervisor (mine & quarry) 939.137-018
AUTHOR (profess. & kin.) term
authorizer (clerical) 249.367-022
author's agent (business ser.) 191.117-034
Auto-Body Painter (automotive ser.) 845.381-014
AUTO-BODY REPAIRER, FIBERGLASS (automotive ser.) 807.381-030
auto-camp attendant (hotel & rest.) 329.467-010
AUTOCLAVE OPERATOR (aircraft mfg.) 553.362-014
AUTOCLAVE OPERATOR (knitting) 587.585-010
autoclave operator (medical ser.; pharmaceut.; protective dev.) 599.585-010
AUTOCLAVE OPERATOR I (chemical) 553.382-010
AUTOCLAVE OPERATOR II (chemical) 709.682-010
AUTOCLAVE OPERATOR (textile) 587.682-010
AUTO-DESIGN CHECKER (auto. mfg.) 017.261-010
AUTO-DESIGN DETAILER (auto. mfg.) 017.281-010
auto-glass worker (automotive ser.) 865.684-010
AUTOMAT-CAR ATTENDANT (r.r. trans.) 319.464-010
AUTOMATED CUTTING MACHINE OPERATOR (aircraft mfg.) 699.362-010
AUTOMATED EQUIPMENT ENGINEER-TECHNICIAN (machinery mfg.) 638.261-010
AUTOMATIC BANDSAW TENDER (furniture) 667.685-070
Automatic-Beading-Lathe Operator (any industry) 619.685-082
AUTOMATIC CASTING-FORGING MACHINE OPERATOR (forging) 611.682-014
automatic clipper and stripper (knitting) 684.686-010
automatic-coil-machine operator (furniture) 616.685-018
Automatic-Coil-Winding-Machine Operator (metal prod., nec) 616.485-010
automatic component insertion operator (comm. equip.; electron. comp.; office machines) 726.685-014
AUTOMATIC-DOOR MECHANIC (construction) 829.281-010
automatic embroidery machine tender (tex. prod., nec) 689.685-150
AUTOMATIC-EQUIPMENT TECHNICIAN (tel. & tel.) 822.281-010
automatic-fancy-machine operator (button & notion) 690.685-062
automatic forming machine operator (glass mfg.) 575.382-014
automatic-lathe operator (woodworking) 664.382-010
Automatic-Lathe Setter (woodworking) 669.280-010
automatic-lathe tender (machine shop) 604.685-026
automatic lehr operator (glass mfg.) 573.685-026
AUTOMATIC LUMP MAKING MACHINE TENDER (tobacco) 529.685-014
AUTOMATIC-MACHINE ATTENDANT (paper goods) 649.685-010
automatic maintainer (tel. & tel.) 822.261-026
automatic-mold sander (woodworking) 662.682-010
AUTOMATIC-NAILING-MACHINE FEEDER (saw. & plan.) 669.686-010
AUTOMATIC-PAD-MAKING-MACHINE OPERATOR (tex. prod., nec) 689.382-010
AUTOMATIC-PAD-MAKING-MACHINE OPERATOR HELPER (tex. prod., nec) 689.686-010
AUTOMATIC PATTERN EDGER (glass products) 673.682-010
automatic-screw-machine operator (machine shop) 604.380-022
automatic-screw-machine operator (machine shop) 604.280-014
automatic-screw-machine operator (machine shop) 604.280-018
automatic-screw-machine setter, swiss-type (clock & watch) 604.260-010
automatic-silk-screen printer (textile) 652.682-018
automatic-splicing-machine operator (tex. prod., nec) 689.685-122
automatic-spray-machine operator (any industry) 741.685-010
AUTOMATIC STACKER (tinware) 619.686-010
Automatic-Transmission Mechanic (automotive ser.) 620.281-062
AUTOMATIC-WHEEL-LINE OPERATOR (machine shop) 609.682-010
AUTOMATIC-WINDOW-SEAT-AND-TOP-LIFT REPAIRER (automotive ser.) 825.381-014
AUTOMOBILE-ACCESSORIES INSTALLER (automotive ser.) 806.684-038
Automobile Air-Conditioner Assembler (svc. ind. mach.) 827.684-010
automobile-and-truck-mechanic apprentice (automotive ser.) 620.261-012
AUTOMOBILE-BODY CUSTOMIZER (automotive ser.) 807.361-010
automobile-body repair chief (automotive ser.) 807.137-010
AUTOMOBILE-BODY REPAIRER (automotive ser.) 807.381-010
Automobile-Body Repairer, Combination (automotive ser.) 807.381-010
AUTOMOBILE-BODY-REPAIRER HELPER (automotive ser.) 807.687-010
automobile-body worker (automotive ser.) 807.381-010
AUTOMOBILE-BUMPER STRAIGHTENER (automotive ser.) 807.684-010
AUTOMOBILE-CLUB-SAFETY-PROGRAM COORDINATOR (nonprofit org.) 249.167-010
automobile-damage appraiser (business ser.; insurance) 241.267-014
AUTOMOBILE DETAILER (automotive ser.) 915.687-034
Automobile-Headlight Assembler (light. fix.) 729.684-034
automobile inspector (automotive ser.) 620.261-018
automobile inspector (government ser.) 168.267-058
Automobile-Insurance-Claim Adjuster (business ser.; insurance) 241.217-010
Automobile-Insurance-Claim Examiner (business ser.; insurance) 241.267-018
automobile-light assembler (light. fix.) 729.684-034
AUTOMOBILE LOCATOR (retail trade) 296.367-010
AUTOMOBILE MECHANIC (automotive ser.) 620.261-010
AUTOMOBILE-MECHANIC APPRENTICE (automotive ser.) 620.261-012
automobile-mechanic assistant (automotive ser.) 620.684-014
AUTOMOBILE-MECHANIC HELPER (automotive ser.) 620.684-014
Automobile Mechanic, Motor (automotive ser.) 620.261-010
automobile mechanic, radiator (automotive ser.) 620.381-010
automobile-mechanic supervisor (automotive ser.) 620.131-014
automobile parker (automotive ser.) 915.473-010
AUTOMOBILE RACER (amuse. & rec.) 153.243-010
AUTOMOBILE-RADIATOR MECHANIC (automotive ser.) 620.381-010
Automobile Radio Repairer (any industry) 720.281-010
automobile-refrigeration mechanic (automotive ser.) 620.281-010
automobile rental agent (automotive ser.) 295.467-026
AUTOMOBILE RENTAL CLERK (automotive ser.) 295.467-026
automobile rental representative (automotive ser.) 295.467-026
AUTOMOBILE-REPAIR-SERVICE ESTIMATOR (automotive ser.) 620.261-018
Automobile Repossessor (clerical) 241.367-022
AUTOMOBILE-SEAT-COVER-AND-CONVERTIBLE-TOP INSTALLER (automotive ser.) 780.384-010
AUTOMOBILE-SEAT-COVER INSTALLER (automotive ser.) 915.687-010
AUTOMOBILE-SELF-SERVE-SERVICE-STATION ATTENDANT (automotive ser.) 915.477-010
AUTOMOBILE-SERVICE-STATION ATTENDANT (automotive ser.) 915.467-010
AUTOMOBILE-SERVICE-STATION MECHANIC (automotive ser.) 620.261-030
automobile-spring repairer (automotive ser.) 619.380-018
Automobile-Taillight Assembler (light. fix.) 729.684-034
AUTOMOBILE TESTER (automotive ser.) 620.261-014
AUTOMOBILE TESTER (government ser.) 379.364-010
AUTOMOBILE UPHOLSTERER (automotive ser.) 780.381-010
AUTOMOBILE-UPHOLSTERER APPRENTICE (automotive ser.) 780.381-014
automobile-upholstery-trim installer (automotive ser.) 780.384-010
Automobile Washer (automotive ser.) 919.687-014
automobile washer, steam (automotive ser.) 915.687-026
AUTOMOBILE WRECKER (wholesale tr.) 620.684-010
Automotive Air-Conditioner Installer (automotive ser.) 620.281-010
AUTOMOTIVE-COOLING-SYSTEM DIAGNOSTIC TECHNICIAN (automotive ser.) 620.261-034
AUTOMOTIVE ENGINEER (auto. mfg.) 007.061-010
AUTOMOTIVE-GENERATOR-AND-STARTER REPAIRER (automotive ser.) 721.281-010
Automotive-Generator Repairer (automotive ser.) 721.281-010
automotive-maintenance-equipment repairer (any industry) 620.281-018

AUTOMOTIVE-MAINTENANCE-EQUIPMENT SERVICER (any industry) 620.281-018
Automotive-Starter Repairer (automotive ser.) 721.281-010
AUTOMOTIVE TECHNICIAN, EXHAUST EMISSIONS (government ser.) 620.281-014
AUTOMOTIVE-TIRE TESTER (ordnance) 736.367-010
AUTOMOTIVE-TIRE-TESTING SUPERVISOR (ordnance) 736.131-010
AUTO ROLLER (tobacco) 529.685-010
Auto-Speedway Operator (amuse. & rec.) 342.663-010
Auto-Test Equipment Operator (electron. comp.) 726.684-026
AUXILIARY-EQUIPMENT OPERATOR (utilities) 952.362-010
AUXILIARY-EQUIPMENT TENDER (cement) 570.685-010
AUXILIARY-EQUIPMENT TENDER (construction) 869.665-010
aviation-safety officer (government ser.) 168.264-010
AVIATION SUPPORT EQUIPMENT REPAIRER (military ser.) 639.281-010
avionics and radar technician (aircraft mfg.; air trans.) 823.261-026
avionics mechanic (aircraft mfg.; air trans.) 823.261-026
AVIONICS TECHNICIAN (aircraft mfg.; air trans.) 823.261-026
Avocado Packer (agriculture; wholesale tr.) 920.687-134
award clerk (clerical) 249.367-066
Awning Assembler (tex. prod., nec) 787.682-058
awning erector (construction; retail trade; tex. prod., nec) 869.484-010
Awning Finisher (tex. prod., nec) 789.484-014
Awning-Frame Maker (fabrication, nec) 809.381-010
AWNING-FRAME MAKER (tex. prod., nec) 809.484-010
AWNING HANGER (construction; retail trade; tex. prod., nec) 869.484-010
AWNING-HANGER HELPER (construction; retail trade; tex. prod., nec) 869.687-010
awning installer (construction; retail trade; tex. prod., nec) 869.484-010
Awning Maker (tex. prod., nec) 739.381-010
AWNING MAKER-AND-INSTALLER (furniture; retail trade) 869.481-010
Awning Spreader (tex. prod., nec) 789.687-090
axle-and-frame mechanic (automotive ser.) 620.281-038
Axle Inspector (steel & rel.) 619.381-010
Ax Sharpener (any industry) 603.664-010

B

BABBITTER (machine shop) 709.684-022
Baby Sitter (domestic ser.) 301.677-010
BABY-STROLLER AND WHEELCHAIR RENTAL CLERK (retail trade) 295.367-014
Baccarat Dealer (amuse. & rec.) 343.464-010
Backer (meat products) 525.684-046
backer and bander, cloth (textile) 920.587-010
backer board (saw. & plan.) 663.685-030
Backer-Up (construction) 869.687-026
BACK FEEDER, PLYWOOD LAYUP LINE (millwork-plywood) 569.686-010
backfiller (textile) 589.665-014
backfiller, hand (construction) see DITCH DIGGER
BACKFILLER OPERATOR (any industry) term
Back-Gray-Cloth Washer (textile) 582.685-030
back grinder (pottery & porc.) 774.684-042
Back-Hoe Operator (any industry) 850.683-030
BACKING-IN-MACHINE TENDER (fabrication, nec) 590.685-010
Back Maker (furniture) 780.684-134
BACK MAKER, LOCKSTITCH (garment) 786.682-026
BACK PADDER (furniture) 780.684-010
Back-Pad Inspector (tex. prod., nec) 789.687-086
Back-Panel Padder (furniture) 780.684-082
back polisher (pottery & porc.) 774.684-042
Backrest Assembler (furniture) 709.684-014
Back Roller (leather mfg.) 583.685-094
Back-Roll-Lathe Operator (wood. container) 664.662-010
Back-Seam Stitcher (boot & shoe) 690.682-082
back sewer (print. & pub.) 653.682-010
back-shoe operator (boot & shoe) 788.667-010
BACK-SHOE WORKER (boot & shoe) 221.387-010
backside grinder (optical goods) 716.685-018
Back Sizer (textile) 589.665-014
Backstay Stitcher (boot & shoe) 690.682-082
BACK-STRIP-MACHINE OPERATOR (boot & shoe) 690.685-018
back tacker (boot & shoe) 788.684-010
back tender (paper goods) 652.687-050
BACK TENDER (textile) 589.686-010
BACK TENDER, CLOTH PRINTING (textile) 652.685-010
Back Tender, Cylinder (paper & pulp) 534.662-010
Back Tender, Fourdrinier (paper & pulp) 534.662-010
BACK TENDER, INSULATION BOARD (wood prod., nec) 532.685-010
BACK TENDER, PAPER MACHINE (paper & pulp) 534.662-010
Back Tender, Pulp Drier (paper & pulp) 534.662-010
BACK TUFTER (furniture) 780.687-062
Back-Up Worker (petrol. & gas) 930.684-026
BACK WASHER (textile) 582.685-010
back winder (tex. prod., nec; textile) 681.685-154
bacteriologist (profess. & kin.) 041.061-058
Bacteriologist, Dairy (profess. & kin.) 041.061-058
Bacteriologist, Fishery (profess. & kin.) 041.061-058
Bacteriologist, Food (profess. & kin.) 041.061-058
Bacteriologist, Industrial (profess. & kin.) 041.061-058
Bacteriologist, Medical (profess. & kin.) 041.061-058
Bacteriologist, Pharmaceutical (profess. & kin.) 041.061-058
Bacteriologist, Soil (profess. & kin.) 041.061-058
Bag-And-Sack Sewer (tex. prod., nec) 787.682-058
BAG CUTTER (tex. prod., nec) 789.687-010
bag-end sewer (paper goods) 787.686-010
Bag-Filler-Machine Operator (tobacco) 920.685-098
BAGGAGE-AND-MAIL AGENT (r.r. trans.) 910.137-010
BAGGAGE CHECKER (air trans.; motor trans.) 357.477-010
Baggage Checker (any industry) 358.677-010
BAGGAGE HANDLER (r.r. trans.) 910.687-010
Baggage Inspector (government ser.) 168.267-022
BAGGAGE PORTER, HEAD (hotel & rest.) 324.137-010
Bagger (aircraft mfg.) 754.684-042
Bagger (any industry) 920.587-018
BAGGER (garment; laundry & rel.) 920.687-018
BAGGER (knitting) 582.687-010
bagger (meat products) 525.587-010
BAGGER (plastic prod.) 553.685-014
BAGGER (retail trade) 920.687-014
Bagger, Meat (meat products) 525.587-014
BAGGING SALVAGER (textile) 689 687-010
bag inspector (paper goods) 649.367-010
Bag Inspector (tex. prod., nec) 789.587-014
BAG LINER (tex. prod., nec) 789.687-014
BAG LOADER (ordnance) 737.687-014
BAG-MACHINE OPERATOR (paper goods) 649.685-014
BAG-MACHINE-OPERATOR HELPER (paper goods) 649.686-010
Bag-Machine Set-Up Operator (paper goods) 649.380-010
bag-making-machine operator (paper goods) 649.685-014
Bag-Making-Machine Tender (tex. prod., nec) 787.685-014
bag patcher (any industry) 782.687-046
Bag Printer (chemical) 920.685-078
BAG PRINTER (print. & pub.) 651.685-010
BAG REPAIRER (paper goods) 794.684-010
Bag Sealer (tinware) 709.686-010
BAG SEWER (paper goods) 787.686-010
Bag Shaker (construction) 579.665-014
Bag Washer (any industry) 361.685-018
bail attacher (tinware) 703.685-010
bail bonding agent (business ser.) 186.267-010
Bailer (petrol. & gas) 930.363-010
BAILIFF (government ser.) 377.667-010
bait packer (can. & preserv.) 529.687-086
Bait Painter (toy-sport equip.) 741.684-018
bait tier (toy-sport equip.) 732.684-074
baked-and-graphite inspector (elec. equip.) 559.364-010
Baked-Goods Stock Clerk (retail trade) 299.367-014
BAKER (bakery products) 526.381-010
baker (brick & tile) 573.682-010
BAKER (hotel & rest.) 313.381-010
baker (jewelry-silver.) 590.685-034
BAKER APPRENTICE (bakery products) 526.381-014
baker apprentice, pastry (hotel & rest.) 313.381-018
Baker, Beads (electron. comp.) 590 684-014
baker, bench (bakery products) 520.384-010
Baker, Biscuit (hotel & rest.) 313.381-010
baker, bread, chief (hotel & rest.) 313.131-010
baker, bread (hotel & rest.) 313.381-010
baker, cake (hotel & rest.) 313.381-026
baker chef (hotel & rest.) 313.131-010
baker, doughnut (bakery products) 526.684-010
BAKER, HEAD (hotel & rest.) 313.131-010
BAKER HELPER (bakery products) 526.686-010
BAKER HELPER (hotel & rest.) 313.684-010
baker, laboratory (grain-feed mills) 526.381-018
baker operator, automatic (bakery products) 526.685-070
baker, paint (paint & varnish) 553.685-082
baker, pastry (hotel & rest.) 313.381-026
baker, pie (hotel & rest.) 313.361-038
BAKER, PIZZA (hotel & rest.) 313.381-014
Baker Scullion (water trans.) 318.687-014
BAKER, SECOND (hotel & rest.) 313.361-010
BAKER, TEST (grain-feed mills) 526.381-018
Bakery Demonstrator (retail trade) 297.354-010
BAKERY-MACHINE MECHANIC (bakery products) 629.281-010
BAKERY-MACHINE-MECHANIC SUPERVISOR (bakery products) 629.131-010
BAKERY SUPERVISOR (bakery products) 526.131-010

Bakery Worker (bakery products) 920.587-018
BAKERY WORKER, CONVEYOR LINE (bakery products) 524.687-022
bakeshop cleaner (hotel & rest.) 313.687-010
Baking-Powder Mixer (food prep., nec) 520.685-162
BALANCE ASSEMBLER (clock & watch) 715.384-010
BALANCE-BRIDGE ASSEMBLER (clock & watch) 715.684-022
balancer (elec. equip.) 727.484-010
balancer (fabrication, nec) 739.684-118
balancer (toy-sport equip.) 732.687-086
BALANCE RECESSER (clock & watch) 604.685-010
BALANCER, SCALE (office machines) 710.381-014
Balance-Staff Inspector (clock & watch) 715.384-022
Balance-Staff Staker (clock & watch) 715.684-182
BALANCE TRUER (clock & watch) 715.684-018
Balance-Wheel-Screw-Hole Driller (clock & watch) 606.685-030
BALANCING-MACHINE OPERATOR (any industry) 609.462-010
BALANCING-MACHINE SET-UP WORKER (any industry) 809.382-010
BALCONY WORKER (glass mfg.) 575.687-010
bale-breaker operator (textile) 680.685-070
bale coverer (textile) 782.687-018
Bale Piler (textile) 929.687-030
baler (any industry) 929.687-058
Baler (forestry) 920.687-046
BALER (plastic-synth.) 690.685-022
baler operator (any industry) 920.685-010
BALE SEWER (agriculture) 920.687-022
BALE-TIE-MACHINE OPERATOR (metal prod., nec) 616.682-014
BALING-MACHINE TENDER (any industry) 920.685-010
baling-press operator (any industry) 920.685-010
BALL ASSEMBLER (toy-sport equip.) 732.684-026
Ballast-Cleaning-Machine Operator (r.r. trans.) 859.683-018
ballaster (ship-boat mfg.) 809.684-022
Ballast-Regulator Operator (r.r. trans.) 859.683-018
ball-ender (musical inst.) 730.685-010
baller (laundry & rel.) 363.687-018
baller tender (textile) 681.685-010
Ballet Dancer (amuse. & rec.) 151.047-010
Ballet Master/Mistress (education) 151.027-014
BALL-FRINGE-MACHINE OPERATOR (tex. prod., nec) 689.685-010
BALLING-MACHINE OPERATOR (textile) 681.685-014
BALLISTICS EXPERT, FORENSIC (government ser.) 199.267-010
ballistics tester (ordnance) 739.484-010
ball laster (boot & shoe) 690.685-186
BALL MACHINE OPERATOR (sugar & conf.) 520.686-010
ball maker (glass mfg.) 575.684-026
Ball-Mill Mixer (tex. prod., nec) 550.382-014
Ball-Mill Operator (any industry) 599.685-058
Ball-Mill Operator (cement) 570.685-046
BALL-MILL OPERATOR (chemical) 558.685-014
BALLOON DIPPER (rubber goods) 599.687-010
BALLOON MAKER (rubber goods) 752.684-010
Balloon Tester (rubber goods) 759.684-074
BALLPOINT-PEN-ASSEMBLY-MACHINE OPERATOR (pen & pencil) 692.382-010
BALLPOINT PEN CARTRIDGE TESTER (pen & pencil) 733.281-010
Ball-Point Splitter (boot & shoe) 585.685-114
ball racker (amuse. & rec.) 340.477-010
ball-rolling-machine operator (sugar & conf.) 520.686-010
Ballroom Dancer (amuse. & rec.) 151.047-010
BALL SORTER (machinery mfg.) 609.685-010
ball-thread-machine tender (textile) 681.685-010
BALL-TRUING-MACHINE OPERATOR (toy-sport equip.) 690.682-014
BALL-WARPER TENDER (textile) 681.685-010
ball winder (textile) 681.685-014
ball winder (textile) 681.685-010
Banana Grader (agriculture; wholesale tr.) 529.687-186
Banana-Ripening-Room Supervisor (wholesale tr.) 920.137-010
BAND-AND-CUFF CUTTER (glove & mit.) 784.685-010
BAND ATTACHER (clock & watch) 715.687-010
Band-Bias-Machine Operator (rubber tire) 690.682-022
Band Booker (amuse. & rec.) 191.117-014
BAND BUILDER (rubber tire) 750.684-010
Band Cutter (garment) 699.685-014
Band Cutter (knitting) 781.687-026
BAND CUTTER (rubber goods) 690.685-026
band cutter (tex. prod., nec) 689.687-018
Band-Cutting-Machine Operator (garment; knitting) 686.685-066
bander (any industry) 782.684-058
bander (furniture) 619.685-014
bander (garment) 920.687-190
BANDER (pen & pencil) 733.687-018
bander (pottery & porc.) 740.681-010
BANDER (wood. container) 762.687-010
BANDER-AND-CELLOPHANER HELPER, MACHINE (tobacco) 920.686-010
BANDER-AND-CELLOPHANER, MACHINE (tobacco) 920.685-014
BANDER, HAND (any industry) 929.687-058
Bander, Hand (glass mfg.; glass products) 740.681-010
BANDER, HAND (paper goods) 920.687-026
BANDER, HAND (tobacco) 920.687-030
Band-Head-Saw Operator (saw. & plan.) 667.662-010
banding-and-cellophane-wrapping-machine-operator helper (tobacco) 920.686-010
BANDING-MACHINE OPERATOR (furniture) 619.685-014
BANDING-MACHINE OPERATOR (ordnance) 619.685-018
BANDING-MACHINE OPERATOR (pottery & porc.) 679.682-010
band-instrument maker (musical inst.) 730.381-018
band leader (profess. & kin.) 152.047-014
Band-Lining Bander (hat & cap) 787.682-010
band-log-mill-and-carriage operator (saw. & plan.) 667.662-010
BAND-MACHINE OPERATOR (rubber goods) 690.685-030
BAND MAKER (agriculture) 619.685-010
BANDOLEER PACKER (ordnance) 920.687-034
BANDOLEER STRAIGHTENER-STAMPER (ordnance) 737.587-010
Band-Plating-Machine Operator (hat & cap) 580.685-038
Band Presser (garment) 363.682-018
BAND-REAMER-MACHINE OPERATOR (nonfer. metal) 603.685-010
Band-Resaw Operator (saw. & plan.; wood. container) 667.682-058
Band-Ripsaw Operator (woodworking) 667.682-066
BAND SALVAGER (agriculture) 929.686-014
Band-Saw Filer (any industry) 701.381-014
BAND-SAWING-MACHINE OPERATOR (fabrication, nec) 690.485-010
band-saw marker (woodworking) 761.684-022
band-sawmill operator (saw. & plan.) 667.662-010
band-saw operator (machine shop) 607.682-010
BAND-SAW OPERATOR (meat products) 525.685-010
BAND-SAW OPERATOR (paper goods) 640.685-090
BAND-SAW OPERATOR (tex. prod., nec) 686.682-010
BAND-SAW OPERATOR (wood. container) 667.685-010
BAND-SAW OPERATOR (woodworking) 667.685-014
Band Saw Operator, Cake Cutting (bakery products) 521.685-302
BAND-SCROLL-SAW OPERATOR (woodworking) 667.682-010
band sewer (any industry) 782.684-058
Band Shover, Press (agriculture) 920.686-042
band splicer (agriculture) 619.685-010
Band Splitter (boot & shoe) 585.685-114
band straightener (agriculture) 929.686-014
Band Tacker (any industry) 787.685-042
band-top assembler (furniture) 780.684-014
BAND-TOP MAKER (furniture) 780.684-014
BAND TUMBLER (rubber goods) 551.685-010
BANK BOSS (construction) 851.137-010
BANK BOSS (mine & quarry) 932.132-010
Bank-Credit-Card-Collection Clerk (financial) 241.357-010
banker (stonework) 679.664-010
Bank Examiner (government ser.) 160.167-054
BANKING PIN ADJUSTER (clock & watch) 715.381-018
BANK-NOTE DESIGNER (government ser.) 142.061-010
Banquet Captain (hotel & rest.) 311.137-018
Banquet Chef (hotel & rest.) 313.131-014
BAR AND FILLER ASSEMBLER (furniture) 706.684-034
bar attendant (hotel & rest.) 312.474-010
BAR ATTENDANT (hotel & rest.) 312.477-010
Bar Attendant (r.r. trans.) 311.477-022
BARBED-WIRE-MACHINE OPERATOR (metal prod., nec) 616.382-010
Barbecue-Briquette-Machine Operator (fabrication, nec) 549.662-010
BARBER (personal ser.) 330.371-010
BARBER APPRENTICE (personal ser.) 330.371-014
Barber-Tool Sharpener (any industry) 701.381-018
Bareback Rider (amuse. & rec.) 159.344-010
BAR EXAMINER (profess. & kin.) 110.167-010
bar-gauger and lubricator tender (ordnance) 590.685-058
barge captain (water trans.) 197.163-014
BARGE CAPTAIN (water trans.) 911.137-010
barge-crane operator (water trans.) 921.683-034
Barge Engineer (water trans.) 197.130-010
Barge Hand (water trans.) 911.687-022
Barge Loader (water trans.) 911.364-014
Barge-Loader Helper (water trans.) 911.687-010
barkeeper (hotel & rest.) 312.474-010
BARKER (amuse. & rec.) 342.657-010
barker (amuse. & rec.; personal ser.) 353.363-010
BARKER OPERATOR (millwork-plywood) 663.682-010
BARK-PRESS OPERATOR (paper & pulp) 563.685-010
Bark Tanner (leather mfg.) 582.482-018
BARLEY STEEPER (beverage) 522.685-114
Bar-Machine Operator (bakery products) 520.682-034
bar-machine operator, multiple spindle (machine shop) 604.280-014
bar-machine operator, multiple spindle (machine shop) 604.382-010
bar-machine operator, production (machine shop) 604.685-034
bar-machine operator, single spindle (machine shop) 604.280-018

bar machine operator, single spindle (machine shop) 604.382-014
BARN BOSS (any industry) 410.131-010
barnworker, groom (any industry) 410.674-022
bar porter (hotel & rest.) 312.687-010
BARREL ASSEMBLER (clock & watch) 715.381-022
BARREL ASSEMBLER (wood. container) 669.682-014
BARREL-ASSEMBLER HELPER (wood. container) 669.685-010
BARREL BRANDER (wood. container) 764.684-010
BARREL-BRIDGE ASSEMBLER (clock & watch) 715.381-026
barrel-bung-remover and dumper (wood. container) 764.687-018
barrel burner (wood. container) 764.684-014
BARREL-CAP SETTER (clock & watch) 715.687-014
BARREL CHARRER (wood. container) 764.684-014
BARREL-CHARRER HELPER (wood. container) 764.687-034
Barrel cooler (wood. container) 764.687-026
Barrel Cutter (beverage) 529.687-066
BARREL DEDENTING-MACHINE OPERATOR (beverage) 617.682-010
BARREL DRAINER (wood. container) 764.687-018
BARREL ENDSHAKE ADJUSTER (clock & watch) 715.381-030
Barrel Filler (can. & preserv.) 529.687-022
BARREL FILLER (grain-feed mills) 529.485-010
Barrel Filler, Head (any industry) 920.132-010
BARREL FILLER I (beverage) 522.687-010
BARREL FILLER II (beverage) 914.485-010
BARREL FINISHER (clock & watch) 715.682-010
BARREL FINISHER (ordnance) 736.684-018
Barrel Inspector (clock & watch) 715.384-022
BARREL INSPECTOR, TIGHT (wood. container) 764.687-022
Barrel Lapper (ordnance) 603.685-070
BARREL LATHE OPERATOR, INSIDE (wood. container) 664.682-010
BARREL LATHE OPERATOR, OUTSIDE (wood. container) 664.682-014
barrel leveler (wood. container) 764.687-094
barrel-line operator (electroplating) 500.362-014
BARREL LINER (wood. container) 764.687-026
BARREL LOADER AND CLEANER (ordnance) 736.587-010
barrel maker (wood. container) 764.684-018
BARREL MARKER (wood. container) 769.687-030
barrel painter (any industry) 599.685-0[illegible]
Barrel Painter (wood. container) 664.682-[illegible]
BARREL POLISHER, INSIDE (ordnance) 603.685-014
BARREL RAISER (wood. container) 764.684-018
BARREL-RAISER HELPER (wood. container) 764.687-038
Barrel Reamer (ordnance) 606.682-014
BARREL REPAIRER (ordnance) 736.684-022
barrel repairer (wood. container) 764.684-022
barrel-repairer helper (wood. container) 764.687-050
BARREL-RIB MATTING-MACHINE OPERATOR (ordnance) 605.682-010
BARREL RIFLER (ordnance) 605.685-010
Barrel Rifler, Broach (ordnance) 605.685-010
Barrel Rifler, Button (ordnance) 605.685-010
Barrel Rifler, Hook (ordnance) 605.685-010
barrel rifler operator (ordnance) 605.685-010
Barrel Roller (beverage) 529.687-066
barrel roller (wood. container) 764.687-030
Barrel Scraper (beverage) 529.687-066
barrel-stave inspector (wood. container) 764.687-054
BARREL STRAIGHTENER I (ordnance) 736.684-026
Barrel Straightener II (ordnance) 617.482-026
barrel tester and drainer (wood. container) 764.687-022
Barrel Washer, Machine (any industry) 529.685-074
Barrel Waterer (wood. container) 764.687-010
Barrer And Tacker (boot & shoe) 690.682-082
bar runner (hotel & rest.) 312.687-010
Bar-Straightening-Machine Operator (any industry) 613.662-022
Bar Tacker (any industry) 787.685-042
BARTENDER (hotel & rest.) 312.474-010
BARTENDER HELPER (hotel & rest.) 312.687-010
Barytes Grinder (paint & varnish) 599.685-058
base-and-wick assembler (fabrication, nec) 739.687-202
baseball-glove stuffer (toy-sport equip.) 732.687-042
BASEBALL INSPECTOR AND REPAIRER (toy-sport equip.) 732.684-030
Baseball Scout (amuse. & rec.) 153.117-018
BASEBALL SEWER, HAND (toy-sport equip.) 732.684-034
Baseball Winder (toy-sport equip.) 692.685-246
Base-Cloth Inspector (carpet & rug) 689.685-038
BASE-DRAW OPERATOR (ordnance) 504.685-010
BASE FILLER (toy-sport equip.) 732.687-018
BASE-FILLER OPERATOR (toy-sport equip.) 732.685-010
BASE-PLY HAND (rubber goods) 759.684-014
BASE REMOVER (light. fix.) 692.686-014
Baser (light. fix.) 692.685-118
Base-Wad Operator-Adjuster (ordnance) 535.482-010
BASIN OPERATOR (waterworks) 954.385-010
BASKET ASSEMBLER I (wood. container) 669.685-014
BASKET ASSEMBLER II (wood. container) 769.684-010
Basketball Assembler (toy-sport equip.) 732.684-026
Basketball Coach (amuse. & rec.) 153.227-010
Basketball Scout (amuse. & rec.) 153.117-018
Basket-Bottom-Machine Operator (wood. container) 669.685-014
Basket-Bottom-Rounding-Machine Operator (wood. container) 667.685-066
basket-factory machine hand (wood. container) 669.685-074
BASKET FILLER (can. & preserv.) 529.687-010
BASKET GRADER (wood. container) 769.687-010
basket-machine operator (wood. container) 669.685-074
basket maker (wood. container) 769.684-054
basket maker (wood. container) 669.685-014
BASKET MENDER (wood. container) 762.684-022
BASKET PATCHER (wood. container) 769.684-014
Basket Turner (agriculture) 920.687-134
Bass-Mechanism Maker (musical inst.) 730.281-010
Bass-String Winder (musical inst.) 692.682-062
Bass-Viol Repairer (any industry) 730.281-050
Baster, Hand (garment) 782.684-058
BASTING-MACHINE OPERATOR (garment) 786.682-030
basting marker (garment) 782.687-058
BASTING PULLER (garment) 782.687-010
Bat Boy/Girl (amuse. & rec.) 358.677-014
Bat Carrier (tex. prod., nec) 586.686-022
BATCH-AND-FURNACE OPERATOR (glass mfg.) 572.382-010
batcher (pharmaceut.) 559.686-022
batcher tender (knitting) 689.685-114
BATCH FREEZER (dairy products) 523.685-010
BATCH MAKER (nonfer. metal; steel & rel.) 515.685-010
batch maker (sugar & conf.) 529.361-014
BATCH MIXER (brick & tile) 570.687-010
batch mixer (food prep., nec) 520.685-014
batch mixer (glass mfg.) 570.685-054
batch mixer (paint & varnish) 550.685-078
BATCH MIXER (soap & rel.) 550.685-010
batch-mixer operator (grain-feed mills) 520.685-098
batch-mixing-truck driver (construction) 900.683-010
batch-plant operator (glass mfg.) 570.685-054
batch-plant supervisor (construction) 570.132-010
BATCH-RECORDS CLERK (plastic prod.) 221.387-054
batch-roller operator (sugar & conf.) 520.682-030
BATCH-STILL OPERATOR I (chemical) 552.685-014
Batch-Still Operator II (chemical) 552.362-022
BATCH-TANK CONTROLLER (grain-feed mills) 521.685-022
BATCH TRUCKER (rubber reclaim.) 550.686-010
Batch Trucker (rubber tire) 929.687-030
Batch-Unit Treater (petrol. refin.) 549.362-014
Batch Unloader (glass mfg.) 570.685-026
Batch Weigher (chemical) 929.687-062
batch weigher and mixer (rubber reclaim.) 550.686-010
bath attendant (personal ser.) 334.677-010
bath attendant (personal ser.) 334.374-010
bath-house attendant (personal ser.) 334.374-010
bath mixer (plastic-synth.) 550.684-010
BATH-MIX OPERATOR (plastic-synth.) 552.685-018
bath-solution maker (plastic-synth.) 550.684-010
Bat-Lathe Operator (woodworking) 664.382-010
BATTALION CHIEF (government ser.) 373.167-010
batter (pottery & porc.) 575.684-010
Batterboard Setter (construction) 869.664-014
batter depositor (bakery products) 526.682-010
BATTER MIXER (bakery products) 520.685-010
BATTER MIXER (food prep., nec) 520.685-014
Batter-Mixer Helper (bakery products) 526.686-010
BATTER-OUT (pottery & porc.) 575.684-010
BATTER SCALER (bakery products) 526.682-010
battery analyst (elec. equip.) 727.381-022
BATTERY ASSEMBLER (elec. equip.) 727.684-010
BATTERY ASSEMBLER, DRY CELL (elec. equip.) 727.664-010
BATTERY ASSEMBLER, PLASTIC (elec. equip.) 727.684-014
BATTERY CHARGER (any industry) 825.684-018
BATTERY CHARGER (elec. equip.) 727.587-010
battery charger (mine & quarry) 729.684-042
BATTERY CHARGER, CONVEYOR LINE (elec. equip.) 727.687-026
BATTERY-CHARGER TESTER (elec. equip.) 729.684-010
BATTERY-CONTAINER-FINISHING HAND (elec. equip.) 727.687-034
battery-container inspector (elec. equip.) 727.687-066
battery-container tester, aluminum (elec. equip.) 727.687-018
battery filler (textile) 683.686-010
battery hand (textile) 683.686-010
BATTERY INSPECTOR (railroad equip.; r.r. trans.) 829.684-010
battery loader (elec. equip.) 727.687-030
BATTERY LOADER (textile) 683.686-010
BATTERY MAINTAINER, LARGE EMERGENCY STORAGE (utilities) 820.381-010
BATTERY-PARTS ASSEMBLER (elec. equip.) 727.687-038

Battery Plate Remover (elec. equip.) 727.687-058
BATTERY RECHARGER (elec. equip.) 727.381-010
BATTERY REPAIRER (any industry) 727.381-014
BATTERY STACKER (elec. equip.) 727.687-030
Battery Starter (mine & quarry) 932.687-010
battery tester (any industry) 727.381-014
BATTERY TESTER (elec. equip.) 727.384-010
battery tester and repairer (elec. equip.) 727.684-018
Battery Tester, Field (elec. equip.) 727.384-010
Battery-Vent-Plug Inserter (elec. equip.) 727.687-038
BATTERY-WRECKER OPERATOR (nonfer. metal) 515.686-010
BATTING-MACHINE OPERATOR (tex. prod., nec; textile) 680.585-010
BATTING-MACHINE OPERATOR, INSULATION (nonmet. min.) 677.382-010
BB SHOT PACKER (ordnance) 920.685-018
BEACH LIFEGUARD (amuse. & rec.) 379.364-014
bead blasting machine tender (any industry) 503.685-042
BEAD BUILDER (rubber tire) 750.684-014
BEADER (furniture) 739.687-034
beader tender (chemical) 550.685-058
Bead Filler (rubber tire) 750.684-014
Bead Flipper (rubber tire) 750.684-014
BEAD-FORMING-MACHINE OPERATOR (rubber tire) 692.682-014
Beading-Machine Operator I (any industry) 617.482-014
Beading-Machine Operator II (any industry) 619.685-046
BEADING SAWYER (fabrication, nec) 667.685-018
BEAD INSPECTOR (light. fix.) 725.687-010
BEAD-MACHINE OPERATOR (hat & cap) 583.686-010
BEAD MAKER (jewelry-silver.) 770.381-010
BEAD PICKER (rubber reclaim.) 551.686-010
BEAD PREPARER (rubber goods) 692.685-022
beadsaw operator (rubber goods; rubber reclaim.) 690.685-386
Bead Stringer (elec. equip.) 691.685-018
BEAD STRINGER (jewelry-silver.) 735.684-010
Bead Supervisor (rubber tire) 750.130-010
BEADWORKER (fabrication, nec) 789.381-010
Bead Wrapper (rubber tire) 750.684-014
beam doffer (textile) 681.686-010
beam dyer (textile) 582.685-102
BEAM-DYER OPERATOR (textile) 582.685-014
Beam Dyer, Recessed Vat (textile) 582.685-014
beamer (meat products; oils & grease) 525.687-046
BEAMER (textile) 681.585-010
beamer hand (textile) 681.685-058
BEAMER HELPER (textile) 681.686-014
beam-house inspector (leather mfg.) 585.687-010
BEAMING INSPECTOR (leather mfg.) 585.687-010
beaming-machine operator (textile) 681.685-058
beam-machine operator (any industry) 699.682-022
Beam-Press Operator (rubber goods) 699.682-022
BEAM RACKER (textile) 681.686-010
beam warper (knitting; narrow fabrics; nonmet. min.; textile) 681.685-018
BEAM-WARPER TENDER, AUTOMATIC (knitting; narrow fabrics; nonmet. min.; textile) 681.685-018
bean dumper (sugar & conf.) 521.685-066
Bean-Sprout Grower (agriculture) 405.161-018
Bean-Sprout Laborer (agriculture) 405.687-014
bearing inspector (machinery mfg.) 706.382-014
Bearing-Press-Machine Operator (railroad equip.) 616.682-010
BEARING-RING ASSEMBLER (machinery mfg.) 706.684-038
Bear Keeper (amuse. & rec.) 412.674-010
beater (boot & shoe) 690.685-074
beater (nonmet. min.) 570.686-018
BEATER-AND-PULPER FEEDER (paper & pulp; tex. prod., nec) 530.686-010
BEATER ENGINEER (paper & pulp; tex. prod., nec) 530.662-010
BEATER-ENGINEER HELPER (paper & pulp; tex. prod., nec) 530.665-010
beater, head (paper & pulp) 530.132-014
Beater, Lead (paper & pulp; tex. prod., nec) 530.662-010
BEATER OPERATOR (chemical) 555.685-010
beater operator (paper & pulp; tex. prod., nec) 530.662-010
beater-operator helper (paper & pulp; tex. prod., nec) 530.665-010
beater-out, leveling machine (boot & shoe) 690.685-382
Beating-Machine Operator (leather mfg.) 589.686-022
beautician (personal ser.) 332.271-010
beautician apprentice (personal ser.) 332.271-014
beauty culturist (personal ser.) 332.271-010
beauty-culturist apprentice (personal ser.) 332.271-014
beauty operator (personal ser.) 332.271-010
beauty-operator apprentice (personal ser.) 332.271-014
Beauty Parlor Cleaner (personal ser.) 323.687-014
Beaver Trapper (fishing & hunt.) 461.684-014
beck tender (textile) 582.665-014
BEDDER (pottery & porc.) 573.687-010
BED LASTER (boot & shoe) 690.682-018
BED OPERATOR (steel & rel.) 613.685-034
BED RUBBER (stonework) 673.685-014
BED SETTER (stonework) 679.664-010
Bedspread Cutter, Hand (tex. prod., nec) 781.684-074
Bedspread Folder (tex. prod., nec) 589.687-014
Bedspread Inspector (tex. prod., nec) 789.587-014
Bedspread Seamer (tex. prod., nec) 787.682-066
Bedspring Assembler (furniture) 780.684-098
bed washer (furniture) 709.687-014
bed worker (fishing & hunt.) 446.684-014
bee farmer (agriculture) 413.161-010
Beef Boner (meat products) 525.684-010
Beef Grader (meat products) 525.387-010
Beef-Pluck Trimmer (meat products) 525.684-038
Beef Ribber (meat products) 525.684-018
beef trimmer (meat products) 521.687-106
Beegle-Iron Worker (wood prod., nec) 563.687-010
BEEKEEPER (agriculture) 413.161-010
Bee Producer (agriculture) 413.161-010
bee raiser (agriculture) 413.161-010
bee rancher (agriculture) 413.161-010
Beer-Coil Cleaner (any industry) 599.684-010
beer-still runner compounder (beverage) 522.382-026
beeswax bleacher (chemical) 551.685-158
beeswax blender (fabrication, nec) 550.585-046
beet flumer (sugar & conf.) 521.686-042
beet flumer (sugar & conf.) 922.665-010
BEE WORKER (agriculture) 413.687-018
BELL CAPTAIN (hotel & rest.) 324.137-014
Bell-Hole Digger (construction) 869.687-026
BELLHOP (hotel & rest.) 324.677-010
belling machine operator (steel & rel.) 617.685-022
BELL MAKER (musical inst.) 730.381-014
Bell Maker, Sousaphones (musical inst.) 730.381-014
BELL-NECK HAMMERER (musical inst.) 730.684-014
BELLOWS ASSEMBLER (inst. & app.) 710.684-042
bellows assembler (photo. appar.) 714.684-014
BELLOWS FILLER (inst. & app.) 710.684-014
Bellows Maker (musical inst.) 730.281-010
BELLOWS MAKER (photo. appar.) 714.684-014
BELLOWS TESTER (inst. & app.) 710.687-014
BELL SPINNER (musical inst.) 619.682-010
Bell Spinner, Sousaphones (musical inst.) 619.682-010
Bell Tier (concrete prod.) 579.687-042
BELLY BUILDER (musical inst.) 730.684-018
Belly Dancer (amuse. & rec.) 151.047-010
Belly Opener (meat products) 525.687-010
Belly Packer (meat products) 525.687-026
Belly Roller (leather mfg.) 583.685-094
Belly Trimmer (meat products) 525.684-054
Belly Wringer (leather mfg.) 589.685-098
belt-and-link-shop supervisor (ordnance) 737.137-022
belt back operator (button & notion) 690.685-194
Belt Brander (rubber goods) 690.685-454
BELT BUILDER (rubber goods) 752.684-014
BELT-BUILDER HELPER (rubber goods) 759.684-018
Belt Cleaner (steel & rel.) 911.687-014
Belt Cutter (garment) 699.685-014
BELTER (construction) term
BELTING-AND-WEBBING INSPECTOR (narrow fabrics) 683.487-010
Belting Cutter (leather prod.) 585.685-038
Belt-Loop Cutter (garment) 699.685-014
Belt-Loop Maker (garment) 787.685-014
BELT MAKER (nonmet. min.) 776.684-010
BELT-MAKER HELPER (nonmet. min.) 776.687-010
Belt Measurer (rubber goods) 690.685-454
Belt Notcher (rubber goods) 690.685-454
BELT PICKER (mine & quarry) 939.687-010
BELT-PRESS OPERATOR I (rubber goods) 553.362-010
BELT-PRESS OPERATOR II (rubber goods) 553.665-010
belt puncher (leather prod.) 690.685-266
BELT REPAIRER (any industry) 630.684-014
belt roller (leather prod.) 920.685-070
Belt Sander (woodworking) 761.682-014
BELT SANDER, STONE (stonework) 673.666-010
belt seamer (glass products) 775.684-042
belt tender (any industry) 921.685-026
Belt Turner (garment) 789.687-182
BENCH ASSEMBLER (agric. equip.) 706.684-042
bench assembler (any industry) 706.684-022
bench assembler (engine-turbine) 706.481-010
bench assembler, battery (elec. equip.) 727.684-026
bench assembler, electrical (aircraft mfg.) 729.384-026
bench-assembler operator (pen & pencil) 733.687-014
bench-assembler operator (pen & pencil) 733.687-034
bench-boring-machine operator (pen & pencil) 733.685-018

BENCH CARPENTER (woodworking) 760.684-010
bench die maker (machine shop) 601.281-010
BENCH GRINDER (any industry) 705.684-010
BENCH HAND (bakery products) 520.384-010
BENCH HAND (clock & watch) 715.684-026
BENCH HAND (furniture) 706.381-014
bench hand (jewelry-silver.) 700.687-026
bench hand (jewelry-silver.) 700.687-062
BENCH HAND (jewelry-silver.) 735.381-010
bench hand (machinery mfg.; machine tools) 600.281-022
BENCH HAND (motor-bicycles) 706.684-046
Bench-Hand Helper (bakery products) 526.686-010
bench hand, machine (bakery products) 520.685-214
bench inspector (any industry) 609.684-010
bench-lathe operator (machine shop) 604.380-018
Bench-Lay-Out Technician (optical goods) 716.381-014
BENCH-MOLDER APPRENTICE (jewelry-silver.) 518.381-010
bench-press operator (any industry) 616.682-026
bench-press operator (any industry) 690.685-014
BENCH-SHEAR OPERATOR (furniture) 703.684-010
bench worker (jewelry-silver.) 735.381-010
BENCH WORKER (metal prod., nec) 616.485-010
BENCH WORKER (optical goods) 713.684-018
bench-worker apprentice (jewelry-silver.) 700.281-014
BENCH WORKER, BINDING (print. & pub.) 977.684-026
BENCH WORKER, HOLLOW HANDLE (jewelry-silver.) 700.687-010
bench worker (jewelry-silver.) 700.281-010
BEN-DAY ARTIST (print. & pub.) 970.681-010
bender (jewelry-silver.) 700.684-010
Bender (toy-sport equip.) 569.685-014
Bender, Armature Coil (elec. equip.) 724.684-026
bender, hand (any industry) 709.684-090
BENDER, HAND (woodworking) 769.684-018
BENDER, MACHINE (paper goods) 641.685-010
BENDER, MACHINE (woodworking) 569.685-014
bending-machine operator (paper goods) 641.685-010
Bending-Machine-Operator Helper (any industry) 619.687-014
BENDING-MACHINE OPERATOR I (any industry) 617.482-010
BENDING-MACHINE OPERATOR II (any industry) 617.685-010
bending-press operator (any industry) 617.260-010
bending-press operator (woodworking) 569.685-014
bending-roll operator (any industry) 619.362-014
bend sorter (leather mfg.) 589.387-010
bend trimmer (leather mfg.) 585.684-010
Benefits Clerk I (clerical) 209.362-026
BENEFITS CLERK II (clerical) 205.567-010
benzene operator (chemical; steel & rel.) 551.682-010
Benzene-Still Utility Operator (chemical) 559.682-066
BENZENE-WASHER OPERATOR (chemical; steel & rel.) 551.682-010
benzol operator (chemical; steel & rel.) 551.682-010
berry grower (agriculture) 403.161-014
Bessemer-Bottom Maker (steel & rel.) 861.381-026
Bet Taker (amuse. & rec.) 211.462-022
beveler (boot & shoe; rubber goods) 690.685-378
BEVELER (clock & watch) 715.684-030
BEVELER (glass mfg.; glass products) 775.684-010
beveler (glass mfg.; glass products) 673.682-014
beveler (glass mfg.) 573.685-018
BEVELER (glass products) 673.685-018
BEVELER (nonmet. min.) 673.685-022
BEVELER (stonework) 771.484-010
BEVELER, PRINTED CIRCUIT BOARDS (electron. comp.) 699.682-034
bevel-gear-generator operator (machine shop) 602.382-018
BEVELING-AND-EDGING-MACHINE OPERATOR (glass mfg.; glass products) 673.682-014
BEVELING-AND-EDGING-MACHINE-OPERATOR HELPER (glass mfg.; glass products) 673.686-010
beveling-machine operator (glass mfg.; glass products) 673.682-014
BEVELING-MACHINE OPERATOR (hat & cap) 690.686-010
Beveling-Machine-Operator Helper (glass mfg.; glass products) 673.686-010
BEVEL POLISHER (clock & watch) 603.685-022
beverage-inspection-machine tender (beverage) 529.685-026
Bezel Cutter (jewelry-silver.) 770.261-010
Bias-Binding Cutter (tex. prod., nec) 686.685-066
bias-binding folder (rubber goods; tex. prod., nec) 689.685-134
bias-cutting-machine operator (rubber tire) 690.682-022
BIAS-CUTTING-MACHINE OPERATOR (tex. prod., nec) 686.682-014
Bias-Cutting-Machine Operator, Vertical (rubber tire) 690.682-022
BIAS-MACHINE OPERATOR (rubber tire) 690.682-022
BIAS-MACHINE-OPERATOR HELPER (rubber tire) 690.686-014
Biazzi-Nitrator Operator (chemical) 558.382-046
BIBLIOGRAPHER (profess. & kin.) 100.367-010
bicycle mechanic (any industry) 639.681-010
BICYCLE-RENTAL CLERK (retail trade) 295.467-010
BICYCLE REPAIRER (any industry) 639.681-010
Bicycle, Subassembler (motor-bicycles) 806.687-010
bid clerk (clerical) 249.367-066
Bight Maker (fabrication, nec) 590.662-022
Bill Adjuster (clerical) 241.367-014
Billboard-Erector Helper (construction) 869.664-014
bill clerk (clerical) 214.482-010
bill collector (clerical) 241.367-010
bill cutter (saw. & plan.) 667.482-018
biller (clerical) 214.482-010
BILLET ASSEMBLER (chemical) 614.684-010
billet header (nonfer. metal; smelt. & refin.) 514.584-010
Billet Inspector (steel & rel.) 619.381-010
Billiard-Table Repairer (retail trade; toy-sport equip.) 732.384-010
Billing Checker (clerical) 209.687-010
billing clerk (clerical) 214.382-014
billing clerk (clerical) 214.482-010
BILLING CLERK (clerical) 214.362-042
BILLING-CONTROL CLERK (utilities) 214.387-010
BILLING-MACHINE OPERATOR (clerical) 214.482-010
billing supervisor (utilities; waterworks) 214.137-022
BILLING TYPIST (clerical) 214.382-014
Bill-of-Lading Clerk (clerical) 214.382-014
BILLPOSTER (any industry) 299.667-010
BILLPOSTER (business ser.) 841.684-010
Bill Recapitulation Clerk (utilities) 216.482-010
Bill Sorter (clerical) 209.687-022
BIN CLEANER (beverage; grain-feed mills) 529.687-014
BINDER (any industry) 787.682-010
binder (elec. equip.) 724.687-010
binder (rubber goods) 690.686-026
binder (tobacco) 790.684-010
binder (woodworking) 929.685-018
BINDER AND BOX BUILDER (textile) 628.684-010
BINDER-AND-WRAPPER PACKER (tobacco) 922.687-014
Binder Caser (tobacco) 522.687-026
BINDER, CHAINSTITCH (garment) 786.682-034
BINDER, COVERSTITCH (garment) 786.682-038
BINDER CUTTER, HAND (tobacco) 521.687-014
binder fixer (textile) 628.684-010
BINDER LAYER (tobacco) 529.685-018
BINDER, LOCKSTITCH (garment) 786.682-042
binder operator (paper goods) 641.685-090
binder roller (tobacco) 790.684-010
BINDER SELECTOR (tobacco) 521.687-018
binder sorter (tobacco) 521.687-018
Binder Stripper, Hand (tobacco) 521.687-134
Binder Stripper, Machine (tobacco) 521.685-334
BINDER TECHNICIAN (glass mfg.) 550.585-010
bindery chief (print. & pub.) 653.131-010
bindery leadperson (print. & pub.) 653.360-018
BINDERY-MACHINE FEEDER-OFFBEARER (print. & pub.) 653.686-026
BINDERY-MACHINE SETTER (print. & pub.) 653.360-018
bindery operator (print. & pub.) 640.685-010
bindery operator (print. & pub.) 653.685-010
BINDERY WORKER (paper goods) 649.685-018
BINDERY WORKER (print. & pub.) 653.685-010
Binding Cementer, French Cord (boot & shoe) 690.686-018
Binding Cutter (garment; textile) 686.685-066
Binding Cutter (hat & cap) 690.682-030
BINDING CUTTER, SYNTHETIC CLOTH (tex. prod., nec) 699.682-010
binding-end stitcher (any industry) 787.682-010
BINDING FOLDER, MACHINE (boot & shoe) 788.684-018
binding-machine operator (any industry) 787.682-010
Binding Nicker (boot & shoe) 690.685-298
BINDING PRINTER (textile) 652.685-014
Binding Stitcher (boot & shoe) 690.682-082
BIN FILLER (tobacco) 922.687-010
Binitrotoluene Operator (chemical) 558.382-046
bin packer (tobacco) 922.687-010
bin piler (textile) 589.685-074
BIN TRIPPER OPERATOR (steel & rel.) 922.665-014
BIOCHEMIST (profess. & kin.) 041.061-026
BIOCHEMISTRY TECHNOLOGIST (medical ser.) 078.261-010
BIOGRAPHER (profess. & kin.) 052.067-010
BIOLOGICAL AIDE (agriculture) 049.364-018
BIOLOGICAL PHOTOGRAPHER (profess. & kin.) 143.362-010
biological-plant operator (chemical) 558.682-018
BIOLOGIST (profess. & kin.) 041.061-030
BIOLOGY SPECIMEN TECHNICIAN (profess. & kin.) 041.381-010
biomedical electronics technician (profess. & kin.) 019.261-010
biomedical engineering technician (profess. & kin.) 019.261-010
BIOMEDICAL ENGINEER (profess. & kin.) 019.061-010
BIOMEDICAL EQUIPMENT TECHNICIAN (profess. & kin.) 019.261-010
BIOPHYSICIST (profess. & kin.) 041.061-034
BIRD-CAGE ASSEMBLER (metal prod., nec) 709.684-026

Bird Keeper (amuse. & rec.) 412.674-010
BIRTH ATTENDANT (medical ser.) 354.377-010
biscuit-machine operator (plastic prod.; plastic-synth.) 556.685-058
BISQUE CLEANER (pottery & porc.) 774.684-010
bisque finisher (pottery & porc.) 774.684-010
bisque grader (pottery & porc.) 774.684-010
BISQUE GRADER (pottery & porc.) 774.687-010
Bisque-Kiln Drawer (pottery & porc.) 573.667-010
Bisque-Kiln Placer (pottery & porc.) 573.686-026
Bisque-Tile Burner (brick & tile) 573.382-018
BIT BENDER (fabrication, nec) 752.684-018
BITE-BLOCK MAKER (protective dev.) 712.684-014
bit grinder (any industry) 603.685-026
bit grinder (mine & quarry) 603.685-030
Bit Sander (fabrication, nec) 761.684-030
bit setter (fabrication, nec) 739.687-014
BIT SHARPENER (any industry) 603.685-026
BIT-SHARPENER OPERATOR (mine & quarry) 603.685-030
BIT SHAVER (fabrication, nec) 754.684-018
Bit Tripoler (fabrication, nec) 739.684-026
bituminous-distributor operator (construction) 853.663-018
bituminous-paving-machine operator (construction) 853.663-010
BLACK-ASH-BURNER OPERATOR (paper & pulp) 553.682-010
Black-Ash Worker (paint & varnish) 559.685-110
blackener (leather mfg.) 599.685-094
blacking-machine operator (leather mfg.) 599.685-094
Blacking-Wheel Tender (leather mfg.) 582.685-050
Black-Leather Buffer (leather mfg.) 585.685-018
Black-Leather Trimmer (leather mfg.) 585.684-010
BLACK-MILL OPERATOR (chemical) 553.665-014
BLACK OXIDE COATING EQUIPMENT TENDER (electron. comp.) 501.685-018
black oxide operator (electron. comp.) 501.685-018
BLACKSMITH (forging) 610.381-010
BLACKSMITH APPRENTICE (forging) 610.381-014
Blacksmith, Farm (agriculture) 610.381-010
blacksmith, hammer operator (aircraft mfg.; forging) 610.362-010
BLACKSMITH HELPER (forging) 610.684-010
blacksmith supervisor (forging) 612.131-010
blacktop-paver operator (construction) 853.663-010
blacktop spreader (construction) 853.663-010
Bladder Changer (rubber tire) 629.684-010
Bladder Trimmer (meat products) 525.684-038
blade aligner (elec. equip.) 706.687-018
BLADE BALANCER (agric. equip.) 701.687-014
Blade Boner (meat products) 525.684-010
blade-grader operator (construction) 850.663-022
BLADE GROOVER (cutlery-hrdwr.) 705.582-010
blanching-machine operator (can. & preserv.) 521.685-246
BLANCHING-MACHINE OPERATOR (can. & preserv.) 523.685-014
Blankbook Forwarder (print. & pub.) 794.687-026
Blankbook-Stitching-Machine Operator I (print. & pub.) 653.685-014
Blankbook-Stitching-Machine Operator II (print. & pub.) 653.682-010
blank driller (cutlery-hrdwr.) 709.684-082
blanker operator (paper goods) 649.685-118
blanker-press operator (paper goods) 649.682-026
Blanket Binder (tex. prod., nec) 787.682-010
Blanket Cutter, Hand (tex. prod., nec) 781.684-074
BLANKET-CUTTING-MACHINE OPERATOR (tex. prod., nec) 689.585-010
Blanket Folder (tex. prod., nec) 589.687-014
Blanket Inspector (tex. prod., nec) 789.587-014
BLANKET WASHER (smelt. & refin.) 511.687-010
BLANKET-WINDER HELPER (paper goods) 641.686-010
BLANKET-WINDER OPERATOR (paper goods) 641.682-010
Blanking-Machine Operator (any industry) 617.685-026
BLANKMAKER (glass mfg.) 579.382-022
BLASTER (any industry) 859.261-010
BLASTER (mine & quarry) 931.261-010
blaster (stonework) 771.281-010
BLASTER HELPER (any industry) 859.687-010
BLAST-FURNACE KEEPER (steel & rel.) 502.664-010
BLAST-FURNACE-KEEPER HELPER (steel & rel.) 502.687-010
BLASTING-CAP ASSEMBLER (ordnance) 737.687-018
BLEACH-BOILER FILLER (paper & pulp) 533.685-010
bleach-boiler packer (paper & pulp) 533.685-010
Bleach-Boiler Puller (paper & pulp) 539.587-010
Bleach Chlorinator (chemical) 558.382-030
bleacher (boot & shoe) 788.687-014
bleacher (plastic-synth.) 582.685-162
bleacher (textile) 582.685-102
Bleacher, Groundwood Pulp (paper & pulp) 533.362-010
Bleacher, Kraft Pulp (paper & pulp) 533.362-010
BLEACHER, LARD (meat products; oils & grease) 521.685-026
BLEACHER OPERATOR (chemical; soap & rel.) 558.685-018
BLEACHER, PULP (paper & pulp) 533.362-010
Bleacher, Sulfite Pulp (paper & pulp) 533.362-010
Bleaching Supervisor (leather mfg.) 582.131-010
BLEACH-LIQUOR MAKER (paper & pulp) 550.662-010
BLEACH PACKER (chemical) 558.687-010
BLEACH-RANGE OPERATOR (textile) 582.685-018
BLEMISH REMOVER (boot & shoe) 788.684-022
BLENDER (bakery products) 520.585-010
blender (beverage; can. & preserv.) 520.685-030
blender (build. mat., nec) 570.685-094
blender (chemical; electron. comp.) 550.685-082
blender (chemical) 555.685-046
blender (grain-feed mills) 520.685-106
blender (hat & cap) 680.685-062
blender (nonfer. metal; steel & rel.) 510.685-018
Blender (oils & grease) 529.382-026
blender (paint & varnish) 550.685-078
blender (paint & varnish) 550.585-038
BLENDER (petrol. refin.) 540.462-010
Blender (plastic prod.; plastic-synth.) 550.685-134
blender (soap & rel.) 550.685-010
BLENDER (tobacco) 520.387-010
BLENDER-CONVEYOR OPERATOR (dairy products) 529.685-022
blender helper (grain-feed mills) 520.686-022
BLENDER HELPER (plastic prod.; plastic-synth.) 550.586-010
BLENDER I (chemical) 550.685-014
BLENDER II (chemical) 550.665-010
BLENDER LABORER (tobacco) 520.687-010
BLENDER-MACHINE OPERATOR (oils & grease) 520.685-018
blender operator (any industry) 680.685-082
Blender Operator (brick & tile) 570.382-010
blender operator (chemical) 570.665-010
blender operator (chemical) 550.382-018
BLENDER, SNUFF (tobacco) 520.685-022
blending-kettle tender (beverage; can. & preserv.) 520.685-030
BLENDING-LINE ATTENDANT (tobacco) 520.685-026
Blending-Machine Feeder (nonmet. min.) 570.686-018
BLENDING-MACHINE OPERATOR (dairy products) 522.685-010
blending-machine operator (fabrication, nec) 680.685-066
BLENDING-MACHINE OPERATOR (textile) 680.685-010
BLENDING-PLANT OPERATOR (oils & grease) 520.682-010
BLENDING SUPERVISOR (grain-feed mills) 520.132-010
BLENDING SUPERVISOR (tobacco) 520.136-010
BLENDING-TANK TENDER (beverage; can. & preserv.) 520.685-030
BLENDING-TANK TENDER HELPER (can. & preserv.) 520.687-066
BLIND AIDE (personal ser.) 359.573-010
Blind Eyeletter (boot & shoe) 699.685-018
Blind Hooker (boot & shoe) 699.685-018
BLIND-SLAT-STAPLING-MACHINE OPERATOR (saw. & plan.) 669.685-018
BLINDSTITCH-MACHINE OPERATOR (garment) 786.682-046
BLINTZE ROLLER (food prep., nec) 520.687-014
Blister-Packing-Machine Tender (any industry) 920.685-078
block and case maker (pottery & porc.) 777.684-018
Block Breaker (concrete prod.) 579.687-042
BLOCK-BREAKER OPERATOR (chemical) 555.686-010
block chopper, hand (fabrication, nec; paper & pulp) 569.687-026
Block Cleaner (clock & watch) 715.687-126
Block Cuber (concrete prod.) 579.687-042
block cutter (print. & pub.) 979.281-014
blocker (any industry) 363.685-018
BLOCKER (clock & watch) 715.684-034
BLOCKER (glass mfg.; glass products) 673.685-026
Blocker (jewelry-silver.) 770.261-010
BLOCKER (laundry & rel.) 363.684-010
BLOCKER (narrow fabrics; nonmet. min.) 689.685-014
blocker (pottery & porc.) 777.684-018
BLOCKER (tex. prod., nec) 920.685-022
BLOCKER AND CUTTER, CONTACT LENS (optical goods) 716.681-010
BLOCKER AND POLISHER, GOLD WHEEL (clock & watch) 715.381-034
blocker and sewer (fabrication, nec) 739.384-014
BLOCKER, AUTOMATIC (glass mfg.; glass products) 673.685-030
BLOCKER, HAND (optical goods) 716.684-010
BLOCKER, HAND I (hat & cap) 580.684-010
BLOCKER, HAND II (hat & cap) 580.684-014
blocker, heated metal-forms (hat & cap) 580.684-010
BLOCKER I (print. & pub.) 979.682-010
BLOCKER II (print. & pub.) 971.684-010
BLOCKER, METAL BASE (print. & pub.) 974.682-010
blocker, polishing (clock & watch) 715.684-034
BLOCK FEEDER (fabrication, nec) 663.686-010
block hacker (fabrication, nec; paper & pulp) 569.687-026
blocking-machine operator (hat & cap) 580.685-026
Blocking-Machine Operator, Second (hat & cap) 580.685-038
BLOCKING-MACHINE TENDER (optical goods) 716.685-010
BLOCK INSPECTOR (fabrication, nec) 739.687-038

BLOCK MAKER (protective dev.) 719.381-018
block maker (concrete prod.) 575.685-014
block maker (stonework) 771.684-010
BLOCK-MAKING-MACHINE OPERATOR (concrete prod.) 575.685-014
block-press operator (chemical) 559.685-038
BLOCK-PRESS OPERATOR (chemical) 556.685-014
Block Setter, Gypsum (construction) 861.381-018
BLOCK-SPLITTER OPERATOR (paper & pulp) 663.685-010
block trimmer (leather mfg.) 585.684-010
blood-bank-booking clerk (medical ser.) 245.367-018
BLOOD-DONOR RECRUITER (medical ser.) 293.357-010
BLOOD-DONOR-UNIT ASSISTANT (medical ser.) 245.367-014
BLOOD TESTER, FOWL (agriculture) 411.364-010
Blower (can. & preserv.) 525.687-126
blower (glass mfg.) 772.381-022
blower (hat & cap) 680.685-046
blower (retail trade) 369.685-010
blower (toy-sport equip.) 731.685-014
BLOWER AND COMPRESSOR ASSEMBLER (machinery mfg.) 801.361-010
blower, blast furnace (steel & rel.) 519.132-010
BLOWER FEEDER, DYED RAW STOCK (textile) 581.686-010
BLOWER INSULATOR (railroad equip.; retail trade; wholesale tr.) 863.664-010
blower-room attendant (any industry) 950.585-010
Blow-Machine Tender, Starch Spraying (textile) 582.685-138
BLOW-MOLDING-MACHINE OPERATOR (plastic prod.) 556.682-010
BLOW-MOLDING-MACHINE TENDER (toy-sport equip.) 556.685-086
Blow-Off Worker (chemical) 549.587-010
BLOW-OFF WORKER (furniture) 763.687-010
BLOW-PIT HELPER (paper & pulp) 533.686-010
BLOW-PIT OPERATOR (paper & pulp) 533.665-010
BLOW-UP OPERATOR (sugar & conf.) 529.485-014
Blueberry Grower (agriculture) 403.161-014
Blue-Leather Setter (leather mfg.) 589.685-098
Blue-Leather Sorter (leather mfg.) 589.387-010
blue-line hanger (leather mfg.) 589.686-026
blue-line operator (any industry) 979.682-014
blue-line trimmer (leather mfg.) 585.684-010
blueprint assembler (any industry) 920.687-038
blue print control clerk (aircraft mfg.; electron. comp.) 206.367-010
BLUEPRINTING-MACHINE OPERATOR (any industry) 979.682-014
blueprint maker (any industry) 979.682-014
Blueprint-Paper-Coating-Machine Operator (photo. appar.) 534.582-010
BLUEPRINT TRIMMER (any industry) 920.687-038
Bluer (ordnance) 599.685-026
Blue-Split Trimmer (leather mfg.) 585.684-010
bluing-oven tender (heat treating) 504.685-018
Blunger Loader (textile) 929.687-030
blunger-machine operator (brick & tile; pottery & porc.) 570.482-010
BOARD ATTENDANT (amuse. & rec.) 249.587-010
Board Drophammer Operator (forging) 610.362-010
boarder (knitting) 589.685-010
boarder (knitting) 589.686-042
boarder (knitting) 583.687-010
boarder, hand (knitting) 589.686-042
boarder, machine (knitting) 589.685-010
boarder, steam (knitting) 589.686-042
boarder tender (knitting) 589.686-042
board handler (wood prod., nec) 569.686-042
BOARDING-MACHINE OPERATOR (knitting) 589.685-010
Board Layer (wood. container) 669.686-014
BOARD-LINER OPERATOR (wood. container) 641.685-014
Board-Lining-Machine Operator (paper goods) 641.562-010
BOARD-MACHINE SET-UP OPERATOR (concrete prod.) 579.380-010
board operator (motion picture; radio-tv broad.; recording) 194.262-018
boat accessories installer (retail trade; ship-boat mfg.) 806.464-010
boat bottomer (ship-boat mfg.) 806.684-106
BOAT BUFFER, PLASTIC (ship-boat mfg.) 849.684-010
BOATBUILDER APPRENTICE, WOOD (ship-boat mfg.) 860.381-014
BOATBUILDER, WOOD (ship-boat mfg.) 860.361-010
BOAT-CANVAS MAKER-INSTALLER (tex. prod., nec) 789.261-010
Boat Cleaner (steel & rel.) 911.687-014
BOAT DISPATCHER (water trans.) 184.167-010
boat garnisher (ship-boat mfg.) 806.684-146
BOAT-HOIST OPERATOR (retail trade) 921.683-010
BOAT-HOIST-OPERATOR HELPER (retail trade) 921.667-010
boat joiner (ship-boat mfg.) 860.381-050
BOAT LOADER HELPER (water trans.) 911.687-010
BOAT LOADER I (water trans.) 911.364-014
BOAT LOADER II (water trans.) 921.685-010
boat mechanic (engine-turbine; ship-boat mfg.) 623.281-038
BOAT-OAR MAKER (woodworking) 761.381-010
BOAT OUTFITTER (ship-boat mfg.) 806.684-146
BOAT PATCHER, PLASTIC (ship-boat mfg.) 807.684-014
boat puller (ship-boat mfg.) 809.667-010
boat puller (water trans.) 911.687-018
BOAT-RENTAL CLERK (amuse. & rec.) 295.467-014
BOAT REPAIRER (ship-boat mfg.) 807.361-014
boat-ride operator (amuse. & rec.) 342.667-010
BOAT RIGGER (retail trade; ship-boat mfg.) 806.464-010
BOATSWAIN (water trans.) 911.131-010
BOATSWAIN, OTTER TRAWLER (fishing & hunt.) 441.132-010
Boat-Tank Attendant (amuse. & rec.) 342.667-010
Boat Tender (logging) 911.663-010
Boat Worker (saw. & plan.) 921.686-022
boat wrapper (ship-boat mfg.) 869.684-078
BOBBIN CLEANER, HAND (textile) 689.687-014
BOBBIN-CLEANING-MACHINE OPERATOR (textile) 689.686-014
Bobbin-Coil Winder (electron. comp.) 724.684-026
BOBBIN DISKER (glass mfg.) 734.687-022
Bobbin Drier (plastic-synth.) 581.685-018
bobbin fixer (tex. prod., nec; textile) 681.687-026
Bobbin Handler (textile) 929.687-030
BOBBIN INSPECTOR (woodworking) 769.687-014
BOBBIN PRESSER (tex. prod., nec) 689.685-018
bobbin salvager (glass mfg.; plastic-synth.; textile) 922.687-018
BOBBIN SORTER (glass mfg.; plastic-synth.; textile) 922.687-018
BOBBIN STRIPPER (tex. prod., nec) 689.685-022
bobbin-stripper (textile) 689.686-014
Bobbin Washer (plastic-synth.) 582.685-162
bobbin winder (metal prod., nec; nonfer. metal) 691.685-026
Bobbin Winder (textile) 681.685-154
BOBBIN WINDER, MACHINE (boot & shoe) 681.685-022
BOBBIN WINDER, MACHINE (tex. prod., nec; textile) 681.585-014
BOBBIN WINDER, SEWING MACHINE (textile) 681.685-026
BOBBIN-WINDER TENDER (glass mfg.) 619.685-022
body builder (auto. mfg.; automotive ser.) 807.281-010
Body Coverer (fabrication, nec) 780.684-026
body-die maker (machine shop) 601.280-010
body finisher (hat & cap) 589.685-062
BODYGUARD (personal ser.) 372.667-014
body-line finisher (automotive ser.) 807.381-010
Body Maker (fabrication, nec) 739.684-190
body maker (musical inst.) 730.682-010
Body Maker (tinware) 616.685-042
BODY-MAKER MACHINE SETTER (tinware) 616.360-010
BODY-MAKE-UP ARTIST (amuse. & rec.; motion picture) 333.271-010
body masker (any industry) 749.687-018
Body Presser (laundry & rel.) 363.685-026
body repairer, bus (automotive ser.) 807.381-010
body-rolling-machine tender (paper goods) 641.685-062
Body Trimmer (automotive ser.) 780.381-010
BODY WIRER (auto. mfg.; vehicles, nec) 829.684-014
BOILER (soap & rel.) 553.382-014
boiler (sugar & conf.) 529.361-014
Boiler Cleaner (any industry) 891.687-022
boiler cleaner, chief (any industry) 805.667-010
BOILER HOUSE INSPECTOR (any industry) 805.667-010
BOILER HOUSE MECHANIC (any industry) 805.361-010
boiler house operator (any industry) 950.382-010
boiler house supervisor (any industry) 950.131-014
BOILERMAKER APPRENTICE (struct. metal) 805.261-010
boilermaker, assembly and erection (struct. metal) 805.261-014
Boilermaker, Central Steam Plant (struct. metal) 805.381-010
BOILERMAKER FITTER (struct. metal) 805.361-014
BOILERMAKER HELPER I (struct. metal) 805.687-010
BOILERMAKER HELPER II (struct. metal) 805.664-010
BOILERMAKER I (struct. metal) 805.261-014
BOILERMAKER II (struct. metal) 805.381-010
Boilermaker, Industrial Boilers (struct. metal) 805.381-010
boilermaker mechanic (struct. metal) 805.381-010
Boilermaker, Ship (struct. metal) 805.381-010
boiler mechanic (any industry) 805.361-010
BOILER OPERATOR (any industry) 950.382-010
boiler operator (any industry) 951.685-014
boiler-operator helper (any industry) 950.685-014
BOILER-OPERATOR HELPER (sugar & conf.) 950.585-014
BOILER-OUT (jewelry-silver.) 700.687-014
BOILER RELINER, PLASTIC BLOCK (foundry) 849.484-010
boiler-room helper (any industry) 699.687-018
BOILER-ROOM HELPER (any industry) 950.685-014
Boiler-Shop Supervisor (any industry) 809.130-014
boiler tender (any industry) 951.685-010
Boiler-Tube Blower (any industry) 891.687-030
Boiler-Tube Reamer (any industry) 891.687-030
Boiling-Off Winder (textile) 689.685-046
BOILING-TUB OPERATOR (chemical) 551.685-014
BOIL-OFF-MACHINE OPERATOR, CLOTH (textile) 582.685-022
Bologna Lacer (meat products) 529.687-034
bolter (bakery products) 520.585-010

BOLTER (grain-feed mills) 521.685-030
BOLTER (saw. & plan.) 667.685-022
BOLTER HELPER (grain-feed mills) 521.686-010
bolter helper (grain-feed mills) 520.686-022
bolting-machine operator (mine & quarry) 930.683-026
BOLT LOADER (saw. & plan.) 922.687-022
Bolt-Machine Operator (nut & bolt) 612.462-010
bolt sawyer (saw. & plan.) 667.685-022
bolt sawyer (wood. container) 667.685-062
Bolt-Threading-Machine Operator (machine shop) 604.682-014
Bolt-Up Worker (metal prod., nec) 706.684-090
Bomb-Disposal Specialist (government ser.) 632.261-018
BOMB LOADER (ordnance) 737.684-014
Bombsight Specialist (government ser.) 632.261-010
Bonbon-Cream Warmer (sugar & conf.) 526.382-014
Bonbon Dipper (sugar & conf.) 524.684-010
BONDACTOR-MACHINE OPERATOR (foundry) 899.684-010
bonded-strand operator (glass mfg.) 574.665-010
BONDED STRUCTURES REPAIRER (aircraft mfg.) 807.381-014
Bonder (electron. comp.) 726.687-022
bonder (foundry) 518.685-030
BONDER, AUTOMOBILE BRAKES (automotive ser.) 620.685-010
Bonderite Operator (any industry) 599.382-010
Bonderizer (auto. mfg.) 599.685-026
bonder, rework and repair (aircraft mfg.) 807.381-014
BONDER, SEMICONDUCTOR (electron. comp.) 726.685-066
BONDING AGENT (business ser.) 186.267-010
Bonding And Composite Fabricator (aircraft mfg.) 754.381-018
bonding equipment operator (aircraft mfg.) 553.362-014
bonding-machine operator (any industry) 690.685-154
bonding-machine operator (foundry) 518.685-030
BONDING-MACHINE SETTER (textile) 589.360-010
BONDING-MACHINE TENDER (textile) 589.665-010
BONE-CHAR KILN OPERATOR (grain-feed mills) 523.662-010
BONE-CHAR KILN TENDER (chemical) 553.685-018
BONE-CHAR OPERATOR (chemical) 553.686-010
BONE-COOKING OPERATOR (chemical) 551.685-018
BONE CRUSHER (chemical) 555.685-014
bone drier (chemical) 553.685-022
BONE-DRIER OPERATOR (chemical) 553.685-022
BONE PICKER (can. & preserv.) 521.687-022
BONE PICKER (chemical) 551.687-010
BONE-PROCESS OPERATOR (chemical) 559.665-010
BONER (garment; protective dev.) 789.687-018
BONER, MEAT (meat products) 525.684-010
Bone Sawyer (meat products) 525.684-018
BONSAI CULTURIST (agriculture) 405.161-010
BOOKBINDER (print. & pub.) 977.381-010
BOOKBINDER APPRENTICE (print. & pub.) 977.381-014
bookbinder, chief (print. & pub.) 653.131-010
Book Critic (print. & pub.; radio-tv broad.) 131.067-018
booker (amuse. & rec.) 191.117-014
BOOKER (rubber goods; rubber tire) 599.687-014
book folder (tex. prod., nec; textile) 589.687-014
bookie (amuse. & rec.) 187.167-014
booking agent (amuse. & rec.) 191.117-014
BOOKING CLERK (water trans.) 248.367-014
BOOKING CLERK (wholesale tr.) 216.587-010
BOOKING MANAGER (amuse. & rec.) 191.117-014
BOOKING PRIZER (tobacco) 216.462-010
BOOKING SUPERVISOR (water trans.) 248.137-010
BOOK-JACKET-COVER-MACHINE OPERATOR (paper goods) 640.685-014
BOOKKEEPER (clerical) 210.382-014
book-loan clerk (library) 249.367-046
BOOKMAKER (amuse. & rec.) 187.167-014
bookmaker (print. & pub.) 977.381-010
bookmaker, map (print. & pub.) 979.684-022
book mender (any industry) 977.684-010
Bookmobile Clerk (library) 249.367-046
BOOKMOBILE DRIVER (library) 249.363-010
BOOKMOBILE LIBRARIAN (library) 100.167-014
book paster (print. & pub.) 977.684-018
Book-Pocket-Machine Operator (paper goods) 649.685-042
BOOK REPAIRER (any industry) 977.684-010
Bookseamer, Blindstitch (garment) 786.682-126
book sewer (print. & pub.) 653.685-014
BOOK-SEWING-MACHINE OPERATOR I (print. & pub.) 653.685-014
BOOK-SEWING-MACHINE OPERATOR II (print. & pub.) 653.682-010
Book Sorter (nonprofit org.) 222.387-054
book stripper (print. & pub.) 972.381-022
BOOK TRIMMER (print. & pub.) 640.685-010
Boomboat Operator (logging) 911.663-010
BOOM-CONVEYOR OPERATOR (any industry) 921.683-014
boom operator (motion picture; radio-tv broad.) 962.384-010
Boom Supervisor (logging) 455.134-010
BOOSTER ASSEMBLER (ordnance) 737.687-022
boothblack (personal ser.) 366.677-010
Boot-Lace Cutter, Machine (leather prod.) 585.685-038
boot-liner maker (rubber goods) 795.684-026
BOOTMAKER, HAND (rubber goods) 753.381-010
boot polisher (personal ser.) 366.677-010
Boot Tester (rubber goods) 759.684-074
Boot Trimmer (boot & shoe) 690.685-434
Boot Turner (boot & shoe) 788.687-130
Borderer (ordnance) 761.381-034
BORDER GUARD (government ser.) 375.363-010
Border Inspector (government ser.) 168.267-022
border-machine operator (furniture) 787.685-022
border-machine operator (tex. prod., nec) 689.382-010
BORDER MEASURER AND CUTTER (furniture) 780.687-010
border measurer (furniture) 780.687-010
border patrol agent (government ser.) 375.363-010
borer, stem (fabrication, nec) 739.687-014
BORING-AND-FILLING-MACHINE OPERATOR (fabrication, nec) 692.682-018
Boring-Machine Feeder (woodworking) 669.686-030
Boring-Machine Operator (clock & watch) 606.685-030
boring-machine operator (construction) 850.662-010
BORING-MACHINE OPERATOR (furniture) 666.685-014
BORING-MACHINE OPERATOR (machine shop) 606.382-022
Boring-Machine Operator (rubber goods) 690.680-010
BORING-MACHINE OPERATOR (woodworking) 666.382-010
Boring-Machine Operator, Double End (woodworking) 666.382-010
boring-machine-operator helper (construction) 850.684-014
Boring-Machine Operator, Horizontal (woodworking) 666.382-010
BORING-MACHINE OPERATOR, PRODUCTION (machine shop) 606.685-010
Boring-Machine Operator, Vertical (woodworking) 666.382-010
BORING-MACHINE SET-UP OPERATOR, JIG (machine shop) 606.280-010
BORING-MILL SET-UP OPERATOR, HORIZONTAL (machine shop) 606.280-014
Boring-Mill Set-Up Operator, Vertical (machine shop) 606.280-014
Bosom Presser (laundry & rel.) 363.685-026
boss (any industry) 899.133-010
boss (any industry) see SUPERVISOR
BOTANIST (profess. & kin.) 041.061-038
Bottle Assembler (rubber goods) 752.684-038
Bottle Blower (glass mfg.) 772.381-022
bottle-blowing-machine tender (glass mfg.) 575.685-038
BOTTLED-BEVERAGE INSPECTOR (beverage) 529.685-026
BOTTLE GAUGER (beverage) 529.587-010
Bottle-House Pumper (beverage) 914.665-014
BOTTLE-HOUSE QUALITY-CONTROL TECHNICIAN (beverage) 029.361-010
bottle inspector (beverage) 529.685-026
Bottle Inspector (glass mfg.) 579.384-018
Bottle-Label Inspector (beverage) 920.687-042
Bottle-Machine Operator (glass mfg.) 575.382-014
BOTTLE PACKER (beverage) 920.685-026
Bottle-Packing-Machine Cleaner (any industry) 699.687-014
Bottle Washer, Machine I (any industry) 529.685-074
Bottle Washer, Machine II (any industry) 920.685-078
BOTTLING-LINE ATTENDANT (beverage) 920.687-042
Bottling Supervisor (any industry) 920.132-010
BOTTOM BLEACHER (boot & shoe) 788.687-014
Bottom Board And Truss Leg Installer (musical inst.) 763.684-058
Bottom Brusher (boot & shoe) 788.687-018
Bottom Buffer (boot & shoe) 690.685-046
Bottom Burnisher (boot & shoe) 690.685-058
Bottom Cementer I (boot & shoe) 690.686-018
Bottom Cementer II (boot & shoe) 788.687-030
BOTTOMER I (mine & quarry) 932.667-010
Bottomer II (mine & quarry) 939.667-010
BOTTOM FILLER (boot & shoe) 788.684-026
Bottom-Hole-Pressure-Recording Operator (petrol. & gas) 930.167-010
BOTTOM-HOLE-PRESSURE-RECORDING-OPERATOR HELPER (petrol. & gas) 930.687-010
BOTTOM-HOOP DRIVER (wood. container) 669.685-022
BOTTOMING-MACHINE OPERATOR (paper goods) 649.685-022
Bottoming-Room Inspector (boot & shoe) 788.384-010
Bottoming-Room Supervisor (boot & shoe) 788.131-010
bottom ironer (boot & shoe) 690.685-034
Bottom-Liquor Attendant (chemical) 558.682-014
BOTTOM MAKER (steel & rel.) 509.687-010
Bottom Maker (wood. container) 669.685-014
Bottom Nailer (wood. container) 669.682-058
BOTTOM POLISHER (elec. equip.) 603.685-034
Bottom Pounder, Cement Shoes (boot & shoe) 690.685-314
BOTTOM-PRECIPITATOR OPERATOR (smelt. & refin.) 511.664-010
BOTTOM PRESSER (boot & shoe) 690.685-034

Bottom Sander (fabrication, nec) 761.684-030
BOTTOM-SAW OPERATOR (saw. & plan.) 667.682-014
bottom scrubber (boot & shoe) 788.687-014
bottom stainer (boot & shoe) 788.687-098
Bottom Stamper (boot & shoe) 690.685-158
Bottom Steep Tender (grain-feed mills) 522.465-010
Bottom Stitcher (toy-sport equip.) 732.684-050
Bottom-Stop Attacher (button & notion) 692.685-206
bottom turner (wood. container) 669.685-026
BOTTOM-TURNING-LATHE TENDER (wood. container) 665.685-010
BOTTOM WHEELER (boot & shoe) 788.684-030
boucle finisher (laundry & rel.) 363.684-010
BOUFFANT-CURTAIN-MACHINE TENDER (tex. prod., nec) 689.685-026
boulevard-glassware cleaner (utilities) 952.667-010
boulevard-glassware replacer (utilities) 952.667-010
BOUNCER (amuse. & rec.) 376.667-010
bounty hunter (fishing & hunt.) 461.661-010
Bow Attacher (garment) 782.684-058
Bowling-Alley-Installation Supervisor (construction) 860.131-018
BOWLING-BALL ENGRAVER (toy-sport equip.) 732.584-010
BOWLING-BALL FINISHER (toy-sport equip.) 690.685-038
BOWLING-BALL GRADER AND MARKER (toy-sport equip.) 732.381-014
BOWLING-BALL-MOLD ASSEMBLER (toy-sport equip.) 556.687-010
BOWLING-BALL MOLDER (toy-sport equip.) 556.685-018
BOWLING-BALL WEIGHER AND PACKER (toy-sport equip.) 732.487-010
bowling-pin-machine mechanic (any industry) 638.261-022
Bowl Sander (fabrication, nec) 662.685-038
Bowl Topper (fabrication, nec) 761.684-030
BOWL TURNER (fabrication, nec) 664.684-010
BOW MAKER (any industry) 789.684-010
BOW MAKER (boot & shoe) 788.684-034
BOW MAKER (garment; hat & cap) 784.684-010
BOW MAKER (musical inst.) 730.281-058
BOW MAKER, CUSTOM (toy-sport equip.) 732.381-010
Bow Maker, Gift Wrapping (any industry) 920.587-018
BOW-MAKER-MACHINE TENDER, AUTOMATIC (tex. prod., nec) 689.685-030
BOW MAKER, PRODUCTION (toy-sport equip.) 732.684-038
BOW REHAIRER (any industry) 730.684-022
Bow Repairer (any industry) 730.281-050
Bow Repairer, Custom (toy-sport equip.) 732.381-010
Bow Stapler (boot & shoe) 690.685-162
BOW-STRING MAKER (toy-sport equip.) 732.684-042
Bow Tacker I (hat & cap) 782.684-058
Bow Tacker II (hat & cap) 787.685-042
Box Attacher (button & notion) 692.685-206
BOX BENDER (paper goods) 641.687-010
Box-Blank-Machine Feeder (woodworking) 669.686-030
BOX-BLANK-MACHINE OPERATOR (wood. container) 669.662-010
BOX-BLANK-MACHINE-OPERATOR HELPER (wood. container) 669.686-014
Boxcar Weigher (railroad equip.) 221.587-030
Box Coverer, Hand (paper goods) 795.687-014
box-covering-machine operator (paper goods) 641.685-034
boxer (any industry) 920.684-010
Boxer (agriculture) 920.687-134
Box Feeder (tex. prod., nec) 586.686-022
BOX-FOLDING-MACHINE OPERATOR (paper goods) 649.682-010
Box Gluer (wood. container) 762.687-034
box-hinge and lock attacher (wood. container) 762.687-046
Box Icer (can. & preserv.) 922.687-046
BOXING-AND-PRESSING SUPERVISOR (knitting) 789.137-010
BOXING INSPECTOR (garment) 789.587-010
Boxing-Machine Operator (furniture) 780.682-018
BOX INSPECTOR (wood. container) 762.687-014
box labeler (any industry) 652.682-010
BOX-LINING-MACHINE FEEDER (paper goods) 641.685-018
box maker (any industry) 669.682-058
BOX MAKER (fabrication, nec) 762.684-026
Box Maker (musical inst.) 730.281-010
Box Maker, Cardboard (any industry) 920.587-018
BOX MAKER, PAPERBOARD (any industry) 794.684-014
Box Maker, Wood (any industry) 762.684-050
BOX MAKER, WOOD (wood. container) 760.684-014
box marker (boot & shoe; garment) 652.685-018
Box Nailer (wood. container) 762.687-046
BOX PRINTER (any industry) 652.682-010
box-printing-machine operator (any industry) 652.682-010
Box Repairer (any industry) 762.684-050
Box Repairer I (wood. container) 760.684-014
BOX REPAIRER II (wood. container) 762.687-018
BOX-SEALING INSPECTOR (paper goods) 641.687-014
Box-Sealing-Machine Catcher (any industry) 920.685-074
Box-Sealing-Machine Feeder (any industry) 920.685-074
BOX-SEALING-MACHINE OPERATOR (paper goods) 641.662-010
box-shook patcher (wood. container) 762.687-018
Box-Spring-Frame Builder (furniture) 762.684-066
BOX-SPRING MAKER I (furniture) 780.684-018
BOX-SPRING MAKER II (furniture) 780.684-022
box stamper, machine (boot & shoe; garment) 652.685-018
box strapper (wood. container) 692.682-058
BOX TENDER (plastic-synth.) 689.280-010
Box-Toe Buffer (boot & shoe) 690.685-046
Box-Toe Cementer (boot & shoe) 788.687-030
Box-Toe Cutter (boot & shoe) 699.682-022
box-toe flanger, stitchdowns (boot & shoe) 690.685-426
Box-Toe Stitcher (boot & shoe) 690.682-082
Box-Top-Stitching-Machine Operator (wood. container) 669.685-042
BOX-TRUCK WASHER (meat products) 529.687-018
box turner (can. & preserv.) 522.687-038
Box Wrapper (any industry) 920.587-018
BRACELET AND BROOCH MAKER (jewelry-silver.) 735.681-010
Bracelet-Form Coverer (jewelry-silver.) 739.687-138
Bracelet Former (jewelry-silver.) 739.687-138
Bracelet Maker, Novelty (jewelry-silver.) 700.684-014
bracer (construction) 860.381-042
braddisher (mine & quarry) 869.684-058
Braid Cutter (rubber goods) 699.685-014
Braided-Band Assembler (hat & cap) 784.684-022
braided-rug maker (carpet & rug) 782.687-042
braider (nonfer. metal) 691.682-014
Braider (wood. container) 669.685-014
BRAIDER OPERATOR (nonfer. metal) 691.682-014
BRAIDER SETTER (rubber goods) 759.664-010
braider tender (narrow fabrics; nonmet. min.) 683.685-010
braider tender (nonfer. metal) 691.682-014
braid folder (boot & shoe) 788.684-018
BRAIDING-MACHINE OPERATOR (narrow fabrics; nonmet. min.) 683.685-010
BRAIDING MACHINE TENDER (rubber goods) 692.665-010
braid maker (narrow fabrics) 683.260-010
BRAID-PATTERN SETTER (narrow fabrics) 683.260-010
BRAILLE-AND-TALKING BOOKS CLERK (library) 222.587-014
braille coder (education; nonprofit org.; print. & pub.) 203.582-014
braille coder (education; nonprofit org.; print. & pub.) 209.584-010
BRAILLE-DUPLICATING-MACHINE OPERATOR (print. & pub.) 207.685-010
BRAILLE OPERATOR (print. & pub.) 203.582-010
BRAILLE PROOFREADER (nonprofit org.; print. & pub.) 209.367-014
braille-thermoform operator (print. & pub.) 207.685-010
braille transcriber (education; nonprofit org.; print. & pub.) 203.582-014
BRAILLE TRANSCRIBER, HAND (education; nonprofit org.; print. & pub.) 209.584-010
BRAILLE TYPIST (education; nonprofit org.; print. & pub.) 203.582-014
Brain Picker (meat products) 525.684-034
BRAKE ADJUSTER (automotive ser.) 620.684-018
Brake Assembler (motor-bicycles) 806.684-094
Brake Coupler, Dinkey (any industry) 910.664-010
BRAKE COUPLER, ROAD FREIGHT (r.r. trans.) 910.367-010
BRAKE-DRUM-LATHE OPERATOR (automotive ser.) 620.682-010
BRAKE HOLDER (any industry) 932.664-010
brake inspector (r.r. trans.) 910.387-014
BRAKE-LINING CURER (nonmet. min.) 573.686-010
BRAKE-LINING FINISHER, ASBESTOS (nonmet. min.) 579.665-010
BRAKE-LINING-FINISHER HELPER, ASBESTOS (nonmet. min.) 579.687-010
Brake Machine Setter (any industry) 616.360-022
brake mechanic (automotive ser.) 620.281-026
Brake Operator, Heavy Duty (any industry) 617.360-010
Brake-Operator Helper (any industry) 619.687-014
BRAKE OPERATOR I (any industry) 617.360-010
BRAKE OPERATOR II (any industry) 619.685-026
Brake Operator, Sheet Metal I (any industry) 617.360-010
Brake Operator, Sheet Metal II (any industry) 619.685-026
BRAKE REPAIRER (automotive ser.) 620.281-026
Brake Repairer, Air (automotive ser.) 620.281-026
Brake Repairer, Bus (automotive ser.) 620.281-026
Brake Repairer, Hydraulic (automotive ser.) 620.281-026
BRAKE REPAIRER, RAILROAD (r.r. trans.) 622.261-010
brake-repair mechanic (automotive ser.) 620.281-026
BRAKER, PASSENGER TRAIN (r.r. trans.) 910.364-010
brakeshoe repairer (automotive ser.) 620.281-026
Brancher (button & notion) 734.684-010
Branch-Library Clerk (library) 249.367-046
branch maker (brick & tile) 862.684-010
branch manager (financial) 186.117-034
brander (boot & shoe) 753.687-014
BRANDING-MACHINE TENDER (rubber goods) 690.685-042
BRAND RECORDER (government ser.) 206.587-010
BRAN MIXER (grain-feed mills) 599.685-014

BRANNER-MACHINE TENDER (galvanizing) 509.685-014
Brass-Bobbin Winder (tex. prod., nec) 681.685-154
Brassiere-Cup-Mold Cutter (garment) 781.682-010
BRASSIERE-SLIDE-MAKING-MACHINE TENDER, AUTOMATIC (garment) 692.685-026
Brass Plater (electroplating) 500.380-010
Brass Reclaimer (machine shop) 609.684-014
BRASS-WIND-INSTRUMENT MAKER (musical inst.) 730.381-018
Brasswind-Instrument Repairer (any industry) 730.281-054
brazer (welding) 813.684-010
BRAZER, ASSEMBLER (welding) 813.684-010
BRAZER, CONTROLLED ATMOSPHERIC FURNACE (welding) 813.685-010
Brazer, Crawler Torch (welding) 813.684-010
brazer, electronic (welding) 813.382-010
BRAZER, FURNACE (welding) 813.482-010
Brazer Helper, Furnace (welding) 819.666-010
Brazer Helper, Induction (welding) 819.666-010
BRAZER, INDUCTION (welding) 813.382-010
Brazer, Production Line (welding) 819.684-010
Brazer, Repair And Salvage (welding) 813.684-010
BRAZER, RESISTANCE (welding) 813.682-010
Brazing-Furnace Feeder (welding) 819.686-010
Brazing-Machine Feeder (welding) 819.686-010
BRAZING-MACHINE OPERATOR (welding) 813.382-014
brazing-machine operator, automatic (welding) 813.382-014
Brazing-Machine-Operator Helper (welding) 819.666-010
BRAZING-MACHINE SETTER (welding) 813.360-010
Bread-Dough Mixer (bakery products) 520.685-234
Bread Icer (bakery products) 524.684-022
Bread Icer, Machine (bakery products) 524.685-034
BREADING MACHINE TENDER (can. & preserv.) 524.685-010
bread maker (hotel & rest.) 313.381-010
Bread-Pan Greaser (bakery products) 526.685-034
Bread Slicer, Machine (bakery products) 521.685-302
Bread Supervisor (bakery products) 526.131-010
Bread-Wrapping-Machine Feeder (bakery products) 920.685-078
BREAK-AND-LOAD OPERATOR (electron. comp.) 726.685-018
BREAKER (glass products) 779.687-010
breaker (paper goods) 794.687-050
breaker (toy-sport equip.) 732.687-050
breaker boss (mine & quarry) 549.137-014
BREAKER-MACHINE OPERATOR (saw. & plan.; wood prod., nec) 564.685-010
BREAKER-MACHINE TENDER (textile) 583.685-010
Breaker-Off (jewelry-silver.) 700.687-062
breaker operator (nonfer. metal) 614.684-014
breaker operator (sugar & conf.) 521.685-034
breaker operator (textile) 680.685-070
Breaker Repairer (mine & quarry) 630.281-022
Breaker Table Worker (recording) 559.686-010
BREAKER TENDER (steel & rel.) 544.685-010
breaker-up (hat & cap) 589.685-014
BREAKER-UP-MACHINE OPERATOR (hat & cap) 589.685-014
breaker-wheel operator (leather mfg.; tex. prod., nec) 582.685-050
BREAKING-MACHINE OPERATOR (sugar & conf.) 521.685-034
BREAK-OFF WORKER (millwork-plywood) 663.686-014
Breast Buffer (boot & shoe) 690.685-046
breast finisher (boot & shoe) 788.684-126
Breast Sawyer (meat products) 525.684-018
Breast Worker (construction) 850.381-010
breeding technician (agriculture) 418.384-014
BREWERY CELLAR WORKER (beverage) 522.685-014
BREWING DIRECTOR (beverage) 183.167-010
brewing superintendent (beverage) 183.167-010
BRIAR CUTTER (fabrication, nec) 664.685-010
BRIAR-WOOD SORTER (fabrication, nec) 769.687-058
BRICK-AND-TILE-MAKING-MACHINE OPERATOR (brick & tile) 575.382-010
brick burner, head (brick & tile) 573.132-010
Brick Cleaner (construction) 869.687-026
Brick-Kiln Burner (brick & tile) 573.682-010
BRICKLAYER (brick & tile) 861.381-014
BRICKLAYER (construction) 861.381-018
BRICKLAYER APPRENTICE (construction) 861.381-022
BRICKLAYER, FIREBRICK AND REFRACTORY TILE (construction) 861.381-026
Bricklayer Helper (construction) 869.687-026
BRICKLAYER HELPER, FIREBRICK AND REFRACTORY TILE (construction) 861.687-010
Bricklayer, Maintenance (any industry) 861.381-018
Bricklayer, Paving Brick (construction) 869.664-014
Bricklayer, Sewer (construction) 861.381-018
BRICKLAYER SUPERVISOR (construction) 861.131-010
brickmason (construction) 861.381-026
brickmason helper (construction) 861.687-010
Brick-Molder, Hand (brick & tile) 575.684-042
Brick-Paving Checker (construction) 869.687-026
BRICK SETTER OPERATOR (brick & tile) 579.685-058
Brick Sorter (brick & tile) 573.687-034
BRICK TESTER (brick & tile) 579.384-010
BRICK UNLOADER TENDER (brick & tile) 579.685-062
Brick Veneer Maker (concrete prod.) 579.685-042
Bridge Attacher (button & notion) 692.685-206
Bridge Crane Operator (any industry) 921.663-010
bridge expert (education) 159.227-010
Bridge Fitter (musical inst.) 730.684-010
BRIDGE INSPECTOR (r.r. trans.) 869.287-010
Bridge-Maintenance Worker (construction) 801.361-014
BRIDGE OPERATOR, SLIP (r.r. trans.) 919.682-010
bridge repairer (r.r. trans.) 860.381-030
bridge tender (r.r. trans.) 919.682-010
bridge tender (r.r. trans.) 371.362-010
bridge worker (construction) 801.361-014
bridge worker apprentice (construction) 801.361-018
Briefcase Sewer (leather prod.) 783.682-014
BRIGHT CUTTER (jewelry-silver.) 700.684-018
BRILLIANDEER-LOPPER (jewelry-silver.) 770.261-010
BRIM-AND-CROWN PRESSER (hat & cap) 583.685-022
Brim Blocker (laundry & rel.) 363.684-014
Brim Buffer (hat & cap) 585.685-014
brim buster (hat & cap) 583.685-018
brim buster (hat & cap) 583.685-022
BRIM CURLER (hat & cap) 583.685-014
brim cutter (hat & cap; tex. prod., nec) 585.685-086
Brim Cutter (hat & cap) 699.682-022
brim-edge trimmer (hat & cap) 686.685-074
BRIMER (metal prod., nec) 700.687-018
brim flanger (hat & cap) 784.684-026
brim flexer (hat & cap) 585.685-066
Brim Greaser Operator (hat & cap) 582.685-082
BRIM IRONER, HAND (hat & cap) 784.684-014
brimmer (hat & cap) 583.685-018
BRIMMER (hat & cap) term
brimmer blocker (hat & cap) 580.685-010
brimming-machine operator (hat & cap) 580.685-010
brim molder (hat & cap) 580.685-042
brim plater (hat & cap) 583.685-018
brim pouncer (hat & cap) 585.685-010
BRIM-POUNCING-MACHINE OPERATOR (hat & cap) 585.685-010
BRIM PRESSER I (hat & cap) 583.685-018
Brim Presser II (hat & cap) 580.685-038
BRIM RAISER (hat & cap) 784.687-010
brim rounder (hat & cap) 784.684-050
brim setter (hat & cap) 784.684-014
brim setter (hat & cap) 583.685-022
brim shaper (hat & cap) 784.684-026
Brim Slotter (hat & cap) 686.685-038
Brim Stiffener (hat & cap) 589.687-038
BRIM STITCHER I (hat & cap) 784.685-014
Brim Stitcher II (hat & cap) 784.682-014
brim stretcher (hat & cap) 580.685-010
BRIM-STRETCHING-MACHINE OPERATOR (hat & cap) 580.685-010
Brim-Welt-Sewing-Machine Operator (hat & cap) 784.682-014
BRINE MAKER I (chemical) 550.685-018
BRINE MAKER I (can. & preserv.) 522.685-018
BRINE MAKER II (chemical) 551.687-014
BRINE MAKER II (can. & preserv.) 522.685-022
BRINE-MIXER OPERATOR, AUTOMATIC (can. & preserv.) 520.685-034
brine-process operator (chemical) 550.685-018
Brine Purifier (chemical) 550.685-018
BRINER (can. & preserv.) 522.687-014
Briner, Machine (can. & preserv.) 529.685-190
Brine-Room Laborer (dairy products) 529.686-050
BRINE-TANK-SEPARATOR OPERATOR (can. & preserv.) 521.685-038
BRINE-TANK TENDER (dairy products) 529.685-030
BRINE-WELL OPERATOR (chemical) 559.685-026
BRIQUETTE-MACHINE OPERATOR (fabrication, nec) 549.662-010
BRIQUETTE-MACHINE-OPERATOR HELPER (fabrication, nec) 549.686-010
briquette molder (fabrication, nec) 549.662-010
BRIQUETTE OPERATOR (brick & tile) 579.685-066
briquette-press operator (nonfer. metal; steel & rel.) 617.685-038
BRIQUETTER OPERATOR (chemical) 559.685-030
briquetting-machine operator (plastic prod.; plastic-synth.) 556.685-058
BRIQUETTING-MACHINE OPERATOR (smelt. & refin.) 519.685-010
broacher (clock & watch) 770.682-010
Broach Grinder (machine shop) 603.280-038
BROACHING-MACHINE OPERATOR, PRODUCTION (machine shop) 605.682-014
Broaching-Machine Repairer (machine tools) 638.261-030

BROACHING-MACHINE SET-UP OPERATOR (machine shop) 605.382-010
broach operator (machine shop) 605.682-014
BROADCAST CHECKER (radio-tv broad.) 249.387-010
Broke-Beater Tender (paper & pulp; wood prod., nec) 530.685-014
Broke Handler (paper & pulp) 929.687-022
broker (financial) 162.167-038
broker (financial) 250.257-018
broker (financial) 162.167-034
broker (profess. & kin.) 162.157-018
BROKERAGE CLERK I (financial) 219.482-010
BROKERAGE CLERK II (financial) 219.362-018
Brokerage Manager (insurance) 166.167-046
broker, agricultural produce (wholesale tr.) 260.357-010
BROKER-AND-MARKET OPERATOR, GRAIN (financial; wholesale tr.) 162.157-010
Bromination Equipment Operator (chemical) 559.682-018
Bronze Plater (electroplating) 500.380-010
Bronzer (print. & pub.) 970.681-014
brooch-and-bracelet maker (jewelry-silver.) 735.681-010
Brooch Maker, Novelty (jewelry-silver.) 700.684-014
BROOM BUNDLER (fabrication, nec) 692.685-030
BROOMCORN GRADER (fabrication, nec) 739.687-042
broomcorn scraper (fabrication, nec) 692.686-018
BROOMCORN SEEDER (fabrication, nec) 692.686-018
broomcorn sorter (fabrication, nec) 739.687-042
Broom-Handle Dipper (fabrication, nec) 599.685-026
broom-machine operator (fabrication, nec) 692.682-066
BROOMMAKER (fabrication, nec) 739.684-018
BROOM STITCHER (fabrication, nec) 692.682-022
BROTH MIXER (bakery products) 520.585-014
broth setter (bakery products) 520.585-014
BROWNING PROCESSOR (ordnance) 505.685-010
BROWN-STOCK WASHER (paper & pulp) 533.685-014
Bruise Trimmer (meat products) 525.687-010
Brush Clearer, Surveying (any industry) 869.567-010
BRUSHER (any industry) term
brusher (any industry) 459.687-010
BRUSHER (boot & shoe) 788.687-018
brusher (boot & shoe) 690.685-046
brusher (boot & shoe) 690.685-058
BRUSHER (construction; furniture) term
brusher (hat & cap) 784.387-010
brusher and shearer (carpet & rug; textile) 585.685-102
brusher-down (laundry & rel.) 362.687-014
brusher, hand (hat & cap) 784.687-014
BRUSHER, MACHINE (hat & cap) 587.685-014
Brush-Fabricating-Machine Setter (fabrication, nec) 692.360-014
BRUSH-FABRICATION SUPERVISOR (fabrication, nec) 692.130-010
BRUSH FILLER, HAND (fabrication, nec) 739.687-046
BRUSH-HEAD MAKER (fabrication, nec) 739.685-018
Brush-Holder Assembler (elec. equip.) 721.684-022
Brush-Holder Inspector (house. appl.) 729.384-022
brushing operator (tex. prod., nec; textile) 585.685-070
BRUSH LOADER AND HANDLE ATTACHER (fabrication, nec) 739.687-206
BRUSH-MACHINE SETTER (fabrication, nec) 692.360-014
brush maker (elec. equip.) 721.684-014
brush maker (fabrication, nec) 733.684-010
BRUSH MAKER, MACHINE (fabrication, nec) 739.685-014
BRUSH MATERIAL PREPARER (fabrication, nec) 739.684-022
BRUSH OPERATOR (textile) 587.685-010
BRUSH POLISHER (clock & watch) 603.685-038
Brush Sander (woodworking) 761.682-014
Brush Shade-Hand (furniture) 742.684-010
Brush Stainer (furniture) 742.684-014
Brush-Trimming-Machine Setter (fabrication, nec) 692.360-014
Brush Washer (textile) 599.687-030
BUCKER (logging) 454.684-010
bucker (mine & quarry) 579.484-010
BUCKET CHUCKER (wood. container) 664.685-014
BUCKET OPERATOR (concrete prod.) 575.683-010
BUCKET TURNER (wood. container) 669.682-018
buckle-and-button maker (any industry) 734.687-046
buckle assembler (button & notion) 734.687-050
Buckle-Attaching-Machine Operator (hat & cap) 699.685-018
buckle coverer (button & notion) 734.687-050
BUCKLE-FRAME SHAPER (button & notion) 692.685-034
buckle gluer (button & notion) 734.687-050
BUCKLE INSPECTOR (button & notion) 734.687-026
BUCKLER AND LACER (boot & shoe) 788.687-022
Buckle-Sewer, Machine (boot & shoe) 690.682-082
BUCKLE SORTER (button & notion) 734.687-030
Buckle Stapler (boot & shoe) 690.685-162
BUCKLE-STRAP-DRUM OPERATOR (rubber goods) 554.485-010
Buckle-Strap Puncher (boot & shoe) 690.685-114
BUCKLE-WIRE INSERTER (button & notion) 734.687-034
buck presser (any industry) 363.682-018
Buckram Cutter (boot & shoe; hat & cap; leather prod.) 699.682-022
Buckram Sewer (tex. prod., nec) 787.682-066
BUCKSHOT-SWAGE OPERATOR (ordnance) 612.682-010
BUDDER (agriculture) 405.684-010
BUDGET ANALYST (government ser.) 161.267-030
BUDGET CLERK (clerical) 216.382-022
Budget Consultant (profess. & kin.) 160.207-010
BUDGET OFFICER (profess. & kin.) 161.117-010
budget-record clerk (clerical) 216.382-022
budget-report clerk (clerical) 216.382-022
buffer (automotive ser.) 690.685-422
BUFFER (boot & shoe) 690.685-046
BUFFER (fabrication, nec) 739.684-026
BUFFER (hat & cap) 585.685-014
BUFFER (plastic prod.) 752.684-022
BUFFER (rubber goods; rubber tire) 759.684-022
buffer (stonework) 775.664-010
buffer (stonework) 673.382-018
BUFFER, AUTOMATIC (boot & shoe) 690.685-050
Buffer, Chrome (any industry) 705.684-014
Buffer, Copper (any industry) 705.684-014
BUFFER I (any industry) 705.684-014
Buffer II (any industry) 705.687-014
BUFFER, INFLATED-PAD (boot & shoe) 690.685-054
BUFFER, MACHINE (leather mfg.) 585.685-018
Buffer, Nickel (any industry) 705.684-014
BUFFING-AND-POLISHING-WHEEL REPAIRER (any industry) 739.684-030
BUFFING-AND-SUEDING-MACHINE OPERATOR (boot & shoe) 753.684-010
BUFFING-LINE SET-UP WORKER (any industry) 603.360-010
BUFFING-MACHINE OPERATOR (any industry) 603.382-010
buffing-machine operator (boot & shoe) 690.685-046
buffing-machine operator (hat & cap) 585.685-014
buffing-machine operator, semiautomatic (jewelry-silver.) 603.682-022
BUFFING-MACHINE OPERATOR, SILVERWARE (jewelry-silver.) 603.682-010
BUFFING-MACHINE TENDER (any industry) 603.665-010
BUFFING TURNER-AND-COUNTER (tex. prod., nec) 789.687-022
BUFFING-WHEEL FORMER, AUTOMATIC (tex. prod., nec) 689.685-034
BUFFING-WHEEL FORMER, HAND (tex. prod., nec) 789.684-014
BUFFING-WHEEL INSPECTOR (tex. prod., nec) 789.687-026
buffing-wheel operator (leather mfg.) 585.685-018
buff-wheel fabricator (any industry) 739.684-030
buggy pusher (construction) see WHEELER
BUILDER, BEAM (mfd. bldgs.) 860.684-010
building-and-grounds supervisor (any industry) 891.137-010
BUILDING CLEANER (any industry) 891.684-022
Building-Construction Inspector (construction) 182.267-010
BUILDING CONSULTANT (wholesale tr.) 250.357-010
BUILDING-EQUIPMENT INSPECTOR (utilities) 956.387-010
Building-Illuminating Engineer (profess. & kin.) 003.061-046
BUILDING INSPECTOR (insurance) 168.267-010
Building-Insulating Carpenter (construction; retail trade) 860.381-022
BUILDING-INSULATION SUPERVISOR (construction) 863.134-010
Building-Maintenance Supervisor, Electrical (any industry) 829.131-014
building-maintenance supervisor, mechanical (any industry) 891.137-010
building repairer (any industry) 899.381-010
building-service supervisor (any industry) 187.167-190
Building Stonecutter (stonework) 771.381-014
building supervisor (any industry) 891.137-010
BUILDING SUPERVISOR (construction) term
Bulb Assembler (electron. comp.) 725.684-022
BULB FILLER (light. fix.) 692.686-022
Bulb Grower (agriculture) 405.161-014
Bulb Sorter (agriculture) 529.687-186
bulk cement loader (cement) 921.565-010
Bulk Driver (motor trans.) 905.663-018
BULKER (tobacco) 522.687-018
BULKER, CUT TOBACCO (tobacco) 529.685-034
BULK FILLER (can. & preserv.) 529.687-022
Bulkhead Carpenter (ship-boat mfg.) 860.361-010
bulking-machine operator (textile) 689.685-158
bulk intake worker (dairy products) 222.485-010
bulk loader (any industry) 921.667-018
bulk loader (cement) 921.565-010
Bulk-Loader Operator (water trans.) 921.662-018
Bulk-Pigment Reducer (paint & varnish) 550.585-038
BULK-PLANT OPERATOR (sugar & conf.) 520.362-010
Bulk-Sausage-Casing Tier-Off (meat products) 529.687-034
Bulk-Sausage-Stuffing-Machine Operator (meat products) 520.685-210
BULK-SEALER OPERATOR (plastic-synth.) 554.685-010
BULK-STATION OPERATOR (petrol. & gas) 570.362-010
bulk-system operator (food prep., nec) 921.382-010

BULL-CHAIN OPERATOR (saw. & plan.) 921.685-014
bulldogger (steel & rel.) 613.362-018
BULLDOZER OPERATOR I (any industry) 850.683-010
Bulldozer Operator II (any industry) 617.260-010
BULLET-ASSEMBLY-PRESS OPERATOR (ordnance) 694.685-014
BULLET-ASSEMBLY-PRESS SETTER OPERATOR (ordnance) 694.682-010
BULLET-CASTING OPERATOR (ordnance) 502.682-010
BULLET-GROOVING-SIZING-AND-LUBRICATING-MACHINE OPERATOR (ordnance) 619.382-010
bulletin clerk (motor trans.) 215.367-010
BULLET-LUBRICANT MIXER (ordnance) 543.685-010
BULLET-LUBRICATING-MACHINE OPERATOR (ordnance) 694.685-018
BULLET-SLUG-CASTING-MACHINE OPERATOR (ordnance) 502.382-010
bullet-swaging-machine adjuster (ordnance) 617.360-014
bullet-swaging-machine operator (ordnance) 617.585-010
bull-gang supervisor (any industry) 899.133-010
Bull-Gang Supervisor (tobacco) 922.137-018
BULL-GANG WORKER (construction) term
BULL-GANG WORKER (tobacco) 922.687-026
bull riveter (any industry) 800.662-010
Bulwark Carpenter (ship-boat mfg.) 860.361-010
bumper-machine operator (hat & cap) 586.685-034
bumper operator (wood. container) 669.685-046
bumper straightener (automotive ser.) 807.684-010
bump-grader operator (grain-feed mills) 529.685-262
bunch breaker (tobacco) 790.684-010
bunch-breaker-machine operator (tobacco) 529.685-038
Buncher (forestry) 920.687-046
buncher, hand (tobacco) 790.684-010
buncher, machine (tobacco) 529.685-038
BUNCH MAKER, HAND (tobacco) 790.684-010
BUNCH MAKER, MACHINE (tobacco) 529.685-038
BUNCH TRIMMER, MOLD (tobacco) 521.687-026
BUNDLE BREAKER (tex. prod., nec) 689.687-018
bundle clerk (laundry & rel.) 361.687-018
bundle cutter (tex. prod., nec) 689.687-018
Bundler (any industry) 920.587-018
bundler (furniture) 780.587-010
bundler (garment) 920.687-190
bundler (garment; glove & mit.) 781.687-010
bundler (leather prod.) 222.587-046
bundler (woodworking) 929.685-018
BUNDLER, SEASONAL GREENERY (forestry) 920.687-046
bundle shaker (tobacco) 521.687-110
BUNDLES HANGER (tobacco) 529.686-010
BUNDLE TIER AND LABELER (saw. & plan.) 920.685-110
bundle tier (garment; glove & mit.) 781.687-010
Bundle Weigher (laundry & rel.) 361.687-018
BUNG DRIVER (wood. container) 764.687-042
Bung Dropper (meat products) 525.687-010
Bung Grader (meat products) 525.684-038
Bung-Gut Tier (meat products) 525.687-010
Bunghole Borer (wood. container) 666.382-010
Bung Remover (beverage) 529.687-066
bung sewer (meat products) 529.687-030
bunk assembler (furniture) 709.667-010
BUREAU CHIEF (print. & pub.) 132.067-010
burglar-alarm installer (business ser.) 822.361-018
burglar-alarm installer and servicer (business ser.) 822.361-022
burglar-alarm-repairer helper (business ser.) 822.684-014
burglar-alarm superintendent (business ser.) 822.131-022
Burlap-Bag Sewer (tex. prod., nec) 787.682-058
burlapper (textile) 929.687-042
burlapper (textile) 782.687-018
Burlap-Sizing-Machine Operator (tex. prod., nec) 582.665-026
BURLAP SPREADER (tex. prod., nec) 581.687-010
BURLER (carpet & rug; textile) 689.684-010
burner (brick & tile) 573.682-010
BURNER (brick & tile) 573.685-038
burner (construction) 869.685-010
burner, hand (welding) 816.464-010
Burner, Hearth (brick & tile) 573.685-038
BURNER OPERATOR (chemical) 558.382-014
burner operator (petrol. refin.) 573.685-014
Burner, Shaft (brick & tile) 573.685-038
BURNER TENDER (mine & quarry) 571.685-010
burning-machine operator (welding) 816.482-010
BURNING-PLANT OPERATOR (ordnance) 509.685-018
BURNING SUPERVISOR (brick & tile) 573.132-010
burnisher (boot & shoe) 690.685-034
BURNISHER (boot & shoe) 690.685-058
BURNISHER (clock & watch) 603.685-042
burnisher (furniture; wood prod., nec) 742.684-010
burnisher (leather mfg.) 585.685-018
BURNISHER, BALANCE WHEEL ARM (clock & watch) 715.684-038
burn-out-scarfing operator (welding) 816.364-010
BURN-OUT TENDER, LACE (tex. prod., nec) 589.685-018
Burnt-Lime Drawer (concrete prod.) 921.683-050
BURRER (clock & watch) 715.684-042
Burrer (machine shop) 705.687-014
burrer, hand (clock & watch) 715.684-042
BURRER, MACHINE (clock & watch) 603.685-046
Burrer-Marker, Axle (machine shop) 705.687-014
BURR GRINDER (optical goods) 673.686-014
burring-machine operator (clock & watch) 603.685-046
burring-machine operator (hat & cap) 583.686-010
BURRING-MACHINE OPERATOR (nut & bolt) 615.685-010
Burrito Maker (food prep., nec) 520.687-046
Burr-Mill Operator (grain-feed mills) 521.682-026
BURSAR (education) 160.167-042
BUS ATTENDANT (motor trans.) 352.577-010
Bus Cleaner (automotive ser.) 919.687-014
BUS DISPATCHER, INTERSTATE (motor trans.) 913.167-010
BUS DRIVER (motor trans.) 913.463-010
BUS DRIVER, DAY-HAUL OR FARM CHARTER (agriculture) 913.363-010
Bus Driver, Garage (motor trans.) 909.663-010
Bus Driver, School (motor trans.) 913.463-010
busheler (garment; personal ser., retail trade) 785.261-010
Busheler (logging) 454.384-010
BUSHER (nonmet. min.) 502.687-014
Bushing-And-Broach Operator (metal prod., nec) 706.684-090
business agent (amuse. & rec.) 191.117-018
business and financial counsel (profess. & kin.) 110.117-022
BUSINESS-ENTERPRISE OFFICER (government ser.) 188.117-014
business investor (business ser., real estate) 189.157-010
Business Librarian (library) 100.167-026
business-machine mechanic (any industry) 633.281-018
business-machine-mechanic apprentice (any industry) 633.281-022
BUSINESS MANAGER (amuse. & rec.) 191.117-018
BUSINESS MANAGER, COLLEGE OR UNIVERSITY (education) 186.117-010
BUSINESS-OPPORTUNITY-AND-PROPERTY-INVESTMENT BROKER (business ser.; real estate) 189.157-010
Business Regulation Investigator (government ser.) 168.167-090
BUSINESS REPRESENTATIVE, LABOR UNION (profess. & kin.) 187.167-018
business-service officer (government ser.) 188.117-122
BUS INSPECTOR (automotive ser.) 620.281-030
Bus Mechanic (automotive ser.) 620.261-010
bus person (hotel & rest.) 311.677-018
Bus Upholsterer (automotive ser.) 780.381-010
Butadiene-Compressor Operator (chemical) 950.382-014
Butadiene-Converter Helper (chemical) 558.585-010
Butadiene-Converter Operator (chemical) 558.362-010
Butadiene-Converter Utility Operator (chemical) 559.682-066
Butadiene Operator, Chief (chemical; petrol. refin.) 559.132-078
Butane-Compressor Operator (petrol. refin.) 950.382-014
butcher (hotel & rest.) 316.681-010
butcher (retail trade; wholesale tr.) 316.684-018
BUTCHER, ALL-ROUND (meat products) 525.381-014
BUTCHER APPRENTICE (meat products) 525.381-010
butcher apprentice (retail trade; wholesale tr.) 316.684-022
BUTCHER, CHICKEN AND FISH (hotel & rest.) 316.684-010
BUTCHER, FISH (can. & preserv.) 525.684-014
Butcher, Head (hotel & rest.) 316.681-010
BUTCHER, MEAT (hotel & rest.) 316.681-010
Butcher Scullion (water trans.) 318.687-014
BUTLER (domestic ser.) 309.137-010
BUTLER, SECOND (domestic ser.) 309.674-010
Butter-Chilling Equipment Operator (dairy products) 529.362-010
Butter Churner (dairy products) 529.362-010
BUTTER LIQUEFIER (oils & grease) 523.585-010
BUTTERMAKER (dairy products) 529.362-010
BUTTERMAKER, CONTINUOUS CHURN (dairy products) 529.382-010
Buttermaker Helper (dairy products) 529.686-026
butter melter (oils & grease) 523.585-010
Buttermilk-Drier Operator (dairy products) 523.682-022
Butter Production Supervisor (dairy products) 529.131-014
BUTT MAKER (tobacco) 529.685-042
BUTTON-AND-BUCKLE MAKER (any industry) 734.687-046
Button-Attaching-Machine Operator (any industry) 699.685-018
BUTTON-ATTACHING-MACHINE OPERATOR (garment; hat & cap) 699.685-010
button bradder (any industry) 699.685-018
button bradder (garment; hat & cap) 699.685-010
button-breaker operator (textile) 583.685-010
button broacher (button & notion) 690.682-090
Button-Buttonhole Marker (garment) 781.687-042
button clamper (any industry) 699.685-018
button clamper (garment; hat & cap) 699.685-010

button cutter (button & notion) 734.384-010
BUTTON-CUTTING-MACHINE OPERATOR (button & notion) 734.384-010
BUTTON-DECORATING-MACHINE OPERATOR (button & notion) 690.685-062
BUTTONER (garment; knitting) 782.687-014
BUTTON-FACING-MACHINE OPERATOR (button & notion) 690.685-066
BUTTON GRADER (button & notion) 734.687-038
BUTTONHOLE-AND-BUTTON-SEWING-MACHINE OPERATOR (garment) 786.685-042
BUTTONHOLE-MACHINE OPERATOR (garment) 786.685-014
BUTTONHOLE MAKER (boot & shoe) 788.684-038
Buttonhole Maker, Hand (garment) 782.684-058
Buttonhole Tacker (garment) 782.684-058
BUTTON MAKER AND INSTALLER (tex. prod., nec) 734.685-014
BUTTON RECLAIMER (knitting) 734.687-042
button riveter (any industry) 699.685-018
button riveter (garment; hat & cap) 699.685-010
Button Sewer, Hand (garment) 782.684-058
BUTTON-SEWING-MACHINE OPERATOR (garment) 786.685-010
BUTTON SPINDLER (button & notion) 740.687-010
button tacker (garment; hat & cap) 699.685-010
button tufter (furniture) 687.684-014
button tufter (furniture) 780.687-050
button-tufting-machine operator (furniture) 687.685-014
Butt Presser (meat products) 520.685-182
butt sawyer (paper & pulp; saw. & plan.) 667.685-034
Butt Trimmer (meat products) 525.684-054
Buy-Boat Operator (fishing & hunt.) 197.133-010
buyer (profess. & kin.) 162.157-038
BUYER (profess. & kin.) 162.157-018
buyer, assistant (clerical) 249.367-066
BUYER, ASSISTANT (retail trade) 162.157-022
BUYER, GRAIN (grain-feed mills; wholesale tr.) 162.167-010
Buyer, Grain (wholesale tr.) 162.157-010
buyer, head (wholesale tr.) 162.167-014
buyer-renter (motion picture) 162.157-030
BUYER, TOBACCO, HEAD (wholesale tr.) 162.167-014
buzzle buffer (leather mfg.) 585.685-018
BUZZSAW OPERATOR (any industry) 667.685-026
BUZZSAW-OPERATOR HELPER (any industry) 667.687-010
Byproducts Maker (dairy products) 529.382-018

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CABANA ATTENDANT (amuse. & rec.) 349.677-010
Cabbage Salter (can. & preserv.) 529.687-022
cab driver (motor trans.) 913.463-018
CABIN-EQUIPMENT SUPERVISOR (air trans.) 869.131-010
Cabinet-Abrasive Sandblaster (any industry) 503.687-010
Cabinet-And-Trim Installer (mfd. bldgs.; vehicles, nec) 869.684-026
Cabinet-And-Trim Installer (vehicles, nec) 806.684-018
CABINET ASSEMBLER (furniture) 763.684-014
Cabinet Assembler (mfd. bldgs.; vehicles, nec) 762.684-014
Cabinet Assembler (mfd. bldgs.) 763.684-050
cabinet finisher (furniture) 703.684-014
CABINETMAKER (woodworking) 660.280-010
CABINETMAKER APPRENTICE (woodworking) 660.280-014
Cabinetmaker, Maintenance (woodworking) 660.280-010
CABINETMAKER, SUPERVISOR (woodworking) 660.130-010
cabin furnishings installer (aircraft mfg.) 806.381-078
Cabin-Service Agent (air trans.) 919.687-014
cable armorer (nonfer. metal) 691.685-010
cable assembler (aircraft mfg.) 806.381-042
CABLE ASSEMBLER AND SWAGER (aircraft mfg.) 806.381-042
cable cutter and swager (aircraft mfg.) 806.381-042
cable dispatcher (tel. & tel.) 239.167-014
CABLE ENGINEER, OUTSIDE PLANT (tel. & tel.) 003.167-010
CABLE INSTALLER-REPAIRER (utilities) 821.361-010
Cable Installer-Repairer Helper (utilities) 821.667-010
cable-machine operator (elec. equip.; light. fix.; metal prod., nec; nonfer. metal) 616.682-034
CABLE MAINTAINER (utilities) 952.464-010
cable maker (elec. equip.; electron. comp.; office machines) 728.684-010
cable-mill helper (nonfer. metal) 616.687-010
cable placer (construction; utilities) 829.684-018
CABLE PULLER (construction; utilities) 829.684-018
cable rigger (construction; utilities) 829.684-018
CABLESHIP WORKER (tel. & tel.) term
CABLE SPLICER (construction; tel. & tel.; utilities) 829.361-010
cable splicer (petrol. & gas) 728.684-014
CABLE-SPLICER APPRENTICE (construction; tel. & tel.; utilities) 829.361-014
CABLE-SPLICER HELPER (construction; tel. & tel.; utilities) 829.667-010
cable-splicing supervisor (construction; tel. & tel.; utilities) 829.131-010
Cable Spooler (nonfer. metal) 691.685-026
CABLE SUPERVISOR (construction; tel. & tel.; utilities) 829.131-010
CABLE SUPERVISOR (tel. & tel.) 184.161-010
CABLE TELEVISION INSTALLER (radio-tv broad.) 821.281-010
CABLE TELEVISION LINE TECHNICIAN (radio-tv broad.) 821.261-010
CABLE TESTER (tel. & tel.) 822.361-010
cable-tower operator (construction) 850.683-042
Cableway Operator (any industry) 921.663-030
cabling-machine operator (elec. equip.; light. fix.; metal prod., nec; nonfer. metal) 616.682-034
cab starter (motor trans.) 913.367-010
CADDIE (amuse. & rec.) 341.677-010
CADDIE SUPERVISOR (amuse. & rec.) 341.137-010
CADET, DECK (water trans.) 911.133-010
Cadet Engineer (water trans.) 197.130-010
CADMIUM BURNER (chemical) 553.685-114
CADMIUM-LIQUOR MAKER (paint & varnish) 553.685-026
Cadmium Plater (electroplating) 500.380-010
CAFETERIA ATTENDANT (hotel & rest.) 311.677-010
Cafeteria Cashier (hotel & rest.) 211.462-010
cage clerk (personal ser.) 358.677-014
CAGE MAKER (concrete prod.) 709.684-030
CAGE MAKER, MACHINE (concrete prod.) 616.682-018
Cage Operator (any industry) 921.663-030
CAGER (mine & quarry) 939.667-010
CAGER OPERATOR (can. & preserv.) 921.685-018
Cage Tender (construction) 869.687-026
CAISSON WORKER (construction) term
Cake-Batter Mixer (bakery products) 520.685-010
Cake-Batter Scaler (bakery products) 526.682-010
Cake Cutter, Machine (bakery products) 521.685-302
CAKE DECORATOR (bakery products) 524.381-010
CAKE FORMER (oils & grease) 520.685-038
Cake Icer (bakery products) 524.684-022
Cake Icer, Machine (bakery products) 524.685-034
Cake Inspector (plastic-synth.) 681.687-018
cake maker (hotel & rest.) 313.381-026
Cake-Pan Greaser (bakery products) 526.685-034
CAKE-PRESS OPERATOR (plastic-synth.) 556.665-010
CAKE-PRESS-OPERATOR HELPER (plastic-synth.) 556.686-010
CAKE PULLER (oils & grease) 521.686-014
CAKE STRIPPER (oils & grease) 520.685-042
Cake Supervisor (bakery products) 526.131-010
CAKE TESTER (grain-feed mills) 526.381-022
Cake Washer (plastic-synth.) 582.685-162
Cake Winder (textile) 681.685-154
CAKE WRAPPER (plastic-synth.) 589.687-010
Cake Wringer (plastic-synth.) 581.685-038
Calciminer (construction) 840.381-010
calcination helper (smelt. & refin.) 513.587-010
CALCINE FURNACE LOADER (paint & varnish) 553.486-010
CALCINE-FURNACE TENDER (paint & varnish) 553.685-030
calciner (cement; chemical; mine & quarry) 573.382-010
calciner feeder (chemical) 553.686-038
CALCINER, GYPSUM (concrete prod.) 579.382-010
calciner operator (chemical) 553.685-050
CALCINER OPERATOR (mine & quarry; smelt. & refin.) 513.362-010
CALCINER-OPERATOR HELPER (mine & quarry; smelt. & refin.) 513.667-010
CALCULATING-MACHINE OPERATOR (clerical) 216.482-022
Calculating-Machine Servicer (any industry) 633.281-018
Calculation Clerk (insurance) 216.382-050
Calculation Reviewer (insurance) 216.382-050
calculator operator (clerical) 216.482-022
CALENDAR-CONTROL CLERK, BLOOD BANK (medical ser.) 245.367-018
calenderer (knitting) 580.485-010
CALENDER FEEDER (rubber goods) 554.686-010
calender helper (rubber goods; rubber tire) 554.665-010
CALENDERING-MACHINE OPERATOR (knitting) 580.485-010
Calender Inspector (rubber goods) 759.684-074
CALENDER-LET-OFF HELPER (rubber goods; rubber tire) 554.686-014
CALENDER-LET-OFF OPERATOR (rubber goods; rubber tire) 554.682-010
CALENDER-MACHINE OPERATOR (nonmet. min.) 583.585-010
CALENDER OPERATOR (fabrication, nec) 590.682-010
calender operator (paper goods) 649.682-022
CALENDER OPERATOR (rubber goods; rubber tire) 554.362-010
CALENDER OPERATOR (tex. prod., nec; textile) 583.685-026
CALENDER OPERATOR, ARTIFICIAL LEATHER (tex. prod., nec) 584.685-010
Calender Operator, Fabric (rubber goods; rubber tire) 554.362-010
CALENDER OPERATOR, FOUR-ROLL (plastic prod.; rubber goods; rubber tire) 554.662-010
Calender Operator, Gum Stock (rubber goods; rubber tire) 554.362-010
CALENDER-OPERATOR HELPER (rubber goods; rubber tire) 554.686-018
Calender-Operator Helper (tex. prod., nec) 589.687-026

CALENDER OPERATOR, INSULATION BOARD (wood prod., nec) 539.482-010
calender-roll operator (plastic-synth.) 554.682-018
CALENDER-ROLL PRESS OPERATOR (machinery mfg.) 692.462-010
CALENDER SUPERVISOR (plastic-synth.) 559.132-014
Calender Supervisor (tex. prod., nec) 589.130-014
calender tender (tex. prod., nec; textile) 583.685-026
CALENDER-WIND-UP HELPER (rubber goods; rubber tire) 554.686-022
CALENDER-WIND-UP TENDER (rubber goods; rubber tire) 554.665-010
Calf Skinner (meat products) 525.684-046
Calfskin Trimmer (meat products) 525.687-046
Calf Sticker (meat products) 525.684-050
CALIBRATION LABORATORY TECHNICIAN (aircraft mfg.; electron. comp.) 019.281-010
calibration technician (inst. & app.) 710.381-034
CALIBRATOR (cutlery-hrdwr.) 701.684-010
CALIBRATOR (inst. & app.) 710.381-034
CALIBRATOR, BAROMETERS (inst. & app.) 710.381-042
California Seamer (boot & shoe) 690.682-082
Call-Box Wirer (tel. & tel.) 822.381-010
caller (clerical) 209.667-014
CALLER (r.r. trans.) 215.563-010
calligrapher (profess. & kin.) 970.661-010
Calliope Player (amuse. & rec.) 152.041-010
call-out clerk (clerical) 209.667-014
CALL-OUT OPERATOR (business ser.; retail trade) 237.367-014
Camera Assembler (photo. appar.) 714.684-010
camera control operator (radio-tv broad.) 194.282-010
Camera-Lens Inspector (optical goods) 716.381-010
CAMERA OPERATOR (motion picture; radio-tv broad.) 143.062-022
CAMERA OPERATOR, ANIMATION (motion picture) 143.382-010
camera operator, first (motion picture; radio-tv broad.) 143.062-010
camera operator, head (motion picture; radio-tv broad.) 143.062-010
Camera Operator, Second (motion picture; radio-tv broad.) 143.062-022
Camera Operator, Sound Effects (motion picture; radio-tv broad.) 143.062-022
Camera Operator, Television (radio-tv broad.) 143.062-022
CAMERA OPERATOR, TITLE (motion picture) 976.382-010
CAMERA REPAIRER (photo. appar.) 714.281-014
Camera-Storeroom Clerk (motion picture) 222.387-058
Camera Supervisor (print. & pub.) 972.137-010
cam-milling-machine operator (machine shop) 605.382-026
cam-milling-machine operator (machine shop) 605.280-014
CAMOUFLAGE ASSEMBLER (ordnance) 869.687-014
CAMOUFLAGE SPECIALIST (military ser.) 378.684-010
Campground Caretaker (government ser.) 406.687-010
campground hand (amuse. & rec.) 329.683-010
Camp Guard (any industry) 372.667-034
camp-laundry operator (any industry) 361.684-014
CAMP TENDER (agriculture) 410.137-010
Canadian-Bacon Tier (meat products) 529.687-034
CANAL-EQUIPMENT MECHANIC (waterworks) 899.281-010
canal-lock tender, chief operator (water trans.) 911.131-014
canal-structure operator (water trans.) 911.362-010
canal tender (waterworks) 954.362-010
CANARY BREEDER (agriculture) 411.161-010
can-bander operator (beverage) 920.685-042
CANCELING-AND-CUTTING CONTROL CLERK (financial) 219.367-042
canceling-and-metering-machine operator (clerical) 208.685-026
Canceling-Machine Operator (clerical) 208.685-026
CANCELLATION CLERK (insurance) 203.382-014
CAN-CONVEYOR FEEDER (food prep., nec) 529.685-046
CANDLE CUTTER (fabrication, nec) 739.687-050
CANDLE-EXTRUSION-MACHINE OPERATOR (fabrication, nec) 692.682-026
CANDLEMAKER (fabrication, nec) 739.664-010
CANDLE MOLDER, HAND (fabrication, nec) 739.687-054
CANDLE MOLDER, MACHINE (fabrication, nec) 692.685-038
candle pourer (fabrication, nec) 739.687-158
Candle Wrapper (fabrication, nec) 920.587-018
CANDLE WRAPPING-MACHINE OPERATOR (fabrication, nec) 920.685-030
CAN DOFFER (textile) 680.686-010
can-drier operator (textile) 581.685-022
Candy-Bar-Core Inspector (sugar & conf.) 529.686-034
Candy Catcher (sugar & conf.) 529.686-034
candy-cooker helper (sugar & conf.) 520.685-050
CANDY CUTTER, HAND (sugar & conf.) 790.687-010
candy cutter, machine (sugar & conf.) 521.685-102
Candy Decorator (sugar & conf.) 524.684-014
Candy-Department Manager (retail trade) 299.137-010
CANDY DIPPER, HAND (sugar & conf.) 524.684-010
candy feeder (sugar & conf.) 524.686-010
CANDY MAKER (sugar & conf.) 529.361-014
Candy Maker, Bar (sugar & conf.) 520.687-022
candy-maker helper (sugar & conf.) 520.687-022
CANDY-MAKER HELPER (sugar & conf.) 520.685-050
candy mixer (sugar & conf.) 520.684-014
CANDY MOLDER, HAND (sugar & conf.) 520.687-018
Candy Packer (sugar & conf.) 920.587-018
candy polisher (sugar & conf.) 524.382-010
CANDY PULLER (sugar & conf.) 520.685-046
candy roller (sugar & conf.) 520.686-010
candy roller (sugar & conf.) 520.684-014
candy-rolling-machine operator (sugar & conf.) 520.685-198
candy separator, enrobing (sugar & conf.) 524.686-010
Candy Separator, Hard (sugar & conf.) 529.686-034
CANDY SPREADER (sugar & conf.) 520.687-022
Candy-Spreader Helper (sugar & conf.) 529.686-034
candy-starch-mold printer (sugar & conf.) 526.687-014
Candy-Waffle Assembler (sugar & conf.) 529.686-034
Candy-Wrapping-Machine Operator (sugar & conf.) 920.685-078
CANE CUTTER (furniture) 763.687-030
CANER I (furniture) 763.684-018
CANER II (furniture) 763.684-022
can feeder (tobacco) 920.686-030
Can Filler (food prep., nec) 523.685-102
CAN FILLER (tobacco) 922.687-030
CAN-FILLING-AND-CLOSING-MACHINE TENDER (can. & preserv.) 529.685-282
Can-Filling-Machine Operator (tobacco) 920.685-098
Can-Filling-Room Sweeper (beverage) 381.687-018
CAN INSPECTOR (beverage; can. & preserv.) 920.687-050
can intake worker (dairy products) 222.585-010
can-line examiner (tinware) 709.367-010
Cannery-Tender Engineer (water trans.) 197.130-010
CANNERY WORKER (can. & preserv.) 529.686-014
CANNON-PINION ADJUSTER (clock & watch) 715.684-046
CANOE INSPECTOR, FINAL (ship-boat mfg.) 769.687-018
Canopy Inspector (tex. prod., nec) 789.687-114
CANOPY STRINGER (tex. prod., nec) 789.684-018
CAN PATCHER (can. & preserv.) 920.687-054
can pusher (textile) 680.686-010
CAN RECONDITIONER (can. & preserv.) 920.687-058
Can-Reforming-Machine Operator (tinware) 709.686-010
can-repairer (tinware) 709.587-014
cans operator (textile) 581.685-022
Can Stacker (tinware) 709.686-010
Can Supervisor (any industry) 920.132-010
can technician (tinware) 709.367-010
CANTEEN OPERATOR (any industry) 311.674-010
can tender (textile) 581.685-022
can tester (tinware) 703.685-014
CANTILEVER-CRANE OPERATOR (water trans.) 921.683-018
CANTOR (profess. & kin.) 129.027-010
Canvas-Bag Maker (tex. prod., nec) 787.682-058
CANVAS BASTER, JUMPBASTING (garment) 786.682-050
Canvas Cutter, Hand (tex. prod., nec) 781.684-074
Canvas Cutter, Machine (tex. prod., nec) 781.684-014
Canvas Marker (tex. prod., nec) 781.384-014
CANVAS REPAIRER (any industry) 782.684-010
canvasser (retail trade) 291.357-010
CANVAS SHRINKER (textile) 587.687-010
CANVAS WORKER (ship-boat mfg.; tex. prod., nec) 739.381-010
CANVAS-WORKER APPRENTICE (ship-boat mfg.; tex. prod., nec) 739.381-014
Can Washer, Machine (any industry) 529.685-074
CAPACITOR ASSEMBLER (elec. equip.) 729.684-014
Capacitor Inspector (electron. comp.) 726.684-022
CAPACITOR-PACK-PRESS OPERATOR (elec. equip.) 726.684-010
Capacitor Repairer (elec. equip.) 729.684-014
Capacitor Tester (electron. comp.) 726.684-078
Cap-And-Stud-Machine Operator (rubber goods) 699.685-018
cap blocker (hat & cap) 580.684-014
Cap Coverer (fabrication, nec) 780.684-026
cap inspector (can. & preserv.) 920.687-194
CAP-JEWEL PLATE ASSEMBLER (clock & watch) 715.684-050
cap-lining-machine operator (any industry) 692.685-062
cap-machine operator (hat & cap) 784.684-018
Cap Maker (fabrication, nec) 739.684-190
CAP MAKER (hat & cap) 784.684-018
CAPONIZER (agriculture) 411.684-010
cap operator (hat & cap) 784.684-018
Cap-Parts Cutter (hat & cap) 699.682-022
Capper (agriculture) 920.687-134
capper (cutlery-hrdwr.) 779.684-034
Capper Picker (agriculture; wholesale tr.) 529.687-186
Capping-Machine Operator (any industry) 920.685-078
CAPPING-MACHINE OPERATOR (elec. equip.) 692.685-042
Cap Sizer (hat & cap) 784.682-014
CAPSULE-FILLING-MACHINE OPERATOR (pharmaceut.) 559.682-010
captain (government ser.) 375.167-034

captain (hotel & rest.) 311.137-018
captain (water trans.) see MASTER
Captain, Cannery Tender (fishing & hunt.) 197.133-010
CAPTAIN, FIRE-PREVENTION BUREAU (government ser.) 373.167-014
CAPTAIN, FISHING VESSEL (fishing & hunt.) 197.133-010
Captain, Room Service (hotel & rest.) 311.137-022
CAPTION WRITER (motion picture; radio-tv broad.) 203.362-026
Caramel-Candy Maker (sugar & conf.) 529.361-014
Caramel-Candy-Maker Helper (sugar & conf.) 520.685-050
Caramel Cutter, Hand (sugar & conf.) 790.687-010
Caramel-Cutter Helper (sugar & conf.) 529.686-034
Caramel Cutter, Machine (sugar & conf.) 521.685-102
Carbide-Die Maker (machine shop) 601.280-018
carbide grinder (machine shop) 601.380-010
CARBIDE OPERATOR (machine shop) 601.380-010
CARBIDE-POWDER PROCESSOR (machine shop) 510.465-010
Carbide-Tool Maker (clock & watch) 601.280-042
CAR BLOCKER (any industry) 860.684-018
car-body inspector (railroad equip.) 807.381-026
car-body-inspector helper (railroad equip.) 807.687-014
CARBON-AND-GRAPHITE-BRUSH-MACHINE OPERATOR (elec. equip.) 692.482-010
carbonating-stone cleaner (beverage) 529.687-190
CARBONATION EQUIPMENT OPERATOR (sugar & conf.) 529.582-010
CARBONATION EQUIPMENT TENDER (beverage) 522.685-026
CARBONATION TESTER (beverage) 522.587-010
Carbon Brushes Tester (elec. equip.) 729.684-058
carbon-brush maker (elec. equip.) 721.684-014
CARBON-COATER-MACHINE OPERATOR (pen & pencil) 534.682-014
CARBON CUTTER (elec. equip.) 677.685-018
carbon-dioxide operator (chemical) 559.665-030
CARBON-FURNACE OPERATOR (smelt. & refin.) 543.562-010
CARBON-FURNACE-OPERATOR HELPER (smelt. & refin.) 543.664-010
carbonizer (heat treating) 504.685-026
carbonizer (heat treating) 504.682-014
CARBONIZER (textile) 581.585-010
carbon-lamp cleaner (utilities) 952.667-010
CARBON-PAPER-COATING-MACHINE SETTER (pen & pencil) 534.380-010
CARBON-PAPER INTERLEAFER (pen & pencil) 640.685-018
Carbon-Paste-Mixer Operator, Panelboard (elec. equip.; smelt. & refin.) 540.585-010
CARBON PRINTER (print. & pub.) 979.684-010
CARBON ROD INSERTER (elec. equip.) 692.686-026
CARBON SETTER (smelt. & refin.) 519.667-010
Carboy Filler (chemical) 559.687-050
Carburetor Assembler (engine-turbine) 706.481-010
Carburetor Mechanic (air trans.) 621.281-014
CARBURETOR MECHANIC (automotive ser.) 620.281-034
carburetor repairer (automotive ser.) 620.281-034
carburizer (heat treating) 504.682-014
Carcass Assembler (toy-sport equip.) 732.684-026
CARCASS SPLITTER (meat products) 525.684-018
Carcass Trimmer (rubber reclaim.) 690.685-386
car changer (construction) 921.663-014
CAR CHASER (beverage) 910.167-010
car checker (automotive ser.; retail trade) 806.361-026
car checker (r.r. trans.) 910.387-014
CAR CHECKER (r.r. trans.) 222.387-014
Car Cleaner (mine & quarry) 939.687-014
car cleaner (retail trade; wholesale tr.) 915.687-022
car cleaner (railroad equip.) 845.684-010
Car Cleaner (r.r. trans.) 919.687-014
CAR-CLEANING SUPERVISOR (r.r. trans.) 910.137-014
CAR CLERK, PULLMAN (r.r. trans.) 215.167-010
CAR COOPER (any industry) 910.687-014
card-apron cleaner (nonmet. min.) 680.687-010
card assembler (any industry) 920.685-034
Cardboard Cutter (any industry) 690.685-122
CARDBOARD INSERTER (knitting) 920.687-062
CARD CHANGER, JACQUARD LOOM (textile) 683.685-014
Card Cleaner (textile) 699.687-014
CARD CLOTHIER (textile) 628.381-010
card-cutter helper (textile) 689.587-010
CARD CUTTER, JACQUARD (narrow fabrics; textile) 683.582-010
CARD DECORATOR (print. & pub.) 649.686-014
Card Doffer (textile) 680.686-010
CARDER (any industry) 920.685-034
carder (textile) 680.685-050
carder, blankets (laundry & rel.) 363.687-022
card fixer (nonmet. min.; textile) 680.380-010
Card Fixer (textile) 689.260-010
card-gill tender (textile) 680.685-058
card grader (amuse. & rec.) 343.687-010
CARD GRINDER (nonmet. min.; textile) 680.380-010
CARD GRINDER HELPER (textile) 680.684-010
card hand (nonmet. min.; textile) 680.685-018
card hanger (textile) 683.685-014
CARDIAC MONITOR TECHNICIAN (medical ser.) 078.367-010
carding doubler (textile) 680.685-086
carding doubler (textile) 680.685-094
Carding-Machine Feeder (textile) 680.686-018
carding-machine operator (any industry) 920.685-034
CARDING-MACHINE OPERATOR (tex. prod., nec) 681.685-030
CARDIOLOGIST (medical ser.) 070.101-014
CARDIOPULMONARY TECHNOLOGIST (medical ser.) 078.362-030
CARDIOPULMONARY TECHNOLOGIST, CHIEF (medical ser.) 078.161-014
cardiovascular technologist (medical ser.) 078.362-030
car distributor (mine & quarry) 932.167-010
CAR DISTRIBUTOR (r.r. trans.) 910.367-014
CARD LACER, JACQUARD (narrow fabrics; textile) 683.685-018
card operator (nonmet. min.; textile) 680.685-018
CARD PLAYER (amuse. & rec.) 343.367-010
card processing clerk (financial) 249.367-026
Card Reader (amuse. & rec.) 159.647-018
car driver (auto. mfg.; automotive ser.) 919.683-014
CARDROOM ATTENDANT I (amuse. & rec.) 343.467-010
CARDROOM ATTENDANT II (amuse. & rec.) 343.577-010
Cardroom Supervisor (nonmet. min.) 579.137-014
CARDROOM WORKER (nonmet. min.; textile) term
CAR DROPPER (mine & quarry) 932.683-010
card setter (nonmet. min.; textile) 680.380-010
CARD STRIPPER (textile) 680.685-014
CARD TENDER (nonmet. min.; textile) 680.685-018
Car Dumper (any industry) 921.667-018
car-dumper operator (any industry) 921.685-038
CAR-DUMPER OPERATOR (beverage) 921.662-010
CAR-DUMPER-OPERATOR HELPER (beverage) 921.687-010
card writer, hand (any industry) 970.281-022
career counselor (military ser.) 166.267-026
CAREER-GUIDANCE TECHNICIAN (education) 249.367-014
career-information specialist (education) 249.367-014
Career Placement Services Counselor (education) 045.107-010
career resource technician (education) 249.367-014
CARETAKER (domestic ser.) 301.687-010
CARETAKER, FARM (agriculture) term
caretaker, grounds (any industry) 406.684-014
caretaker, resort (hotel & rest.) 329.467-010
car filler (any industry) 914.667-010
Charge-Bag Sewer (tex. prod., nec) 787.682-058
CARGO AGENT (air trans.) 248.367-018
CARGO CHECKER (water trans.) 222.367-010
cargo-gear mechanic (water trans.) 222.387-062
Cargo Inspector (government ser.) 168.267-022
CARGO INSPECTOR (petrol. refin.; pipe lines) 549.387-010
CAR HOP (hotel & rest.) 311.477-010
Caricaturist (amuse. & rec.) 149.041-010
car ice-bunker filler (food prep., nec; meat products) 910.687-018
CAR ICER (food prep., nec; meat products) 910.687-018
Car Inspector (mine & quarry) 622.381-030
CAR INSPECTOR (railroad equip.) 910.667-010
Car Jockey (automotive ser.) 919.683-014
Car Letterer (railroad equip.) 970.381-038
Car Loader (any industry) 929.687-030
car loader (saw. & plan.) 922.687-022
CARNALLITE-PLANT OPERATOR (smelt. & refin.) 519.484-010
carney (amuse. & rec.) 342.657-010
CARPENTER (construction) 860.381-022
CARPENTER APPRENTICE (construction) 860.381-026
carpenter apprentice, ship (ship-boat mfg.) 860.381-062
carpenter, box (wood. container) 760.684-014
CARPENTER, BRIDGE (r.r. trans.) 860.381-030
Carpenter, Cradle And Dolly (ship-boat mfg.) 860.381-042
carpenter, form (construction) 860.381-046
carpenter helper (ship-boat mfg.) 860.664-018
Carpenter Helper, Hardwood Flooring (construction) 869.687-026
Carpenter Helper, Maintenance (construction) 869.664-014
CARPENTER I (mfd. bldgs.) 860.664-010
CARPENTER II (mfd. bldgs.) 860.681-010
CARPENTER INSPECTOR (any industry) 860.261-010
CARPENTER-LABOR SUPERVISOR (construction) 860.137-010
CARPENTER, MAINTENANCE (any industry) 860.281-010
Carpenter, Mine (mine & quarry) 860.281-010
CARPENTER, MOLD (brick & tile; concrete prod.) 860.381-034
carpenter, packing (any industry) 920.684-010
CARPENTER, PROTOTYPE (ship-boat mfg.) 806.281-058
CARPENTER, RAILCAR (railroad equip.) 860.381-038
Carpenter, Refrigerator (svc. ind. mach.) 860.381-022
carpenter, repair (any industry) 860.281-010
CARPENTER, ROUGH (construction) 860.381-042

CARPENTER, SHIP (ship-boat mfg.) 860.281-014
carpenter, ship (ship-boat mfg.) 860.381-058
Carpenter, Streetcar (railroad equip.) 860.381-038
carpenter supervisor, wooden ship (ship-boat mfg.) 860.131-014
carpenter, wooden-tank erecting (construction) 860.381-070
carpet cleaner (laundry & rel.) 369.384-014
CARPET CUTTER (retail trade) 929.381-010
CARPET CUTTER I (carpet & rug) 781.684-010
CARPET CUTTER II (carpet & rug) 585.687-014
Carpet-Finishing Supervisor (carpet & rug) 589.130-010
CARPET INSPECTOR, FINISHED (carpet & rug) 689.564-010
CARPET LAYER (retail trade) 864.381-010
CARPET-LAYER HELPER (retail trade) 864.687-010
CARPET-LOOM FIXER (carpet & rug) 683.260-014
CARPET SEWER (carpet & rug; retail trade) 787.682-014
CARPET WEAVER (carpet & rug) 683.682-010
CARPET WEAVER, JACQUARD LOOM (carpet & rug) 683.682-014
Carpet Winder (carpet & rug) 689.685-046
car pincher (mine & quarry) 932.683-010
CAR PINCHER (steel & rel.) 922.687-034
car porter (retail trade; wholesale tr.) 915.687-022
car-record clerk (r.r. trans.) 214.362-010
car rental clerk (automotive ser.) 295.467-026
CAR REPAIRER (railroad equip.) 622.381-014
car repairer (railroad equip.) 721.381-010
CAR-REPAIRER APPRENTICE (railroad equip.) 622.381-022
CAR-REPAIRER HELPER (railroad equip.) 622.684-014
CAR REPAIRER, PULLMAN (r.r. trans.) 622.381-018
CAR-RETARDER OPERATOR (r.r. trans.) 910.382-010
Carriage Feeder (fabrication, nec) 590.662-022
car rider (any industry) 932.664-010
Car Rider (r.r. trans.) 910.664-010
carrier (retail trade) 292.457-010
carrier blower (tobacco) 529.687-194
Carrier Guider (fabrication, nec) 590.686-014
carrier loader (textile) 589.687-062
carrier operator (sugar & conf.) 521.685-090
CARRIER PACKER (protective dev.) 920.687-066
carrier washer (tobacco) 529.687-194
Car-Roof Repairer (railroad equip.) 807.381-026
CARROTER (hat & cap) 784.687-014
Carrot Grader-Inspector (agriculture) 409.687-010
CARROTING-MACHINE OFFBEARER (hat & cap) 586.686-010
CARROTING-MACHINE OPERATOR (hat & cap) 586.685-010
Carrot Washer (agriculture; can. & preserv.; wholesale tr.) 529.685-258
car runner (mine & quarry) 932.683-010
Car Salter (mine & quarry) 939.687-014
CAR SCRUBBER (railroad equip.) 845.684-010
Car-Shakeout Operator (cement; mine & quarry) 921.685-038
car shifter (steel & rel.) 922.687-034
car spotter (beverage) 910.167-010
Car Straightener (railroad equip.) 622.381-014
car supplier (r.r. trans.) 910.367-014
Cart Driver (any industry) 919.664-010
car tester (auto. mfg.) 806.283-014
Car Tester (railroad equip.) 622.684-014
CARTOGRAPHIC TECHNICIAN (profess. & kin.) term
cartographic technician (profess. & kin.) 018.261-026
carton catcher (any industry) 921.686-014
CARTON-COUNTER FEEDER (tobacco) 921.686-010
carton filler (tobacco) 920.687-130
Carton-Forming-Machine Adjuster (any industry) 638.281-014
CARTON-FORMING-MACHINE HELPER (any industry) 641.686-014
CARTON-FORMING-MACHINE OPERATOR (any industry) 641.685-022
CARTON-FORMING-MACHINE TENDER (paper goods) 641.685-026
Carton-Gluing-Machine Operator (any industry) 920.685-078
CARTON INSPECTOR (tobacco) 920.687-070
carton-lettering-machine operator (any industry) 652.682-010
CARTON MARKER, MACHINE (boot & shoe; garment) 652.685-018
CARTON-PACKAGING-MACHINE OPERATOR (tobacco) 920.665-010
Carton Repairer (beverage) 529.687-066
carton searcher (tobacco) 920.687-070
carton stamper (boot & shoe; garment) 652.685-018
Carton Stapler (any industry) 920.587-018
Carton Stenciler (any industry) 920.687-178
Carton-Waxing-Machine Operator (paper goods) 534.482-010
Cartoon-Background Artist (motion picture; radio-tv broad.) 141.081-010
CARTOON DESIGNER (tex. prod., nec) 781.381-010
CARTOONIST (print. & pub.) 141.061-010
CARTOONIST, MOTION PICTURES (motion picture; radio-tv broad.) 141.081-010
Cartoonist, Special Effects (motion picture; radio-tv broad.) 141.081-010
Car-Top Bolter (railroad equip.) 622.684-014
cartridge-actuated-tool operator (construction) see STUD-DRIVER OPERATOR
cartridge assembler (comm. equip.) 720.684-014
Cartridge Assembler (pen & pencil) 733.685-010
cartridge-assembling-machine adjuster (ordnance) 632.360-014
cartridge belt puncher (leather prod.) 690.685-266
Cartridge Feeder (pen & pencil) 692.686-010
cartridge gauger (ordnance) 737.684-026
CARTRIDGE LOADER (elec. equip.) 779.687-014
cartridge loader (recording) 726.685-010
cartridge-loading operator (ordnance) 694.685-026
CAR TRIMMER (railroad equip.) 806.684-046
car unloader (beverage) 921.662-010
car-unloader helper (beverage) 921.687-010
Car Varnisher (railroad equip.) 740.684-022
carver (boot & shoe) 788.684-082
carver (carpet & rug) 781.684-046
carver (engraving) 704.381-030
CARVER (hotel & rest.) 316.661-010
Carver And Checkerer, Specials (ordnance) 761.381-034
CARVER, HAND (woodworking) 761.281-010
carver, machine (woodworking) 761.682-018
carving-machine operator (woodworking) 761.682-018
CAR-WASH ATTENDANT, AUTOMATIC (automotive ser.) 915.667-010
CAR-WASH SUPERVISOR (automotive ser.) 915.137-010
car whacker (any industry) 910.687-014
Cascara-Bark Cutter (forestry) 453.687-010
CASE AIDE (social ser.) 195.367-010
case assembler (leather prod.) 739.684-034
case assembler (agric. equip.) 801.684-022
CASE FINISHER (leather prod.) 739.684-034
CASE-FINISHING-MACHINE ADJUSTER (ordnance) 626.381-010
CASE FITTER (furniture) 763.684-026
case hardener (heat treating) 504.685-026
CASE HARDENER (heat treating) 504.682-014
Case Inspector (clock & watch) 715.384-022
CASE-LOADER OPERATOR (beverage) 920.685-042
case maker (any industry) 920.684-010
case maker (wood. container) 760.684-014
CASE-MAKING-MACHINE OPERATOR (print. & pub.) 653.685-018
case packer (tobacco) 920.687-130
CASE PACKER AND SEALER (tobacco) 920.685-038
CASE PREPARER-AND-LINER (ordnance) 509.384-010
caser (beverage) 920.685-026
caser (boot & shoe) 788.687-026
CASER (clock & watch) 715.684-054
CASER (petrol. & gas) 930.664-010
caser (pottery & porc.) 777.684-018
Caser (print. & pub.) 977.684-018
Case Repairer (leather prod.) 739.684-034
caser helper (tobacco) 522.687-030
caser-in (print. & pub.) 653.686-010
caser-in (print. & pub.) 977.684-018
caser operator (print. & pub.) 653.685-018
Caser, Rolled Glass (glass mfg.) 920.587-018
CASER, SHOE PARTS (boot & shoe) 788.687-026
case sealer (tobacco) 920.687-130
case supervisor (social ser.) 195.137-010
CASEWORKER (government ser.) 169.262-010
CASEWORKER (social ser.) 195.107-010
Caseworker, Child Placement (social ser.) 195.107-014
CASEWORKER, CHILD WELFARE (social ser.) 195.107-014
CASEWORKER, FAMILY (social ser.) 195.107-018
Caseworker, Intake (social ser.) 195.107-014
Caseworker, Protective Services (social ser.) 195.107-014
CASEWORK SUPERVISOR (social ser.) 195.137-010
cash-accounting clerk (clerical) 211.362-010
cash clerk (clerical) 211.462-010
cash grain grower (agriculture) 401.161-010
cashier (financial) 186.117-070
cashier, automobile services (automotive ser.) 915.477-010
Cashier, Box Office (amuse. & rec.) 211.467-030
cashier, check-cashing agency (business ser.) 211.462-026
CASHIER-CHECKER (retail trade) 211.462-014
CASHIER, COURTESY BOOTH (retail trade) 211.467-010
Cashier, Credit (clerical) 211.462-010
cashier, fast foods restaurant (hotel & rest.) 311.472-010
Cashier, Front Office (hotel & rest.) 211.362-010
CASHIER, GAMBLING (amuse. & rec.) 211.462-022
cashier, general (clerical) 211.462-010
CASHIER I (clerical) 211.362-010
CASHIER II (clerical) 211.462-010
cashier, office (clerical) 211.462-010
Cashier, Parking Lot (automotive ser.) 211.462-010
Cashier, Payments Received (clerical) 211.462-010
Cashier, Self-Service Gasoline (automotive ser.) 211.462-010
cashier, ticket selling (clerical) 211.467-030

CASHIER, TUBE ROOM (retail trade) 211.482-010
CASHIER-WRAPPER (retail trade) 211.462-018
cash-on-delivery clerk (clerical) 214.382-018
cast-register repairer (any industry) 633.281-010
CASH-REGISTER SERVICER (any industry) 633.281-010
Cash-Sales-Audit Clerk (clerical) 210.382-010
Cash-Surrender Calculator (insurance) 216.382-050
CASING CLEANER (meat products) 525.686-010
CASING-FLUID TENDER (tobacco) 520.685-054
CASING GRADER (meat produc") 529.687-026
CASING-IN-LINE FEEDER (print. & pub.) 653.686-010
CASING-IN-LINE SETTER (print. & pub.) 653.360-010
casing inspector (meat products) 529.687-026
Casing-Machine Operator (meat products) 525.686-010
CASING-MACHINE OPERATOR (tobacco) 522.685-030
CASING-MATERIAL WEIGHER (tobacco) 520.687-026
casing mixer (tobacco) 520.687-026
Casing Packer (meat products) 525.686-010
Casing Puller (meat products) 525.684-038
casing puller (petrol. & gas) 930.382-030
casing runner (meat products) 525.685-014
CASING-RUNNING-MACHINE TENDER (meat products) 525.685-014
Casing Salter (meat products) 525.687-026
CASING SEWER (meat products) 529.687-030
Casing Soaker (meat products) 525.686-010
casing sorter (meat products) 529.687-026
CASING SPLITTER (meat products) 525.687-014
casing tester (meat products) 529.687-026
CASING TIER (meat products) 529.687-034
casing wetter (tobacco) 522.687-026
casing-wringer operator (tobacco) 522.685-106
CASKET ASSEMBLER (fabrication, nec) 739.684-190
CASKET ASSEMBLER, METAL (fabrication, nec) 809.684-014
CASKET COVERER (fabrication, nec) 780.684-026
CASKET INSPECTOR (fabrication, nec) 739.387-010
CASKET LINER (fabrication, nec) 780.684-030
casket trimmer (fabrication, nec) 780.684-026
casket upholsterer (fabrication, nec) 780.684-030
cask maker (wood. container) 764.684-026
Casserole Preparer (hotel & rest.) 319.484-010
castables worker (brick & tile) 579.684-026
CASTER (brick & tile) 579.684-026
caster (hat & cap) 784.361-010
caster (jewelry-silver.) 502.682-018
CASTER (jewelry-silver.) 502.381-010
CASTER (nonfer. metal) 502.482-010
CASTER (nonmet. min.) 575.684-018
caster (nonmet. min.) 779.684-046
CASTER (plastic prod.) 754.684-022
caster (plastic-synth.) 559.682-022
CASTER (pottery & porc.) 575.684-014
CASTER (smelt. & refin.) 514.684-010
caster (steel & rel.) 502.664-014
CASTER HELPER (jewelry-silver.) 700.687-022
caster, investment casting (foundry; steel & rel.) 512.362-018
caster operator (machinery mfg.; print. & pub.) 654.382-010
CASTING-AND-CURING OPERATOR (chemical) 559.682-014
Casting-And-Locker-Room Servicer (plastic-synth.) 381.687-018
Casting Carrier (foundry) 519.687-022
casting finisher (foundry) 705.684-074
casting header (nonfer. metal; smelt. & refin.) 514.584-010
CASTING-HOUSE WORKER (nonfer. metal) 514.687-014
Casting Inspector (elec. equip.) 502.687-018
CASTING INSPECTOR (foundry) 514.687-010
casting-machine adjuster (elec. equip.) 502.684-018
Casting-Machine-Control-Board Operator (foundry) 514.562-010
CASTING-MACHINE OPERATOR (dairy products) 520.685-058
CASTING-MACHINE OPERATOR (machinery mfg.; print. & pub.) 654.382-010
CASTING-MACHINE OPERATOR (nonfer. metal) 502.682-014
casting-machine operator (sugar & conf.) 520.682-014
CASTING-MACHINE OPERATOR (sugar & conf.) 520.685-062
CASTING-MACHINE OPERATOR, AUTOMATIC (elec. equip.) 502.482-014
CASTING-MACHINE-OPERATOR HELPER (elec. equip.) 502.686-010
CASTING-MACHINE-SERVICE OPERATOR (plastic-synth.) 559.687-018
CASTING OPERATOR (nonfer. metal) 514.662-010
CASTING-OPERATOR HELPER (nonfer. metal) 514.687-018
CASTING-PLUG ASSEMBLER (toy-sport equip.) 732.687-022
CASTING REPAIRER (any industry) 619.281-010
CASTING-ROOM OPERATOR (plastic-synth.) 556.585-010
Casting Sorter (foundry) 519.687-022
casting supervisor (concrete prod.) 575.131-010
Casting Supervisor (foundry) 519.131-010
casting tester (foundry) 514.687-010
Casting Trucker (foundry) 921.683-050
CASTING-WHEEL OPERATOR (smelt. & refin.) 514.682-010
CASTING-WHEEL-OPERATOR HELPER (smelt. & refin.) 514.667-010
cast-shell grinder (foundry) 705.684-074
Casual-Shoe Inspector (boot & shoe) 788.384-010
Casualty-Insurance-Claim Adjuster (clerical) 241.217-010
cataloger (library) 100.387-010
CATALOG LIBRARIAN (library) 100.387-010
catalyst impregnator (chemical) 559.685-106
catalyst-manufacturing operator (chemical) 558.382-034
catalyst operator (chemical) 553.682-022
CATALYST OPERATOR (chemical) term
CATALYST OPERATOR, CHIEF (chemical) 559.132-018
CATALYST OPERATOR, GASOLINE (chemical) 559.382-014
catalyst plant supervisor (chemical) 559.132-018
CATALYST-RECOVERY OPERATOR (chemical) 551.685-022
catalyst supervisor (chemical; petrol. refin.) 559.132-078
catalytic-case operator (chemical) 558.362-010
CATALYTIC-CONVERTER OPERATOR (chemical) 558.362-010
CATALYTIC-CONVERTER-OPERATOR HELPER (chemical) 558.585-010
Cataract-Lens Generator (optical goods) 716.682-014
Cat Breeder (agriculture) 410.161-010
Cat Chaser (logging) 921.667-014
Catch-Basin Cleaner (sanitary ser.) 955.687-010
Catcher (metal prod., nec) 706.684-090
CATCHER (steel & rel.) 613.686-010
CATCHER, FILTER TIP (tobacco) 529.666-010
catcher, plug (tobacco) 529.666-010
catching inspector (tobacco) 529.567-010
Caterer (personal ser.) 187.167-106
CATERER HELPER (personal ser.) 319.677-010
catering-truck operator (hotel & rest.) 292.463-010
Cathead Worker (petrol. & gas) 930.684-026
CATHETER BUILDER (rubber goods) 752.684-026
Catheter Finisher-And-Inspector (rubber goods) 759.684-074
cathode builder (chemical) 826.684-022
CATHODE MAKER (chemical) 554.585-010
CATHODE RAY TUBE SALVAGE PROCESSOR (electron. comp.) 725.684-026
Cathode Washer (chemical) 559.687-022
Cat Hooker (logging) 921.687-014
Cattle Dropper And Pritcher (meat products) 525.684-046
Cattle Header (meat products) 525.684-046
Cattle Rancher (agriculture) 410.161-018
Cattle Sticker (meat products) 525.684-050
Caul-Fat Puller (meat products) 525.687-010
Cauliflower-Harvesting-And-Packing Supervisor (agriculture) 409.131-010
caulker (any industry) 843.684-010
CAULKER (construction; ship-boat mfg.) term
Caulker (construction) 869.664-014
CAUSTICISER (chemical) 558.382-022
CAUSTICISER (paper & pulp) 558.382-018
caustic-liquor maker (paper & pulp) 558.382-018
Caustic Loader (chemical) 914.667-010
Caustic Mixer (textile) 550.585-018
CAUSTIC OPERATOR (paper & pulp) 558.485-010
CAUSTIC OPERATOR (plastic-synth.) 554.684-010
Caustic-Purification Operator (chemical) 559.382-018
caustic-room attendant (plastic-synth.) 551.685-138
Caustic-Strength Inspector (textile) 582.587-010
cd-manufacturing supervisor (chemical) 559.132-070
CD-MIXER (rubber reclaim.) 550.685-022
CD-MIXER HELPER (rubber reclaim.) 553.686-014
CD-REACTOR OPERATOR (chemical) 558.385-010
CD-REACTOR OPERATOR, HEAD (chemical) 558.362-014
CD-STORAGE-AND-MATERIALS MAKE-UP HELPER (chemical) 559.685-034
CD-STORAGE-AND-MATERIALS-MAKE-UP OPERATOR, HEAD (chemical) 559.167-010
Ceiling Cleaner (any industry) 381.687-018
ceiling installer (mfd. bldgs.) 869.684-038
cellar hand (leather mfg.) 589.686-026
Cellar Laborer (dairy products) 529.686-050
Cellar Pumper (beverage) 914.665-014
CELLAR SUPERVISOR (beverage) 529.131-010
cellar worker (beverage) 914.665-014
cell assembly, booker (elec. equip.) 727.687-038
cell assembly, pinner (elec. equip.) 727.687-038
cell attendant (chemical) 558.382-026
cell-attendant helper (chemical) 558.685-022
CELL CHANGER (chemical) 826.684-014
CELL CLEANER (chemical) 559.687-022
CELL COVERER (elec. equip.) 727.687-042
CELL-FEED-DEPARTMENT SUPERVISOR (smelt. & refin.) 519.130-010
CELL INSPECTOR (plastic-synth.) 556.684-010
CELL INSTALLER (chemical) 826.684-018

CELL MAKER (chemical) 844.681-010
cell-making supervisor, plastics sheets (plastic-synth.) 579.137-022
Cellophane-Bag-Machine Operator (paper goods) 649.685-014
CELLOPHANE-BATH MIXER (plastic-synth.) 550.585-014
CELLOPHANE-CASTING-MACHINE REPAIRER (plastic prod.) 629.281-014
Cellophane Sheeter (any industry) 699.682-018
Cellophane Wrapper, Machine (any industry) 920.685-078
cellophane-wrapping examiner (tobacco) 920.667-010
CELL PLASTERER (smelt. & refin.) 519.687-010
cell pourer (plastic-synth.) 556.684-018
CELL PREPARER (plastic-synth.) 556.687-014
CELL REPAIRER (chemical) 826.384-010
CELL REPAIRER (elec. equip.) 727.684-018
CELL STRIPPER (plastic-synth.) 556.686-014
cell stripper, final (plastic-synth.) 556.587-010
CELL TENDER (chemical) 558.382-026
CELL-TENDER HELPER (chemical) 558.685-022
CELL TESTER (chemical) 558.584-010
CELL TUBER, HAND (elec. equip.) 727.687-046
CELL TUBER, MACHINE (elec. equip.) 692.685-046
CELLULOID TRIMMER (toy-sport equip.) 732.684-046
CEMENT-BOAT-AND-BARGE LOADER (cement) 921.665-010
Cement-Car Dumper (construction) 579.665-014
Cement-Conveyor Operator (construction) 579.665-014
cementer (any industry) 795.687-014
cementer (any industry) 780.684-062
cementer (automotive ser.) 750.684-038
cementer (leather mfg.) 585.687-022
CEMENTER (optical goods) 711.684-014
Cementer (pen & pencil) 733.687-030
Cementer (ship-boat mfg.) 844.364-010
CEMENTER AND FOLDER, MACHINE (boot & shoe) 690.685-070
Cementer For Folding, Machine (boot & shoe) 690.686-018
CEMENTER, HAND (boot & shoe) 788.687-030
Cementer Helper (petrol. & gas) 939.684-018
CEMENTER, MACHINE (boot & shoe) 692.685-050
cementer, machine (leather prod.) 690.686-022
CEMENTER, MACHINE APPLICATOR (boot & shoe) 690.686-018
CEMENTER, MACHINE JOINER (boot & shoe) 690.685-074
Cementer, Oil Well (petrol. & gas) 939.462-010
cement finisher (construction) 844.364-010
cement-finisher apprentice (construction) 844.364-014
Cement-Finishing Supervisor (construction) 869.131-014
CEMENT FITTINGS MAKER (concrete prod.) 779.684-010
Cement-Gun Operator (concrete prod.; construction) 849.665-010
Cement Handler (construction) 579.665-014
CEMENT LOADER (cement) 921.565-010
CEMENT MASON (construction) 844.364-010
CEMENT-MASON APPRENTICE (construction) 844.364-014
Cement-Mason Helper (construction) 869.687-026
Cement Mason, Highways And Streets (construction) 869.664-014
Cement Mason, Maintenance (any industry) 844.364-010
cement mixer (cement) 570.685-010
CEMENT MIXER (rubber goods; rubber tire) 550.685-026
cement patcher (concrete prod.) 844.684-010
cement paver (construction) 844.364-010
Cement-Railroad-Car Loader (cement) 921.565-010
cement rubber (concrete prod.) 844.684-010
Cement-Sack Breaker (construction) 579.665-014
CEMENT SPRAYER HELPER, NOZZLE (concrete prod.; construction) 844.687-010
Cement Sprayer, Nozzle (concrete prod.; construction) 869.664-014
cement-storage worker (cement) 579.685-050
Cement-Tile Maker (concrete prod.) 579.685-042
Cement-Truck Loader (cement) 921.565-010
CEMETERY WORKER (real estate) 406.684-010
Census Clerk (government ser.) 216.382-062
Census Enumerator (government ser.) 205.367-054
Centerless-Grinder Tender (machine shop) 603.685-062
Centerless-Grinding-Machine Adjuster (ordnance) 638.261-030
centerless-grinding-machine operator (machine shop) 603.382-014
Center-Line-Cutter Operator (construction) 853.663-014
CENTER-MACHINE OPERATOR (sugar & conf.) 520.682-014
center maker, hand (sugar & conf.) 520.684-014
CENTER-PUNCH OPERATOR (recording) 690.685-078
Central-Control-Room Operator (utilities) 952.362-042
CENTRAL-OFFICE EQUIPMENT ENGINEER (tel. & tel.) 003.187-010
CENTRAL-OFFICE INSTALLER (tel. & tel.) 822.361-014
central-office maintainer (tel. & tel.) 822.281-014
CENTRAL-OFFICE OPERATOR (tel. & tel.) 235.462-010
CENTRAL-OFFICE-OPERATOR SUPERVISOR (tel. & tel.) 235.132-010
CENTRAL-OFFICE REPAIRER (tel. & tel.) 822.281-014
CENTRAL-OFFICE-REPAIRER SUPERVISOR (tel. & tel.) 822.131-010
Central-Office Supervisor (tel. & tel.) 822.131-010
central-service technician (medical ser.) 381.687-010
CENTRAL-SUPPLY WORKER (medical ser.) 381.687-010
CENTRIFUGAL-CASTING-MACHINE OPERATOR (jewelry-silver.) 502.682-018
CENTRIFUGAL-CASTING-MACHINE OPERATOR I (foundry) 514.685-010
CENTRIFUGAL-CASTING-MACHINE OPERATOR II (foundry) 514.685-014
CENTRIFUGAL-CASTING-MACHINE OPERATOR III (foundry) 514.562-010
CENTRIFUGAL-CASTING-MACHINE TENDER (button & notion) 556.385-010
CENTRIFUGAL-CASTING-MACHINE TENDER (plastic prod.) 556.685-090
CENTRIFUGAL-DRIER OPERATOR (chemical) 551.685-026
centrifugal-extractor operator (any industry) 581.685-038
CENTRIFUGAL OPERATOR (grain-feed mills; sugar & conf.) 521.682-010
Centrifugal-Screen Tender (paper & pulp) 533.685-022
Centrifugal Separator (sugar & conf.) 521.685-070
CENTRIFUGAL SPINNER (concrete prod.) 575.664-010
CENTRIFUGAL-STATION OPERATOR, AUTOMATIC (sugar & conf.) 521.585-010
centrifugal supervisor (sugar & conf.) 529.130-042
Centrifugal-Wax Molder (foundry; jewelry-silver.) 549.685-038
CENTRIFUGE OPERATOR (dairy products) 521.685-042
CENTRIFUGE OPERATOR (grain-feed mills) 521.685-046
CENTRIFUGE OPERATOR (oils & grease) 521.685-050
CENTRIFUGE OPERATOR (paint & varnish) 551.685-034
CENTRIFUGE OPERATOR (soap & rel.) 551.685-030
CENTRIFUGE OPERATOR (sugar & conf.) 529.682-010
Centrifuge Operator (beverage) 521.685-118
centrifuge operator (chemical) 551.685-026
CENTRIFUGE OPERATOR, PLASMA PROCESSING (medical ser.; pharmaceut.) 599.685-018
CENTRIFUGE-SEPARATOR OPERATOR (chemical) 551.685-038
CENTRIFUGE-SEPARATOR TENDER (nonfer. metal) 541.585-010
CEPHALOMETRIC ANALYST (medical ser.) 078.384-010
cephalometric technician (medical ser.) 078.384-010
cephalometric tracer (medical ser.) 078.384-010
CERAMIC CAPACITOR PROCESSOR (electron. comp.) 590.684-010
CERAMIC COATER, MACHINE (any industry) 509.685-022
CERAMIC DESIGN ENGINEER (profess. & kin.) 006.061-010
CERAMIC ENGINEER (profess. & kin.) 006.061-014
Ceramic-Maker Demonstrator (retail trade) 297.354-010
ceramic plater (any industry) 509.685-022
CERAMIC RESEARCH ENGINEER (profess. & kin.) 006.061-018
Ceramic Saw, Tender (brick & tile) 677.685-034
Ceramic Sprayer (brick & tile; pottery & porc.) 741.684-026
ceramics technician (protective dev.) 712.381-042
CERAMICS TEST ENGINEER (profess. & kin.) 006.061-022
cereal miller (grain-feed mills) 521.682-022
cereal popper (grain-feed mills) 523.382-010
CERTIFICATION AND SELECTION SPECIALIST (education) 099.167-010
Certified Financial Planner (profess. & kin.) 250.257-014
CERTIFIED MEDICATION TECHNICIAN (medical ser.) 355.374-014
certified public accountant (profess. & kin.) see ACCOUNTANT, CERTIFIED PUBLIC
certified welder (welding) see WELDER, CERTIFIED
CHAIN BUILDER, LOOM CONTROL (textile) 683.381-010
chainer (textile) 683.381-010
Chain-Forming-Machine Operator (forging) 612.462-010
Chain-Hoist Operator (mine & quarry) 921.663-026
chain-machine operator (button & notion) 692.685-270
CHAIN MAKER, HAND (jewelry-silver.) 700.381-010
chain maker, loom control (textile) 683.381-010
CHAIN MAKER, MACHINE (jewelry-silver.) 700.684-022
Chain Mender (jewelry-silver.) 735.687-014
Chain-Mortiser Operator (woodworking) 665.482-014
CHAIN OFFBEARER (saw. & plan.) 669.686-018
chain pegger (textile) 683.381-010
CHAIN REPAIRER (carpet & rug) 683.684-010
chain-saw mechanic (any industry) 625.281-030
CHAIN SAW OPERATOR (chemical; logging; millwork-plywood) 454.687-010
chain splitter (textile) 683.381-010
CHAINSTITCH SEWING MACHINE OPERATOR (garment) 786.682-054
CHAIN-TESTING-MACHINE OPERATOR (forging) 616.685-010
Chair Inspector (furniture) 763.687-026
CHAIR INSPECTOR AND LEVELER (furniture) 763.687-014
Chairperson, Scholarship And Loan Committee (education) 090.117-030
chair-post-machine operator (furniture) 669.682-022
Chair-Spring Assembler (furniture) 780.684-098
chair trimmer (furniture) 780.684-034
CHAIR UPHOLSTERER (furniture) 780.684-034
CHALK CUTTER (pen & pencil) 733.687-022
chalker, soles (boot & shoe) 788.687-010
CHALK-EXTRUDING-MACHINE OPERATOR (pen & pencil) 575.685-018
CHALK-MOLDING-MACHINE OPERATOR (pen & pencil) 575.685-022
Chamfering-Machine Operator (clock & watch) 606.685-030

CHAMFERING-MACHINE OPERATOR I (ordnance) 606.685-014
CHAMFERING-MACHINE OPERATOR II (ordnance) 606.685-018
Champagne Maker (beverage) 183.161-014
chancellor (education) 090.117-034
Chandelier Maker (light. fix.) 600.380-010
Change-Booth Cashier (amuse. & rec.) 211.462-010
CHANGE-HOUSE ATTENDANT (any industry) 358.687-010
Change-of-Address Clerk (clerical) 206.387-034
changeover operator (carpet & rug) 683.687-030
CHANGE PERSON (amuse. & rec.) 211.467-034
Channel Cementer, Insole, Machine (boot & shoe) 690.686-018
Channel Cementer, Outsole, Machine (boot & shoe) 690.686-018
CHANNELER, INSOLE (boot & shoe) 690.685-086
Channeler, Outsole (boot & shoe) 690.685-086
channeling-machine operator (mine & quarry) 930.383-010
CHANNELING-MACHINE RUNNER (mine & quarry) 930.383-010
Channel Installer (struct. metal) 809.684-010
CHANNEL INSTALLER (wood. container) 764.687-046
channel-lip stiffener, insoles (boot & shoe) 788.687-062
CHANNEL OPENER, OUTSOLES (boot & shoe) 690.685-082
Channel Rebuilder (smelt. & refin.) 630.684-010
Channel Rougher (boot & shoe) 690.685-046
channel turner (boot & shoe) 690.685-082
chaperon (any industry) 187.167-186
CHAPERON (personal ser.) 359.667-010
Chaplain (profess. & kin.) 120.107-010
Character Actor (amuse. & rec.) 150.047-010
Character Actress (amuse. & rec.) 150.047-010
Charcoal-Briquette-Machine Operator (fabrication, nec) 549.662-010
CHARCOAL BURNER, BEEHIVE KILN (chemical) 563.682-010
charcoal unloader (chemical) 569.686-034
CHAR-CONVEYOR TENDER (sugar & conf.) 529.685-050
Char Conveyor Tender, Cellar (sugar & conf.) 529.685-050
CHAR-DUST CLEANER AND SALVAGER (sugar & conf.) 529.687-038
CHAR-FILTER OPERATOR (sugar & conf.) 521.365-010
CHAR-FILTER-OPERATOR HELPER (sugar & conf.) 521.687-034
CHAR-FILTER-TANK TENDER, HEAD (grain-feed mills) 521.665-010
charge-account authorizer (clerical) 249.367-022
CHARGE-ACCOUNT CLERK (clerical) 205.367-014
charge-account identification clerk (retail trade) 241.367-030
Charge-Accounts-Audit Clerk (clerical) 210.382-010
charge attendant (medical ser.) 355.377-014
charge-gang weigher (nonfer. metal) 509.687-022
charge loader (oils & grease) 921.685-030
CHARGE-MACHINE OPERATOR (chemical) 921.662-014
CHARGE PREPARATION TECHNICIAN (electron. comp.) 590.384-010
charger (chemical) 558.687-010
charger (oils & grease) 521.685-242
charger (steel & rel.) 504.665-014
charger (steel & rel.) 512.683-010
charger-car operator (steel & rel.) 519.683-014
CHARGER I (jewelry-silver.) 740.684-010
CHARGER II (jewelry-silver.) 700.687-026
CHARGER-OPERATOR HELPER (steel & rel.) 504.686-010
CHARGER OPERATOR (steel & rel.) 504.665-014
charging-board operator (svc. ind. mach.) 827.485-010
charging-car operator (steel & rel.) 519.683-014
Charging-Crane Operator I (foundry; steel & rel.) 921.663-010
Charging-Crane Operator II (foundry; steel & rel.) 921.663-042
CHARGING-MACHINE OPERATOR (steel & rel.) 512.683-010
charging manipulator (forging) 612.683-010
charging operator (chemical) 559.565-010
Charging-Plug Placer (elec. equip.) 727.687-026
CHAR PULLER (grain-feed mills; sugar & conf.) 521.687-030
charrer (wood. container) 764.684-014
charrer helper (wood. container) 764.687-034
charring-room worker, barrel (wood. container) 764.684-014
charring-room-worker helper, barrel (wood. container) 764.687-034
CHART CALCULATOR (utilities) 214.487-010
CHART CHANGER (clerical) 221.584-010
CHART CLERK (clerical) 221.382-010
chart clerk (petrol. refin.; pipe lines; utilities) 216.685-010
Chart Clerk, Chief (clerical) 221.132-010
chart collector (clerical) 221.584-010
CHARTER (amuse. & rec.) 249.367-018
Charter-Boat Operator (amuse. & rec.) 911.663-010
charter representative (motor trans.) 214.362-030
Charting Clerk (medical ser.) 245.362-010
CHASER (jewelry-silver.) 704.381-010
chaser (jewelry-silver.) 700.381-034
CHASER (logging) 921.667-014
chaser apprentice (jewelry-silver.) 700.381-038
chaser helper (jewelry-silver.) 700.687-050
CHASER, TAR (steel & rel.) 549.687-010
chassis driver (auto. mfg.) 806.283-014
Chassis Inspector (auto. mfg.) 806.687-018
Chassis Inspector (automotive ser.) 620.281-030
chassis mechanic (automotive ser.) 620.281-038
CHAUFFEUR (any industry) 913.663-010
CHAUFFEUR (domestic ser.) 359.673-010
Chauffeur, Airport Limousine (motor trans.) 913.463-018
CHAUFFEUR, FUNERAL CAR (personal ser.) 359.673-014
chauffeur, motorbus (motor trans.) 913.463-010
check-and-transfer beader (any industry) 509.687-014
CHECK CASHIER (business ser.) 211.462-026
check clerk (clerical) 209.687-010
check clerk (r.r. trans.) 209.367-054
checker (auto. mfg.) 806.687-018
checker (beverage) 522.687-010
CHECKER (chemical) 559.165-010
checker (clerical) 221.587-030
checker (electron. comp.) 726.684-022
checker (furniture) 739.687-110
CHECKER (laundry & rel.) 369.687-014
CHECKER (motor trans.) 919.687-010
checker (photofinishing) 976.687-014
checker (rubber reclaim.) 914.665-010
checker (stonework) 670.384-010
CHECKER (textile) 221.587-010
CHECKER, BAKERY PRODUCTS (bakery products) 222.487-010
CHECKER, DUMP GROUNDS (business ser.) 219.367-010
checkerer, hand (ordnance) 761.381-034
CHECKER, FILM TESTS (photo. appar.) 714.687-010
CHECKER I (clerical) 222.687-010
CHECKER II (clerical) 209.687-010
CHECKER-IN (boot & shoe) 221.587-014
CHECKERING-MACHINE ADJUSTER (ordnance) 669.360-010
checkering-machine operator (ordnance) 665.685-034
checker, product design (auto. mfg.) 017.261-010
Check Grader (woodworking) 669.687-030
Check Imprinter (print. & pub.) 651.362-010
checking clerk (clerical) 222.687-018
checking department supervisor (photofinishing) 976.137-014
Check Inspector (electron. comp.) 726.381-010
Checkout Mechanic, Hydraulic And Rigging (aircraft mfg.) 806.261-050
CHECK PILOT (air trans.) 196.263-022
CHECKROOM ATTENDANT (any industry) 358.677-010
CHECKROOM CHIEF (any industry) 358.137-010
check viewer (mine & quarry) 168.267-074
CHECK WEIGHER (ordnance) 737.687-026
CHECK WRITER (retail trade) 219.382-010
CHEESE BLENDER (dairy products) 520.487-010
cheese cooker (dairy products) 529.361-018
CHEESE CUTTER (dairy products) 529.585-010
cheese cutter (tobacco) 521.685-298
CHEESE GRADER (dairy products) 529.387-010
CHEESEMAKER (dairy products) 529.361-018
CHEESEMAKER HELPER (dairy products) 529.682-014
cheese-pancake roller (food prep., nec) 520.687-014
Cheese Production Supervisor (dairy products) 529.131-014
CHEESE SPRAYER (sugar & conf.) 524.685-014
CHEF (hotel & rest.) 313.131-014
chef (r.r. trans.) 315.381-018
chef assistant (hotel & rest.) 313.131-026
Chef, Broiler Or Fry (hotel & rest.) 313.131-014
chef de cuisine (hotel & rest.) 187.161-010
CHEF DE FROID (hotel & rest.) 313.281-010
chef, department (hotel & rest.) see SPECIALTY CHEF
Chef, French (hotel & rest.) 313.131-014
Chef, German (hotel & rest.) 313.131-014
chef, head (hotel & rest.) 187.161-010
Chef, Italian (hotel & rest.) 313.131-014
CHEF, PASSENGER VESSEL (water trans.) 315.137-010
Chef, Saucier (hotel & rest.) 313.131-014
chef, station (hotel & rest.) see SPECIALTY CHEF
chef, under (hotel & rest.) 313.131-026
chemical-building worker (plastic-synth.) see CHEMICAL DEPARTMENT WORKER
chemical checker (textile) 582.587-010
CHEMICAL COMPOUNDER (chemical) 559.682-018
CHEMICAL-COMPOUNDER HELPER (chemical) 550.687-010
CHEMICAL-DEPARTMENT WORKER (plastic-synth.) term
chemical dependency attendant (medical ser.) 355.377-014
CHEMICAL DESIGN ENGINEER, PROCESSES (profess. & kin.) 008.061-014
CHEMICAL ENGINEER (profess. & kin.) 008.061-018
CHEMICAL-ENGINEERING TECHNICIAN (profess. & kin.) 008.261-010
Chemical-Engineering Technician, Prototype-Development (profess. & kin.) 008.261-010
CHEMICAL-EQUIPMENT SALES ENGINEER (profess. & kin.) 008.151-010

CHEMICAL-ETCHING PROCESSOR (aircraft mfg.) 704.381-014
CHEMICAL-LABORATORY CHIEF (profess. & kin.) 022.161-010
CHEMICAL-LABORATORY TECHNICIAN (profess. & kin.) 022.261-010
chemical-milling processor (aircraft mfg.) 704.381-014
Chemical Mixer (pharmaceut.) 550.685-090
CHEMICAL MIXER (photofinishing) 550.485-010
CHEMICAL MIXER (textile) 550.585-018
chemical operator (chemical) 590.464-010
chemical operator (plastic-synth.) see CHEMICAL DEPARTMENT WORKER
chemical operator (smelt. & refin.) 511.382-010
CHEMICAL OPERATOR I (chemical) term
CHEMICAL OPERATOR II (chemical) 558.685-062
CHEMICAL OPERATOR III (chemical) 559.382-018
CHEMICAL PREPARER (chemical; electron. comp.) 550.685-030
CHEMICAL-PROCESSING SUPERVISOR (pharmaceut.) 559.130-010
CHEMICAL-RADIATION TECHNICIAN (government ser.) 015.261-010
CHEMICAL RECLAMATION EQUIPMENT OPERATOR (electron. comp.) 558.685-058
CHEMICAL RESEARCH ENGINEER (profess. & kin.) 008.061-022
CHEMICAL-STRENGTH TESTER (textile) 582.587-010
CHEMICAL-TEST ENGINEER (profess. & kin.) 008.061-026
chemical weigher (any industry) 550.684-014
CHEMIST (profess. & kin.) 022.061-010
Chemist, Analytical (profess. & kin.) 022.061-010
chemist, biological (profess. & kin.) 041.061-026
Chemist, Clinical (profess. & kin.) 041.061-026
Chemist, Enzymes (profess. & kin.) 041.061-026
CHEMIST, FOOD (profess. & kin.) 022.061-014
Chemist, Inorganic (profess. & kin.) 022.061-010
CHEMIST, INSTRUMENTATION (profess. & kin.) 022.261-018
Chemist, Organic (profess. & kin.) 022.061-010
Chemist, Pharmaceutical (profess. & kin.) 041.061-026
Chemist, Physical (profess. & kin.) 022.061-010
Chemist, Proteins (profess. & kin.) 041.061-026
Chemist, Steroids (profess. & kin.) 041.061-026
CHEMIST, WASTEWATER-TREATMENT PLANT (profess. & kin.) 022.261-022
CHEMIST, WATER PURIFICATION (waterworks) 022.281-014
chenille-machine operator (carpet & rug; tex. prod., nec) 687.682-014
chenille-machine operator (carpet & rug; textile) 687.685-018
CHERRY CUTTER (can. & preserv.) 524.687-010
Cherry Dipper (sugar & conf.) 524.684-010
Cherry Grower (agriculture) 403.161-010
Cherry Packer (agriculture; wholesale tr.) 920.687-134
CHERRY-PICKER OPERATOR (construction) 921.663-014
Cherry Sorter (agriculture; can. & preserv.; wholesale tr.) 529.687-186
Chestnut Tanner (leather mfg.) 582.482-018
CHEST-PAINTING AND SEALING SUPERVISOR (ordnance) 749.137-010
chest-painting leader (ordnance) 749.137-010
chicken-and-fish cleaner (hotel & rest.) 316.684-010
Chicken Cleaner (meat products) 525.687-074
Chicken Dresser (meat products) 525.687-070
chicken fancier (agriculture) 411.161-014
Chicken Vaccinator (agriculture) 411.684-014
CHICK GRADER (agriculture) 411.687-010
CHICK SEXER (agriculture) 411.687-014
CHICLE-GRINDER FEEDER (sugar & conf.) 521.686-018
chief (any industry) see SUPERVISOR
Chief, Airport Safety And Security (government ser.) 375.167-034
CHIEF BANK EXAMINER (government ser.) 160.167-046
chief chemist (profess. & kin.) 022.161-010
chief clerk (any industry) 169.167-034
chief clerk (government ser.) 375.137-022
CHIEF CLERK, MEASUREMENT DEPARTMENT (petrol. & gas; pipe lines) 221.132-010
CHIEF CLERK, PRINT SHOP (clerical) 207.137-010
Chief Clerk, Shelter (nonprofit org.) 249.137-010
chief clerk, yard office (r.r. trans.) 910.367-014
CHIEF COMPUTER PROGRAMMER (profess. & kin.) 030.167-010
chief console operator (clerical) 213.132-010
CHIEF CONTROLLER (government ser.) 193.167-010
Chief Controller, Center (government ser.) 193.167-010
Chief Controller, Station (government ser.) 193.167-010
Chief Controller, Tower (government ser.) 193.167-010
Chief Cruiser (forestry) 459.387-010
CHIEF DISPATCHER (petrol. & gas) 939.137-010
chief dispatcher (utilities) 952.137-010
chief, dog license inspector (nonprofit org.) 379.137-014
CHIEF DRAFTER (profess. & kin.) 007.261-010
Chief Electroencephalographic Technologist (medical ser.) 078.362-022
chief engineer (any industry) 959.131-010
chief engineer (government ser.) 373.117-010
CHIEF ENGINEER (petrol. & gas; pipe lines) 010.167-010
chief engineer (profess. & kin.) 019.167-014
chief engineer, broadcasting operations (radio-tv broad.) 003.167-030
Chief Engineer, Drilling And Recovery (petrol. & gas) 010.167-010
Chief Engineer, Pipe-Line (petrol. & gas) 010.167-010
Chief Engineer, Production (petrol. & gas) 010.167-010
CHIEF ENGINEER, RESEARCH (petrol. & gas) 010.161-010
CHIEF ENGINEER, WATERWORKS (waterworks) 005.167-010
CHIEF, FISHERY DIVISION (government ser.) 188.117-018
chief gauger (petrol. & gas; petrol. refin.; pipe lines) 914.134-010
chief information officer (profess. & kin.) 109.067-010
CHIEF INSPECTOR (office machines) 706.131-018
Chief Librarian, Branch (library) 100.127-010
CHIEF LIBRARIAN, BRANCH OR DEPARTMENT (library) 100.127-010
Chief Librarian, Circulation Department (library) 100.127-010
Chief Librarian, Extension Department (library) 100.127-010
Chief Librarian, General Reference Department (library) 100.127-010
Chief Librarian, Music Department (library) 100.127-010
Chief Librarian, Periodical Reading Room (library) 100.127-010
Chief Librarian, Readers' Advisory Service (library) 100.127-010
Chief Librarian, Work With Blind (library) 100.127-010
CHIEF LOAD DISPATCHER (utilities) 952.137-010
chief lock-operator (water trans.) 911.131-014
chief-maintenance supervisor (utilities) 862.137-014
chief, nuclear medicine technologist (medical ser.) 078.131-010
Chief of Field Operations (government ser.) 373.117-010
CHIEF OF NUCLEAR MEDICINE (medical ser.) 070.117-010
CHIEF OF PARTY (profess. & kin.) 018.167-010
chief of production (real estate) 186.167-086
chief of vital statistics (government ser.) 188.167-022
chief operating engineer (utilities) 184.167-166
CHIEF OPERATOR (chemical) 558.260-010
chief operator (petrol. refin.) 549.132-030
Chief Operator, Ammonium Sulfate (chemical) 558.260-010
chief operator, hydroformer (petrol. refin.) 549.132-030
Chief Operator, Purification And Reaction (chemical) 558.260-010
Chief Operator, Reformer (chemical) 558.260-010
Chief Operator, Synthesis (chemical) 558.260-010
Chief Ophthalmic Technician (medical ser.) 078.361-038
CHIEF PETROLEUM ENGINEER (petrol. & gas) 010.161-014
CHIEF PILOT (air trans.) 196.167-010
Chief Planner (profess. & kin.) 199.167-014
Chief Polysomnographic Technician (medical ser.) 078.362-042
chief power dispatcher (utilities) 184.167-150
CHIEF PROJECTIONIST (motion picture) 960.132-010
chief, radiology (medical ser.) 078.162-010
chief, relay tester (utilities) 729.131-014
Chief, Reservoir Engineering (petrol. & gas) 010.167-010
chief steward/stewardess (hotel & rest.) 310.137-018
chief technician (any industry) 823.131-010
CHIEF TECHNOLOGIST, NUCLEAR MEDICINE (medical ser.) 078.131-010
chief, vendor quality (any industry) 012.167-062
CHIEF WARDEN (government ser.) 188.167-018
child-care attendant (any industry) 359.677-010
CHILD-CARE ATTENDANT, SCHOOL (personal ser.) 355.674-010
child-care leader (any industry) 359.677-018
child-day-care center worker (any industry) 359.677-018
Child Day Care Program Supervisor (government ser.) 168.167-090
child development specialist (social ser.) 195.227-018
CHILD MONITOR (domestic ser.) 301.677-010
Child Psychologist (profess. & kin.) 045.061-010
CHILDREN'S ATTENDANT (amuse. & rec.) 349.677-018
CHILDREN'S LIBRARIAN (library) 100.167-018
CHILDREN'S TUTOR (domestic ser.) 099.227-010
Children's Tutor, Nursery (domestic ser.) 099.227-010
children's zoo caretaker (amuse. & rec., museums) 412.674-014
CHILD SUPPORT OFFICER (government ser.) 195.267-022
Chili-Pepper Grinder (food prep., nec) 521.685-326
CHILLER OPERATOR (chemical) 551.685-042
CHILLER TENDER (meat products) 523.585-014
CHILLING-HOOD OPERATOR (meat products) 523.685-018
Chimney Builder, Brick (construction) 861.381-018
Chimney Builder, Reinforced Concrete (construction) 801.361-014
chimney cleaner (any industry) 891.687-010
CHIMNEY ERECTOR (construction) term
CHIMNEY REPAIRER (business ser.) 899.364-010
Chimney Repairer (construction) 869.381-030
CHIMNEY SUPERVISOR, BRICK (construction) 861.131-014
CHIMNEY SWEEP (any industry) 891.687-010
Chinchilla Farmer (agriculture) 410.161-014
CHINCHILLA-MACHINE OPERATOR (textile) 585.685-022
CHIN-STRAP CUTTER (hat & cap) 686.685-010
Chin-Strap Maker (hat & cap) 699.685-018
Chin-Strap Sewer (hat & cap) 784.682-014
chip (amuse. & rec.) 343.467-010
chip applier (paint & varnish; print. & pub.) 641.685-030
CHIP-APPLYING-MACHINE TENDER (paint & varnish; print. & pub.) 641.685-030

CHIP-BIN CONVEYOR TENDER (chemical; paper & pulp) 921.685-022
Chip-Crusher Operator (nonfer. metal) 519.686-010
chip deliverer (chemical; paper & pulp) 921.685-022
Chip Drier (nonfer. metal) 519.686-010
chip mixer (wood prod., nec) 560.465-010
CHIP-MIXING-MACHINE OPERATOR (wood prod., nec) 560.465-010
CHIPPER (chemical; paper & pulp; saw. & plan.) 564.685-014
chipper (logging) 564.662-010
chipper (musical inst.) 730.684-026
chipper (paint & varnish) 559.684-022
Chipper I (any industry) 705.684-030
Chipper II (any industry) 809.684-026
CHIPPING-MACHINE OPERATOR (wood prod., nec) 564.682-010
chip separator (ordnance) 694.585-010
chip-silo tender (chemical; paper & pulp) 921.685-022
CHIP TESTER (paper & pulp) 539.387-010
CHIP TUNER (musical inst.) 730.684-026
CHIP UNLOADER (paper & pulp) 921.663-018
CHIP WASHER (beverage) 522.686-010
chiropodist (medical ser.) 079.101-022
chiropractic (medical ser.) 079.101-010
CHIROPRACTOR (medical ser.) 079.101-010
CHIROPRACTOR ASSISTANT (medical ser.) 079.364-010
Chiseler, Head (meat products) 525.684-034
Chisel Grinder (any industry) 603.664-010
Chisel-Mortiser Operator (woodworking) 665.482-014
chisel worker (stonework) 771.381-014
CHLORINATOR OPERATOR (chemical) 558.382-030
Chlorine-Cell Tender (chemical) 558.382-026
chlorine operator (chemical) 559.362-018
chlorine-plant operator (chemical) 559.362-018
Chlorobutadiene-Scrubber Operator (chemical) 559.382-034
CHLOROPRENE OPERATOR (chemical) term
Chocolate Coater (sugar & conf.) 524.684-010
chocolate-coating-machine operator (bakery products) 524.685-026
Chocolate-Drops-Machine Operator (sugar & conf.) 520.685-078
chocolate finisher (sugar & conf.) 521.682-034
chocolate-finisher operator (sugar & conf.) 521.682-034
Chocolate-Machine Operator (bakery products; sugar & conf.) 524.382-014
chocolate maker (bakery products; grain-feed mills) 523.685-022
chocolate-mixer operator (bakery products; grain-feed mills) 523.685-022
Chocolate Molder (sugar & conf.) 520.687-018
CHOCOLATE MOLDER, MACHINE (sugar & conf.) 529.685-054
Chocolate-Peanut Coating-Machine Operator (sugar & conf.) 524.382-010
CHOCOLATE-PRODUCTION-MACHINE OPERATOR (sugar & conf.) 529.382-014
chocolate refiner (sugar & conf.) 521.682-034
chocolate-refining roller (sugar & conf.) 521.682-034
CHOCOLATE TEMPERER (bakery products; grain-feed mills) 523.685-022
CHOCOLATE TEMPERER (sugar & conf.) 523.682-010
choir leader (profess. & kin.) 152.047-010
CHOKE REAMER (ordnance) 606.685-022
CHOKE SETTER (logging) 921.687-014
chop-and-frame operator (button & notion) 692.685-034
CHOPPED-STRAND OPERATOR (textile) 680.685-022
CHOPPER (chemical) 564.687-010
chopper (hat & cap) 585.685-046
chopper (logging) 454.384-010
chopper and cracker feeder (rubber goods; rubber reclaim.) 555.685-030
chopper feeder (textile) 680.685-102
CHOPPING-MACHINE OPERATOR (meat products) 520.685-066
CHORAL DIRECTOR (profess. & kin.) 152.047-010
CHOREOGRAPHER (amuse. & rec.) 151.027-010
chore tender (agriculture) 421.687-010
Chorus Dancer (amuse. & rec.) 151.047-010
CHRISTIAN SCIENCE NURSE (profess. & kin.) 129.107-010
CHRISTIAN SCIENCE PRACTITIONER (profess. & kin.) 129.107-014
CHRISTMAS-TREE CONTRACTOR (any industry) 162.117-010
CHRISTMAS-TREE FARM WORKER (forestry) 451.687-010
CHRISTMAS-TREE GRADER (forestry) 451.687-014
Chrome Cleaner (any industry) 709.687-010
Chrome-Tanning-Drum Operator (leather mfg.) 582.482-018
Chromium Plater (electroplating) 500.380-010
CHRONOGRAPH OPERATOR (ordnance) 739.484-010
CHRONOMETER ASSEMBLER AND ADJUSTER (clock & watch) 715.381-038
CHRONOMETER-BALANCE-AND-HAIRSPRING ASSEMBLER (clock & watch) 715.381-042
Chuck Boner (meat products) 525.684-010
CHUCKING-AND-BORING-MACHINE OPERATOR (furniture) 669.682-022
CHUCKING-AND-SAWING-MACHINE OPERATOR (woodworking) 669.682-026
chucking-lathe operator (machine shop) 604.380-010
CHUCKING-MACHINE OPERATOR (woodworking) 665.382-010
Chucking-Machine Setter, Multiple Spindle, Vertical (machine shop) 604.380-014
CHUCKING-MACHINE SET-UP OPERATOR (machine shop) 604.380-010
CHUCKING-MACHINE SET-UP OPERATOR, MULTIPLE SPINDLE, VERTICAL (machine shop) 604.380-014
Chucking-Machine Set-Up Operator, Tool (machine shop) 604.280-022
CHURNER (oils & grease) 520.565-010
CHURN OPERATOR, MARGARINE (oils & grease) 520.685-070
CHURN TENDER (plastic-synth.) 550.685-034
chute blaster (mine & quarry; smelt. & refin.) 933.687-010
chute feeder (millwork-plywood; paper & pulp; saw. & plan.) 921.686-022
chute feeder (tobacco) 529.686-038
CHUTE LOADER (mine & quarry) 932.687-010
chute tapper (mine & quarry; smelt. & refin.) 933.687-010
chute worker (construction) see WHEELER
Chute Worker (laundry & rel.) 361.687-018
Ciato-Counter Molder (boot & shoe) 690.685-102
Ciato-Lumite Injector (boot & shoe) 690.685-278
cicerone (amuse. & rec.; personal ser.) 353.363-010
cigar bander, hand (tobacco) 920.687-030
CIGAR BRANDER (tobacco) 920.685-046
cigarette and assembly-machine inspector (tobacco) 529.666-014
cigarette and assembly machine operator (tobacco) 529.685-066
CIGARETTE-AND-FILTER CHIEF INSPECTOR (tobacco) 529.367-010
Cigarette-Boxing-Machine Operator (tobacco) 920.665-010
Cigarette-Carton Sealer (tobacco) 920.685-074
cigarette examiner (tobacco) 529.567-010
CIGARETTE-FILTER-MAKING-MACHINE OPERATOR (tobacco) 529.685-062
CIGARETTE INSPECTOR (tobacco) 529.567-010
CIGARETTE-LIGHTER REPAIRER (any industry) 709.684-034
cigarette-making examiner (tobacco) 529.567-010
CIGARETTE-MAKING-MACHINE CATCHER (tobacco) 529.666-014
CIGARETTE-MAKING-MACHINE HOPPER FEEDER (tobacco) 529.686-018
CIGARETTE-MAKING-MACHINE OPERATOR (tobacco) 529.685-066
CIGARETTE-PACKAGE EXAMINER (tobacco) 920.667-010
CIGARETTE-PACKING-MACHINE OPERATOR (tobacco) 920.685-050
CIGARETTE TESTER (tobacco) 529.387-014
CIGARETTE VENDOR (hotel & rest.) 291.457-010
cigar-head holer (tobacco) 529.685-058
cigar-head pegger (tobacco) 529.685-058
cigar-head perforator (tobacco) 529.685-058
CIGAR-HEAD PIERCER (tobacco) 529.685-058
cigar-head puncher (tobacco) 529.685-058
cigar-head stringer (tobacco) 529.685-058
CIGAR INSPECTOR (tobacco) 529.687-042
CIGAR MAKER (tobacco) 790.684-014
CIGAR MAKER, LONG-FILLER MACHINE (tobacco) term
CIGAR PACKER (tobacco) 790.687-014
cigar packer and grader (tobacco) 790.687-014
cigar packer and picker (tobacco) 790.687-014
cigar packer and shader (tobacco) 790.687-014
cigar packer and sorter (tobacco) 790.687-014
cigar-packing examiner (tobacco) 529.687-042
cigar patcher (tobacco) 790.684-018
cigar roller (tobacco) 790.684-022
cigar sorter (tobacco) 790.687-014
Cigar-Tobacco Rehandler (tobacco) 522.687-026
CIGAR-WRAPPER TENDER, AUTOMATIC (tobacco) 529.685-286
Cinder-Block Mason (construction) 861.381-018
Cinder-Crane Operator I (foundry; steel & rel.) 921.663-010
Cinder-Crane Operator II (foundry; steel & rel.) 921.663-042
cinematographer (motion picture; radio-tv broad.) 143.062-010
cinetechnician (motion picture; photo. appar.) 714.281-018
cinetechnician supervisor (motion picture; photo. appar.) 714.131-010
Cinnamon Grinder (food prep., nec) 521.685-326
cipher expert (government ser.) 199.267-014
CIRCLE BEVELER (glass products) 673.685-034
CIRCLE-CUTTING SAW OPERATOR (wood. containers) 669.685-026
CIRCLE EDGER (glass products) 673.685-038
circuit board inspector (electron. comp.) 726.684-062
Circuit Breaker Assembler (elec. equip.) 729.687-010
Circuit-Breaker Mechanic (utilities) 829.261-018
Circuit-Breaker Supervisor (utilities) 829.131-014
circuit rider (wholesale tr.) 162.167-014
circuit walker (wholesale tr.) 162.167-014
Circular-Gang-Saw Operator (saw. & plan.) 667.682-030
Circular-Head-Saw Operator (saw. & plan.) 667.662-010
Circular-Knife Cutter, Machine (any industry) 781.684-014
Circular Knitter (knitting) 685.665-014
Circular-Knitter Helper (knitting) 685.686-014
Circular-Resaw Operator (saw. & plan.; wood. container) 667.682-058
Circular-Ripsaw Operator (woodworking) 667.682-066
Circular-Saw Filer (any industry) 701.381-014
CIRCULAR SAW OPERATOR (construction) 869.682-010

circular-saw operator (machine shop) 607.682-010
CIRCULAR SAWYER HELPER (stonework) 677.486-010
CIRCULAR SAWYER, STONE (stonework) 677.462-010
circular-shear operator (any industry) 615.482-030
Circular-Tank Cooper (wood. container) 764.684-030
CIRCULATING PROCESS INSPECTOR (elec. equip.) 829.361-018
circulation clerk (library) 249.367-046
CIRCULATION CLERK (print. & pub.) 209.362-010
Circulation Librarian (library) 100.127-014
CIRCULATION-SALES REPRESENTATIVE (print. & pub.) 299.167-010
circulator (any industry) 914.682-010
CIRCUS AGENT (amuse. & rec.) 191.117-022
CIRCUS LABORER (amuse. & rec.) 969.687-010
CIRCUS-TRAIN SUPERVISOR (amuse. & rec.) 910.137-018
C-Iron Worker (wood prod., nec) 563.687-010
CISTERN-ROOM OPERATOR (beverage) 520.382-010
cistern-room working supervisor (beverage) 520.382-010
Citrus-Fruit Packer (agriculture; wholesale tr.) 920.687-134
Citrus-Fruit-Packing Grader (agriculture; wholesale tr.) 529.687-186
City Auditor (government ser.) 160.167-030
city carrier (government ser.) 230.367-010
City-Distribution Clerk (print. & pub.) 209.362-010
city editor (print. & pub.) 132.037-014
City-Library Director (library) 100.117-010
city planner (profess. & kin.) 199.167-014
CITY PLANNING AIDE (profess. & kin.) 199.364-010
city-planning engineer (profess. & kin.) 199.167-014
City-Plant Supervisor (tel. & tel.) 822.131-010
city service supervisor (motor trans.) 184.117-018
CIVIL ENGINEER (profess. & kin.) 005.061-014
CIVIL ENGINEERING TECHNICIAN (profess. & kin.) 005.261-014
Civil Preparedness Coordinator (government ser.) 188.117-022
CIVIL PREPAREDNESS OFFICER (government ser.) 188.117-022
Civil Preparedness Operations Officer (government ser.) 188.117-022
Civil Preparedness Public Information Officer (government ser.) 169.127-010
Civil Preparedness Radiological Officer (government ser.) 188.117-022
Civil Preparedness Supply Specialist (government ser.) 188.117-022
CIVIL PREPAREDNESS TRAINING OFFICER (government ser.) 169.127-010
CIVIL-SERVICE CLERK (government ser.) 205.362-010
CLAIM ADJUSTER (business ser.; insurance) 241.217-010
CLAIM AGENT (petrol. & gas; pipe lines) 191.167-014
claim attorney (insurance) 110.117-014
Claim Clerk (clerical) 209.362-034
CLAIM EXAMINER (business ser.; insurance) 241.267-018
CLAIM EXAMINER (insurance) 168.267-014
CLAIMS ADJUDICATOR (government ser.) 169.267-010
claims administrator (insurance) 241.137-018
claims agent, right-of-way (any industry) 191.117-046
Claims And Insurance Information Clerk, Automobile Club (nonprofit org.) 237.267-010
CLAIMS CLERK (auto. mfg.) 241.387-010
claims clerk (r.r. trans.) 219.362-066
CLAIMS CLERK I (insurance) 241.362-010
CLAIMS CLERK II (insurance) 205.367-018
Claims Collector (clerical) 241.367-010
Clam-Bed Laborer (fishing & hunt.) 446.687-014
Clam-Bed Worker (fishing & hunt.) 446.684-014
Clam Digger (fishing & hunt.) 446.684-014
Clam Dredge Operator (fishing & hunt.) 446.663-010
Clam Grader (can. & preserv.) 529.687-098
Clam Grower (fishing & hunt.) 446.161-014
Clamp-Carrier Operator (woodworking) 762.687-034
Clamper (construction) 869.687-026
CLAMPER (pen & pencil) 733.687-026
CLAMPER (print. & pub.) 979.382-010
CLAMPER (woodworking) 669.685-030
CLAMP-JIG ASSEMBLER (woodworking) 762.687-022
CLAMP REMOVER (millwork-plywood) 569.687-010
Clamshell Operator I (any industry) 921.663-058
Clamshell Operator II (any industry) 921.663-062
Clam Shucker (can. & preserv.) 521.687-122
Clam-Shucking-Machine Tender (can. & preserv.) 529.685-214
CLAM SORTER (fishing & hunt.) 446.687-010
Clam Steamer (can. & preserv.) 529.685-214
Clam Tonger (fishing & hunt.) 446.684-014
Clam Treader (fishing & hunt.) 446.684-014
Clarification Operator (chemical) 551.685-122
CLARIFIER (beverage) 521.685-058
CLARIFIER (grain-feed mills; oils & grease) 521.685-054
clarifier (oils & grease) 529.382-026
clarifier (plastic-synth.) 559.687-038
Clarifier Operator (dairy products) 529.382-018
CLARIFIER OPERATOR (smelt. & refin.) 511.662-010
CLARIFIER-OPERATOR HELPER (smelt. & refin.) 511.667-010
CLARIFYING-PLANT OPERATOR (textile) 955.382-010
clasp machine operator (paper goods) 649.685-070
CLASSIFICATION CLERK (clerical) 206.387-010
CLASSIFICATION-CONTROL CLERK (clerical) 210.382-030
classification inspector (r.r. trans.) 910.387-014
CLASSIFIED-AD CLERK I (print. & pub.) 247.367-010
CLASSIFIED-AD CLERK II (print. & pub.) 247.387-022
classified-copy-control clerk (print. & pub.) 247.387-022
CLASSIFIER (laundry & rel.) 361.687-014
CLASSIFIER (library) 100.367-014
CLASSIFIER (rubber goods) 753.467-010
CLASSIFIER OPERATOR (smelt. & refin.) 511.562-010
CLASSIFIER TENDER (smelt. & refin.) 511.685-014
classifying-machine operator (button & notion) 692.685-182
clay burner (petrol. refin.) 573.685-014
Clay Coating-Machine Tender (paper & pulp; paper goods) 534.682-018
Clay-Dry-Press Helper (brick & tile) 575.686-010
Clay-Dry-Press-Mixer Operator (brick & tile) 570.382-010
Clay-Dry-Press Operator (brick & tile) 575.662-010
Clay Hoister (cement) 850.683-018
clay-house worker (glass mfg.) 579.664-010
claying-up worker (pottery & porc.) 573.687-010
CLAY MAKER (brick & tile; pottery & porc.) 570.482-010
CLAY MIXER (brick & tile) 570.685-014
clay mixer (brick & tile; pottery & porc.) 570.482-010
clay mixer (paper & pulp) 530.685-010
Clay Mixer (steel & rel.) 570.685-070
CLAY MODELER (any industry) 779.281-010
Clay-Plant Treater (petrol. refin.) 549.362-014
Clay-Products Glazer (elec. equip.) 599.685-026
clay puddler (brick & tile) 570.687-010
CLAY ROASTER (petrol. refin.) 573.685-014
CLAY-STAIN MIXER (brick & tile) 773.487-010
CLAY-STRUCTURE BUILDER AND SERVICER (glass mfg.) 579.664-010
clay temperer (brick & tile; pottery & porc.) 570.382-010
clay thrower (pottery & porc.) 774.381-010
clay washer (brick & tile; pottery & porc.) 570.482-010
cleaner (any industry) 599.687-030
cleaner (any industry) 503.685-030
Cleaner (electroplating) 500.686-010
CLEANER (engraving) 704.687-010
CLEANER (fabrication, nec) 739.687-058
CLEANER (mfd. bldgs.) 869.687-018
cleaner (mine & quarry) 939.687-014
cleaner (optical goods) 716.687-010
CLEANER (ordnance) 503.684-010
Cleaner (tinware) 709.686-010
CLEANER AND POLISHER (any industry) 709.687-010
CLEANER AND PREPARER (elec. equip.) 721.687-010
cleaner assistant (laundry & rel.) 362.686-010
cleaner, carpet and upholstery (any industry) 389.664-010
CLEANER, COMMERCIAL OR INSTITUTIONAL (any industry) 381.687-014
CLEANER, FURNITURE (furniture) 709.687-014
cleaner-greaser (ordnance) 736.687-010
cleaner helper (laundry & rel.) 362.686-010
CLEANER, HOME RESTORATION SERVICE (any industry) 389.664-010
CLEANER, HOSPITAL (medical ser.) 323.687-010
CLEANER, HOUSEKEEPING (any industry) 323.687-014
CLEANER I (any industry) master
CLEANER II (any industry) 919.687-014
CLEANER III (any industry) 911.687-014
CLEANER, INDUSTRIAL (any industry) 381.687-018
CLEANER, LABORATORY EQUIPMENT (any industry) 381.687-022
cleaner operator (any industry) 503.362-010
cleaner operator (any industry) 389.683-010
CLEANER, SIGNS (fabrication, nec) 739.687-062
CLEANER-TOUCH-UP WORKER (office machines) 706.587-010
CLEANER, WALL (any industry) 381.687-026
CLEANER, WINDOW (any industry) 389.687-014
cleaning-machine operator (glass mfg.; glass products) 673.685-030
CLEANING MACHINE TENDER, SEMICONDUCTOR WAFERS (electron. comp.) 590.685-062
cleaning operator (any industry) 891.687-010
CLEAN-OUT DRILLER (petrol. & gas) 930.363-010
CLEAN-OUT-DRILLER HELPER (petrol. & gas) 930.664-014
CLEAN-RICE BROKER (grain-feed mills) 162.167-018
CLEAN-RICE GRADER AND REEL TENDER (grain-feed mills) 521.685-062
Clean-Up Helper, Banquet (hotel & rest.) 311.677-018
clean-up supervisor (construction) 869.133-010
clean-up worker (any industry) 381.687-014
clean-up worker (any industry) 381.687-018
clean-up worker (brick & tile) 579.667-010
CLEARANCE CUTTER (clock & watch) 615.685-014
clearing-distribution clerk (financial) 216.382-026

CLEARING-HOUSE CLERK (financial) 216.382-026
Clearing Inspector (office machines) 706.387-014
CLEARING SUPERVISOR (construction) 869.133-010
CLEAT FEEDER (wood. container) 669.687-010
Cleat Layer (wood. container) 669.686-014
Cleat Nailer (wood. container) 669.682-058
Cleat Notcher (wood. container) 669.382-010
cleat thrower (wood. container) 669.687-010
cleaver (jewelry-silver.) 770.381-014
CLERGY MEMBER (profess. & kin.) 120.107-010
CLERICAL-METHODS ANALYST (profess. & kin.) 161.267-010
clerk, cable transfer (tel. & tel.) 219.387-010
CLERK, GENERAL (clerical) 209.562-010
clerk, general office (clerical) 219.362-010
clerk guide (personal ser.) 359.573-010
CLERK-OF-SCALES (amuse. & rec.) 153.467-010
clerk-operator (tel. & tel.) 239.362-010
clerk, personal service bureau (tel. & tel.) 219.362-022
clerk, private wire-billing and control (tel. & tel.) 219.362-022
clerk, rating (tel. & tel.) 214.587-010
CLERK, ROUTE (tel. & tel.) 235.562-010
clerk-stenographer (clerical) 202.362-014
CLERK, TELEGRAPH SERVICE (tel. & tel.) 219.362-022
CLERK, TELEVISION PRODUCTION (radio-tv broad.) 221.367-086
clerk, travel reservations (clerical) 238.362-014
CLERK-TYPIST (clerical) 203.362-010
clicker (any industry) 699.682-022
clicker-machine operator (hat & cap) 686.685-038
clicker operator (any industry) 699.682-022
clicking-machine operator (any industry) 699.682-022
CLICKING-MACHINE OPERATOR (boot & shoe; glove & mit.; leather prod.) 789.382-010
CLINCHING-MACHINE OPERATOR (elec. equip.) 616.685-014
clinical counselor (profess. & kin.) 045.107-050
Clinical Engineer (profess. & kin.) 019.061-010
Clinical Instructor (education) 090.227-010
Clinical Pathologist (medical ser.) 070.061-010
CLINICAL PSYCHOLOGIST (profess. & kin.) 045.107-022
CLINICAL SOCIOLOGIST (profess. & kin.) 054.107-010
CLINICAL THERAPIST (profess. & kin.) 045.107-050
Clinical Transplant Coordinator (medical ser.) 079.151-010
clinical veterinarian (medical ser.) 073.061-030
clinic clerk (medical ser.) 205.362-018
CLIP-AND-HANGER ATTACHER (glass products) 739.684-038
clip baker (optical goods) 713.687-010
CLIP-BOLTER AND WRAPPER (metal prod., nec) 709.684-038
CLIP COATER (optical goods) 713.687-010
CLIP-LOADING-MACHINE ADJUSTER (ordnance) 694.362-010
CLIP-LOADING-MACHINE FEEDER (ordnance) 694.686-010
CLIPPER (any industry) 789.687-030
CLIPPER (boot & shoe) 753.687-010
clipper (carpet & rug) 781.684-046
CLIPPER (fabrication, nec) 739.685-022
clipper (hat & cap) 585.685-046
Clipper (laundry & rel.) 361.687-018
clipper and turner (any industry) 789.687-182
CLIPPER AND TURNER (furniture) 780.687-014
clipper, automatic (knitting) 684.686-010
CLIPPER, AUTOMATIC (millwork-plywood) 663.585-010
Clipper, Counters (rubber goods) 753.687-010
CLIPPER, MACHINE (knitting) 684.686-010
clipper offbearer (millwork-plywood) 663.686-018
Clipper, Outside Back Stay (rubber goods) 753.687-010
Clipper, Tongues (rubber goods) 753.687-010
clipping marker (business ser.) 249.387-022
clipping, stringing, and turning machine tender (tex. prod., nec) 689.585-018
Clip Riveter (metal prod., nec) 706.684-090
clip wrapper (metal prod., nec) 709.684-038
CLOCK ASSEMBLER (clock & watch) 715.684-058
CLOCKER (amuse. & rec.) 153.367-010
clocker (optical goods) 716.687-026
clockmaker (clock & watch) 715.281-010
clockmaker apprentice (clock & watch) 715.281-014
closer (boot & shoe) 690.682-082
Closer (glove & mit.) 784.682-010
Closer (metal prod., nec) 616.682-034
CLOSER (real estate) 186.167-074
Closer (toy-sport equip.) 787.682-054
closet builder (mfd. bldgs.) 869.684-038
Closing Supervisor (metal prod., nec) 691.130-014
Cloth-And-Leather-Department Supervisor (leather prod.) 783.132-010
CLOTH-BALE HEADER (textile) 782.687-018
Cloth Baler (textile) 920.685-010
cloth beamer (textile) 689.685-046
Cloth-Bin Packer (textile) 922.687-058
Cloth-Bleaching-Range Back-Tender (textile) 589.686-010
Cloth-Bleaching-Range Operator, Chief (textile) 589.562-010
Cloth-Bleaching-Range Tender (textile) 589.685-026
Cloth-Bleaching Supervisor (textile) 589.130-010
CLOTH-BOLT BANDER (textile) 920.587-010
Cloth-Brushing-And-Sueding Supervisor (textile) 589.130-010
cloth calender (nonmet. min.) 583.585-010
cloth changer (beverage) 529.667-014
cloth classer (textile) 689.387-010
Cloth-Colors Examiner (textile) 781.687-014
cloth-covered-helmet puller (hat & cap) 689.685-074
cloth coverer (hat & cap) 689.685-074
Cloth-Cutting Inspector (textile) 781.687-014
cloth-cutting-machine operator (any industry) 781.684-014
CLOTH DESIGNER (profess. & kin.) 142.061-014
Cloth-Desizing-Range Operator, Chief (textile) 589.562-010
Cloth-Desizing-Range Tender (textile) 589.685-026
CLOTH DOFFER (textile) 689.686-058
CLOTH-DOUBLING-AND-WINDING-MACHINE OPERATOR (textile) 689.685-050
CLOTH DRIER (knitting) 580.685-014
cloth drier (textile) 589.686-010
cloth-dry-can operator (textile) 581.685-022
Cloth-Dyeing-Range Operator, Chief (textile) 589.562-010
Cloth-Dyeing-Range Tender (textile) 589.685-026
cloth dyer (textile) 582.665-014
cloth dyer (textile) 582.582-010
CLOTH-EDGE SINGER (textile) 585.687-018
clothes designer (profess. & kin.) 142.061-018
Clothes-Drier Assembler (house. appl.) 827.684-010
Clothes-Drier Repairer (any industry) 827.261-010
clothes marker (laundry & rel.) 369.687-026
CLOTHESPIN-DRIER OPERATOR (woodworking) 563.685-014
CLOTHESPIN-MACHINE OPERATOR (woodworking) 667.686-010
clothes wringer (any industry) 581.685-038
CLOTH EXAMINER, HAND (narrow fabrics) 689.687-022
CLOTH EXAMINER, HAND (textile) 781.687-014
CLOTH EXAMINER, MACHINE (textile) 689.685-038
CLOTH FEEDER (textile) 589.686-014
CLOTH FINISHER (carpet & rug; textile) 589.130-010
Cloth-Finishing-Range Back-Tender (textile) 589.686-010
CLOTH-FINISHING-RANGE OPERATOR (textile) 589.665-014
CLOTH-FINISHING-RANGE OPERATOR, CHIEF (textile) 589.562-010
CLOTH-FINISHING-RANGE TENDER (textile) 589.685-026
CLOTH FOLDER (textile) term
CLOTH FOLDER, HAND (tex. prod., nec; textile) 589.687-014
cloth folder, machine (textile) 689.585-014
cloth folder, machine (textile) 689.685-078
CLOTH FRAMER (textile) 689.687-026
CLOTH GRADER (textile) 689.387-010
CLOTH-GRADER SUPERVISOR (textile) 689.134-010
cloth handler (textile) 689.686-058
Cloth Hauler (textile) 929.687-030
CLOTHING MAKER (garment) term
clothing operator (garment) see CLOTHING MAKER
CLOTHING-PATTERN PREPARER (garment) 781.287-010
Clothing Sorter (nonprofit org.) 222.387-054
cloth inspector (carpet & rug; textile) 683.684-034
CLOTH INSPECTOR (knitting) 685.687-010
cloth inspector (textile) 689.685-038
Cloth Joiner, Tents (tex. prod., nec) 787.682-058
Cloth-Laminating Supervisor (textile) 589.130-010
cloth layer (any industry) 781.687-058
cloth layer-out (textile) 781.687-038
CLOTH MEASURER, MACHINE (garment; textile) 589.685-022
Cloth-Mercerizer Back-Tender (textile) 589.686-010
CLOTH-MERCERIZER OPERATOR (textile) 584.685-014
Cloth-Mercerizing Supervisor (textile) 589.130-010
Cloth-Napping Supervisor (textile) 589.130-010
Cloth Neutralizer (textile) 582.685-030
Cloth Numberer (tex. prod., nec) 787.682-022
cloth opener, hand (textile) 589.685-090
cloth pattern maker (profess. & kin.) 142.061-014
cloth picker (carpet & rug; textile) 689.684-010
cloth presser (textile) 584.685-042
CLOTH PRINTER (any industry) 652.382-010
Cloth Printer (ordnance) 651.685-022
CLOTH-PRINTER HELPER (any industry) 652.686-010
Cloth-Printer Helper (tex. prod., nec) 586.686-022
CLOTH-PRINTING INSPECTOR (textile) 652.567-010
Cloth-Printing-Machine-Operator Helper (tex. prod., nec) 589.687-026
CLOTH REELER (textile) 689.685-042
cloth-roll winder (textile) 689.685-046
CLOTH SANDER (textile) 581.685-010
Cloth Seconds Sorter (textile) 789.687-146

CLOTH SHADER (garment; textile) 582.685-026
cloth shearer (carpet & rug; textile) 585.685-102
Cloth-Shearing Supervisor (textile) 589.130-010
cloth shrinker (textile) 587.685-018
CLOTH-SHRINKING-MACHINE OPERATOR (textile) 587.685-018
CLOTH-SHRINKING-MACHINE OPERATOR HELPER (textile) 587.686-010
Cloth-Shrinking Supervisor (textile) 589.130-010
CLOTH-SHRINKING TESTER (textile) 587.384-010
cloth sponger (textile) 587.685-018
cloth spreader (any industry) 781.687-058
cloth spreader (knitting) 580.685-014
CLOTH SPREADER, SCREEN PRINTING (textile) 652.687-010
CLOTH-STOCK SORTER (tex. prod., nec; textile) 789.687-034
cloth stretcher (textile) 580.685-066
CLOTH TEARER (garment) 781.687-018
CLOTH TESTER (garment; textile) 029.381-010
CLOTH TESTER, QUALITY (textile) 689.384-010
Cloth Trimmer, Hand (textile) 781.687-070
CLOTH TRIMMER, MACHINE (textile) 585.685-026
Cloth Washer (any industry) 361.685-018
Cloth-Washer Back-Tender (textile) 589.686-010
CLOTH-WASHER OPERATOR (textile) 582.685-030
Cloth Weigher (knitting) 222.387-074
CLOTH WINDER (textile) 689.685-046
CLOWN (amuse. & rec.) 159.047-010
club former (toy-sport equip.) 732.381-018
Clubhouse Attendant (amuse. & rec.) 358.677-014
Cluster-Bore Operator (woodworking) 666.382-010
Clutch Assembler (motor-bicycles) 806.684-094
CLUTCH REBUILDER (automotive ser.) 620.684-022
coach (amuse. & rec.) 153.227-010
coach (retail trade) see SPONSOR
Coach Cleaner (r.r. trans.) 919.687-014
COACH DRIVER (business ser.) 349.677-014
coach operator (motor trans.) 913.463-010
Coach-Player (amuse. & rec.) 153.117-010
COACH, PROFESSIONAL ATHLETES (amuse. & rec.) 153.227-010
coach wirer (auto. mfg.; vehicles, nec) 829.684-014
Coagulant Dipper (rubber goods) 556.685-030
COAGULATING-BATH MIXER (plastic-synth.) 550.684-010
coagulating-bath operator (plastic-synth.) 550.585-014
Coagulating-Drying Supervisor (plastic-synth.) 559.132-022
COAGULATION OPERATOR (plastic-synth.) 559.582-010
coagulator (plastic-synth.) 559.685-190
coal-and-ash supervisor (any industry) 921.137-010
Coal-Briquette-Machine Operator (fabrication, nec) 549.662-010
Coal-Conveyor Operator (any industry) 921.662-018
coal-cutting-machine operator (mine & quarry) 930.683-014
coal-drier operator (mine & quarry) 543.682-014
COAL-EQUIPMENT OPERATOR (utilities) 921.683-022
Coal Hauler (any industry) 902.683-010
coal inspector (mine & quarry) 579.484-010
Coal-Mine Inspector (mine & quarry) 168.267-074
Coal Passer (any industry) 929.687-030
COAL-PIPE-LINE OPERATOR (pipe lines) 914.362-010
Coal-Pulverizer Operator (any industry) 544.582-010
COAL SAMPLER (utilities) 922.687-038
coal-tower operator (water trans.) 921.683-074
coal-transport-and-mill operator (utilities) 544.665-010
COAL TRIMMER (water trans.) 911.687-018
COAL WASHER (mine & quarry) 541.382-010
coal-washer tender (mine & quarry) 541.382-010
COAL-YARD SUPERVISOR (any industry) 921.137-010
Coarse-Wire Drawer (nonfer. metal) 614.382-010
Coat Baster (garment; retail trade) 785.361-022
Coat Checker (any industry) 358.677-010
Coat Draper (garment) 781.684-026
Coated Fabric Cutter (tex. prod., nec) 699.682-026
COATER (business ser.) 503.685-010
coater (fabrication, nec) 590.685-014
COATER (pharmaceut.) 554.382-010
coater (photo. appar.) 534.582-010
coater (sugar & conf.) 524.382-010
COATER (textile) 584.682-010
coater (woodworking) 763.381-010
Coater, Asphalt (build. mat., nec) 554.682-022
COATER, BRAKE LININGS (nonmet. min.) 574.685-010
coater, carbon paper (pen & pencil) 534.682-014
coater, hand (wood prod., nec) 562.687-014
Coater Helper (tex. prod., nec) 586.686-022
COATER HELPER (textile) 584.665-010
COATER OPERATOR (any industry) 509.382-010
COATER OPERATOR (plastic-synth.) 554.585-014
COATER OPERATOR, INSULATION BOARD (wood prod., nec) 539.685-010
Coater, Slate (build. mat., nec) 554.682-022
COATER, SMOKING PIPE (fabrication, nec) 562.685-022
Coat Fitter (garment) 785.261-014
COAT-HANGER-SHAPER MACHINE OPERATOR (woodworking) 669.685-034
COATING-AND-BAKING OPERATOR (any industry) 554.685-014
COATING-AND-EMBOSSING-UNIT OPERATOR (tex. prod., nec; textile) 583.682-010
COATING EQUIPMENT OPERATOR, PRINTED CIRCUIT BOARDS (electron. comp.) 590.685-066
Coating-Line Checker (paper & pulp; wood prod., nec) 539.667-010
COATING-MACHINE FEEDER (leather prod.) 690.686-022
Coating-Machine Helper (sugar & conf.) 529.686-034
coating-machine operator (any industry) 599.685-046
COATING-MACHINE OPERATOR (carpet & rug; tex. prod., nec) 584.562-010
COATING-MACHINE OPERATOR (fabrication, nec) 590.685-014
COATING-MACHINE OPERATOR (galvanizing) 501.362-010
COATING-MACHINE OPERATOR (paper & pulp; paper goods) 534.682-018
COATING-MACHINE OPERATOR (pen & pencil) 692.685-054
COATING-MACHINE OPERATOR (sugar & conf.) 524.382-010
COATING-MACHINE OPERATOR, HARDBOARD (paper goods; wood prod., nec) 534.682-022
COATING-MACHINE-OPERATOR HELPER (fabrication, nec) 590.686-010
Coating-Machine-Operator Helper (paper & pulp; paper goods) 534.686-010
Coating-Machine-Operator Helper (tex. prod., nec) 589.687-026
COATING-MACHINE OPERATOR I (tex. prod., nec) 584.382-010
COATING-MACHINE OPERATOR II (tex. prod., nec) 584.685-018
Coating-Machine Operator, Metal Tags And Signs (fabrication, nec) 554.685-014
coating mixer (tinware) 509.485-010
COATING-MIXER SUPERVISOR (paper & pulp) 530.132-010
COATING-MIXER TENDER (paper & pulp) 530.685-010
COATING OPERATOR (chemical) 550.585-022
COATING OPERATOR (grain-feed mills) 524.685-018
Coating Supervisor (tex. prod., nec) 589.130-014
coat-insulator operator (nonfer. metal) 691.682-018
Coat Ironer, Hand (garment) 363.684-018
COAT JOINER, LOCKSTITCH (garment) 786.682-058
coat-operator, insulator (nonfer. metal) 691.682-018
Coat Padder (garment; retail trade) 785.361-022
Coat Presser (any industry) 363.682-018
Coat-Repair Inspector (retail trade) 783.387-010
Coat Tailor (garment) 785.261-014
COBBLER (boot & shoe) 788.381-010
cobbler (personal ser.) 365.361-014
Cobbler, McKay (boot & shoe) 788.381-010
Cobbler, Sole (boot & shoe) 788.381-010
Cobbler, Upper (boot & shoe) 788.381-010
Cob Borer (fabrication, nec) 669.685-094
COB SAWYER (fabrication, nec) 667.685-030
COCOA-BEAN CLEANER (sugar & conf.) 521.685-066
COCOA-BEAN-ROASTER HELPER (sugar & conf.) 523.666-010
COCOA-BEAN ROASTER I (sugar & conf.) 523.362-010
COCOA-BEAN ROASTER II (sugar & conf.) 523.380-010
COCOA-BUTTER-FILTER OPERATOR (sugar & conf.) 521.685-070
cocoa-milling-machine operator (sugar & conf.) 521.685-202
cocoa-mill operator (sugar & conf.) 521.685-074
COCOA-POWDER-MIXER OPERATOR (sugar & conf.) 520.685-074
COCOA-PRESS OPERATOR (sugar & conf.) 521.682-014
COCOA-ROOM OPERATOR (sugar & conf.) 521.685-074
Coconut-Candy Maker (sugar & conf.) 529.361-014
Coconut Cooker (sugar & conf.) 526.382-014
Coconut-Jelly Roller (sugar & conf.) 520.682-030
C.o.d. Audit Clerk (clerical) 210.382-010
C.O.D. Biller (clerical) 214.382-014
C.O.D. CLERK (clerical) 214.382-018
CODE AND TEST CLERK (financial) 209.667-018
code clerk (clerical) 203.582-018
CODE INSPECTOR (government ser.) 168.367-018
coding file clerk (clerical) 206.387-010
coffee blender (food prep., nec) 520.685-110
COFFEE GRINDER (food prep., nec) 521.685-078
COFFEE MAKER (hotel & rest.) 317.684-010
Coffee-Maker Servicer (any industry) 827.261-010
COFFEE ROASTER (food prep., nec) 523.682-014
COFFEE ROASTER, CONTINUOUS PROCESS (food prep., nec) 523.685-026
COFFEE-ROASTER HELPER (food prep., nec) 523.687-010
Coffee Server, Cafeteria Or Restaurant (hotel & rest.) 311.677-010
Coffee Taster (food prep., nec) 529.281-010
coffee-urn attendant (hotel & rest.) 317.684-010
COFFEE WEIGHER (food prep., nec) 529.687-046
Cofferdam-Construction Supervisor (construction) 860.131-018
coil assembler (elec. equip.) 721.484-010
COIL ASSEMBLER, MACHINE (furniture) 616.685-018
COIL BINDER (nonfer. metal) 619.687-010

coil cleaner (can. & preserv.) 529.687-054
COIL CONNECTOR (elec. equip.) 721.684-018
Coil-Connector Repairer (elec. equip.) 721.281-018
COILED-COIL INSPECTOR (light. fix.) 725.684-010
COILER (light. fix.) 725.687-014
coiler (metal prod., nec) 619.482-010
COILER (nonfer. metal; steel & rel.) 613.685-010
COILER (protective dev.) 712.687-014
COILER (tex. prod., nec) 681.685-034
coiler (wood. container) 619.682-034
coiler operator (nonfer. metal; steel & rel.) 613.685-010
COILER OPERATOR (steel & rel.) 613.382-010
coil fin assembler (svc. ind. mach.) 706.684-010
Coil Finisher (elec. equip.; electron. comp.) 724.684-026
Coil Former, Template (elec. equip.) 724.684-026
coil-machine operator (metal prod., nec) 616.485-014
Coil-Machine Supervisor (furniture) 616.130-022
coil placer (furniture) 780.684-098
COIL-REWIND-MACHINE OPERATOR (nonfer. metal) 619.685-030
COIL SHAPER (any industry) 724.684-022
Coil Sprayer (electron. comp.) 741.687-018
coil spreader (any industry) 724.684-022
coil-spring assembler (furniture) 780.684-098
Coil Strapper (steel & rel.) 920.587-018
Coil Taper (elec. equip.) 724.684-026
Coil Tester (elec. equip.) 729.684-058
coil tier (furniture) 616.685-018
COIL WINDER (elec. equip.; electron. comp.) 724.684-026
Coil Winder, Hand (electron. comp.) 724.684-026
Coil Winder, Open Slot (elec. equip.) 724.684-026
COIL WINDER, REPAIR (any industry) 724.381-014
Coil Winder, Strap (elec. equip.) 724.684-026
coin-box collector (business ser.; tel. & tel.) 292.687-010
COIN COLLECTOR (business ser.) 292.483-010
COIN-COUNTER-AND-WRAPPER (financial) 217.585-010
Coining-Press Operator (forging) 611.685-010
coining-press operator (nonfer. metal; steel & rel.) 617.685-038
COIN-MACHINE ASSEMBLER (svc. ind. mach.) 731.684-010
COIN-MACHINE COLLECTOR (business ser.; tel. & tel.) 292.687-010
COIN-MACHINE-COLLECTOR SUPERVISOR (clerical) 292.137-010
coin-machine operator (financial) 217.585-010
COIN-MACHINE-SERVICE REPAIRER (svc. ind. mach.) 639.281-014
Coin-Purse Assembler (leather prod.) 783.684-010
Coin-Purse Framer (leather prod.) 739.684-090
coin teller (financial) 217.585-010
Coin-Vault Guard (any industry) 372.667-034
COKE BURNER (steel & rel.) 543.682-010
COKE-CRUSHER OPERATOR (steel & rel.) 544.662-010
COKE DRAWER, HAND (steel & rel.) 543.687-010
COKE INSPECTOR (steel & rel.) 542.567-010
COKE LOADER (steel & rel.) 921.563-010
Coke-Oven Mason (steel & rel.) 861.381-026
Cold-Food Packer (hotel & rest.) 319.484-010
Cold-Header Operator (forging) 612.462-010
cold-meat chef (hotel & rest.) 313.361-034
Cold-Mill Inspector (steel & rel.) 619.381-010
Cold-Mill Operator (nonfer. metal) 613.462-018
COLD-MILL OPERATOR (steel & rel.) 613.662-018
Cold-Mill Supervisor (nonfer. metal) 619.132-014
Cold-Molding-Press Operator (plastic prod.) 556.682-014
Cold Patcher (construction) 869.687-026
COLD-PRESS LOADER (cutlery-hrdwr.) 701.687-018
cold-press operator (millwork-plywood) 569.685-058
COLD-ROLL INSPECTOR (plastic-synth.) 751.584-010
Cold-Roll Packer, Sheet Iron (steel & rel.) 921.663-042
cold-water machine operator (textile) 587.685-018
cold-working supervisor (ordnance) 619.130-010
cold-work operator (ordnance) 694.682-014
Collar-Band Creaser (garment) 583.685-042
COLLAR BASTER, JUMPBASTING (garment) 786.682-062
Collar Closer, Lockstitch (garment) 786.682-070
Collarette Separator (knitting) 789.687-030
Collar Feller (garment) 782.684-058
COLLAR FELLER, HANDSTITCHING MACHINE (garment) 786.682-066
collar-folder operator (garment) 580.685-018
Collar Fuser (garment) 363.682-018
Collar Knitter (knitting) 685.665-014
Collar Padder, Blindstitch (garment) 786.682-150
collar pointer (garment) 583.685-102
Collar Separator (knitting) 789.687-030
Collar Setter (garment; retail trade) 785.361-022
COLLAR SETTER, LOCKSTITCH (garment) 786.682-070
COLLAR SETTER, OVERLOCK (garment) 786.682-074
collar-shaper operator (garment) 580.685-018
Collar-Stay-Fuser Tender (garment) 583.685-046
Collar Tacker (garment) 782.684-058
collar-top turner (garment) 583.685-102
Collar Trimmer (garment) 699.685-014
Collar Trimmer (garment; knitting) 781.682-010
Collar Turner (garment) 789.687-182
COLLAR-TURNER OPERATOR (garment) 580.685-018
collateral placement officer (financial; insurance) 186.167-054
COLLATING-MACHINE OPERATOR (print. & pub.) 653.382-014
COLLATOR (print. & pub.) 653.687-010
COLLATOR, HAND (print. & pub.) 977.687-010
COLLATOR OPERATOR (clerical) 208.685-010
collection agent (clerical) 241.367-010
Collection-Card Clerk (clerical) 203.362-010
COLLECTION CLERK (clerical) 241.357-010
COLLECTION CLERK (financial) 216.362-014
collect-on-delivery clerk (clerical) 214.382-018
COLLECTOR (clerical) 241.367-010
COLLECTOR (knitting) 684.687-022
COLLET DRILLER (clock & watch) 715.684-062
COLLETER (clock & watch) 715.684-066
COLLET GLUER (clock & watch) 715.685-010
COLLET MAKER (clock & watch) 609.682-014
collier (chemical) 563.682-010
Colliery Clerk (mine & quarry) 219.362-010
collision estimator (automotive ser.) 620.261-018
color buffer (any industry) 705.684-014
COLOR-CARD MAKER (paint & varnish) 794.687-014
COLOR CHECKER, ROVING OR YARN (textile) 582.387-010
color consultant (profess. & kin.) 141.051-010
Color-Control Operator (print. & pub.) 651.362-030
Color Control Supervisor (chemical) 559.132-122
color corrector (print. & pub.) 972.281-010
color-depositing-machine tender (fabrication, nec) 652.665-014
COLOR DEVELOPER (paper & pulp) 530.261-010
COLOR DIPPER (textile) 652.687-014
Colored-Leather Setter (leather mfg.) 589.685-098
colored-liquid-plastic applier (glass products) 840.684-010
COLORER (brick & tile) 773.684-010
COLORER (print. & pub.) 970.681-014
COLORER, CITRUS FRUIT (wholesale tr.) 529.685-070
COLORER, HIDES AND SKINS (leather mfg.) 582.482-010
colorer, machine (leather mfg.) 582.482-010
COLOR EXPERT (profess. & kin.) 141.051-010
color finisher (leather prod.) 589.687-034
COLORING CHECKER (jewelry-silver.) 735.587-010
COLORING-MACHINE OPERATOR (hat & cap) 582.685-034
COLORIST (profess. & kin.) 022.161-014
colorist (profess. & kin.) 141.051-010
COLORIST, PHOTOGRAPHY (photofinishing) 970.381-010
Color-Laboratory Technician (photofinishing) 976.681-010
COLOR MAKER (chemical) 550.382-010
color maker (profess. & kin.) 022.161-014
COLOR MAKER (tex. prod., nec) 550.382-014
Color-Making Supervisor (chemical) 559.132-122
COLOR MATCHER (boot & shoe) 788.687-034
COLOR MATCHER (knitting) 582.261-010
COLOR MATCHER (leather mfg.; plastic-synth.; tex. prod., nec) 550.381-010
color matcher (paint & varnish) 550.381-014
color matcher (profess. & kin.) 022.161-014
COLOR MIXER (furniture) 589.464-010
color mixer (leather mfg.; plastic-synth.; tex. prod., nec) 550.381-010
Color Mixer (plastic prod.; plastic-synth.) 550.685-134
COLOR MIXER (textile) term
color-mixer assistant (textile) 550.687-014
color-mixer helper (any industry) 550.687-018
COLOR-PASTE MIXER (textile) 550.685-038
COLOR-PRINTER OPERATOR (photofinishing) 976.382-014
Color-Print Inspector (photofinishing) 976.687-014
Color Receiver (fabrication, nec) 555.685-050
color repairer (boot & shoe) 788.684-022
colors custodian (amuse. & rec.) 346.677-014
color-setting-machine operator (carpet & rug) 681.682-018
color shader (paint & varnish) 550.381-014
color-shop helper (any industry) 550.687-018
color specialist (profess. & kin.) 141.051-010
Color Sprayer (leather prod.) 584.687-014
COLOR STRAINER (textile) 550.687-014
Color-Straining-Bag Washer (textile) 361.685-018
color stripper (print. & pub.) 972.281-022
color-television console monitor (radio-tv broad.) 194.282-010
COLOR TESTER (smelt. & refin.) 511.667-014
color weigher (any industry) 550.684-014
COLOR WEIGHER (fabrication, nec) 590.487-010
Columnist (print. & pub.) 131.067-010
COLUMNIST/COMMENTATOR (print. & pub.; radio-tv broad.) 131.067-010

COLUMN PRECASTER (mfd. bldgs.) 869.667-010
Combat Operations Research Specialist (profess. & kin.) 059.167-010
COMBAT RIFLE CREWMEMBER (military ser.) 378.684-014
COMBAT SURVEILLANCE AND TARGET ACQUISITION CREWMEMBER (military ser.) 378.687-010
COMBAT SURVEILLANCE AND TARGET ACQUISITION NONCOMMISSIONED OFFICER (military ser.) 378.161-010
comb capper (food prep., nec) 521.687-070
Comber (leather mfg.) 589.686-022
Comber (meat products) 525.587-014
Comber Fixer (textile) 689.260-010
COMBER TENDER (textile) 680.685-118
Combination Operator (radio-tv broad.) 159.147-014
combination presser (laundry & rel.) 363.682-014
combination-saw operator (woodworking) 667.682-086
Combination Valving-And-Sewing-Machine Operator (paper goods) 641.685-094
Combination-Window Installer (construction) 860.381-022
Combine Inspector (agric. equip.) 624.361-010
combiner (hat & cap) 584.685-026
COMBINER OPERATOR (paper & pulp; paper goods) 534.682-026
Combiner-Operator Helper (paper & pulp; paper goods) 534.686-010
combiner-sheet operator (paper & pulp; paper goods) 534.682-026
combing-machine tender (tex. prod., nec) 680.685-034
combining-machine operator (knitting; textile) 584.682-014
COMBINING-MACHINE OPERATOR (plastic-synth.) 554.685-018
COMB-MACHINE OPERATOR (fabrication, nec) 640.685-022
combustion analyst (glass mfg.) 572.360-010
COMEDIAN (amuse. & rec.) 159.047-014
Comedy Diver (amuse. & rec.) 159.347-018
Comedy Writer (profess. & kin.) 131.067-026
comic (amuse. & rec.) 159.047-014
COMMAND AND CONTROL SPECIALIST (military ser.) 235.662-010
COMMANDER, IDENTIFICATION AND RECORDS (government ser.) 375.137-010
COMMANDER, INTERNAL AFFAIRS (government ser.) 375.167-050
COMMANDER, POLICE RESERVES (government ser.) 375.137-030
Commanding Officer, Automobile Section (government ser.) 375.167-022
commanding officer, detectives (government ser.) 375.167-022
commanding officer, garage (government ser.) 375.167-018
commanding officer, highway district (government ser.) 375.163-010
COMMANDING OFFICER, HOMICIDE SQUAD (government ser.) 375.167-010
COMMANDING OFFICER, INVESTIGATION DIVISION (government ser.) 375.167-014
COMMANDING OFFICER, MOTOR EQUIPMENT (government ser.) 375.167-018
COMMANDING OFFICER, MOTORIZED SQUAD (government ser.) 375.163-010
commanding officer, motor transport division (government ser.) 375.167-018
COMMANDING OFFICER, POLICE (government ser.) 375.137-034
commanding officer, precinct (government ser.) 375.167-034
commanding officer, radio division communications officer (government ser.) 193.167-018
Commanding Officer, Traffic Division (government ser.) 375.163-010
commanding officer, vehicle maintenance unit (government ser.) 375.167-018
commanding officer, vice squad (government ser.) 375.167-014
Commentator (radio-tv broad.) 131.067-010
Commercial Account Officer (financial) 186.267-018
commercial artist (profess. & kin.) 141.061-022
commercial artist, lettering (profess. & kin.) 970.661-014
COMMERCIAL DECORATOR (any industry) term
commercial decorator (any industry) 298.381-010
COMMERCIAL DESIGNER (profess. & kin.) 141.061-038
COMMERCIAL ENGINEER (radio-tv broad.) 003.187-014
COMMERCIAL INSTRUCTOR SUPERVISOR (tel. & tel.; utilities; water works) 239.137-010
COMMERCIAL LOAN COLLECTION OFFICER (financial) 186.167-078
Commercial Officer (government ser.) 188.117-106
commercial photographer (profess. & kin.) 143.062-030
commercial photographer apprentice (profess. & kin.) 143.062-018
commercial pilot (air trans.) 196.263-014
commercial representative (tel. & tel.) 253.257-010
commercial service representative (tel. & tel.; utilities) 253.357-010
commercial stripper (print. & pub.) 972.281-022
Commissary Agent (air trans.) 922.687-058
COMMISSARY ASSISTANT (amuse. & rec.; museums) 412.687-010
commissary helper (amuse. & rec.; museums) 412.687-010
COMMISSARY MANAGER (any industry) 185.167-010
COMMISSION AGENT, AGRICULTURAL PRODUCE (wholesale tr.) 260.357-010
COMMISSION AGENT, LIVESTOCK (wholesale tr.) 162.157-026
Commission Auditor (insurance) 210.382-010
COMMISSIONER, CONSERVATION OF RESOURCES (government ser.) 188.117-026
Commissioner, Iron Range Resources And Rehabilitation (government ser.) 188.117-026
COMMISSIONER OF CONCILIATION (government ser.) 188.217-010
commissioner of relocation services (government ser.) 188.167-070
COMMISSIONER, PUBLIC WORKS (government ser.) 188.117-030
commodities requirements analyst (aircraft mfg.) 012.167-082
Commodity-Industry Analyst (profess. & kin.) 050.067-010
COMMUNICATION-CENTER COORDINATOR (air trans.) 235.132-014
COMMUNICATION-CENTER OPERATOR (air trans.) 235.662-014
COMMUNICATIONS CONSULTANT (tel. & tel.) 253.157-010
Communications Consultant, Commercial Services (tel. & tel.) 253.157-010
Communications Consultant, Industrial Services (tel. & tel.) 253.157-010
Communications Consultant, Residential Services (tel. & tel.) 253.157-010
COMMUNICATIONS COORDINATOR (medical ser.) 239.167-010
COMMUNICATIONS ELECTRICIAN SUPERVISOR (any industry) 823.131-010
Communications-Equipment Supervisor (tel. & tel.) 722.131-010
Communications Manager (print. & pub.) 132.037-022
COMMUNICATIONS TECHNICIAN (education) 962.362-010
communication technician (any industry) 828.261-022
COMMUNITY DIETITIAN (profess. & kin.) 077.127-010
community health educator (profess. & kin.) 079.117-014
COMMUNITY ORGANIZATION WORKER (social ser.) 195.167-010
community placement worker (social ser.) 195.107-010
community planner (profess. & kin.) 001.061-018
community planning director, community chest (nonprofit org.) 187.167-234
COMMUNITY-RELATIONS-AND-SERVICES ADVISOR, PUBLIC HOUSING (social ser.) 195.167-014
community service consultant (social ser.) 195.167-010
COMMUNITY SERVICE OFFICER, PATROL (government ser.) 372.367-010
COMMUNITY-SERVICES-AND-HEALTH-EDUCATION OFFICER (government ser.) 079.167-010
COMMUNITY WORKER (government ser.) 195.367-018
COMMUTATOR ASSEMBLER (elec. equip.) 724.684-030
Commutator Inspector (house. appl.) 729.384-022
commutator presser (elec. equip.) 724.684-030
Commutator Repairer (any industry) 721.281-018
Commutator Tester (elec. equip.) 729.684-058
Commutator Undercutter (elec. equip.) 724.684-030
Commutator V-Ring Assembler (elec. equip.) 724.684-030
COMPACT ASSEMBLER (jewelry-silver.) 739.687-066
compact-press operator (nonfer. metal; steel & rel.) 617.685-038
COMPANION (domestic ser.) 309.677-010
company doctor (medical ser.) 070.101-078
COMPANY LABORER (mine & quarry) 939.687-014
company laundry worker (any industry) 361.684-014
Company Manager (amuse. & rec.) 191.117-038
company pilot (any industry) 196.263-030
COMPARATOR OPERATOR (any industry) 699.384-010
COMPARISON SHOPPER (retail trade; wholesale tr.) 296.367-014
COMPENSATOR (paper goods) 640.685-026
COMPILER (clerical) 209.387-014
COMPLAINT CLERK (boot & shoe) 221.387-014
COMPLAINT EVALUATION OFFICER (government ser.) 375.367-014
COMPLAINT EVALUATION SUPERVISOR (government ser.) 375.137-038
COMPLAINT INSPECTOR (utilities) 829.261-010
complaint supervisor (utilities) 953.137-018
COMPO CASTER (wood prod., nec) 769.381-010
Compo-Conveyor Operator (boot & shoe) 690.685-074
component insertion operator (comm. equip.; electron. comp.; office machines) 726.685-014
Component Lead Former (electron. comp.) 728.684-022
composer (print. & pub.) 971.382-018
COMPOSER (profess. & kin.) 152.067-014
composing-machine operator (machinery mfg.; print. & pub.) 650.582-014
composing-machine operator (print. & pub.) 650.582-010
composing-machine operator (print. & pub.) 203.382-018
COMPOSING-ROOM MACHINIST (print. & pub.) 627.261-010
Composite Assembler (aircraft mfg.) 754.684-042
Composite Bond Worker (aircraft mfg.) 754.684-042
Composite Laminator (aircraft mfg.) 754.684-042
Composite Layup Worker (aircraft mfg.) 754.684-042
Composites Fabricator And Assembler (aircraft mfg.) 754.381-018
Composite Trim And Drill Worker (aircraft mfg.) 754.684-042
composite worker (aircraft mfg.) 754.684-042
composition-board-press operator (paper & pulp) 535.685-010
Composition Mixer (chemical) 550.382-018
COMPOSITION MIXER (fabrication, nec) 550.665-014
COMPOSITION-ROLL MAKER AND CUTTER (rubber goods) 559.482-010
Composition Roofer (construction) 866.381-010
composition-siding worker (construction) 863.684-010
COMPOSITION-STONE APPLICATOR (construction) 861.361-010
COMPOSITION-WEATHERBOARD APPLIER (construction) 863.684-010

COMPOSITOR (print. & pub.) 973.381-010
COMPOSITOR APPRENTICE (print. & pub.) 973.381-014
COMPOUND-COATING-MACHINE OFFBEARER (tinware) 509.666-010
COMPOUNDER (chemical) 550.685-050
compounder (chemical; pharmaceut.) 550.685-090
COMPOUNDER (petrol. refin.) 540.382-010
COMPOUNDER (pharmaceut.; soap & rel.) 550.685-046
Compounder (rubber reclaim.) 929.687-062
compounder (textile) 550.585-018
COMPOUNDER, CORK (wood prod., nec) 560.587-010
COMPOUNDER, FLAVORINGS (beverage) 529.381-010
COMPOUNDER HELPER (petrol. refin.) 540.686-010
compounder helper (plastic prod.; plastic-synth.) 550.586-010
compounder, sterile products (pharmaceut.) 559.682-054
COMPOUND FILLER (chemical) 550.686-014
COMPOUND FINISHER (chemical) 550.685-042
compound-machine operator (boot & shoe) 690.685-278
Compound Mixer (elec. equip.; electron. comp.) 726.687-022
COMPOUND MIXER (tinware) 509.485-010
COMPOUND WORKER (recording) 559.686-010
Compressed-Air-Pile-Driver Operator (construction) 859.682-018
COMPRESSED-GAS-PLANT WORKER (chemical) 549.587-010
compressed-gas tester (chemical) 549.364-010
COMPRESSION-MOLDING-MACHINE OPERATOR (elec. equip.; plastic prod.) 556.682-014
Compression-Molding-Machine Setter (plastic prod.) 556.380-010
COMPRESSION-MOLDING-MACHINE TENDER (plastic prod.) 556.685-022
COMPRESSOR (elec. equip.; pharmaceut.) 556.682-022
Compressor Assembler (machinery mfg.) 801.361-010
compressor engineer (any industry) 950.685-010
compressor-house operator (utilities) 953.382-010
Compressor Mechanic, Bus (automotive ser.) 620.261-010
compressor operator (any industry) 950.685-010
Compressor Operator (construction) 869.665-010
compressor operator-adjuster (ordnance) 535.482-010
Compressor Operator I (chemical) 559.362-018
COMPRESSOR OPERATOR II (chemical) 559.685-038
Compressor Operator, Portable (any industry) 950.685-010
compressor repairer (railroad equip.) 622.684-010
Compressor-Station Engineer (pipe lines) 950.382-014
COMPRESSOR-STATION ENGINEER, CHIEF (pipe lines) 914.132-010
Compress Trucker (agriculture) 929.687-030
comptroller (profess. & kin.) 160.167-058
Computer-Assisted Retoucher, Photoengraving (print. & pub.) 970.381-030
COMPUTER-CONTROLLED-COLOR-PHOTOGRAPH-PRINTER OPERATOR (photofinishing) 976.380-010
COMPUTERIZED ENVIRONMENTAL CONTROL INSTALLER (electron. comp.) 828.281-026
Computer-Laboratory Technician (profess. & kin.) 003.161-014
computer-numerical-control nesting operator (aircraft mfg.) 007.362-010
COMPUTER OPERATOR (clerical) 213.362-010
COMPUTER-PERIPHERAL-EQUIPMENT OPERATOR (clerical) 213.382-010
COMPUTER PROCESSING SCHEDULER (clerical) 221.362-030
COMPUTER PROGRAMMER (profess. & kin.) 030.162-010
computer-programmer, numerical control (any industry) 007.167-018
COMPUTER SECURITY COORDINATOR (profess. & kin.) 033.162-010
COMPUTER SECURITY SPECIALIST (profess. & kin.) 033.362-010
computer systems engineer (profess. & kin.) 033.167-010
COMPUTER SYSTEMS HARDWARE ANALYST (profess. & kin.) 033.167-010
COMPUTER TYPESETTER-KEYLINER (print. & pub.) 979.382-026
CONCAVING-MACHINE OPERATOR (boot & shoe) 585.685-030
Concaving-Machine Operator (elec. equip.) 692.482-010
CONCENTRATOR OPERATOR (smelt. & refin.) 511.462-010
Concert Or Lecture Hall Manager (amuse. & rec.) 191.117-014
conche loader and unloader (sugar & conf.) 526.382-010
CONCHE OPERATOR (sugar & conf.) 526.382-010
Conciliation-Court Judge (government ser.) 111.107-010
CONCILIATOR (profess. & kin.) 169.207-010
CONCRETE-BATCHING AND MIXING-PLANT SUPERVISOR (construction) 570.132-010
Concrete-Batch-Plant Operator (concrete prod.; construction) 570.682-014
Concrete-Block Mason (construction) 861.381-018
Concrete-Bucket Hooker (construction) 921.667-022
Concrete-Bucket Loader (construction) 579.665-014
Concrete Bucket Unloader (construction) 579.665-014
CONCRETE-BUILDING ASSEMBLER (mfd. bldgs.) 869.664-010
CONCRETE CHIPPER (construction) term
Concrete-Conveyor Operator (construction) 579.665-014
CONCRETE CURER (construction) term
CONCRETE-FENCE BUILDER (construction) 869.681-010
concrete finisher (construction) 844.364-010
concrete-finisher apprentice (construction) 844.364-014
Concrete-Finishing-Machine Operator (construction) 853.663-014
concrete floater (construction) 844.364-010
CONCRETE-FLOAT MAKER (concrete prod.) 869.687-022
Concrete-Gun Operator (construction) 849.665-010
Concrete-Hopper Operator (construction) 579.665-014
Concrete-Mixer Loader, Truck Mounted (construction) 579.665-014
concrete-mixer-operator helper (construction) 579.665-014
CONCRETE-MIXING-TRUCK DRIVER (construction) 900.683-010
Concrete-Panel Installer (construction; retail trade) 863.684-014
concrete-paving-form grader (construction) 850.683-022
CONCRETE-PAVING-MACHINE OPERATOR (construction) 853.663-014
Concrete-Paving Supervisor (construction) 869.131-014
Concrete-Pile-Driver Operator (construction) 859.682-018
CONCRETE-PIPE MAKER (concrete prod.) 779.684-014
CONCRETE-PIPE-MAKING-MACHINE OPERATOR (concrete prod.) 575.665-010
concrete pointer (concrete prod.) 844.684-010
concrete polisher (concrete prod.) 844.684-010
Concrete-Pouring Supervisor (construction) 869.131-014
CONCRETE PUDDLER (construction) term
Concrete-Pump Operator (construction) 849.665-010
Concrete-Pump-Operator Helper (construction) 869.687-026
CONCRETE RUBBER (concrete prod.) 844.684-010
CONCRETE SCREEDER (construction) term
CONCRETE SCULPTOR (concrete prod.) 777.281-010
concrete shoveler (construction) see CONCRETE PUDDLER
concrete spader (construction) see CONCRETE PUDDLER
concrete spreader (construction) see CONCRETE PUDDLER
CONCRETE-STONE FABRICATOR (concrete prod.) 575.461-010
CONCRETE-STONE FINISHER (concrete prod.) 844.461-010
concrete tamper (construction) see CONCRETE PUDDLER
CONCRETE-VAULT MAKER (concrete prod.) 579.684-010
Concrete-Vibrator Operator (construction) 869.687-026
Concrete-Wall-Grinder Operator (construction) 869.664-014
CONCRETING SUPERVISOR (construction) 869.131-014
CONDENSER SETTER (smelt. & refin.) 512.687-010
CONDENSER-TUBE TENDER (smelt. & refin.) 511.685-018
CONDITIONER TENDER (textile) 587.685-022
CONDITIONER-TUMBLER OPERATOR (laundry & rel.) 361.685-010
conditioning-machine operator (tobacco) 522.682-014
conditioning-room worker (textile) 587.685-022
CONDOMINIUM MANAGER (real estate) 186.167-062
CONDUCTOR (r.r. trans.) 910.667-014
Conductor, Dance Band (profess. & kin.) 152.047-014
CONDUCTOR, ORCHESTRA (profess. & kin.) 152.047-014
CONDUCTOR, PASSENGER CAR (r.r. trans.) 198.167-010
CONDUCTOR, PULLMAN (r.r. trans.) 198.167-014
CONDUCTOR, ROAD FREIGHT (r.r. trans.) 198.167-018
conductor, sleeping car (r.r. trans.) 198.167-014
Conductor, Symphonic-Orchestra (profess. & kin.) 152.047-014
CONDUCTOR, YARD (r.r. trans.) 910.137-022
Conduit Installer (r.r. trans.) 825.381-038
CONDUIT MECHANIC (construction; utilities) 869.361-010
Cone Baker, Machine (bakery products) 526.685-066
cone chocolate dipper (dairy products) 524.686-014
Cone-Classifier Tender (smelt. & refin.) 511.685-014
cone former (hat & cap) 586.685-030
cone inspector (glass mfg.; plastic-synth.; textile) 681.687-030
cone-machine feeder (hat & cap) 586.686-018
CONE OPERATOR (mine & quarry) 934.685-010
cone racker (dairy products) 524.686-014
coner (hat & cap) 586.685-030
coner (textile) 681.685-098
Cone Spooler (any industry) 681.685-154
CONE TREATER (paper goods) 534.687-010
Cone Winder (textile) 681.685-154
confectioner (sugar & conf.) 529.361-014
CONFECTIONERY COOKER (sugar & conf.) 526.382-014
CONFECTIONERY-DROPS-MACHINE OPERATOR (sugar & conf.) 520.685-078
conference service coordinator (clerical) 238.367-022
CONFIGURATION MANAGEMENT ANALYST (profess. & kin.) 012.167-010
conformal pad former (boot & shoe) 788.687-094
CONGRESSIONAL-DISTRICT AIDE (government ser.) 209.362-030
Conical Mixer (hat & cap) 680.685-062
connection worker (petrol. & gas) 869.684-046
connector (elec. equip.) 721.684-018
Connector Hand (construction) 869.687-026
conservation officer (government ser.) 379.167-010
CONSERVATION TECHNICIAN (museums) 102.261-010
CONSERVATOR, ARTIFACTS (profess. & kin.) 055.381-010
CONSOLE ASSEMBLER (musical inst.) 730.684-030
console operator (print. & pub.) 979.282-010
CONSTRUCTION-AND-MAINTENANCE INSPECTOR (petrol. refin.) 914.362-014
CONSTRUCTION CHECKER (utilities) 821.367-010

CONSTRUCTION-EQUIPMENT MECHANIC (construction) 620.261-022
CONSTRUCTION-EQUIPMENT-MECHANIC HELPER (construction) 620.664-010
Construction Grip (motion picture) 962.687-022
CONSTRUCTION INSPECTOR (construction) 182.267-010
Construction-Machinery-And-Equipment-Rental Clerk (business ser.) 295.467-022
Construction Millwright (saw. & plan.) 860.381-042
Construction-Records Clerk (construction; utilities) 219.362-010
CONSTRUCTION WORKER I (construction) 869.664-014
CONSTRUCTION WORKER II (construction) 869.687-026
Consular Officer (government ser.) 188.117-106
consultant (any industry) 199.251-010
CONSULTANT (profess. & kin.) 189.167-010
CONSULTANT, EDUCATION (education) 099.167-014
CONSULTANT, EDUCATIONAL, STATE BOARD OF NURSING (government ser.) 075.117-010
CONSULTING ENGINEER (profess. & kin.) term
consumer-relations-complaint clerk (clerical) 241.367-014
consumer services consultant (profess. & kin.) 096.121-014
CONTACT-ACID-PLANT OPERATOR (chemical) 558.585-018
CONTACT-ACID-PLANT OPERATOR HELPER (chemical) 559.687-026
contact assembler (elec. equip.; light. fix.) 729.687-010
CONTACT CLERK (utilities) 209.387-018
Contact-Finger Assembler (elec. equip.) 729.687-010
contact-frame operator (electron. comp.; print. & pub.) 971.382-014
Contact-Lens-Curve Grinder (optical goods) 716.685-022
contact-lens cutter (optical goods) 716.382-010
Contact-Lens-Edge Buffer (optical goods) 716.685-022
CONTACT-LENS-FLASHING PUNCHER (optical goods) 713.687-014
Contact-Lens Inspector (optical goods) 716.381-010
CONTACT-LENS MOLDER (optical goods) 690.685-090
Contact-Lens Polisher (optical goods) 716.682-018
Contact Printer, Dry Film (electron. comp.) 976.684-030
CONTACT PRINTER, PHOTORESIST (inst. & app.; optical goods) 976.684-034
CONTACT PRINTER, PRINTED CIRCUIT BOARDS (electron. comp.) 976.684-030
CONTACT REPRESENTATIVE (government ser.) 169.167-018
CONTACT WORKER, LITHOGRAPHY (print. & pub.) 976.684-038
Container-Cargo Clerk (water trans.) 248.367-014
CONTAINER COORDINATOR (water trans.) 248.367-022
container crane operator (water trans.) 921.683-018
Container Fillet (any industry) 920.587-018
container finisher (elec. equip.) 727.687-034
Container-Maker-Filler-Packer Operator (any industry) 920.685-078
container-packer operator (tobacco) 920.685-038
container repairer (any industry) 619.685-034
CONTAINER WASHER, MACHINE (any industry) 529.685-074
content checker (beverage) 522.667-010
CONTESTANT COORDINATOR (radio-tv broad.) 166.167-010
CONTINUITY CLERK (motion picture) 209.382-010
CONTINUITY DIRECTOR (radio-tv broad.) 132.037-010
Continuity Reader (radio-tv broad.) 131.267-022
CONTINUITY WRITER (radio-tv broad.) 131.087-010
CONTINUOUS-ABSORPTION-PROCESS OPERATOR (sugar & conf.) 521.362-010
Continuous-Annealing Furnace Operator (heat treating) 504.682-010
Continuous-Conveyor-Screen Drier (chemical) 553.582-010
CONTINUOUS-CRUSHER OPERATOR (textile) 586.685-014
continuous-drier helper (tex. prod., nec) 581.687-018
continuous-drier operator (tex. prod., nec) 581.685-034
continuous-dryout operator (any industry) 503.362-010
continuous-dryout-operator helper (any industry) 503.686-010
CONTINUOUS-LINTER-DRIER OPERATOR (chemical) 553.685-034
continuous-loft operator (paper & pulp) 534.682-010
CONTINUOUS-MINING-MACHINE OPERATOR (mine & quarry) 930.683-010
CONTINUOUS PILLOWCASE CUTTER (tex. prod., nec) 686.685-014
continuous process machine operator (photofinishing) 976.685-014
Continuous-Still Operator (chemical) 552.362-022
CONTINUOUS-TOWEL ROLLER (laundry & rel.) 361.685-014
Continuous-Vulcanizing-Machine Operator (nonfer. metal) 691.382-010
continuous-washer operator (ordnance) 503.685-026
continuous-yarn dyeing-machine operator (textile) 582.685-158
Contortionist (amuse. & rec.) 159.247-010
CONTOUR-BAND-SAW OPERATOR, VERTICAL (machine shop) 607.382-010
CONTOUR GRINDER (stonework) 675.682-010
Contour-Path Tape-Mill Operator (machine shop) 605.380-010
contour sander (woodworking) 662.682-010
contour stitcher (garment) 786.685-026
Contour Wire Sawyer (stonework) 677.462-014
CONTOUR WIRE SPECIALIST, DENTURE (protective dev.) 712.381-014
CONTRACT ADMINISTRATOR (any industry) 162.117-014
contract administrator (insurance) 241.267-010
CONTRACT CLERK (profess. & kin.) 119.267-018
CONTRACT CLERK, AUTOMOBILE (retail trade) 219.362-026
contract consultant (profess. & kin.) 119.267-018
contract coordinator (profess. & kin.) 162.117-018
CONTRACTOR (construction) 182.167-010
Contractor, Broomcorn Threshing (agriculture) 409.117-010
Contractor, Field Hauling (agriculture) 409.117-010
Contractor, General Building (construction) 182.167-010
Contractor, General Engineering (construction) 182.167-010
Contract-Post-Office Clerk (retail trade) 243.367-014
CONTRACT SPECIALIST (profess. & kin.) 162.117-018
contract technician (profess. & kin.) 119.267-018
contribution solicitor (nonprofit org.) 293.357-014
control-board operator (clerical) 235.662-022
control board operator, sugar refining (grain-feed mills) 521.362-018
Control-Cabinet Assembler (elec. equip.) 826.361-010
CONTROL CLERK (clock & watch) 221.387-018
CONTROL CLERK, AUDITING (insurance) 209.362-014
control clerk, food-and-beverage (hotel & rest.) 216.362-022
CONTROL CLERK, HEAD (clock & watch) 221.137-010
Control Clerk, Repairs (clock & watch) 221.387-018
Control Clerk, Subassembly (clock & watch) 221.387-018
Control Clerk, Training And Mechanism (clock & watch) 221.387-018
CONTROL INSPECTOR (paper & pulp; wood prod., nec) 539.667-010
control inspector (railroad equip.) 825.381-018
Controlled-Area Checker (any industry) 372.667-030
CONTROLLER (profess. & kin.) 160.167-058
CONTROLLER, COAL OR ORE (mine & quarry) 939.167-010
CONTROLLER, REMOTELY-PILOTED VEHICLE (RPV) (aircraft mfg.) 196.263-026
CONTROLLER REPAIRER-AND-TESTER (railroad equip.) 825.381-018
CONTROL OPERATOR (smelt. & refin.) 511.482-010
Control Operator, Flow Coat (elec. equip.) 599.382-010
control-panel assembler (elec. equip.) 721.381-014
control-panel operator (bakery products) 520.462-010
CONTROL-PANEL OPERATOR (petrol. refin.) 546.382-010
Control-Panel Operator, Cracking Unit (petrol. refin.) 546.382-010
Control-Panel Operator, Crude Unit (petrol. refin.) 546.382-010
Control-Panel Operator, Polymerization Unit (petrol. refin.) 546.382-010
Control-Panel Operator, Solvent-Treating Unit (petrol. refin.) 546.382-010
CONTROL-PANEL TESTER (elec. equip.) 827.381-010
control-room operator (any industry) 950.382-010
CONTROLS DESIGNER (profess. & kin.) 003.261-014
Controls Designer, Computer-Assisted (profess. & kin.) 003.261-014
Controls Development Mechanic (aircraft mfg.) 693.261-014
CONTROLS OPERATOR, MOLDED GOODS (fabrication, nec) 590.662-010
controls project engineer (profess. & kin.) 003.261-014
control-tower-radio operator (government ser.) 193.162-018
CONVERTER OPERATOR (grain-feed mills) 526.382-018
CONVERTER SUPERVISOR (smelt. & refin.) 513.132-010
Convertible-Power-Shovel Operator (any industry) 850.683-030
CONVEX GRINDER OPERATOR (button & notion) 673.685-042
conveyor attendant (mine & quarry; smelt. & refin.) 939.362-014
Conveyor Belt Package Sorter (retail trade) 222.687-022
Conveyor-Belt Repairer (any industry) 630.684-014
conveyor console operator (any industry) 921.662-018
Conveyor Feeder (steel & rel.) 509.687-026
conveyor feeder (tobacco) 529.686-038
CONVEYOR FEEDER-OFFBEARER (any industry) 921.686-014
Conveyorized Oven Tender (bakery products) 526.685-070
conveyor loader (glass products) 579.686-022
CONVEYOR LOADER I (meat products) 525.687-018
CONVEYOR LOADER II (meat products) 525.686-014
CONVEYOR-MAINTENANCE MECHANIC (any industry) 630.381-010
conveyor monitor (any industry) 921.685-026
CONVEYOR OPERATOR, PNEUMATIC SYSTEM (food prep., nec) 921.382-010
CONVEYOR-SYSTEM OPERATOR (any industry) 921.662-018
CONVEYOR TENDER (any industry) 921.685-026
Conveyor Tender, Concrete-Mixing Plant (construction) 579.665-014
conveyor-weighet operator (chemical) 559.687-070
CONVOLUTE-TUBE WINDER (paper goods) 640.682-010
COOK (any industry) 315.361-010
cook (beverage; can. & preserv.; grain-feed mills) 526.381-026
COOK (chemical) 553.665-018
COOK (domestic ser.) 305.281-010
COOK (fishing & hunt.) 315.381-010
COOK (hotel & rest.) 313.361-014
COOK (meat products) 526.685-010
cook (paper & pulp; paper goods) 532.362-010
COOK APPRENTICE (hotel & rest.) 313.361-018
COOK APPRENTICE, PASTRY (hotel & rest.) 313.381-018
COOK, BARBECUE (hotel & rest.) 313.381-022
cook blender (dairy products) 526.665-010

cook, boat (water trans.) 315.371-010
COOK-BOX FILLER (meat products) 523.685-030
COOK, BREAKFAST (hotel & rest.) term
Cook, Broiler (hotel & rest.) 313.361-014
Cook, Camp (any industry) 315.361-010
cook, candy (sugar & conf.) 529.361-014
cook, chief (hotel & rest.) 313.131-014
COOK, CHIEF (water trans.) 315.131-010
Cook, Chili (food prep., nec) 526.134-010
Cook, Chinese-Style Food (hotel & rest.) 313.361-030
cook, cold meat (hotel & rest.) 313.361-034
Cook, Dessert (hotel & rest.) 313.361-014
Cook, Dinner (hotel & rest.) 313.361-014
COOK, DOG-AND-CAT FOOD (meat products) 526.682-014
cooked foods supervisor (hotel & rest.) 319.137-022
cookee (hotel & rest.) 318.687-010
Cook, Enchilada (food prep., nec) 526.134-010
cooker (beverage) 522.382-022
cooker (beverage; can. & preserv.; grain-feed mills) 526.381-026
cooker (can. & preserv.) 529.685-174
COOKER (grain-feed mills) 526.685-022
cooker (oils & grease) 523.685-034
Cooker And Presser (meat products) 529.685-202
COOKER, CASING (tobacco) 520.685-082
cooker, chip (food prep., nec) 526.685-046
COOKER CLEANER (can. & preserv.) 529.687-054
cooker helper (can. & preserv.) 529.486-010
COOKER LOADER (oils & grease) 921.685-030
COOKER, MEAL (oils & grease) 523.685-034
Cooker, Pie Filling (bakery products) 520.685-114
COOKER, PROCESS CHEESE (dairy products) 526.665-010
Cooker, Soda (paper & pulp; paper goods) 532.362-010
Cooker, Sulfate (paper & pulp; paper goods) 532.362-010
Cooker, Sulfite (paper & pulp; paper goods) 532.362-010
cooker, syrup (beverage) 520.485-026
COOKER TENDER (oils & grease) 553.665-022
COOKER TENDER (paper & pulp) 532.685-014
COOK, FAST FOOD (hotel & rest.) 313.374-010
Cook, Fish And Chips (hotel & rest.) 313.361-026
Cook, Fish Eggs (can. & preserv.) 526.381-026
cook, fishing vessel (fishing & hunt.) 315.381-010
cook, frozen dessert (hotel & rest.) 313.381-034
Cook, Fruit (can. & preserv.) 526.381-026
Cook, Fry (hotel & rest.) 313.361-014
Cook, Fry (r.r. trans.) 315.381-018
COOK, FRY, DEEP FAT (can. & preserv.; hotel & rest.) 526.685-014
COOK, HEAD, SCHOOL CAFETERIA (hotel & rest.) 313.131-018
COOK HELPER (can. & preserv.) 529.687-050
cook helper (hotel & rest.) 318.687-010
COOK HELPER (hotel & rest.) 317.687-010
cook helper (paper & pulp; paper goods) 532.686-010
Cook Helper, Broiler Or Fry (hotel & rest.) 317.687-010
Cook Helper, Dessert (hotel & rest.) 317.687-010
Cook Helper, Fruit (can. & preserv.) 529.687-050
Cook Helper, Juice (can. & preserv.) 529.687-050
Cook Helper, Meat (can. & preserv.) 529.687-050
COOK HELPER, PASTRY (hotel & rest.) 313.687-010
Cook Helper, Preserves (can. & preserv.) 529.687-050
Cook Helper, Vegetable (hotel & rest.) 317.687-010
cook, ice cream (hotel & rest.) 313.381-034
cookie breaker (boot & shoe) 788.685-010
Cookie Mixer (bakery products) 520.685-234
Cookie-Mixer Helper (bakery products) 526.686-010
COOKING, CASING, AND DRYING SUPERVISOR (tobacco) 529.135-010
Cook, Institution (any industry) 315.361-010
Cook, Italian-Style Food (hotel & rest.) 313.361-030
Cook, Jelly (can. & preserv.) 526.381-026
Cook, Juice (can. & preserv.) 526.381-026
COOK, KETTLE (beverage; can. & preserv.; grain-feed mills) 526.381-026
Cook, Kosher-Style Food (hotel & rest.) 313.361-030
COOK, LARDER (water trans.) 315.381-014
Cook, Mayonnaise (can. & preserv.) 526.381-026
cook, mess (any industry) 315.361-010
COOK, MESS (water trans.) 315.371-010
COOK, MEXICAN FOOD (food prep., nec) 526.134-010
Cook, Morning (hotel & rest.) 313.361-014
Cook, Night (hotel & rest.) 313.361-014
COOK, PASTRY (hotel & rest.) 313.381-026
cook, pastry (hotel & rest.) 313.361-038
Cook, Pickled Meat (can. & preserv.) 526.381-026
cook, pie (hotel & rest.) 313.361-038
Cook, Preserve (can. & preserv.) 526.381-026
cook, pressure (beverage; can. & preserv.; grain-feed mills) 526.381-026
COOK, RAILROAD (r.r. trans.) 315.381-018
Cook, Ranch (agriculture) 315.361-010
Cook, Relief (hotel & rest.) 313.361-014
cook, restaurant (hotel & rest.) 313.361-014
Cook, Roast (hotel & rest.) 313.361-014
Cook, Roast Pig (hotel & rest.) 313.381-022
Cook, Sauce (can. & preserv.) 526.381-026
Cook, Sauce (hotel & rest.) 313.361-014
COOK, SCHOOL CAFETERIA (hotel & rest.) 313.381-030
Cook, Seafood (can. & preserv.) 526.381-026
COOK, SECOND (hotel & rest.) term
Cook, Ship (water trans.) 315.361-010
cook, ship (water trans.) 315.371-010
COOK, SHORT ORDER (hotel & rest.) 313.374-014
Cook, Soup (hotel & rest.) 313.361-014
COOK, SOYBEAN SPECIALTIES (food prep., nec) 529.685-290
Cook, Spaghetti (can. & preserv.) 526.381-026
Cook, Spanish-Style Food (hotel & rest.) 313.361-030
Cook, Special Diet (hotel & rest.) 313.361-014
COOK, SPECIALTY (hotel & rest.) 313.361-026
COOK, SPECIALTY, FOREIGN FOOD (hotel & rest.) 313.361-030
Cook, Starch (can. & preserv.) 526.381-026
COOK, STATION (water trans.) 315.361-022
Cook, Station, Breakfast (water trans.) 315.361-022
Cook, Station, Grill (water trans.) 315.361-022
Cook, Station, Roast (water trans.) 315.361-022
Cook, Station, Soup And Fish (water trans.) 315.361-022
COOK, SYRUP MAKER (beverage) 526.682-018
Cook, Taco (food prep., nec) 526.134-010
Cook, Tamale (food prep., nec) 526.134-010
COOK, THIRD (water trans.) 315.381-022
Cook, Tortilla (food prep., nec) 526.134-010
COOK, VACUUM KETTLE (can. & preserv.) 526.685-018
Cook, Vegetable (can. & preserv.) 526.381-026
Cook, Vegetable (hotel & rest.) 313.361-014
Cooler-Conveyor Loader (meat products) 525.686-014
cooler operator (beverage) 523.685-042
Cooler Operator (dairy products) 529.382-018
COOLER ROOM WORKER (meat products) 525.687-022
cooler servicer (any industry) 637.381-010
Cooler Supervisor (dairy products) 929.137-022
COOLER TENDER (grain-feed mills) 523.685-038
COOLER TENDER (sugar & conf.) 520.585-018
Cooler Worker (dairy products) 922.687-058
COOLING-MACHINE OPERATOR (beverage) 523.685-042
COOLING-PAN TENDER (can. & preserv.) 523.685-046
COOLING-PIPE INSPECTOR (construction) 862.687-010
COOLING-ROOM ATTENDANT (personal ser.) 335.677-010
cooling-system operator (any industry) 950.362-014
Cooling-Tower Operator (petrol. refin.) 549.362-010
COOPER (wood. container) 764.684-022
cooperative extension advisor specialist (government ser.) 096.127-014
COOPER HELPER (wood. container) 764.687-050
COORDINATE MEASURING EQUIPMENT OPERATOR (electron. comp.) 726.682-018
coordinator, auxiliary personnel (medical ser.) 079.127-010
coordinator, computer programming (profess. & kin.) 030.167-010
coordinator of placement (education) 166.167-014
COORDINATOR OF REHABILITATION SERVICES (medical ser.) 076.117-010
coordinator, program planning (radio-tv broad.) 132.067-030
COORDINATOR, SKILL-TRAINING PROGRAM (government ser.) 169.167-062
COORDINATOR, VOLUNTEER SERVICES (social ser.) 187.167-022
cop breaker (textile) 689.686-014
COPER, HAND (stonework) 771.384-010
Copilot (air trans.) 196.263-014
Copper Deposition Operator (electron. comp.) 501.685-022
Copper Etcher (print. & pub.) 971.381-014
Copper-Flotation Operator (smelt. & refin.) 511.685-026
Copper Plater (electroplating) 500.380-010
copper-roller handler, printing (textile) 652.385-010
Coppersmith (any industry) 804.281-010
COPPERSMITH (ship-boat mfg.) 862.281-010
COPPERSMITH APPRENTICE (ship-boat mfg.) 862.281-014
COPRA PROCESSOR (soap & rel.) 555.685-018
Cop Winder (nonmet. min.; textile) 681.685-154
copy-camera operator (any industry) 976.361-010
copy-camera-operator apprentice (print. & pub.) 972.382-010
COPY CUTTER (print. & pub.) 221.167-010
COPY HOLDER (print. & pub.) 209.667-010
COPYIST (any industry) 152.267-010
COPYIST (garment) 142.281-010
copyist (paper goods) 794.684-022
COPY-LATHE TENDER (woodworking) 664.685-018
Copy Reader (print. & pub.) 132.267-014
copy reader (radio-tv broad.) 131.267-022

Copy Reader, Book (print. & pub.) 132.267-014
copyright clerk (radio-tv broad.) 249.267-010
COPYRIGHT EXPERT (radio-tv broad.) 249.267-010
COPY WRITER (profess. & kin.) 131.067-014
corder (any industry) 787.682-082
Corder (garment; tex. prod., nec) 787.682-022
cording-machine operator (any industry) 787.682-082
cord-reel operator (paper goods) 640.685-046
cord splicer (rubber tire) 759.684-058
CORDUROY-BRUSHER OPERATOR (textile) 585.685-034
CORDUROY-CUTTER OPERATOR (textile) 585.565-010
cordwood-cutter helper (any industry) 667.687-010
core analyst (petrol. & gas) 024.381-010
core-assembly supervisor (elec. equip.) 619.130-042
core-blower operator (foundry) 518.685-022
CORE CHECKER (foundry) 518.687-010
CORE-COMPOSER FEEDER (millwork-plywood) 692.685-038
CORE-COMPOSER-MACHINE TENDER (millwork-plywood) 569.685-022
Core-Covering Sewer (tex. prod., nec) 787.682-058
Core Cutter (paper & pulp) 649.685-026
CORE-CUTTER AND REAMER (paper goods) 649.685-026
core driller (petrol. & gas) 930.382-018
core driller (petrol. & gas) 930.382-026
CORE-DRILL OPERATOR (any industry) 930.682-010
CORE-DRILL OPERATOR (construction) 869.682-014
CORE-DRILL-OPERATOR HELPER (any industry) 930.687-014
Core Dropper (elec. equip.) 727.687-022
CORE EXTRUDER (elec. equip.) 557.685-010
core feeder (millwork-plywood; wood prod., nec) 569.685-042
CORE FEEDER, PLYWOOD LAYUP LINE (millwork-plywood) 569.685-018
core fitter (foundry) 518.687-014
Core Inserter (tex. prod., nec) 739.685-010
core inspector (foundry) 518.687-010
core layer, plywood (millwork-plywood) 762.687-026
CORE LAYER, PLYWOOD LAYUP LINE (millwork-plywood) 569.686-014
CORE-LAYING-MACHINE OPERATOR (millwork-plywood) 569.685-026
CORE LOADER (ordnance) 737.687-030
COREMAKER (foundry) 518.381-014
Coremaker (paper goods) 640.682-022
COREMAKER APPRENTICE (foundry) 518.381-018
Coremaker, Bench (foundry) 518.381-014
coremaker, experimental (foundry) 518.381-014
Coremaker, Floor (foundry) 518.381-014
coremaker helper (foundry) 518.687-014
COREMAKER, MACHINE I (foundry) 518.685-014
COREMAKER, MACHINE II (foundry) 518.685-018
COREMAKER, MACHINE III (foundry) 518.685-022
COREMAKER, PIPE (foundry) 518.684-014
COREMAKING-MACHINE OPERATOR (elec. equip.) 692.682-030
Coremaking Supervisor (foundry) 519.131-010
core mounter (foundry) 518.684-018
CORE-OVEN TENDER (foundry) 518.685-010
core paster (foundry) 518.687-014
CORE SETTER (foundry) 518.684-010
core setter (foundry) 518.684-018
CORE SHAPER (toy-sport equip.) 692.685-058
Core Shaper, Sides (toy-sport equip.) 692.685-058
Core Shaper, Top (toy-sport equip.) 692.685-058
core stripper (foundry) 518.685-014
CORE WINDING OPERATOR (paper & pulp) 640.682-014
cork coater (wood prod., nec) 562.687-014
corker (beverage) 920.665-014
CORK GRINDER (toy-sport equip.) 662.685-010
CORK INSULATOR, REFRIGERATION PLANT (construction) 863.381-010
cork mixer (wood prod., nec) 560.585-010
cork mixer (wood prod., nec) 560.587-010
CORK MOLDER (wood prod., nec) 569.685-030
CORK-PRESSING-MACHINE OPERATOR (wood prod., nec) 569.686-018
cork sorter (wood prod., nec) 769.687-042
Cork-Tile-Floor Layer (construction; retail trade) 864.481-010
Corn-Chip Maker (food prep., nec) 529.685-078
CORN COOKER (food prep., nec) 522.685-034
Corn-Cutter Operator (grain-feed mills) 521.685-122
corner-block cutter (furniture) 669.682-030
CORNER-BRACE-BLOCK-MACHINE OPERATOR (furniture) 669.682-030
CORNER CUTTER (paper goods) 640.685-030
corner-cutter-machine operator (paper goods) 640.685-030
CORNER FORMER (wood. container) 617.685-014
CORNER-TRIMMER OPERATOR (wood. container) 667.682-018
CORN GRINDER (food prep., nec) 521.685-082
CORN-GRINDER OPERATOR, AUTOMATIC (grain-feed mills) 521.685-086
Corn Grower (agriculture) 401.161-010
Corn-Husk Baler (grain-feed mills) 920.685-010
Cornice Upholsterer (any industry) 780.381-018
Corn Miller (grain-feed mills) 521.682-026
corn-oil extractor (grain-feed mills; oils & grease) 529.685-106
CORN POPPER (sugar & conf.) 526.685-026
CORN-PRESS OPERATOR (food prep., nec) 529.685-078
Corn-Sheller Operator (grain-feed mills) 521.685-122
CORONER (government ser.) 168.161-010
corporate counsel (profess. & kin.) 110.117-022
Corporate Pilot (air trans.) 196.263-014
Corporate Trust Officer (government ser.) 186.117-074
corporation pilot (any industry) 196.263-030
corral boss (any industry) 410.131-010
correctional officer (government ser.) 188.167-026
CORRECTIONAL-TREATMENT SPECIALIST (social ser.) 195.107-042
CORRECTION OFFICER (government ser.) 372.667-018
correction officer (government ser.) 372.677-010
correction officer (government ser.) 375.367-010
Correction Officer, City Or County Jail (government ser.) 372.667-018
CORRECTION OFFICER, HEAD (government ser.) 372.137-010
Correction Officer, Penitentiary (government ser.) 372.667-018
Correction Officer, Reformatory (government ser.) 372.667-018
CORRECTIVE THERAPIST (medical ser.) 076.361-010
CORRESPONDENCE CLERK (clerical) 209.362-034
CORRESPONDENCE-REVIEW CLERK (clerical) 209.367-018
Correspondent (print. & pub.; radio-tv broad.) 131.262-018
correspondent (insurance) 249.262-010
CORROSION-CONTROL FITTER (pipe lines; utilities) 820.361-010
corrosion-control specialist (profess. & kin.) 003.167-022
corrosion engineer (profess. & kin.) 003.167-022
corrugated-combining-machine operator (paper goods) 641.562-010
CORRUGATED-FASTENER DRIVER (woodworking) 669.685-042
Corrugated-Sheet-Material Sheeter (construction) 869.664-014
corrugator (brick & tile) 779.684-042
CORRUGATOR OPERATOR (paper goods) 641.562-010
CORRUGATOR OPERATOR (plastic-synth.) 556.665-014
corrugator operator (woodworking) 669.685-042
CORRUGATOR-OPERATOR HELPER (paper goods) 641.686-018
CORSET FITTER (retail trade) 782.361-010
corsetier (retail trade) 261.354-010
Corset Repairer (garment) 782.684-038
cosmetician (personal ser.) 332.271-010
cosmetician apprentice (personal ser.) 332.271-014
Cosmetics Demonstrator (retail trade) 297.354-010
COSMETICS PRESSER (pharmaceut.) 556.685-026
COSMETICS SUPERVISOR (pharmaceut.) 550.131-010
COSMETOLOGIST (personal ser.) 332.271-010
COSMETOLOGIST APPRENTICE (personal ser.) 332.271-014
cost-accounting clerk (clerical) 216.382-034
COST-AND-SALES-RECORD SUPERVISOR (utilities) 216.137-010
COST CLERK (clerical) 216.382-034
cost development engineer (aircraft mfg.) 002.167-010
Cost-Estimating Clerk (utilities) 216.382-034
cost estimator (profess. & kin.) 169.267-038
cost-report clerk (water trans.) 216.382-054
Costume Designer (profess. & kin.) 142.061-018
COSTUMER (motion picture; radio-tv broad.) 346.261-010
COSTUMER ASSISTANT (motion picture; radio-tv broad.) 346.374-010
Costume-Rental Clerk (retail trade) 295.357-010
cot assembler (furniture) 709.667-010
COTTAGE-CHEESE MAKER (dairy products) 522.382-010
cottage parent (any industry) 187.167-186
Cotton-Bag Clipper (tex. prod., nec) 789.687-030
Cotton-Bag-Cutting-Machine Offbearer (tex. prod., nec) 689.686-018
Cotton-Bag-Cutting-Machine Operator (tex. prod., nec) 686.585-010
Cotton-Bag Sewer (tex. prod., nec) 787.682-058
COTTON BALER (agriculture) 920.685-114
COTTON-BALL BAGGER (protective dev.) 920.686-014
COTTON-BALL-MACHINE TENDER (protective dev.) 580.685-022
COTTON CLASSER (agriculture; textile) 429.387-010
COTTON CLASSER AIDE (agriculture) 429.587-010
cotton cleaner (plastic-synth.) 559.687-030
COTTON DISPATCHER (furniture) 780.684-038
Cotton Farmworker (agriculture) 404.687-010
cotton grader (agriculture; textile) 429.387-010
Cotton Grower (agriculture) 404.161-010
Cotton Header (water trans.) 911.137-018
Cotton Picker (furniture) 680.685-078
Cotton-Picker Operator (chemical) 553.685-034
Cotton Presser (garment) 363.684-018
COTTON PULLER (oils & grease) 521.686-022
COTTON-ROLL PACKER (protective dev.) 920.685-054
COTTON SAMPLER (agriculture; textile) 922.687-042
cottonseed-meat presser (oils & grease) 521.685-242
COTTON TIER (agriculture) 920.687-074
COTTON WASHER (plastic-synth.) 559.687-030
Cotton Weigher (agriculture) 221.587-030
cotton-weigher operator (chemical) 559.687-070

Cotton Wringer (plastic-synth.) 559.687-030
Cottrell Blower (smelt. & refin.) 511.687-014
Cougar Hunter (fishing & hunt.) 461.661-010
counseling-center manager (profess. & kin.) 045.107-018
counselor (hotel & rest.) 352.667-014
counselor (profess. & kin.) 110.107-010
COUNSELOR (profess. & kin.) 045.107-010
counselor-at-law (profess. & kin.) 110.107-010
COUNSELOR, CAMP (amuse. & rec.) 159.124-010
counselor, dormitory (education) 045.107-038
COUNSELOR, MARRIAGE AND FAMILY (profess. & kin.) 045.107-054
COUNSELOR, NURSES' ASSOCIATION (medical ser.) 045.107-014
counselor, orientation and mobility (education; medical ser.; nonprofit org.) 076.224-014
counselor, vocational rehabilitation (government ser.) 045.107-042
counter (clerical) 221.587-030
counter and upper tacker (boot & shoe) 690.685-010
counter attendant (laundry & rel.; personal ser.) 369.477-014
COUNTER ATTENDANT, CAFETERIA (hotel & rest.) 311.677-014
COUNTER ATTENDANT, LUNCHROOM OR COFFEE SHOP (hotel & rest.) 311.477-014
Counter Buffer (boot & shoe) 690.685-046
counter caser (boot & shoe) 788.687-026
COUNTER CLERK (photofinishing) 249.366-010
counter clerk (retail trade; wholesale tr.) 279.357-062
COUNTER CLERK (tel. & tel.) 249.362-010
Counter Clerk, Appliance Parts (retail trade; wholesale tr.) 279.357-062
Counter Clerk, Automotive Parts (retail trade; wholesale tr.) 279.357-062
Counter Clerk, Farm Equipment Parts (retail trade; wholesale tr.) 279.357-062
Counter Clerk, Industrial Machinery And Equipment Parts (retail trade; wholesale tr.) 279.357-062
Counter Clerk, Radio, Television, And Electronics Parts (retail trade; wholesale tr.) 279.357-062
Counter Clerk, Tractor Parts (retail trade; wholesale tr.) 279.357-062
Counter Clerk, Truck Parts (retail trade; wholesale tr.) 279.357-062
COUNTER CUTTER (boot & shoe) 690.685-094
Counter Dish Carrier (hotel & rest.) 311.677-018
COUNTER FORMER (boot & shoe) 690.685-098
COUNTER, HAND (paper goods) 794.687-018
COUNTERINTELLIGENCE AGENT (military ser.) 378.267-010
counter maker (boot & shoe) 690.685-094
counter molder (boot & shoe) 690.685-350
COUNTER MOLDER (boot & shoe) 690.685-102
Counter-Pocket Sewer (boot & shoe) 690.682-082
counter-pocket trimmer (leather mfg.) 585.684-010
COUNTER ROLLER (boot & shoe) 690.685-106
COUNTERSINKER (clock & watch) 715.682-014
Countersinker, Balance Screw Hole (clock & watch) 715.682-014
COUNTER SUPERVISOR (hotel & rest.) 311.137-010
COUNTER-SUPPLY WORKER (hotel & rest.) 319.687-010
counter tacker (boot & shoe) 788.684-078
Counter Top Assembler (mfd. bldgs.; vehicles, nec) 762.684-014
counter-weigher (clerical) 221.587-030
COUNTING-MACHINE OPERATOR (paper goods) 649.685-030
country printer (print. & pub.) 973.381-018
country-printer apprentice (print. & pub.) 973.381-022
county adviser (government ser.) 096.127-010
county agent (government ser.) 096.127-010
COUNTY AGRICULTURAL AGENT (government ser.) 096.127-010
County Auditor (government ser.) 160.167-030
County Director, Welfare (government ser.) 188.117-126
COUNTY HOME-DEMONSTRATION AGENT (government ser.) 096.121-010
County-Library Director (library) 100.117-010
couper (beverage) 764.687-090
COUPLE (any industry) term
coupler (any industry) 932.664-010
coupler (rubber goods) 759.687-014
COUPLING-MACHINE OPERATOR (steel & rel.) 619.682-014
Coupon-And-Bond-Collection Clerk (financial) 215.362-014
COUPON CLERK (financial) 219.462-010
Coupon-Collection Clerk (financial) 216.362-014
Coupon-Manifest Clerk (clerical) 209.687-010
COUPON-REDEMPTION CLERK (retail trade) 290.477-010
courier (clerical) 230.663-010
court abstractor (profess. & kin.) 119.267-010
COURT ADMINISTRATOR (government ser.) 188.117-130
COURT CLERK (government ser.) 243.362-010
court officer (government ser.) 377.667-010
court reporter (clerical) 202.362-010
cover assembler (furniture) 780.684-114
Cover Assembler (furniture) 780.682-010
Cover Assembler (tex. prod., nec) 787.682-066
cover creaser (boot & shoe) 690.685-174
cover cutter (boot & shoe) 788.687-042
Cover Cutter, Machine (furniture; tex. prod., nec) 781.684-014
COVERED-BUCKLE ASSEMBLER (button & notion) 734.687-050
covered button maker (any industry) 734.687-046
COVERER, LOOSELEAF BINDER (print. & pub.) 795.687-010
covering-machine operator (paper goods) 641.685-098
COVERING-MACHINE OPERATOR (print. & pub.) 653.682-014
Covering-Machine Operator (rubber goods) 690.662-014
COVERING-MACHINE OPERATOR (textile) 681.685-038
Covering-Machine-Operator Helper (rubber goods) 690.686-070
COVERING-MACHINE-OPERATOR HELPER (textile) 681.685-042
COVERING-MACHINE TENDER (leather prod.) 783.685-010
COVER INSPECTOR (furniture) 789.687-038
Cover-Machine Operator (wood. container) 669.685-014
Cover Maker (boot & shoe) 690.682-082
Cover Maker (chemical) 844.681-010
Cover Maker (furniture) 780.682-018
cover-making-machine operator (print. & pub.) 653.685-018
Cover Marker (paint & varnish) 920.685-078
Cover-Mat-Machine Operator (wood. container) 669.685-014
cover remover (boot & shoe) 788.687-042
COVERSTITCH-MACHINE OPERATOR (garment) 786.682-078
COVER STRIPPER (paper goods) 641.685-034
cover treater (toy-sport equip.) 559.685-102
COWPUNCHER (agriculture) 410.674-014
Cow Trimmer (meat products) 525.687-046
Coyote Hunter (fishing & hunt.) 461.661-010
cpa (profess. & kin.) see ACCOUNTANT, CERTIFIED PUBLIC
cp bleacher operator (chemical; soap & rel.) 558.685-018
crab backer (can. & preserv.) 525.684-022
CRABBER (textile) 582.685-038
CRAB BUTCHER (can. & preserv.) 525.684-022
CRAB MEAT PROCESSOR (can. & preserv.) 525.687-126
Crab Steamer (can. & preserv.) 529.685-214
cracker (jewelry-silver.) 770.687-030
cracker (rubber goods; rubber reclaim.) 555.685-030
CRACKER-AND-COOKIE-MACHINE OPERATOR (bakery products) 520.682-034
Cracker-And-Cookie-Machine-Operator Helper (bakery products) 526.686-010
Cracker-Dough Mixer (bakery products) 520.685-234
cracker-fanner operator (sugar & conf.) 521.385-010
CRACKER SPRAYER (bakery products) 524.685-022
CRACKING-AND-FANNING-MACHINE OPERATOR (sugar & conf.) 521.385-010
CRACKING-UNIT OPERATOR (plastic-synth.) 558.682-010
Crackling-Press Operator (meat products) 529.685-202
Cradle Placer (construction) 869.664-014
Cradle-Slide Maker (furniture) 616.685-058
CRAFT DEMONSTRATOR (museums) 109.364-010
crafter (jewelry-silver.) 700.381-046
craft supervisor (any industry) 638.131-022
craft worker (jewelry-silver.) 700.381-014
Cranberry-Farm Supervisor (agriculture) 403.131-014
Cranberry Grower (agriculture) 403.161-014
Cranberry Sorter (agriculture; wholesale tr.) 529.687-186
CRANE-CREW SUPERVISOR (any industry) 921.133-010
crane engineer (any industry) see CRANE OPERATOR
crane follower (any industry) 921.667-022
crane hooker (any industry) 921.667-022
crane operator (any industry) 921.663-022
CRANE OPERATOR (any industry) term
crane operator, cab (any industry) 921.663-010
crane operator, ground control (any industry) 921.663-010
Crane Operator-Hooker (steel & rel.) 921.663-010
Crane Operator-Hooktender (aircraft mfg.) 921.663-010
crane rigger (any industry) 921.260-010
Crank Hand (construction) 869.687-026
Crankshaft Straightener (auto. mfg.) 617.482-026
crash-squad accident investigator (government ser.) 375.263-010
crate builder (wood. container) 760.684-014
Crate Icer (can. & preserv.) 922.687-046
CRATE LINER (furniture) 920.687-078
CRATE OPENER (furniture) 929.685-010
CRATER (any industry) 920.684-010
Crater (agriculture) 920.687-134
Crate Repairer (any industry) 920.684-010
Crate Tier (agriculture; wholesale tr.) 920.687-134
CRATING-AND-MOVING ESTIMATOR (motor trans.; r.r. trans.) 252.357-010
crawler-crane operator (any industry) 921.663-058
Crawler-Dragline Operator (any industry) 850.683-018
Crawler-Tractor Operator (any industry) 850.683-010
CRAYON GRADER (mine & quarry) 579.684-014
Crayon-Molding-Machine Operator (pen & pencil) 575.685-022
CRAYON SAWYER (mine & quarry) 677.685-022
CRAYON-SORTING-MACHINE FEEDER (pen & pencil) 929.686-018

Cream-Cheese Maker (dairy products) 526.665-010
Cream Dipper (sugar & conf.) 524.684-010
Cream Maker (pharmaceut.) 550.685-090
creaser (garment) 583.685-042
CREASER (leather prod.) 783.685-014
creasing-and-cutting-press feeder (paper goods) 659.686-014
creasing-machine operator (garment) 583.685-042
CREATIVE DIRECTOR (profess. & kin.) 141.067-010
Creative Perfumer (chemical) 022.161-018
CREDIT ANALYST (clerical) 241.267-022
CREDIT ANALYST (financial) 160.267-022
CREDIT AUTHORIZER (clerical) 249.367-022
CREDIT-CARD CLERK (hotel & rest.) 210.382-038
CREDIT-CARD CLERK (retail trade) 209.587-014
CREDIT CARD CONTROL CLERK (financial) 249.367-026
credit-card interviewer (clerical) 205.367-014
CREDIT CLERK (clerical) 205.367-022
CREDIT CLERK, BLOOD BANK (medical ser.) 245.367-022
Credit-Correspondence Clerk (clerical) 209.362-034
CREDIT COUNSELOR (profess. & kin.) 160.207-010
CREDIT REFERENCE CLERK (financial; retail trade) 209.362-018
Credit Reporter (business ser.) 241.267-030
CREDIT REPORTING CLERK (business ser.) 203.362-014
Creel Cleaner (textile) 699.687-014
CREEL CLERK (government ser.) 205.367-026
CREELER (any industry) 689.687-030
creel selector (glass mfg.) 689.687-038
CREMATOR (personal ser.) 359.685-010
Crepe-Laminator Operator (paper goods) 534.682-030
Crepe-Sole Scourer (boot & shoe) 690.685-046
Crepe-Sole Wire Brusher (boot & shoe) 690.685-046
CREPING-MACHINE OPERATOR (paper goods) 534.682-030
CREPING-MACHINE-OPERATOR HELPER (paper goods) 534.687-014
Crester (toy-sport equip.) 732.684-010
crew boss (agriculture) 180.167-022
crew boss (forestry) 451.137-014
crew leader (agriculture) 180.167-022
crew leader (agriculture) 180.167-050
CREW LEADER, GLUING (millwork-plywood) 569.565-010
crew manager (agriculture) 408.131-010
CREW SCHEDULER (air trans.) 215.362-010
CREW SCHEDULER, CHIEF (air trans.) 215.137-010
crew supervisor (pipe lines) 869.134-018
Crew-Truck Driver (any industry) 906.683-022
Crib-Pad Maker (furniture) 780.685-010
crime laboratory analyst (profess. & kin.) 029.261-026
Criminal-Court Judge (government ser.) 111.107-010
criminal investigator (government ser.) 375.167-042
criminal investigator, customs (government ser.) 188.167-090
CRIMINALIST (profess. & kin.) 029.261-026
Criminologist (profess. & kin.) 054.067-014
crimper (boot & shoe) 788.687-154
crimper (garment) 587.685-042
CRIMPER (rubber goods) 690.686-026
crimper-assembler (struct. metal) 809.684-010
Crimper Operator (grain-feed mills) 521.685-122
CRIMPING-MACHINE OPERATOR (any industry) 616.682-022
crimping machine operator (hat & cap) 689.685-074
crimping-machine operator (plastic-synth.) 589.685-102
crimping-machine operator (textile) 589.686-034
CRIMPING-MACHINE OPERATOR (textile) 680.685-030
CRIMP SETTER (textile) 680.685-026
crinkling-machine operator (paper goods) 534.682-030
Cripple Cutter (boot & shoe) 789.382-010
CRIPPLE WORKER (boot & shoe) 788.684-042
CRITIC (print. & pub.; radio-tv broad.) 131.067-018
crocheter (knitting) 685.682-010
CROCHETER, HAND (knitting) 782.684-014
CROCHET-MACHINE OPERATOR (knitting) 685.682-010
CROOK OPERATOR (musical inst.) 609.682-018
crop-research scientist (profess. & kin.) 040.061-010
Crop Roller (leather mfg.) 583.685-094
crop scientist (profess. & kin.) 040.061-010
Crop-Setting-Out-Machine Operator (leather mfg.) 589.685-098
CROSSBAND LAYER (millwork-plywood) 762.687-026
Crossbar-Frame Wirer (comm. equip.; elec. equip.) 729.381-022
Crossbar-Switch Adjuster (elec. equip.) 724.381-010
Crossbar-Switch Repairer (comm. equip.; elec. equip.) 729.684-038
Crossbar-Unit Wirer (comm. equip.; elec. equip.) 729.381-022
Crossbow Maker (toy-sport equip.) 732.684-038
cross-cut-saw operator (woodworking) 667.682-022
CROSSCUTTER, ROLLED GLASS (glass mfg.) 575.684-022
CROSSING TENDER (any industry) 371.667-010
Cross-Tie-Tram Loader (wood prod., nec) 561.686-010
Cross-Tie Turner (wood prod., nec) 669.687-018
CROSSWORD-PUZZLE MAKER (print. & pub.) 139.087-010
CROWN-ASSEMBLY-MACHINE OPERATOR (any industry) 692.685-062
CROWN ATTACHER (clock & watch) 715.684-070
Crown Blocker (laundry & rel.) 363.684-014
Crown Buffer (hat & cap) 585.685-014
Crown Finisher (hat & cap) 589.685-062
crown-finishing-machine operator (hat & cap) 585.685-058
Crown-Greaser Operator (hat & cap) 582.685-082
crown ironer (hat & cap) 583.685-022
Crown-Ironer Operator (laundry & rel.) 363.684-014
crown-perforator operator (hat & cap) 686.685-038
crown pouncer (hat & cap) 585.685-058
crown pouncer (hat & cap) 585.685-074
CROWN POUNCER, HAND (hat & cap) 784.687-018
Crown Presser (hat & cap) 580.685-038
CROWN-WHEEL ASSEMBLER (clock & watch) 715.684-074
Croze Cutter (wood. container) 669.682-014
Croze-Cutter Helper (wood. container) 669.685-010
CROZE-MACHINE OPERATOR (wood. container) 669.682-034
crozer (wood. container) 669.682-034
cri operator (business ser.) 203.362-014
CRUDE-OIL TREATER (petrol. & gas) 541.382-014
Crude-Oil Treater (petrol. refin.) 549.362-014
crude tester (petrol. refin.) 029.261-022
CRUISER (forestry; logging) 459.387-010
cruller maker (bakery products) 526.684-010
cruller maker, machine (bakery products) 526.682-022
Crushed-Stone Grader (construction) 869.687-026
CRUSHER (fabrication, nec) 780.684-042
CRUSHER-AND-BINDER OPERATOR (tex. prod., nec) 689.685-054
CRUSHER-AND-BLENDER OPERATOR (steel & rel.) 544.582-010
Crusher Assembler (machinery mfg.) 706.361-010
crusher, dry-ground mica (mine & quarry) 579.685-010
Crusher Feeder (steel & rel.) 509.687-026
Crusher-Machine Operator (grain-feed mills) 521.685-122
crusher operator (any industry) 570.685-022
Crusher Operator (brick & tile) 570.382-010
crusher operator (chemical) 555.685-034
CRUSHER OPERATOR (concrete prod.) 570.685-018
Crusher Operator (concrete prod.; construction) 570.682-014
crusher operator (glass mfg.) 570.685-026
crusher operator (mine & quarry; smelt. & refin.) 939.362-014
CRUSHER OPERATOR (sugar & conf.) 521.685-090
crusher operator (tobacco) 521.685-330
CRUSHER SETTER (mine & quarry) 933.664-010
CRUSHER SUPERVISOR (smelt. & refin.) 515.132-010
CRUSHER TENDER (any industry) 570.685-022
CRUSHER TENDER (fabrication, nec) 555.685-022
Crusher Tender (oils & grease) 529.685-106
CRUSHER TENDER (smelt. & refin.) 515.685-014
crusher, wet-ground mica (mine & quarry) 570.685-038
CRUSHING-MACHINE OPERATOR (beverage) 521.685-094
crushing-mill operator (tex. prod., nec) 589.686-018
CRUTCHER (soap & rel.) 550.685-054
CRUTCHER HELPER (soap & rel.) 550.686-018
CRYOLITE-RECOVERY OPERATOR (smelt. & refin.) 511.482-014
CRYPTANALYST (government ser.) 199.267-014
cryptographer (government ser.) 199.267-014
CRYPTOGRAPHIC-MACHINE OPERATOR (clerical) 203.582-018
cryptographic technician (clerical) 203.582-018
CRYSTAL ATTACHER (clock & watch) 715.687-018
CRYSTAL CUTTER (clock & watch) 715.684-078
crystal cutter (electron. comp.) 677.382-018
crystal evaluator (electron. comp.) 726.684-054
Crystal Flat Grinder (electron. comp.) 673.382-026
Crystal Gazer (amuse. & rec.) 159.647-018
CRYSTAL GRINDER (electron. comp.) 673.382-026
CRYSTAL GROWER (electron. comp.) 590.382-014
crystal growing furnace operator (electron. comp.) 590.382-014
CRYSTAL GROWING TECHNICIAN (electron. comp.) 590.262-010
CRYSTALLIZER OPERATOR (grain-feed mills) 523.685-050
CRYSTALLIZER OPERATOR I (chemical) 559.685-042
Crystallizer Operator II (chemical) 552.685-014
CRYSTALLIZER OPERATOR (sugar & conf.) 523.585-018
CRYSTALLOGRAPHER (clock & watch) 024.061-010
CRYSTAL MACHINING COORDINATOR (electron. comp.) 679.362-010
CRYSTAL MOUNTER (electron. comp.) 677.687-014
CRYSTAL SLICER (electron. comp.) 677.382-018
Crystal-Syrup Maker (sugar & conf.) 526.382-014
ctc operator (r.r. trans.) 184.167-262
ct technologist (medical ser.) 078.362-054
Cube Cutter (food prep., nec) 529.685-150
Cubelet-Centrifugal Operator (sugar & conf.) 521.682-010
CUBING-MACHINE TENDER (concrete prod.) 920.685-106
CUE SELECTOR (radio-tv broad.) 152.067-018

CUFF FOLDER (knitting) 685.687-014
Cuff Knitter (knitting) 685.665-014
Cuff Presser (knitting) 583.685-070
Cuff Separator (knitting) 789.687-030
Cuff Setter, Lockstitch (garment) 786.682-070
Cuff Setter, Overlock (garment) 786.682-074
Cuff Slitter (glove & mit.) 699.682-030
Cuff Turner (knitting) 789.687-182
cuff turner (knitting) 685.687-014
cuff-turner-machine operator (garment) 583.685-102
Culled-Fruit Packer (agriculture) 920.687-134
CULLER (wood. container) 764.687-054
CULLET CRUSHER-AND-WASHER (glass mfg.) 570.685-026
Cull Grader (agriculture; wholesale tr.) 529.687-186
Cultural Affairs Officer (government ser.) 188.117-106
CULTURED-MARBLE-PRODUCTS MAKER (stonework) 575.684-050
Culture-Room Worker (beverage) 522.662-010
CUPBOARD BUILDER (furniture) 703.684-014
cup filler (ordnance) 737.687-102
CUPOLA CHARGER (foundry) 512.686-010
CUPOLA CHARGER, INSULATION (concrete prod.) 572.686-010
CUPOLA HOIST OPERATOR (foundry) 921.683-030
cupola liner (foundry) 861.684-010
Cupola-Melting Supervisor (foundry) 519.131-010
CUPOLA OPERATOR, INSULATION (concrete prod.) 579.382-014
CUPOLA PATCHER (foundry) 861.684-010
cupola stocker (foundry) 512.686-010
CUPOLA TAPPER (foundry) 514.664-010
CUPOLA TENDER (foundry) 512.662-010
Cupola-Tender Helper (foundry) 519.687-022
CUPROUS-CHLORIDE HELPER (chemical) 558.585-022
CUPROUS-CHLORIDE OPERATOR (chemical) 558.382-034
CUP SETTER, LOCKSTITCH (garment) 786.682-082
CUP TRIMMING-MACHINE OPERATOR (ordnance) 615.685-018
CURATOR (museums) 102.017-010
Curator, Art Gallery (museums) 102.017-010
Curator, Herbarium (museums) 102.017-010
Curator, Horticultural Museum (museums) 102.017-010
Curator, Medical Museum (museums) 102.017-010
Curator, Natural History Museum (museums) 102.017-010
Curator, Zoological Museum (museums) 102.017-010
CURB ATTENDANT (laundry & rel.) 369.477-010
Curbing Stonecutter (stonework) 771.381-014
CURB-MACHINE OPERATOR (construction) 853.683-010
Curb Setter (construction) 861.381-038
Curb-Setter Helper (construction) 869.687-026
Curb Supervisor (construction) 869.131-014
curer (rubber goods; rubber reclaim.; rubber tire) 553.665-038
Curer, Acid Drum (rubber goods) 556.685-066
CURER, FOAM RUBBER (rubber goods) 553.682-014
CURING-BIN OPERATOR (grain-feed mills) 522.685-038
curing finisher (rubber tire) 553.685-102
Curing-Machine Operator (construction) 853.663-014
CURING-OVEN TENDER (chemical) 553.685-038
curing oven tender (textile) 581.685-030
curing packer (meat products) 522.687-034
CURING-PRESS MAINTAINER (rubber tire) 629.684-010
CURING-PRESS OPERATOR (rubber tire) 553.686-018
Curing Supervisor (rubber goods) 559.137-014
Curing Supervisor (rubber tire) 750.130-010
Curler (button & notion) 734.684-010
curling-machine operator (textile) 585.685-022
CURRENCY COUNTER (financial) 217.485-010
currency-machine operator (financial) 217.485-010
Curtain Cleaner (hotel & rest.) 323.687-018
Curtain Cutter, Hand (tex. prod., nec) 781.684-074
curtain drier (laundry & rel.) 363.687-022
Curtain Feller, Blindstitch (garment) 786.682-046
curtain framer (laundry & rel.) 363.687-022
Curtain Hemmer, Automatic (tex. prod., nec) 787.685-018
Curtain Inspector (tex. prod., nec) 789.587-014
CURTAIN-ROLLER ASSEMBLER (furniture) 739.684-042
curtain stretcher (laundry & rel.) 363.687-022
CURTAIN-STRETCHER ASSEMBLER (woodworking) 762.684-030
Curtain Supervisor (tex. prod., nec) 787.132-010
curved-tooth-gear-generator operator (machine shop) 602.382-014
cushion assembler (furniture) 780.684-054
CUSHION BUILDER (furniture) 780.684-046
cushion cementer (boot & shoe) 788.684-026
Cushion Closer (furniture; tex. prod., nec) 780.682-018
Cushion-Cover Inspector (furniture; tex. prod., nec) 789.687-038
cushion filler (furniture) 780.684-054
Cushion Filler (tex. prod., nec) 780.684-066
Cushion Former (toy-sport equip.) 732.384-010
Cushion Installer (toy-sport equip.) 732.384-010
Cushion Maker, Hand (jewelry-silver.) 739.687-138
CUSHION MAKER I (furniture) 780.684-054
Cushion Maker II (furniture) 780.682-018
cushion-mat maker (furniture) 780.684-054
Cushion-Spring Assembler (furniture) 780.684-098
cushion stuffer (furniture) 780.684-054
cushion sweeper (tex. prod., nec) 789.687-122
Cushion Trimmer (boot & shoe) 690.682-086
custodial services manager (any industry) 187.167-046
CUSTODIAN, ATHLETIC EQUIPMENT (amuse. & rec.) 969.367-010
Custodian, Blood Bank (medical ser.) 222.387-058
custodian, wardrobe (motion picture; radio-tv broad.) 346.374-010
CUSTOMER-COMPLAINT CLERK (clerical) 241.367-014
customer engineer (any industry) 633.281-030
Customer-Engineering Specialist (office machines) 828.261-022
CUSTOMER-EQUIPMENT ENGINEER (tel. & tel.) 003.187-018
CUSTOMER-FACILITIES SUPERVISOR (tel. & tel.) 822.131-014
customer-order clerk (clerical) 249.362-026
customer-return inspector (plastic prod.; plastic-synth.) 559.381-010
customer security clerk (air trans.) 372.667-010
customer service agent (air trans.) 248.367-018
customer-service clerk (insurance) 249.262-010
CUSTOMER-SERVICE CLERK (retail trade) 299.367-010
Customer Service Manager (retail trade) 299.137-010
customer servicer (any industry) 637.261-018
CUSTOMER SERVICE REPRESENTATIVE (financial) 205.362-026
customer service representative (profess. & kin.) 032.262-010
CUSTOMER-SERVICE REPRESENTATIVE (radio-tv broad.; tel. & tel.; utilities; waterworks) 239.362-014
CUSTOMER SERVICE REPRESENTATIVE (utilities) 959.361-010
customer-service representative (utilities) 241.267-034
CUSTOMER-SERVICE-REPRESENTATIVE INSTRUCTOR (tel. & tel.; utilities; waterworks) 239.227-010
CUSTOMER-SERVICE REPRESENTATIVE SUPERVISOR (radio-tv broad.; tel. & tel.; utilities; waterworks) 239.137-014
customer-servicer helper (any industry) 637.684-010
CUSTOMER SERVICES COORDINATOR (print. & pub.) 221.167-026
customer services instructor (air trans.) 099.227-018
customer-service specialist, post exchange (retail trade) 299.367-010
CUSTOM-FEED-MILL OPERATOR (grain-feed mills) 529.132-010
CUSTOM-FEED-MILL-OPERATOR HELPER (grain-feed mills) 521.686-026
Custom-Frame Assembler (auto. mfg.) 806.381-058
Custom Garment Designer (retail trade) 142.061-018
CUSTOM-LEATHER-PRODUCTS MAKER (leather prod.) 783.361-010
CUSTOMS BROKER (financial) 186.117-018
Customs-Entry Clerk (clerical) 214.467-010
customs examiner (government ser.) 168.267-018
Custom-Shoe Designer And Maker (boot & shoe) 788.381-014
customs-house broker (financial) 186.117-018
CUSTOMS IMPORT SPECIALIST (government ser.) 168.267-018
CUSTOMS INSPECTOR (government ser.) 168.267-022
CUSTOM SKI MAKER (toy-sport equip.) 732.281-010
CUSTOMS PATROL OFFICER (government ser.) 168.167-010
CUSTOM TAILOR (garment; personal ser.; retail trade) 785.261-014
CUSTOM VAN CONVERTER (auto. mfg.; automotive ser.) 806.381-070
CUT-AND-COVER LINE WORKER (boot & shoe) 753.684-014
CUT-AND-PRINT-MACHINE OPERATOR (ordnance) 659.682-010
CUTCH CLEANER (metal prod., nec) 700.687-030
CUT-FILE CLERK (print. & pub.) 222.367-014
CUT-IN WORKER (grain-feed mills) 521.686-030
CUT-LACE-MACHINE OPERATOR (leather prod.) 585.685-038
cutlery grinder (any industry) 701.381-018
CUTLET MAKER, PORK (meat products) 529.686-022
cut-off-machine helper (glass mfg.) 677.665-010
cut-off-machine operator (ordnance) 609.685-026
CUT-OFF-MACHINE OPERATOR (ordnance) 615.685-022
CUT-OFF-MACHINE OPERATOR (paper goods) 640.685-034
cut-off-machine operator (pen & pencil) 690.685-306
CUT-OFF-MACHINE OPERATOR (steel & rel.) 619.685-094
cut-off-machine unloader (glass mfg.) 677.665-010
Cut-Off-Saw Grader (woodworking) 667.382-010
cut-off-saw operator (saw. & plan.) 667.682-078
cut-off-saw operator (stonework) 677.462-010
CUT-OFF-SAW OPERATOR I (woodworking) 667.682-022
CUT-OFF-SAW OPERATOR II (woodworking) 667.685-074
CUT-OFF-SAW OPERATOR, METAL (machine shop) 607.682-010
CUT-OFF-SAW OPERATOR, PIPE BLANKS (nonmet. min.) 677.685-026
CUT-OFF SAW TENDER, METAL (machine shop) 607.685-010
CUT-OFF SAWYER, LOG (paper & pulp; saw. & plan.) 667.685-034
Cut-Off Sawyer, Shingle Mill (saw. & plan.) 667.685-022
cut-off tender, glass (glass mfg.) 677.685-030
cut order hand (carpet & rug) 781.684-010
CUT-OUT-AND-MARKING-MACHINE OPERATOR (boot & shoe) 690.685-110
CUT-OUT-MACHINE OPERATOR (boot & shoe) 690.685-114

cut-out marker (boot & shoe) 788.584-014
cut-out-press operator (boot & shoe) 690.685-114
Cut-Out Stitcher (boot & shoe) 690.682-082
Cut-Out Worker (boot & shoe) 690.685-434
Cut-Plug Packer (tobacco) 920.687-130
Cut-Roll-Machine Offbearer (sugar & conf.) 529.686-034
cut-roll-machine operator (sugar & conf.) 520.685-198
cutter (agriculture) 404.686-010
CUTTER (any industry) term
cutter (any industry) 775.684-022
cutter (any industry) 920.687-038
CUTTER (brick & tile) 579.684-030
Cutter (button & notion) 734.684-010
cutter (fabrication, nec) 690.485-010
CUTTER (food prep., nec) 529.685-082
CUTTER (glove & mit.; tex. prod., nec) 699.682-014
cutter (hat & cap) 585.685-046
cutter (jewelry-silver.) 770.281-014
Cutter (leather mfg.) 589.686-022
cutter (motion picture; radio-tv broad.) 962.262-010
Cutter (paper & pulp) 539.587-010
CUTTER (photofinishing) 976.685-010
cutter (stonework) 771.384-010
cutter (tex. prod., nec) 789.687-134
CUTTER (tex. prod., nec) 686.685-022
cutter (toy-sport equip.) 732.685-014
CUTTER, ALUMINUM SHEET (ship-boat mfg.) 804.684-010
cutter and edge trimmer (jewelry-silver.) 700.687-066
CUTTER-AND-PASTER, PRESS CLIPPINGS (business ser.) 249.587-014
cutter and presser (soap & rel.) 559.685-142
CUTTER APPRENTICE, HAND (any industry) 781.684-078
CUTTER, BANANA ROOM (wholesale tr.) 929.687-010
CUTTER, BARREL DRUM (tex. prod., nec) 690.682-026
Cutter, Brake Lining (nonmet. min.) 579.687-010
cutter, first (soap & rel.) 559.686-042
CUTTER, FROZEN MEAT (can. & preserv.) 521.685-098
cutter, gas (welding) 816.464-010
cutter grinder (machine shop) 603.280-038
cutter-grinder operator (machine shop) 603.280-038
CUTTER, HAND (rubber goods) 751.684-014
CUTTER, HAND I (any industry) 781.684-074
CUTTER, HAND II (any industry) 781.687-026
CUTTER, HAND III (any industry) 781.687-030
cutter-head sharpener (machine shop) 603.382-038
CUTTER HELPER (any industry) 781.687-022
CUTTER, HOT KNIFE (boot & shoe; rubber goods) 751.684-018
CUTTER I (fabrication, nec) 690.685-118
CUTTER II (fabrication, nec) 692.686-030
cutter-in (boot & shoe) 690.682-046
CUTTER-INSPECTOR (nonmet. min.) 751.684-010
cutter, machine (leather prod.) 585.685-038
cutter, machine (sugar & conf.) 521.685-102
CUTTER, MACHINE I (any industry) 781.684-014
CUTTER, MACHINE II (any industry) 699.685-014
CUTTER-MACHINE TENDER (electron. comp.) 615.685-046
CUTTER OPERATOR (any industry) 699.682-018
CUTTER OPERATOR (mine & quarry) 930.683-014
cutter operator (paper & pulp; tex. prod., nec) 530.666-010
cutter operator (plastic prod.; plastic-synth.) 555.685-026
CUTTER OPERATOR (plastic-synth.) 555.585-010
cutter operator (print. & pub.) 640.682-018
cutter operator, asbestos shingle (nonmet. min.) 679.686-010
Cutter Operator, Brick (brick & tile) 575.382-010
CUTTER-OPERATOR HELPER (mine & quarry) 930.687-018
Cutter Operator, Tile (brick & tile) 575.382-010
cutter, plastics rolls (plastic-synth.) 690.665-010
Cutter, Plastics Sheets (plastic prod.; plastic-synth.) 690.685-122
CUTTER, ROTARY SHEAR (tex. prod., nec) 781.684-018
CUTTER, V-GROOVE (clock & watch) 715.685-014
CUTTER, WET MACHINE (paper & pulp) 539.686-010
CUTTER, WOODWIND REEDS (musical inst.) 730.686-010
cutting-and-creasing-machine operator (paper goods) 649.682-014
cutting-and-creasing-press operator (paper goods) 659.662-010
CUTTING-AND-PRINTING-MACHINE OPERATOR (tex. prod., nec) 652.685-022
Cutting-And-Sewing Supervisor (tex. prod., nec) 789.132-010
Cutting-Department Supervisor (leather prod.) 783.132-010
Cutting-Department Supervisor (tex. prod., nec) 789.132-014
Cutting Inspector (garment) 789.687-070
CUTTING INSPECTOR (tex. prod., nec) 781.684-022
CUTTING-MACHINE FIXER (textile) 585.380-010
CUTTING-MACHINE OFFBEARER (tex. prod., nec) 689.686-018
cutting-machine operator (beverage) 640.565-010
cutting-machine operator (hat & cap; tex. prod., nec) 585.685-086
cutting-machine operator (mine & quarry) 930.683-014
CUTTING-MACHINE OPERATOR (print. & pub.) 640.682-018
Cutting-Machine Operator (rubber goods) 690.680-010
CUTTING-MACHINE OPERATOR (sugar & conf.) 521.685-102
cutting-machine operator (sugar & conf.) 521.685-034
CUTTING-MACHINE OPERATOR (tex. prod., nec) 686.585-010
cutting-machine operator (textile) 585.565-010
Cutting-Machine Operator Helper (sugar & conf.) 529.686-034
CUTTING-MACHINE TENDER (any industry) 690.685-122
CUTTING-MACHINE TENDER, DECORATIVE (glass mfg.) 775.685-010
CUTTING-MACHINE-TENDER HELPER (any industry) 690.686-030
Cutting-Room Supervisor (boot & shoe) 788.131-010
CUTTING SUPERVISOR (glass products) 775.134-010
cutting supervisor (logging) 183.167-038
cutting-table operator (rubber goods) 751.686-010
cutting-table operator, first (soap & rel.) 559.686-042
cw operator (tel. & tel.) 193.262-030
Cyanide Furnace Operator (heat treating) 504.682-014
cycle repairer (any industry) 639.681-010
CYLINDER BATCHER (textile) 582.665-010
Cylinder-Block-Hole Reliner (automotive ser.) 616.682-010
Cylinder Checker (chemical) 549.587-010
Cylinder Devalver (chemical) 549.587-010
CYLINDER-DIE-MACHINE HELPER (paper goods) 649.686-018
CYLINDER-DIE-MACHINE OPERATOR (paper goods) 649.682-014
cylinder dyer (textile) 582.685-014
CYLINDER FILLER (chemical) 559.565-010
CYLINDER GRINDER (print. & pub.) 500.381-010
Cylinder Handler (chemical) 549.587-010
Cylinder-Head Assembler (engine-turbine) 706.481-010
cylinder honer (machine shop) 603.482-034
CYLINDER INSPECTOR-AND-TESTER (chemical) 953.387-010
cylinder loader (chemical) 559.565-010
CYLINDER-MACHINE OPERATOR (paper & pulp; wood prod., nec) 539.362-010
Cylinder-Machine Operator, Pulp Drier (paper & pulp) 539.362-010
CYLINDER-PRESS FEEDER (print. & pub.) 651.686-010
CYLINDER-PRESS OPERATOR (print. & pub.) 651.362-010
CYLINDER-PRESS-OPERATOR APPRENTICE (print. & pub.) 651.362-014
cylinder-press-operator helper (print. & pub.) 651.686-010
CYLINDER-SANDER OPERATOR (woodworking) 662.685-014
Cylinder Steamer (chemical) 549.587-010
cylinder tester (chemical) 953.387-010
Cylinder Valver (chemical) 549.587-010
cylinder-valve repairer (chemical) 630.381-030
cylindrical grinder, tool (machine shop) 603.280-010
Cylindrical Mixer (hat & cap) 680.685-062
CYTOGENETIC TECHNOLOGIST (medical ser.) 078.261-026
CYTOLOGIST (profess. & kin.) 041.061-042
CYTOTECHNOLOGIST (medical ser.) 078.281-010

D

DADO OPERATOR (woodworking) 669.382-010
Dag Coater (electron. comp.) 725.684-022
Dag Sprayer (electron. comp.) 741.687-018
daily release and dupe printer (motion picture) 976.682-010
DAIRY-EQUIPMENT REPAIRER (dairy products) 629.281-018
Dairy Farmer (agriculture) 410.161-018
Dairy-Feed-Mixing Operator (grain-feed mills) 520.685-098
DAIRY HELPER (dairy products) 529.686-026
Dairy-Management Specialist (profess. & kin.) 040.061-018
dairy-manufacturing technologist (profess. & kin.) 040.061-022
Dairy-Nutrition Specialist (profess. & kin.) 040.061-018
Dairy-Powder-Mixer Operator (sugar & conf.) 520.685-074
DAIRY-PROCESSING-EQUIPMENT OPERATOR (dairy products) 529.382-018
dairy-products technologist (profess. & kin.) 040.061-022
DAIRY SCIENTIST (profess. & kin.) 040.061-018
DAIRY TECHNOLOGIST (profess. & kin.) 040.061-022
damage cutter (garment) 782.684-038
DAMPENER OPERATOR (paper & pulp) 534.685-010
Dampproofer (construction) 869.664-014
dam tender (waterworks) 954.382-018
Dance-Hall Inspector (government ser.) 375.263-014
DANCER (amuse. & rec.) 151.047-010
DANCE THERAPIST (medical ser.) 076.127-018
darkroom worker (photofinishing) 976.681-010
darner (knitting) 782.684-030
Darning-Machine Operator (any industry) 787.682-030
data acquisition laboratory technician (aircraft mfg.) 002.262-010
DATA BASE ADMINISTRATOR (profess. & kin.) 039.162-010
DATA BASE DESIGN ANALYST (profess. & kin.) 039.162-014
data clerk (clerical) 209.687-010
DATA COMMUNICATIONS ANALYST (any industry) 031.262-010

DATA COMMUNICATIONS TECHNICIAN (any industry) 823.261-030
data communications technician supervisor (any industry) 031.132-010
Data Dictionary Administrator (profess. & kin.) 039.162-014
DATA ENTRY CLERK (clerical) 203.582-054
data entry operator (clerical) 203.582-054
DATA-EXAMINATION CLERK (clerical) 209.387-022
DATA RECOVERY PLANNER (profess. & kin.) 033.162-014
data-reduction technician (profess. & kin.) 020.162-010
data security coordinator (profess. & kin.) 033.162-010
Date Puller (sugar & conf.) 521.687-066
DATER ASSEMBLER (pen & pencil) 733.687-030
Daub-Color Matcher (tex. prod., nec) 550.382-014
Daub-Color Mixer (tex. prod., nec) 550.382-014
dauber (steel & rel.) 543.687-014
day care worker (any industry) 359.677-018
Day Guard (any industry) 372.667-034
Day-Haul Youth Supervisor (agriculture) 913.363-010
DAY WORKER (domestic ser.) 301.687-014
dead header (boot & shoe; rubber goods) 922.687-066
DE-ALCOHOLIZER (beverage) 522.685-042
DEALER-COMPLIANCE REPRESENTATIVE (retail trade; wholesale tr.) 168.267-026
dean of admissions (education) 090.167-014
dean of chapel (education) 129.107-018
dean of instruction (education) 090.117-010
Dean of Men (education) 090.117-018
dean of student affairs (education) 090.117-018
DEAN OF STUDENTS (education) 090.117-018
Dean of Women (education) 090.117-018
dean, school of nursing (medical ser.) 075.117-030
Death-Claim Clerk (insurance) 219.362-010
Death-Claim Examiner (insurance) 241.267-018
debeader (rubber goods; rubber reclaim.) 690.685-386
debeaker (agriculture) 411.687-026
DEBLOCKER (optical goods) 716.687-010
DEBONER, PET FOOD (can. & preserv.) 521.685-378
DEBRANDER (boot & shoe) 753.687-014
DEBRIDGING-MACHINE OPERATOR (nonfer. metal) 607.685-014
debtor (clerical) 241.367-026
DEBUBBLIZER (plastic-synth.) 553.585-010
DEBURRER (button & notion) 603.685-050
DEBURRER, MACHINE (clock & watch) 715.685-018
DEBURRER, PRINTED CIRCUIT BOARD PANELS (electron. comp.) 603.686-014
DEBURRER, STRIP (clock & watch) 603.482-010
DEBURRING-AND-TOOLING-MACHINE OPERATOR (office machines) 690.280-010
DECAL APPLIER (any industry) 749.684-010
decal transferrer (any industry) 749.684-010
DECATING-MACHINE OPERATOR (textile) 582.685-042
DECAY-CONTROL OPERATOR (wholesale tr.) 529.685-086
deck and hull assembler (ship-boat mfg.) 806.684-022
DECK ENGINEER (water trans.) 623.281-010
deck-engine operator (water trans.) 921.683-034
DECKER OPERATOR (paper & pulp) 533.682-010
Deck Guard (fishing & hunt.; water trans.) 372.667-034
DECKHAND (chemical) 553.686-022
DECKHAND (water trans.) 911.687-022
Deckhand, Clam Dredge (fishing & hunt.) 449.667-010
Deckhand, Crab Boat (fishing & hunt.) 449.667-010
DECKHAND, FISHING VESSEL (fishing & hunt.) 449.667-010
Deckhand, Maintenance (water trans.) 911.364-010
Deckhand, Oyster Dredge (fishing & hunt.) 449.667-010
Deckhand, Shrimp Boat (fishing & hunt.) 449.667-010
Deckhand, Sponge Boat (fishing & hunt.) 449.667-010
Deckhand, Tuna Boat (fishing & hunt.) 449.667-010
Deck Molder (ship-boat mfg.) 806.684-054
deck sawyer (paper & pulp; saw. & plan.) 667.685-034
Deck Scaler (saw. & plan.) 455.487-010
deck worker (saw. & plan.) 921.685-014
DECONTAMINATOR (any industry) 199.384-010
DECORATING-AND-ASSEMBLY SUPERVISOR (plastic prod.) 754.130-010
DECORATING-EQUIPMENT SETTER (glass mfg.; glass products) 652.380-010
DECORATING INSPECTOR (glass mfg.) 579.687-014
Decorating-Kiln Operator (pottery & porc.) 573.662-010
DECORATING-MACHINE OPERATOR (glass products) 652.685-026
Decorating-Machine Tender (glass mfg.) 979.685-010
Decorative Greens Cutter (forestry) 453.687-010
decorator (any industry) 970.381-022
decorator (any industry) 979.684-034
DECORATOR (any industry) 298.381-010
decorator (bakery products) 524.684-022
DECORATOR (bakery products; sugar & conf.) 524.684-014
decorator (brick & tile) 773.381-010
decorator (construction; stonework) 779.381-022
DECORATOR (dairy products) 524.381-014
decorator (engraving) 704.381-030
decorator (fabrication, nec) 741.684-010
DECORATOR (furniture; toy-sport equip.) 749.684-014
DECORATOR (glass mfg.; glass products) 740.381-010
DECORATOR (hat & cap) 784.684-022
DECORATOR (leather prod.) 739.684-046
decorator (leather prod.) 781.381-018
DECORATOR (pottery & porc.) 740.684-014
decorator consultant (retail trade) 295.357-018
decorator, hand (bakery products; sugar & conf.) 524.684-014
decorator, hand (pottery & porc.) 740.681-010
decorator, hand (sugar & conf.) 524.684-018
decorator, hand (tex. prod., nec) 782.684-018
decorator inspector (pottery & porc.) 774.687-018
DECORATOR, LIGHTING FIXTURES (light. fix.) 749.684-018
DECORATOR, MANNEQUIN (fabrication, nec) 970.381-014
decorator, store (retail trade) 298.081-010
DECORATOR, STREET AND BUILDING (any industry) 899.687-010
dedenter (any industry) 619.685-034
dedenter (beverage) 617.682-010
Deep-Fryer Assembler (house. appl.) 723.684-010
DEEP SUBMERGENCE VEHICLE CREWMEMBER (military ser.) 623.281-014
DEEP SUBMERGENCE VEHICLE OPERATOR (military ser.) 911.263-010
defect cutter (millwork-plywood) 663.585-010
defect cutter (woodworking) 667.682-082
DEFECTIVE-CIGARETTE SLITTER (tobacco) 529.685-090
DEFECT REPAIRER, GLASSWARE (glass mfg.) 772.684-010
DEFENSIVE FIRE CONTROL SYSTEMS OPERATOR (military ser.) 378.382-014
Defensive-Line Coach (amuse. & rec.) 153.227-010
DEFINER (button & notion) 599.685-022
DEFLASH AND WASH OPERATOR (electron. comp.) 726.685-022
DEFLECTOR OPERATOR (beverage) 529.687-058
Degreaser (any industry) 503.685-030
Degreasing-Solution Mixer (chemical) 550.685-106
Degreasing-Solution Reclaimer (chemical) 552.685-014
Degreasing-Wheel Operator (leather mfg.) 582.685-050
degree clerk (education) 205.367-010
DEHAIRING-MACHINE TENDER (meat products) 525.685-018
DEHYDRATING-PRESS OPERATOR (chemical; plastic-synth.) 551.685-046
dehydrator (can. & preserv.; grain-feed mills) 523.685-058
dehydrator operator (petrol. & gas) 541.382-014
DEHYDRATOR TENDER (can. & preserv.) 523.685-054
Dehydrogenation-Converter Helper (chemical) 558.585-010
Dehydrogenation-Converter Operator (chemical) 558.362-010
Dehydrogenation-Converter Utility Operator (chemical) 559.682-066
dehydrogenation operator, head (chemical; petrol. refin.) 559.132-078
DEICER ASSEMBLER, ELECTRIC (rubber goods) 739.684-050
Deicer Assembler, Pneumatic (rubber goods) 739.684-050
DEICER-ELEMENT WINDER, HAND (rubber goods) 739.684-058
DEICER-ELEMENT WINDER, MACHINE (rubber goods) 692.685-066
DEICER FINISHER (rubber goods) 739.684-054
DEICER INSPECTOR, ELECTRIC (rubber goods) 729.387-010
DEICER INSPECTOR, PNEUMATIC (rubber goods) 759.687-010
DEICER-KIT ASSEMBLER (rubber goods) 759.684-030
Deicer Repairer, Electric (rubber goods) 759.684-026
Deicer Repairer, Pneumatic (rubber goods) 759.684-026
DEICER REPAIRER (rubber goods) 759.684-026
DEICER TESTER (rubber goods) 729.387-014
DE-IONIZER OPERATOR (chemical) 558.685-026
Delicatessen-Goods Stock Clerk (retail trade) 299.367-014
DELI CUTTER-SLICER (retail trade) 316.684-014
Delimer (leather mfg.) 582.482-014
DELINEATOR (profess. & kin.) 970.281-014
delinquent-account clerk (clerical) 241.357-010
Delinquent-Notice-Machine Operator (clerical) 214.482-010
DELIVERER, CAR RENTAL (automotive ser.; retail trade) 919.663-010
Deliverer, Food (retail trade) 299.477-010
DELIVERER, MERCHANDISE (retail trade) 299.477-010
DELIVERER, OUTSIDE (clerical) 230.663-010
Deliverer, Pharmacy (retail trade) 299.477-010
delivery-room clerk (hotel & rest.) 324.577-010
delivery-route truck driver (retail trade; wholesale tr.) 292.353-010
Delivery-Table Operator (nonfer. metal; steel & rel.) 613.682-026
Delivery-Truck Driver, Heavy (any industry) 905.663-014
Demand Equipment Repairer (utilities) 715.281-010
demand inspector (utilities) 952.367-010
Demographer I (profess. & kin.) 020.167-026
Demographer II (profess. & kin.) 054.067-014
Demolition-Crane Operator I (any industry) 921.663-058
Demolition-Crane Operator II (any industry) 921.663-062
DEMOLITION SPECIALIST (ordnance) 737.687-034

DEMONSTRATOR (retail trade; wholesale tr.) 297.354-010
Demonstrator, Construction Equipment (wholesale tr.) 859.683-010
DEMONSTRATOR, ELECTRIC-GAS APPLIANCES (utilities) 297.357-010
DEMONSTRATOR, KNITTING (retail trade) 297.354-014
DEMONSTRATOR, SEWING TECHNIQUES (retail trade) 297.454-010
DEMURRAGE CLERK (r.r. trans.) 214.362-010
den-trator operator (chemical) 558.682-022
Densitometrist (motion picture) 976.381-010
DENSITY CONTROL PUNCHER (motion picture) 976.684-010
DENTAL-AMALGAM PROCESSOR (nonfer. metal) 509.382-014
DENTAL ASSISTANT (medical ser.) 079.361-018
DENTAL CERAMIST (protective dev.) 712.381-042
DENTAL CERAMIST ASSISTANT (protective dev.) 712.664-010
Dental-Chair Assembler (furniture) 706.684-058
Dental-Cream Maker (pharmaceut.) 550.685-090
DENTAL-EQUIPMENT INSTALLER AND SERVICER (wholesale tr.) 829.261-014
DENTAL FLOSS PACKER (protective dev.) 920.687-082
DENTAL HYGIENIST (medical ser.) 078.361-010
DENTAL-LABORATORY TECHNICIAN (protective dev.) 712.381-018
DENTAL-LABORATORY-TECHNICIAN APPRENTICE (protective dev.) 712.381-022
dental surgeon (medical ser.) 072.101-010
dental technician (protective dev.) 712.381-018
dental-technician apprentice (protective dev.) 712.381-022
Dental Technician, Crown And Bridge (protective dev.) 712.381-018
Dental Technician, Metal (protective dev.) 712.381-018
DENTIST (medical ser.) 072.101-010
dent remover (automotive ser.) 807.381-010
denture finisher (protective dev.) 712.381-050
DENTURE-MODEL MAKER (protective dev.) 712.684-046
DENTURE WAXER (protective dev.) 712.381-046
DEODORIZER (chemical) 522.685-046
DEOILING-MACHINE AND PASTEURIZING-MACHINE OPERATOR (beverage) 529.685-094
Depalletizer Operator (any industry) 921.682-014
department chairperson, college or university (education) 090.167-010
department head (any industry) 189.167-022
DEPARTMENT HEAD, COLLEGE OR UNIVERSITY (education) 090.167-010
Department Head, Junior College (education) 090.167-010
department helper (leather mfg.) 589.686-026
department manager, chamber of commerce (nonprofit org.) 187.167-042
Department-Store-Collection Clerk (retail trade) 241.357-010
department supervisor (any industry) 183.167-018
department supervisor (retail trade) 299.137-010
departure clerk (air trans.) 912.367-014
DEPOSIT CLERK (utilities) 241.267-026
depositing-machine operator (bakery products) 526.682-010
DEPOSITING-MACHINE OPERATOR (bakery products) 524.682-010
DEPOSITING-MACHINE OPERATOR (sugar & conf.) 529.682-018
deposition operator (electron. comp.) 501.685-022
DEPOSIT-REFUND CLERK (utilities) 214.482-014
Depth-Stretching-Machine Operator (tex. prod., nec) 580.685-058
deputy assessor (government ser.) 188.167-010
deputy assessor (government ser.) 191.367-010
deputy, building guard (government ser.) 377.667-014
DEPUTY, COURT (government ser.) 377.137-018
deputy, grand jury (government ser.) 377.363-010
DEPUTY INSURANCE COMMISSIONER (government ser.) 186.117-022
DEPUTY SHERIFF, BUILDING GUARD (government ser.) 377.667-014
DEPUTY SHERIFF, CHIEF (government ser.) 377.167-010
DEPUTY SHERIFF, CIVIL DIVISION (government ser.) 377.667-018
DEPUTY SHERIFF, COMMANDER, CIVIL DIVISION (government ser.) 377.137-010
DEPUTY SHERIFF, COMMANDER, CRIMINAL AND PATROL DIVISION (government ser.) 377.137-014
DEPUTY SHERIFF, GRAND JURY (government ser.) 377.363-010
DEPUTY UNITED STATES MARSHALL (government ser.) 377.267-010
DERMATOLOGIST (medical ser.) 070.101-018
derrick-barge operator (water trans.) 921.683-034
DERRICK-BOAT CAPTAIN (water trans.) 911.137-014
DERRICK-BOAT OPERATOR (water trans.) 921.683-034
derrick-boat runner (water trans.) 911.137-014
Derrick-Car Operator (r.r. trans.) 919.663-014
DERRICK OPERATOR (any industry) 921.663-022
DERRICK WORKER, WELL SERVICE (petrol. & gas) 930.683-018
descriptive catalog librarian (library) 100.387-010
DESIGN ASSEMBLER (fabrication, nec) 692.686-034
DESIGN DRAFTER, ELECTROMECHANISMS (profess. & kin.) 017.261-014
DESIGN-ENGINEER, AGRICULTURAL EQUIPMENT (profess. & kin.) 013.061-018
DESIGN ENGINEER, FACILITIES (profess. & kin.) master
DESIGN ENGINEER, MARINE EQUIPMENT (profess. & kin.) 014.061-010
DESIGN ENGINEER, MINING-AND-OILFIELD EQUIPMENT (profess. & kin.) 010.061-010
DESIGN ENGINEER, NUCLEAR EQUIPMENT (profess. & kin.) 015.061-010
DESIGN ENGINEER, PRODUCTS (profess. & kin.) master
DESIGNER (protective dev.) 712.281-014
DESIGNER AND PATTERNMAKER (boot & shoe) 788.281-010
DESIGN INSERTER (plastic prod.) 692.685-070
design leader (machine shop) 007.161-010
DESIGN PRINTER, BALLOON (rubber goods) 651.685-014
design specialist, producibility, cost and component technology (aircraft mfg.) 002.167-010
DESIGN TECHNICIAN, COMPUTER-AIDED (electron. comp.) 003.362-010
design transferrer (any industry) 749.684-010
Desilverizer (smelt. & refin.) 519.685-022
Desizing-Machine Back-Tender (textile) 589.686-010
desizing-machine offbearer (textile) 589.686-010
DESIZING-MACHINE OPERATOR, HEAD-END (textile) 582.685-046
desizing-pad operator (textile) 582.685-046
desk assistant (radio-tv broad.) 209.367-038
desk attendant (library) 249.367-046
Desk Captain (government ser.) 375.137-014
DESK CLERK, BOWLING FLOOR (amuse. & rec.) 340.367-010
DESKIDDING-MACHINE OPERATOR (boot & shoe) 690.685-126
Desk Lieutenant (government ser.) 375.137-014
DESK OFFICER (government ser.) 375.137-014
DESK-PEN-SET ASSEMBLER (pen & pencil) 733.687-034
Desk Sergeant (government ser.) 375.137-014
desktop publisher (print. & pub.) 979.382-026
DESSERT-CUP-MACHINE FEEDER (bakery products) 520.686-014
DESTATICIZER FEEDER (clock & watch) 715.686-010
Destination-Sign Repairer (railroad equip.) 807.381-026
Desulfurizer, Hand (plastic-synth.) 582.685-162
Desulfurizer, Machine (plastic-synth.) 582.685-162
DESULFURIZER OPERATOR (steel & rel.) 541.362-010
DETACKER (knitting; textile) 589.685-030
detail and lay-out drafter (utilities) 019.261-014
detail assembler (aircraft mfg.) 806.384-034
detail bench assembler (aircraft mfg.) 706.381-050
DETAILER (profess. & kin.) 017.261-018
DETAILER, FURNITURE (profess. & kin.) 017.261-022
detailer, pharmaceuticals (wholesale tr.) 262.157-010
DETAILER, SCHOOL PHOTOGRAPHS (photofinishing) 976.564-010
detail maker and fitter (machine tools) 600.360-010
detail sergeant (government ser.) 375.133-010
DETECTIVE (government ser.) 375.267-010
Detective, Automobile Section (government ser.) 375.267-010
Detective, Bowling Alley (amuse. & rec.) 376.667-014
detective-bureau chief (government ser.) 375.167-022
Detective Captain (government ser.) 375.167-022
DETECTIVE CHIEF (government ser.) 375.167-022
detective, criminal investigation (government ser.) 375.267-010
Detective, Homicide Squad (government ser.) 375.267-010
DETECTIVE I (any industry) 376.367-014
DETECTIVE II (any industry) 376.667-014
Detective Lieutenant (government ser.) 375.167-022
DETECTIVE, NARCOTICS AND VICE (government ser.) 375.267-014
Detective, Precinct (government ser.) 375.267-010
detective, private eye (business ser.) 376.267-018
Detective Sergeant I (government ser.) 375.167-022
Detective Sergeant II (government ser.) 375.267-010
Detective, Youth Bureau (government ser.) 375.267-010
DETHISTLER OPERATOR (can. & preserv.) 521.685-106
DETONATOR ASSEMBLER (ordnance) 737.687-038
DEVELOPER (photofinishing) 976.681-010
DEVELOPER, AUTOMATIC (photofinishing) 976.685-014
developer operator (motion picture; photofinishing) 976.382-018
DEVELOPER, PRINTED CIRCUIT BOARD PANELS (electron. comp.) 976.685-034
developer-prover, electrical (any industry) 726.261-010
DEVELOPER PROVER, INTERIOR ASSEMBLIES (aircraft mfg.) 693.261-010
Developer-Prover, Mechanical (aircraft mfg.) 693.261-014
developer prover, upholstering (aircraft mfg.) 693.261-010
Developing-Machine Tender (motion picture) 976.685-018
development-and-planning engineer (utilities) 003.167-026
development disability specialist (social ser.) 195.227-018
development engineer (profess. & kin.) see RESEARCH ENGINEER
Development Engineer, Geothermal Operations (profess. & kin.) 010.061-018
Development-Instrumentation Technician (profess. & kin.) 003.161-014
DEVELOPMENT MECHANIC (aircraft mfg.) 693.261-014
development mechanic (motor-bicycles) 600.260-014
Development Technician (inst. & app.) 710.281-018
devil tender (hat & cap) 680.685-062
devil tender (textile) 680.685-050
DEVULCANIZER CHARGER (rubber reclaim.) 558.666-010

devulcanizer, head (rubber reclaim.) 559.132-058
Devulcanizer Inspector (rubber reclaim.) 559.132-058
devulcanizer operator (rubber reclaim.) 558.585-026
DEVULCANIZER TENDER (rubber reclaim.) 558.585-026
DEWATERER OPERATOR (smelt. & refin.) 511.565-010
Dewatering-Filtering Supervisor (smelt. & refin.) 511.135-010
DEXTRINE MIXER (grain-feed mills) 523.682-018
diagnostic cardiac sonographer (medical ser.) 078.364-014
diagnostic medical sonographer (medical ser.) 078.364-010
DIAGRAMMER AND SEAMER (carpet & rug) 789.484-010
DIAL BRUSHER (clock & watch) 715.687-022
DIALER (clock & watch) 715.684-086
DIAL MAKER (clock & watch) 715.381-046
DIAL MAKER (office machines) 710.684-018
DIAL MARKER (elec. equip.) 729.684-018
dial printer (print. & pub.) 651.685-018
DIAL REFINISHER (clock & watch) 715.584-010
DIAL-SCREW ASSEMBLER (clock & watch) 715.684-082
DIALYSIS TECHNICIAN (medical ser.) 078.362-014
diamond assorter (jewelry-silver.) 770.281-010
DIAMOND BLENDER (cutlery-hrdwr.) 590.685-018
DIAMOND CLEAVER (jewelry-silver.) 770.381-014
DIAMOND CUTTER (jewelry-silver.) term
Diamond-Die Maker (machine shop) 601.280-018
DIAMOND-DIE POLISHER (machine tools) 770.381-022
Diamond Driller (any industry) 930.682-010
DIAMOND DRILLER (machine tools) 770.381-018
Diamond-Driller Helper (any industry) 930.687-014
DIAMOND EXPERT (jewelry-silver.) 770.267-010
diamond grader (jewelry-silver.) 770.281-010
DIAMOND MOUNTER (machine tools) 739.384-010
DIAMOND-POWDER TECHNICIAN (nonmet. min.) 673.685-046
Diamond Sander (stonework) 6..,682-030
Diamond-Saw Operator (stonework) 677.462-010
DIAMOND SELECTOR (jewelry-silver.) 770.281-010
Diamond Setter (jewelry-silver.) 700.381-054
DIAMOND SIZER AND SORTER (clock & watch; jewelry-silver.) 770.687-014
Diamond-Tool Maker (clock & watch) 601.280-042
Diamond-Wheel Edger (glass products) 775.684-014
Diamond-Wheel Molder (nonmet. min.) 575.685-010
DIANETIC COUNSELOR (profess. & kin.) 199.207-010
dianeticist (profess. & kin.) 199.207-010
DIAPER MACHINE TENDER (protective dev.) 692.685-278
diaphragm builder (chemical) 826.684-022
Diathermy-Equipment Repairer (any industry) 729.281-030
Diazo Technician (electron. comp.) 976.384-010
Dice Dealer (amuse. & rec.) 343.464-010
DICE MAKER (toy-sport equip.) 731.381-010
Dicer-Machine Operator (can. & preserv.) 521.685-018
DICER OPERATOR (plastic-synth.) 690.685-130
Dice Spotter (toy-sport equip.) 740.687-018
dictating-machine transcriber (clerical) 203.582-058
dictating-machine typist (clerical) 203.582-058
DICTATING-TRANSCRIBING-MACHINE SERVICER (any industry) 633.281-014
Dictating-Transcribing-Machine Servicer, Grooved Tape (any industry) 633.281-014
Dictating-Transcribing-Machine Servicer, Magnetic Tape (any industry) 633.281-014
DIE ATTACHER (electron. comp.) 726.684-042
DIE ATTACHING MACHINE TENDER (electron. comp.) 726.685-026
DIE BARBER (machine shop) 705.381-010
Die Case Hardener (heat treating) 504.682-014
die-cast-die maker (machine shop) 601.280-030
Die-Casting-Machine Maintainer (foundry) 514.360-010
die-casting machine operator (elec. equip.) 502.482-018
DIE-CASTING-MACHINE OPERATOR I (foundry) 514.382-010
DIE-CASTING-MACHINE OPERATOR II (foundry) 514.685-018
DIE-CASTING-MACHINE SETTER (foundry) 514.360-010
Die-Cast Patternmaker (foundry) 661.281-022
DIE CLEANER (food prep., nec) 529.687-062
DIE CUTTER (any industry) 699.682-022
die cutter (jewelry-silver.) 601.381-014
die cutter (print. & pub.) 979.281-010
die cutter (tex. prod., nec; textile) 686.462-010
die-cutter apprentice (jewelry-silver.) 601.381-022
die cutter, diamond (machine tools) 770.381-022
Die-Cutting-Machine Operator, Automatic (rubber goods) 686.462-010
DIE-CUTTING-MACHINE OPERATOR, AUTOMATIC (tex. prod., nec; textile) 686.462-010
Die-Cutting-Machine-Operator Helper, Automatic (tex. prod., nec) 586.686-022
die design drafter (machine shop) 007.161-010
DIE DESIGNER (machine shop) 007.161-010
DIE-DESIGNER APPRENTICE (machine shop) 007.161-014
die developer (machine shop) 007.161-010
DIE-DRAWING CHECKER (profess. & kin.) 007.167-010
die engraver (print. & pub.) 979.281-010
Die-Engraving Supervisor (engraving) 704.131-010
die equipment operator (electron. comp.) 726.685-062
Die Filer (machine tools) 705.484-010
die-finisher, forging (machine shop) 705.484-014
DIE FINISHER (machine shop) 601.381-010
die fitter (machine shop) 601.381-010
Die-Lay-Out Worker (foundry) 661.281-022
dielectric-heat-sealing-machine operator (any industry) 690.685-154
DIELECTRIC-PRESS OPERATOR (auto. mfg.) 692.685-074
Dielectric Tester (rubber goods) 759.684-074
dielectric-testing-machine operator (elec. equip.) 727.687-050
die-machine operator (forging) 611.482-010
DIE MAKER (jewelry-silver.) 601.381-014
die maker (machine shop) 601.281-010
DIE MAKER (paper goods) 739.381-018
DIE MAKER (print. & pub.) 979.281-010
DIE-MAKER APPRENTICE (jewelry-silver.) 601.381-022
DIE-MAKER APPRENTICE (paper goods) 739.381-022
DIE MAKER, BENCH, STAMPING (machine shop) 601.281-010
DIE MAKER, ELECTRONIC (machine shop) 601.381-042
DIE MAKER, STAMPING (machine shop) 601.280-010
DIE MAKER, TRIM (machine shop) 601.280-014
DIE MAKER, WIRE DRAWING (machine shop) 601.280-018
DIE MOUNTER (paper goods) 659.684-010
die-out-machine operator (boot & shoe) 690.685-114
die polisher (machine tools) 770.381-022
DIE POLISHER (nonfer. metal) 601.381-018
DIE PRESSER (pottery & porc.) 575.685-026
die-press operator (any industry) 699.682-022
die-press operator (rubber goods) 690.685-286
Die Repairer, Forging (machine shop) 601.280-022
Die Repairer, Stamping (machine shop) 601.280-010
Die Repairer, Trimmer Dies (machine shop) 601.280-014
Diesel-Dragline Operator (any industry) 850.683-018
Diesel-Engine Assembler (engine-turbine) 806.481-014
diesel-engine engineer (petrol. & gas) 950.382-022
DIESEL-ENGINE ERECTOR (engine-turbine) 625.361-010
diesel-engine fitter (engine-turbine) 625.361-010
Diesel-Engine Inspector (engine-turbine) 806.261-010
diesel-engine-mechanic apprentice (any industry) 625.281-014
Diesel-Engine Mechanic, Automobile (automotive ser.) 625.281-010
Diesel-Engine Mechanic, Bus (automotive ser.) 625.281-010
Diesel-Engine Mechanic, Marine (ship-boat mfg.) 625.281-010
Diesel-Engine Mechanic, Truck (automotive ser.) 625.281-010
Diesel-Engine Operator, Stationary (any industry) 950.382-026
DIESEL-ENGINE TESTER (engine-turbine) 625.261-010
Diesel-Locomotive-Crane Operator (any industry) 921.663-038
DIESEL MECHANIC (any industry) 625.281-010
DIESEL-MECHANIC APPRENTICE (any industry) 625.281-014
Diesel-Mechanic, Construction (construction) 625.281-010
Diesel-Mechanic, Farm (agric. equip.) 625.281-010
DIESEL-MECHANIC HELPER (any industry) 625.684-010
Diesel-Pile-Driver Operator (construction) 859.682-018
DIESEL-PLANT OPERATOR (utilities) 952.382-010
Diesel-Powerplant Mechanic (utilities) 631.261-014
Diesel-Powerplant-Mechanic Helper (utilities) 631.684-010
Diesel-Powerplant Supervisor (utilities) 631.131-010
Diesel-Power-Shovel Operator (any industry) 850.683-030
Diesel-Roller Operator (construction) 859.683-030
Diesel-Tractor Operator (any industry) 929.683-014
Diesel-Truck-Crane Operator (any industry) 921.663-062
die setter (inst. & app.; office machines; plastic prod.; recording) 556.380-010
DIE SETTER (forging) 612.360-010
DIE SET-UP OPERATOR, PRINTED CIRCUIT BOARDS (electron. comp.) 699.380-010
DIE SINKER (machine shop) 601.280-022
die-sinking-machine operator (machine shop) 605.280-014
die-sinking-machine operator (machine shop) 605.382-026
die-stamping-press operator (print. & pub.) 651.382-010
Die-Storage Clerk (clerical) 222.367-062
dietary aide (medical ser.) 319.677-014
dietary assistant (hotel & rest.) 319.137-030
DIETARY MANAGER (hotel & rest.) 187.167-206
DIET CLERK (medical ser.) 245.587-010
DIE TESTER (electron. comp.) 726.685-030
DIETETIC TECHNICIAN (profess. & kin.) 077.124-010
DIETITIAN (profess. & kin.) term
dietitian, administrative (profess. & kin.) 077.117-010
DIETITIAN, CHIEF (profess. & kin.) 077.117-010
DIETITIAN, CLINICAL (profess. & kin.) 077.127-014
DIETITIAN, CONSULTANT (profess. & kin.) 077.127-018
DIETITIAN, RESEARCH (profess. & kin.) 077.061-010

DIETITIAN, TEACHING (profess. & kin.) 077.127-022
dietitian, therapeutic (profess. & kin.) 077.127-014
DIE TRIPPER (brick & tile) 575.665-014
DIE-TRY-OUT WORKER, STAMPING (machine shop) 601.281-014
Differential Repairer (auto. mfg.) 620.381-022
Differential Repairer (automotive ser.) 620.261-010
DIFFUSER OPERATOR (sugar & conf.) 523.562-010
DIFFUSION FURNACE OPERATOR, SEMICONDUCTOR WAFERS (electron. comp.) 590.685-070
digester charger (rubber reclaim.) 558.585-026
digester cook (paper & pulp; paper goods) 532.362-010
digester-cook helper (paper & pulp; paper goods) 532.686-010
digester operator (chemical) 552.682-018
digester operator (chemical) 555.686-010
DIGESTER OPERATOR (paper & pulp; paper goods) 532.362-010
DIGESTER-OPERATOR HELPER (paper & pulp; paper goods) 532.686-010
DIGESTION OPERATOR (smelt. & refin.) 519.565-010
DIGGER (fabrication, nec) 739.687-070
digger (mine & quarry) 939.687-014
digitizer (electron. comp.) 003.362-010
DIGITIZER OPERATOR (business ser.; petrol. & gas) 213.582-010
dimension-quarry supervisor (mine & quarry) 939.137-014
Dimethylaniline-Sulfator Operator (chemical) 550.585-030
DINING ROOM ATTENDANT (hotel & rest.) 311.677-018
dining-room attendant, cafeteria (hotel & rest.) 311.677-010
Dining-Room Cashier (hotel & rest.) 211.462-010
dining-room manager (hotel & rest.) 310.137-010
DINING SERVICE INSPECTOR (r.r. trans.) 168.267-030
dining-service supervisor (hotel & rest.) 319.137-018
dining-service worker (hotel & rest.) 319.484-010
dinker (any industry) 781.687-030
DINKEY OPERATOR (any industry) 919.663-014
Dinkey Operator, Compressed Air (any industry) 919.663-014
Dinkey-Operator Helper (any industry) 932.664-010
Dinkey Operator, Mine (mine & quarry) 919.663-014
Dinkey Operator, Slag (smelt. & refin.) 919.663-014
Dinkey Operator, Slate (mine & quarry) 919.663-014
dinking-machine operator (any industry) 699.682-022
Diorama Model-Maker (fabrication, nec) 739.361-010
Dip Guider, Stoves (fabrication, nec) 590.686-014
Diplomatic Officer (government ser.) 188.117-106
DIP-LUBE OPERATOR (ordnance) 503.685-014
dip painter (any industry) 599.685-026
DIPPER (any industry) 599.685-026
Dipper (elec. equip.; electron. comp.) 726.687-022
DIPPER (fabrication, nec) 590.685-022
dipper (foundry) 518.687-022
dipper (hat & cap) 589.687-038
DIPPER (jewelry-silver.) 735.687-010
DIPPER (knitting; textile) 589.687-018
dipper (optical goods) 713.687-010
DIPPER (pen & pencil) 733.687-038
Dipper (plastic-synth.) 582.685-162
DIPPER (pottery & porc.) 774.684-014
DIPPER (rubber goods) 556.685-030
DIPPER AND BAKER (any industry) 599.685-030
DIPPER AND DRIER (woodworking) 749.687-010
DIPPER, CLOCK AND WATCH HANDS (clock & watch) 715.687-026
dipper, fish (can. & preserv.) 522.687-014
dipping-machine operator (plastic-synth.) 554.585-014
DIPPING-MACHINE OPERATOR (rubber goods) 556.685-034
dip tanker (wood prod., nec) 561.665-010
dip-tube assembler, machine (plastic prod.) 690.682-074
Dip-Unit Operator (rubber goods; rubber tire) 554.682-010
DIRECT-MAIL CLERK (clerical) 209.587-018
director, advertising (any industry) 164.117-010
DIRECTOR, AERONAUTICS COMMISSION (government ser.) 188.117-034
DIRECTOR, AGRICULTURAL SERVICES (government ser.) 188.117-038
director, airport (air trans.) 184.117-026
Director, Airport Operations (air trans.) 184.117-026
director, alumni relations (education) 090.117-014
DIRECTOR, ARTS-AND-HUMANITIES COUNCIL (government ser.) 188.117-042
DIRECTOR, ATHLETIC (education) 090.117-022
Director, Bio-Communications Laboratory (medical ser.) 076.104-010
director, broadcast (radio-tv broad.) 159.167-014
DIRECTOR, CAMP (social ser.) 195.167-018
DIRECTOR, CASTING (motion picture; radio-tv broad.) 159.267-010
director, chemical laboratory (profess. & kin.) 022.161-010
Director, Child Development Center (education) 092.167-010
Director, Child Support Enforcement Program (profess. & kin.) 195.117-010
Director, Civil Preparedness (government ser.) 188.117-022
Director, Civil Preparedness Warden (government ser.) 188.117-022
DIRECTOR, CLASSIFICATION AND TREATMENT (government ser.) 188.167-026
DIRECTOR, COMMISSION FOR THE BLIND (government ser.) 094.117-010
Director, Community Center (profess. & kin.) 195.117-010
DIRECTOR, COMMUNITY-HEALTH NURSING (medical ser.) 075.117-014
DIRECTOR, COMMUNITY ORGANIZATION (nonprofit org.) 187.167-234
DIRECTOR, COMPLIANCE (government ser.) 188.117-046
DIRECTOR, CONSUMER AFFAIRS (government ser.) 188.117-050
DIRECTOR, CORRECTIONAL AGENCY (government ser.) 188.117-054
director, council of social agencies (nonprofit org.) 187.167-234
DIRECTOR, COUNCIL ON AGING (government ser.) 188.117-058
director, counseling bureau (profess. & kin.) 045.107-018
DIRECTOR, CRAFT CENTER (profess. & kin.) 187.167-202
director, dance (amuse. & rec.) 151.027-010
director, data processing (profess. & kin.) 169.167-030
DIRECTOR, DAY CARE CENTER (education) 092.167-010
DIRECTOR, DENTAL SERVICES (medical ser.) 072.117-010
DIRECTOR, DIAGNOSTIC-AND-EVALUATION CLINIC (medical ser.) 070.107-018
director, dietetics department (profess. & kin.) 077.117-010
DIRECTOR, EDUCATION (museums) 099.117-030
director, educational board of nurse examiners (government ser.) 075.117-010
DIRECTOR, EDUCATIONAL, COMMUNITY-HEALTH NURSING (medical ser.) 075.117-018
DIRECTOR, EDUCATIONAL PROGRAM (education) 099.117-010
DIRECTOR, EDUCATIONAL PROGRAMMING (radio-tv broad.) 169.167-070
director, educational, public-health nursing (medical ser.) 075.117-018
Director, Educational Radio (radio-tv broad.) 184.117-010
DIRECTOR, EMPLOYMENT RESEARCH AND PLANNING (government ser.) 050.117-010
DIRECTOR, EMPLOYMENT SERVICES (government ser.) 188.117-078
director, evaluation and research (education) 089.167-022
DIRECTOR, EXTENSION WORK (education) 090.117-026
director, federated fund (nonprofit org.) 187.167-234
DIRECTOR, FIELD (social ser.) 195.167-022
DIRECTOR, FIELD REPRESENTATIVES (government ser.) 188.117-062
DIRECTOR, FIELD SERVICES (education) 090.167-034
DIRECTOR, FINANCIAL RESPONSIBILITY DIVISION (government ser.) 188.167-030
DIRECTOR, FOOD AND BEVERAGE (amuse. & rec.) 187.167-210
DIRECTOR, FOOD SERVICES (hotel & rest.) 187.167-026
DIRECTOR, FUNDRAISING (nonprofit org.) 165.117-010
DIRECTOR, FUNDS DEVELOPMENT (profess. & kin.) 165.117-014
DIRECTOR, FUNERAL (personal ser.) 187.167-030
director, geophysical laboratory (profess. & kin.) 024.167-010
Director, Geothermal Operations (petrol. & gas) 010.161-014
director, housekeeping (any industry) 187.167-046
Director, Industrial Museum (museums) 102.017-010
director, industrial nursing (medical ser.) 075.117-026
DIRECTOR, INDUSTRIAL RELATIONS (profess. & kin.) 166.117-010
DIRECTOR, INSTITUTION (any industry) 187.117-018
DIRECTOR, INSTRUCTIONAL MATERIAL (education) 099.167-018
Director, International Broadcasting (radio-tv broad.) 184.117-062
Director, International Programs (radio-tv broad.) 184.167-030
director, laboratory (profess. & kin.) see LABORATORY CHIEF
DIRECTOR, LABOR STANDARDS (government ser.) 188.117-066
DIRECTOR, LAW ENFORCEMENT (government ser.) 188.117-070
director, recreation (government ser.) 187.117-054
DIRECTOR, LICENSING AND REGISTRATION (government ser.) 188.117-074
director, management information systems (profess. & kin.) 169.167-030
Director, Marketing Research And Analysis (profess. & kin.) 189.117-014
DIRECTOR, MEDIA MARKETING (radio-tv broad.) 163.117-022
DIRECTOR, MEDICAL FACILITIES SECTION (government ser.) 188.117-082
Director, Medical Records (medical ser.) 079.167-014
Director, Mental Health Agency (profess. & kin.) 195.117-010
director, merchandise (retail trade; wholesale tr.) 185.167-034
DIRECTOR, MERIT SYSTEM (government ser.) 188.117-086
DIRECTOR, MOTION PICTURE (motion picture) 159.067-010
DIRECTOR, MUSEUM-OR-ZOO (museums) 102.117-014
DIRECTOR, MUSIC (motion picture; radio-tv broad.) 152.047-018
director, music (profess. & kin.) 152.047-014
DIRECTOR, NEWS (radio-tv broad.) 184.167-014
Director, Nursery School (education) 092.167-010
DIRECTOR, NURSES' REGISTRY (medical ser.) 187.167-034
DIRECTOR, NURSING SERVICE (medical ser.) 075.117-022
DIRECTOR, OCCUPATIONAL HEALTH NURSING (medical ser.) 075.117-026
Director, Occupational Therapy (medical ser.) 076.121-010
director of admissions (education) 090.167-030
DIRECTOR OF ADMISSIONS (education) 090.167-014
director of career planning and placement (education) 166.167-014
director of career resources (education) 166.167-014
director of consumer services (any industry) 199.251-010
DIRECTOR OF COUNSELING (profess. & kin.) 045.107-018
director of engineering (radio-tv broad.) 003.167-034

director of financial aid and placements

director of financial aid and placements (education) 090.117-030
director of flight operations (business ser.) 184.167-026
DIRECTOR OF GUIDANCE IN PUBLIC SCHOOLS (education) 045.117-010
director of home economics (profess. & kin.) 096.161-010
DIRECTOR OF INSTITUTIONAL RESEARCH (education) 090.167-018
director of institutional studies (education) 090.167-018
director of major or capital gifts (profess. & kin.) 165.117-014
director of photography (business ser.) 184.167-026
DIRECTOR OF PHOTOGRAPHY (motion picture; radio-tv broad.) 143.062-010
Director of Photography, Special Effects (motion picture; radio-tv broad.) 143.062-010
DIRECTOR OF PLACEMENT (education) 166.167-014
Director of Publications (profess. & kin.) 189.117-010
DIRECTOR OF PUPIL PERSONNEL PROGRAM (education) 099.167-034
director of recruitment (education) 090.167-034
director of rehabilitative services (medical ser.) 076.117-010
DIRECTOR OF RELIGIOUS ACTIVITIES (education) 129.107-018
director of religious life (education) 129.107-018
director of social services (government ser.) 188.117-126
DIRECTOR OF STUDENT AFFAIRS (education) 090.167-022
director of student aid (education) 090.117-030
director of student services (education) 090.117-018
DIRECTOR OF VITAL STATISTICS (government ser.) 188.167-022
DIRECTOR, OPERATIONS (radio-tv broad.) 184.167-018
DIRECTOR, OPERATIONS, BROADCAST (radio-tv broad.) 184.167-022
DIRECTOR, OUTPATIENT SERVICES (medical ser.) 187.117-058
DIRECTOR, PHARMACY SERVICES (medical ser.) 074.167-010
DIRECTOR, PHOTOGRAMMETRY FLIGHT OPERATIONS (business ser.) 184.167-026
Director, Physical Therapy (medical ser.) 076.121-014
Director, Planning (profess. & kin.) 199.167-014
director, procurement services (profess. & kin.) 162.167-022
director, product assurance (profess. & kin.) 189.117-042
Director, Product Research And Development (profess. & kin.) 189.117-014
DIRECTOR, PROGRAM (radio-tv broad.) 184.167-030
director, public-health nursing (medical ser.) 075.117-014
DIRECTOR, PUBLIC SERVICE (radio-tv broad.) 184.117-010
DIRECTOR, QUALITY ASSURANCE (profess. & kin.) 189.117-042
DIRECTOR, RADIO (radio-tv broad.) 159.167-014
Director, Radio News (radio-tv broad.) 184.167-014
Director, Reactor Projects (government ser.) 188.117-134
DIRECTOR, RECORDS MANAGEMENT (profess. & kin.) 161.117-014
director, recreation (hotel & rest.; water trans.) 352.167-010
DIRECTOR, RECREATION CENTER (social ser.) 195.167-026
DIRECTOR, REGULATORY AGENCY (government ser.) 188.117-134
Director, Rehabilitation Program (profess. & kin.) 195.117-010
DIRECTOR, RELIGIOUS EDUCATION (nonprofit org.) 129.107-022
DIRECTOR, RESEARCH (motion picture; radio-tv broad.) 052.167-010
DIRECTOR, RESEARCH AND DEVELOPMENT (any industry) 189.117-014
DIRECTOR, REVENUE (government ser.) 188.117-090
director, safety (mine & quarry) 010.061-026
DIRECTOR, SAFETY COUNCIL (government ser.) 188.167-034
director, sales (hotel & rest.) 163.117-018
director, sanitation bureau (government ser.) 188.167-098
Director, School For Blind (education) 187.117-018
DIRECTOR, SCHOOL OF NURSING (medical ser.) 075.117-030
DIRECTOR, SECURITIES AND REAL ESTATE (government ser.) 188.167-038
DIRECTOR, SERVICE (nonprofit org.) 187.167-214
DIRECTOR, SERVICE (retail trade) 189.167-014
DIRECTOR, SOCIAL (hotel & rest., water trans.) 352.167-010
Director, Social Service (profess. & kin.) 195.117-010
director, social welfare (profess. & kin.) 195.117-010
DIRECTOR, SPECIAL EDUCATION (education) 094.167-014
DIRECTOR, SPEECH-AND-HEARING (medical ser.) 079.13[illegible]-010
DIRECTOR, SPORTS (radio-tv broad.) 184.167-034
DIRECTOR, STAGE (amuse. & rec.) 150.067-010
DIRECTOR, STATE-ASSESSED PROPERTIES (government ser.) 188.167-042
DIRECTOR, STATE-HISTORICAL SOCIETY (profess. & kin.) 052.067-014
director, student union (education) 090.167-022
DIRECTOR, SUMMER SESSIONS (education) 090.167-026
DIRECTOR, TECHNICAL (radio-tv broad.) 962.162-010
Director, Teen Post (profess. & kin.) 187.117-046
DIRECTOR, TELEVISION (radio-tv broad.) 159.067-014
Director, Television News (radio-tv broad.) 184.167-014
director, traffic and planning (government ser.) 005.167-022
DIRECTOR, TRANSLATION (profess. & kin.) 137.137-010
DIRECTOR, TRANSPORTATION (motor trans.) 184.117-014
Director, Transportation Utilities Regulation (government ser.) 188.117-134
director, underwriter sales (radio-tv broad.) 163.117-026
DIRECTOR, UNDERWRITER SOLICITATION (radio-tv broad.) 163.117-026
DIRECTOR, UNEMPLOYMENT INSURANCE (government ser.) 188.117-094
director, united fund (nonprofit org.) 187.167-234
DIRECTOR, UTILITY ACCOUNTS (government ser.) 160.267-014
director, vocational counseling (profess. & kin.) 045.107-018
DIRECTOR, VOCATIONAL TRAINING (education) 097.167-010
DIRECTOR, VOLUNTEER SERVICES (social ser.) 187.167-038
Director, Weights And Measures (government ser.) 188.117-134
DIRECTORY-ASSISTANCE OPERATOR (tel. & tel.) 235.662-018
Directory Compiler (clerical) 209.387-014
Director, Youth Correctional Facility (government ser.) 187.117-018
Disability-Insurance-Claim Examiner (insurance) 241.267-018
Disability-Insurance-Hearing Officer (government ser.) 119.107-010
DISASSEMBLER (clock & watch) 715.684-090
Disassembler, Product (machine shop) 706.684-018
Disaster Director (nonprofit org.) 187.167-214
DISASTER OR DAMAGE CONTROL SPECIALIST (military ser.) 378.267-014
disaster recovery coordinator (profess. & kin.) 033.162-014
Disbursement Clerk (clerical) 211.362-010
DISBURSEMENT CLERK (financial) 219.367-046
Discount-Variety-Store Stock Clerk (retail trade) 299.367-014
DISC-PAD GRINDER (nonmet. min.) 673.685-086
DISC-PAD GRINDING MACHINE FEEDER (nonmet. min.) 673.686-030
DISC-PAD KNOCKOUT WORKER (nonmet. min.) 579.687-034
DISC-PAD-PLATE FILLER (nonmet. min.) 579.687-038
disc-ruler operator (paper goods; print. & pub.) 659.682-022
disease-and-insect-control boss (agriculture) 408.137-010
Dish Carrier (hotel & rest.) 311.677-018
Dishcloth Folder (tex. prod., nec) 589.687-014
Dish-Cloth Inspector (tex. prod., nec) 789.587-014
Dishing-Machine Operator (any industry) 617.260-010
Dishwasher Preparer (any industry) 827.584-010
Dishwashing-Machine Repairer (any industry) 827.261-010
DISK-AND-TAPE-MACHINE TENDER (leather prod.) 783.685-018
DISK JOCKEY (radio-tv broad.) 159.147-014
disk recoater (any industry) 739.684-030
Disk-Recording-Machine Operator (radio-tv broad.; recording) 194.362-010
Disk Recordist (motion picture) 962.382-010
Disk Sander (woodworking) 761.682-014
disk setter (glass mfg.) 734.687-022
DISPATCHER (air trans.) 912.167-010
dispatcher (clerical) 239.367-014
dispatcher (clerical) 222.587-038
DISPATCHER (construction) 849.137-010
dispatcher (government ser.) 379.362-018
dispatcher (government ser.) 379.362-010
DISPATCHER (government ser.) 193.262-014
DISPATCHER (mine & quarry) 932.167-010
dispatcher (motor trans.) 913.367-010
dispatcher (motor trans.) 913.167-010
dispatcher (motor trans.; r.r. trans.) 184.163-010
dispatcher (r.r. trans.) 184.167-262
DISPATCHER (tel. & tel.) 239.167-014
dispatcher (tel. & tel.) 822.361-030
Dispatcher, Automobile Rental (automotive ser.) 249.167-014
DISPATCHER, BUS AND TROLLEY (motor trans.) 913.167-014
Dispatcher, Chief, Coal Slurry (pipe lines) 184.167-038
DISPATCHER, CHIEF I (petrol. & gas; petrol. refin.; pipe lines) 184.167-038
DISPATCHER, CHIEF II (petrol. & gas; petrol. refin.; pipe lines) 914.167-010
Dispatcher, Chief, Natural Gas (petrol. & gas; pipe lines) 184.167-038
Dispatcher, Chief, Oil (pipe lines) 184.167-038
Dispatcher, Chief, Petroleum Products (petrol. refin.; pipe lines) 184.167-038
DISPATCHER, CHIEF, SERVICE OR WORK (utilities) 959.137-010
DISPATCHER CLERK (r.r. trans.) 215.362-014
DISPATCHER, CONCRETE PRODUCTS (concrete prod.; construction) 579.137-030
dispatcher, electric power (utilities) 952.167-014
Dispatcher, Industrial Locomotive (any industry) 910.367-018
dispatcher, maintenance (clerical) 221.367-066
DISPATCHER, MAINTENANCE SERVICE (clerical) 239.367-014
DISPATCHER, MOTOR VEHICLE (clerical) 249.167-014
DISPATCHER, OIL (petrol. & gas; petrol. refin.; pipe lines) 914.167-014
DISPATCHER, OIL WELL SERVICES (petrol. & gas) 939.362-010
DISPATCHER, RADIO (government ser.) 379.362-010
DISPATCHER, RADIOACTIVE-WASTE-DISPOSAL (chemical) 955.167-010
Dispatcher, Ready-Mix Plant (concrete prod.; construction) 579.137-030
Dispatcher, Refinery (pipe lines) 914.167-014
DISPATCHER, RELAY (pipe lines) 221.362-014
dispatcher, route sales-delivery drivers (retail trade; wholesale tr.) 292.137-014
DISPATCHER, SECURITY GUARD (business ser.) 372.167-010
DISPATCHER, SERVICE (utilities) 959.167-010
DISPATCHER, SERVICE, CHIEF (utilities) 959.137-014
DISPATCHER, SERVICE OR WORK (utilities) 952.167-010
DISPATCHER, SHIP PILOT (water trans.) 248.367-026
DISPATCHER, STREET DEPARTMENT (government ser.) 239.367-030
Dispatcher, Tow Truck (automotive ser.) 249.167-014
DISPATCHER, TRAFFIC OR SYSTEM (motor trans.; r.r. trans.) 919.162-010

DISPATCHER, TUGBOAT (water trans.) 911.167-010
dispensary attendant (personal ser.) 339.687-010
Dispensary Clerk (medical ser.) 203.362-010
dispersion mixer (paint & varnish) 550.685-078
display and banner designer (profess. & kin.) 142.051-010
Display Artist (profess. & kin.) 142.051-010
display-card writer (any industry) 659.682-026
display carver (hotel & rest.) 316.661-010
DISPLAY DESIGNER (profess. & kin.) 142.051-010
Display Designer, Outside (profess. & kin.) 142.051-010
DISPLAYER, MERCHANDISE (retail trade) 298.081-010
DISPLAY FABRICATOR (fabrication, nec) 860.684-022
DISPLAY MAKER (fabrication, nec) 739.361-010
DISPLAY-SCREEN FABRICATOR (electron. comp.) 725.685-010
display trimmer (retail trade) 298.081-010
disposal-plant operator (sanitary ser.) 955.362-010
disposition clerk (clerical) 209.367-042
dissolver operator (chemical) 550.685-018
dissolver operator (chemical) 550.685-114
DISSOLVER OPERATOR (chemical) 558.682-014
DISTILLATION OPERATOR (chemical) 552.462-010
DISTILLATION-OPERATOR HELPER (chemical) 552.687-010
distiller (chemical) 552.685-014
DISTILLER I (chemical) 552.682-010
DISTILLER II (chemical) 552.682-014
DISTILLERY WORKER, GENERAL (beverage) 529.687-066
DISTILLING-DEPARTMENT SUPERVISOR (beverage) 522.131-010
DISTRESSER (furniture) 763.687-018
DISTRIBUTING CLERK (clerical) 222.587-018
DISTRIBUTION-ACCOUNTING CLERK (utilities) 210.362-010
distribution clerk (government ser.) 209.687-014
Distribution Clerk, Railway Or Highway Post Office (government ser.) 209.687-014
distribution district supervisor (utilities) 952.137-018
distribution estimator (utilities) 019.261-014
DISTRIBUTION-FIELD ENGINEER (utilities) 003.167-014
distribution manager (business ser.; wholesale tr.) 163.267-010
DISTRIBUTION SUPERVISOR (pipe lines; wholesale tr.) 914.137-010
Distribution-Transformer Assembler (elec. equip.) 820.381-014
distributor (any industry) 929.687-030
distributor (laundry & rel.) 369.687-010
distributor, advertising material (any industry) 230.687-010
DISTRIBUTOR-CLEANER (tobacco) 529.687-070
distributor, motor vehicles and supplies (wholesale tr.) 273.357-022
distributor, publications (wholesale tr.) 277.357-022
DISTRICT ADVISER (nonprofit org.) 187.117-022
district agent (insurance) 186.167-034
District Agricultural Agent (government ser.) 096.167-010
DISTRICT ATTORNEY (government ser.) 110.117-010
District Branch Manager (insurance) 186.167-034
district captain (government ser.) 375.167-034
District Claims Manager (insurance) 186.167-034
District-Court Judge (government ser.) 111.107-010
DISTRICT CUSTOMS DIRECTOR (government ser.) 188.117-098
DISTRICT CUSTOMS DIRECTOR, DEPUTY (government ser.) 188.167-046
district director (nonprofit org.) 187.117-022
district director (profess. & kin.) 187.167-238
DISTRICT EXTENSION SERVICE AGENT (government ser.) 096.167-010
District Fire Chief (government ser.) 373.117-010
district gauger (petrol. & gas; petrol. refin.; pipe lines) 914.134-010
District Home Economics Agent (government ser.) 096.167-010
District Lieutenant (government ser.) 375.167-014
district manager (utilities) 184.167-150
District Manager, Postal Service (government ser.) 188.167-086
District-Plant Supervisor (tel. & tel.) 822.131-010
District Sales Manager (insurance) 186.167-034
District Scout Executive (nonprofit org.) 187.117-022
district superintendent (petrol. & gas) 181.167-014
district superintendent, gas and gasoline (petrol. & gas; petrol. refin.; pipe lines) 914.167-010
DISTRICT SUPERVISOR (motor trans.) 184.117-018
district supervisor (pipe lines) 914.132-022
DISTRICT SUPERVISOR, MUD-ANALYSIS WELL LOGGING (petrol. & gas) 010.167-014
Disulfurizer Tender (plastic-synth.) 550.685-034
DITCH DIGGER (construction) term
DITCHER OPERATOR (r.r. trans.) 850.683-014
Ditch Inspector (construction) 182.267-010
DITCH RIDER (waterworks) 954.362-010
ditch tender (waterworks) 954.362-010
DIVER (amuse. & rec.) 349.247-010
DIVER (any industry) 899.261-010
diver assistant (any industry) 899.664-010
DIVER HELPER (any industry) 899.664-010
DIVER PUMPER (construction; fishing & hunt.) 899.682-010
diversion clerk (clerical) 209.367-042
diver tender (any industry) 899.664-010
DIVIDEND CLERK (financial) 216.482-034
dividend-deposit-entry clerk (insurance) 216.482-026
DIVIDEND-DEPOSIT-VOUCHER CLERK (insurance) 216.482-026
divider (bakery products) 526.682-010
DIVIDING-MACHINE OPERATOR (bakery products) 520.685-086
Dividing-Machine-Operator Helper (bakery products) 526.686-010
Diving-Board Assembler (toy-sport equip.) 732.684-014
division commander (government ser.) 375.267-026
Division Field Inspector (utilities) 168.264-018
DIVISION MANAGER, CHAMBER OF COMMERCE (nonprofit org.) 187.167-042
DIVISION OFFICER (r.r. trans.) term
DIVISION ROAD SUPERVISOR (r.r. trans.) 184.167-282
division sergeant (government ser.) 375.133-010
division superintendent (motor trans.; r.r. trans.) 184.167-158
division superintendent (petrol. & gas) 181.167-014
division supervisor (any industry) 183.167-018
dobby-loom chain-pegger (narrow fabrics, textile) 689.687-054
Dobby-Loom Fixer (textile) 683.260-018
dock attendant (amuse. & rec.) 342.667-010
dock boss (water trans.) 911.137-018
Dock Builder (construction) 860.381-042
Dock Cleaner (steel & rel.) 911.687-014
Dock Grader (woodworking) 669.687-030
Dock Guard (any industry) 372.667-034
DOCK HAND (air trans.) 919.683-010
DOCK HAND (ship-boat mfg.) 891.684-010
dock hand (water trans.) 911.364-014
dock helper (water trans.) 911.687-010
DOCK SUPERVISOR (ship-boat mfg.) 891.131-010
dock worker (can. & preserv.) 922.687-062
doctor, chiropractic (medical ser.) 079.101-010
DOCTOR, NATUROPATHIC (medical ser.) 079.101-014
doctor, osteopathic (medical ser.) 071.101-010
DOCUMENTATION-BILLING CLERK (air trans.; motor trans.; r.r. trans.; water trans.) 214.362-014
DOCUMENTATION ENGINEER (profess. & kin.) 012.167-078
DOCUMENTATION SUPERVISOR (water trans.) 214.137-010
DOCUMENT PREPARER, MICROFILMING (business ser.) 249.587-018
DOCUMENT RESTORER (profess. & kin.) 979.361-010
doffer (plastic-synth.) 582.685-162
DOFFER (textile) 689.686-022
DOG BATHER (personal ser.) 418.677-010
dog beautician (personal ser.) 418.674-010
Dog Breeder (agriculture) 410.161-010
DOG CATCHER (government ser.) 379.673-010
Dog-Food Dough Mixer (bakery products) 520.685-234
DOG GROOMER (personal ser.) 418.674-010
dog-hair clipper (personal ser.) 418.674-010
DOG LICENSER (nonprofit org.) 249.367-030
Dog-Pound Attendant (government ser.) 410.674-010
dog warden (government ser.) 379.673-010
Doll-Eye-Setter (toy-sport equip.) 731.687-034
DOLL REPAIRER (any industry) 731.684-014
doll-wig maker, rooted hair (fabrication, nec) 731.685-010
DOLLY PUSHER (radio-tv broad.) 962.687-010
DOMER (paper goods) 641.685-038
DOOR ASSEMBLER (mfd. bldgs.; vehicles, nec) 806.684-050
DOOR ASSEMBLER I (woodworking) 762.684-034
Door Assembler II (woodworking) 762.687-050
Door-Clamp Operator (saw. & plan.) 669.685-030
Door Closer (toy-sport equip.) 732.684-026
DOOR-CLOSER MECHANIC (any industry) 630.381-014
DOOR CORE ASSEMBLER (woodworking) 762.687-030
Door-Engine Repairer (automotive ser.; railroad equip.) 620.381-018
Door Fitter (furniture) 763.684-026
Door-Frame Assembler, Machine (woodworking) 669.685-042
Door-Glass Installer (saw. & plan.) 865.684-014
Door Hanger (construction) 860.381-022
Door Installer I (mfd. bldgs.; vehicles, nec) 809.684-030
Door Installer II (mfd. bldgs.; vehicles, nec) 869.684-026
DOORKEEPER (any industry) 324.677-014
Door-Lock Installer (struct. metal) 809.684-010
DOOR-MACHINE OPERATOR (steel & rel.) 519.663-010
Door Maker (saw. & plan.) 669.380-014
Door Patcher (woodworking) 769.684-030
Door Repairer (steel & rel.) 861.381-026
door repairer, bus (automotive ser.) 807.381-010
doorshaker (business ser.) 372.667-038
Door Slinger (grain-feed mills) 529.685-154
dope-and-fabric worker (aircraft mfg.; air trans.) 849.381-010
DOPE-DRY-HOUSE OPERATOR (chemical) 559.685-046
Dope Edger (boot & shoe) 788.684-066

dope firer (construction) 869.685-010
dope heater (construction) 869.685-010
dope-house operator helper (chemical) 559.685-046
dope mixer (chemical) 550.685-106
Dope Mixer (chemical) 550.382-018
Dope Pourer (construction) 869.687-026
doper (aircraft mfg.; air trans.) 849.381-010
doper (leather mfg.) 584.687-010
doper (photofinishing) 976.681-010
Doper Operator (tinware) 741.687-018
Dope Sprayer (leather mfg.) 584.687-014
dopster (garment) 781.287-010
dormitory supervisor (education) 045.107-038
DORR OPERATOR (sugar & conf.) 522.685-050
dosimetrist (medical ser.) 078.261-034
DOT ETCHER APPRENTICE (print. & pub.) 972.281-018
DOT ETCHER (print. & pub.) 972.281-010
DOUBLE (motion picture; radio-tv broad.) 961.364-010
Double-Bottom Driver (any industry) 904.383-010
Double-Corner Cutter (paper goods) 640.685-030
Double-Cut-Off-Saw Operator (woodworking) 667.682-022
double-cut sawyer (paper & pulp; saw. & plan.) 667.682-034
Double Cutter (boot & shoe) 699.682-022
Double-End-Chucking-Machine Operator (woodworking) 665.382-010
Double-Ending-Machine Operator (paper goods) 641.685-042
Double-End-Production Grinder (metal prod., nec) 616.485-010
Double-End Sewer (paper goods) 787.686-010
Double-End-Tenoner Operator (woodworking) 669.382-018
Double-End-Tenoner Setter (woodworking) 669.280-010
DOUBLE-END-TRIMMER-AND-BORING-MACHINE OPERATOR (furniture) 669.682-038
Double-Facing-Corrugating-Machine Operator (paper goods) 641.562-010
Double-Fold-Machine Operator (paper goods) 649.685-046
Double-Lay-Winder-And-Paraffin-Unit Operator (nonfer. metal) 691.682-018
Double-Needle Operator, Lockstitch (garment) 786.682-170
Double-Needle Stitcher (boot & shoe) 690.682-082
doubler (textile) 681.685-046
Double-Spindle-Disk Grinder Tender (metal prod., nec) 603.685-062
Double-Spindle-Shaper Operator (woodworking) 665.682-034
doubling-and-rolling-machine operator (textile) 689.685-050
doubling-machine operator (rubber goods) 554.665-014
doubling-machine operator (textile) 689.685-050
DOUBLING-MACHINE OPERATOR (textile) 681.685-046
DOUGH-BRAKE-MACHINE OPERATOR (bakery products) 520.685-090
DOUGH MIXER (bakery products) 520.685-234
Dough-Mixer Helper (bakery products) 526.686-010
DOUGH-MIXER OPERATOR (bakery products) 520.462-010
dough molder, hand (bakery products) 520.384-010
Doughnut-Batter Mixer (bakery products) 520.685-010
doughnut-cooking-machine operator (bakery products) 526.682-022
Doughnut-Dough Mixer (bakery products) 520.685-234
Doughnut Icer (bakery products) 524.684-022
Doughnut Icer, Machine (bakery products) 524.685-034
DOUGHNUT-MACHINE OPERATOR (bakery products) 526.682-022
Doughnut-Machine-Operator Helper (bakery products) 526.686-010
DOUGHNUT MAKER (bakery products) 526.684-010
Doughnut-Maker Helper, Hand (bakery products) 526.686-010
dough sheeter (bakery products) 520.685-214
DOVETAIL-MACHINE OPERATOR (wood. container) 669.685-046
Dovetail-Machine Operator (woodworking) 665.382-014
doweler (wood. container) 764.687-062
doweler (woodworking) 669.685-050
DOWELING-MACHINE OPERATOR (woodworking) 669.685-050
DOWEL-INSERTING-MACHINE OPERATOR (saw. & plan.) 669.682-042
DOWEL INSPECTOR (woodworking) 669.687-014
DOWEL-MACHINE OPERATOR (woodworking) 665.682-010
DOWEL POINTER (woodworking) 667.685-038
Dowel-Sander Operator (woodworking) 662.685-014
dowel-setting-machine operator (woodworking) 669.685-050
dowel-sticker operator (woodworking) 665.682-010
Down Filler (tex. prod., nec) 780.684-066
DRAFTER (profess. & kin.) master
Drafter (cad), Electrical (profess. & kin.) 003.281-010
DRAFTER, AERONAUTICAL (aircraft mfg.) 002.261-010
DRAFTER APPRENTICE (profess. & kin.) 017.281-014
DRAFTER, ARCHITECTURAL (profess. & kin.) 001.261-010
DRAFTER, ASSISTANT (profess. & kin.) 017.281-018
DRAFTER, AUTOMOTIVE DESIGN (auto. mfg.) 017.261-042
DRAFTER, AUTOMOTIVE DESIGN LAYOUT (auto. mfg.) 017.281-026
Drafter (CAD), Electronic (profess. & kin.) 003.281-014
DRAFTER, CARTOGRAPHIC (profess. & kin.) 018.261-010
DRAFTER, CASTINGS (profess. & kin.) 007.261-014
DRAFTER, CHIEF, DESIGN (utilities) 017.161-010
DRAFTER, CIVIL (profess. & kin.) 005.281-010
Drafter, Civil (CAD) (profess. & kin.) 005.281-010
drafter, civil engineering (profess. & kin.) 005.281-010
DRAFTER, COMMERCIAL (profess. & kin.) 017.261-026
drafter, construction (profess. & kin.) 005.281-010
DRAFTER, DETAIL (profess. & kin.) 017.261-030
DRAFTER, DIRECTIONAL SURVEY (petrol. & gas) 010.281-010
DRAFTER, ELECTRICAL (profess. & kin.) 003.281-010
drafter, electromechanical (profess. & kin.) 003.281-014
DRAFTER, ELECTRONIC (profess. & kin.) 003.281-014
drafter, engineering (profess. & kin.) 007.281-010
drafter, engineering (profess. & kin.) 005.281-010
DRAFTER, GEOLOGICAL (petrol. & gas) 010.281-014
DRAFTER, GEOPHYSICAL (petrol. & gas) 010.281-018
DRAFTER, HEATING AND VENTILATING (profess. & kin.) 017.261-034
DRAFTER, LANDSCAPE (profess. & kin.) 001.261-014
DRAFTER, MARINE (profess. & kin.) 014.281-010
DRAFTER, MECHANICAL (profess. & kin.) 007.281-010
DRAFTER, OIL AND GAS (petrol. & gas; petrol. refin.) 017.281-030
DRAFTER, PATENT (profess. & kin.) 007.261-018
DRAFTER, PLUMBING (profess. & kin.) 017.261-038
Drafter, Refrigeration (profess. & kin.) 017.261-034
Drafter, Seismograph (petrol. & gas) 010.281-018
DRAFTER, STRUCTURAL (profess. & kin.) 005.281-014
DRAFTER, TOOL DESIGN (profess. & kin.) 007.261-022
Drafter, Topographical (profess. & kin.) 005.281-010
draft-roller picker (textile) 680.687-014
dragger (mine & quarry) 921.663-050
Dragline Oiler (mine & quarry) 850.684-018
DRAGLINE OPERATOR (any industry) 850.683-018
DRAINAGE-DESIGN COORDINATOR (waterworks) 005.167-014
Drain Layer (construction) 869.664-014
Drain-Tile-Machine Operator (concrete prod.) 575.665-010
Drain-Tile-Press Operator (brick & tile) 575.462-010
Drama Critic (print. & pub.; radio-tv broad.) 131.067-018
DRAMATIC COACH (profess. & kin.) 150.027-010
Dramatic Reader (amuse. & rec.) 150.047-010
dramatist (profess. & kin.) 131.067-038
DRAPER (garment; knitting) 781.684-026
DRAPER (motion picture; radio-tv broad.) 962.381-010
DRAPERY AND UPHOLSTERY ESTIMATOR (retail trade) 299.387-010
DRAPERY AND UPHOLSTERY MEASURER (retail trade) 299.364-010
Drapery Cutter, Hand (tex. prod., nec) 781.684-074
Drapery Cutter, Machine (tex. prod., nec) 781.684-014
Drapery Estimator (retail trade) 299.387-010
DRAPERY HANGER (retail trade) 869.484-014
DRAPERY-HEAD FORMER (retail trade) 781.684-030
Drapery Hemmer, Automatic (tex. prod., nec) 787.685-018
Drapery Inspector (tex. prod., nec) 789.587-014
DRAPERY OPERATOR (retail trade) 787.682-018
DRAPERY-ROD ASSEMBLER (retail trade) 706.484-010
Drapery Room Supervisor (retail trade; tex. prod., nec) 789.132-010
Drapery Sewer, Hand (tex. prod., nec) 782.684-058
Drapery Supervisor (tex. prod., nec) 787.132-010
drapery worker (retail trade) 787.682-018
DRAW-BENCH OPERATOR (any industry) 614.682-010
draw-bench operator (nonfer. metal; steel & rel.) 614.685-022
DRAW-BENCH OPERATOR (nonfer. metal; steel & rel.) 614.482-010
DRAW-BENCH-OPERATOR HELPER (nonfer. metal; steel & rel.) 614.686-010
DRAWBRIDGE OPERATOR (r.r. trans.) 371.362-010
drawer (textile) 683.684-014
drawer (textile) 680.685-038
drawer (brick & tile) 929.687-014
Drawer Fitter (furniture) 763.684-026
drawer-hardware worker (furniture) 706.684-050
Drawer-In, Dobby Loom (textile) 683.684-014
DRAWER-IN, HAND (textile) 683.684-014
DRAWER-IN HELPER, HAND (textile) 683.687-010
Drawer-In, Jacquard Loom (textile) 683.684-014
Drawer-In, Plain Loom (textile) 683.684-014
DRAWER-IN, STITCH-BONDING MACHINE (textile) 689.684-014
DRAWER LINER (furniture) 763.684-030
DRAWER UPFITTER (furniture) 706.684-050
DRAWER WAXER (furniture) 763.687-022
DRAW-FRAME TENDER (tex. prod., nec) 680.685-034
draw-furnace tender (heat treating) 504.685-018
draw hand (fabrication, nec) 739.687-046
DRAWING-FRAME TENDER (textile) 680.685-038
drawing-in hand (textile) 683.684-014
DRAWING-IN-MACHINE TENDER (textile) 683.682-018
DRAWING-IN-MACHINE-TENDER HELPER (textile) 683.685-022
DRAWING-KILN OPERATOR (glass mfg.) 575.362-010
DRAWING-KILN SUPERVISOR (glass mfg.) 575.137-010
drawing-machine operator (glass mfg.) 575.362-010
drawing-release clerk (aircraft mfg.; electron. comp.) 206.367-010
DRAWINGS CHECKER, ENGINEERING (profess. & kin.) 007.267-010

drawing tender (textile) 680.685-038
draw-in hand (textile) 683.684-014
DRAW-MACHINE OPERATOR (plastic-synth.) 680.665-014
Draw-Press Operator (any industry) 615.382-010
DRAWSTRING KNOTTER (tex. prod., nec) 689.685-058
Dray Driver (any industry) 919.664-010
DREDGE CAPTAIN (water trans.) 197.161-010
Dredge Deckhand (water trans.) 911.687-022
DREDGE MATE (water trans.) 197.137-010
DREDGE OPERATOR (construction; mine & quarry) 850.663-010
dredge operator (water trans.) 197.161-010
DREDGE OPERATOR SUPERVISOR (mine & quarry) 939.132-010
Dredge Pipe Installer (construction) 869.687-026
dredge pumper (construction; mine & quarry) 850.663-010
dredge runner (water trans.) 197.161-010
Dress-Cap Maker (hat & cap) 784.684-018
Dress Draper (garment) 781.684-026
DRESSER (amuse. & rec.) 346.674-010
DRESSER (boot & shoe) 788.687-038
DRESSER TENDER (textile) 681.682-010
dress-gang worker (can. & preserv.; fishing & hunt.) 525.684-030
dressing-room attendant (personal ser.) 358.677-014
DRESSMAKER (any industry) 785.361-010
Dressmaker (garment) 782.684-058
Dress Marker (garment) 781.384-014
Dress-Shoe Inspector (boot & shoe) 788.384-010
DRIED FRUIT WASHER (food prep., nec) 521.685-110
DRIER (garment) 581.685-014
DRIER (knitting) 581.686-014
Drier (rubber goods) 553.665-038
drier (tex. prod., nec) 581.685-034
drier-and-evaporator operator (chemical; smelt. & refin.) 559.685-074
DRIER-AND-GRINDER TENDER (mine & quarry) 579.685-010
DRIER-AND-PULVERIZER TENDER (chemical) 559.685-050
drier attendant (fabrication, nec) 543.685-014
DRIER ATTENDANT (can. & preserv.; grain-feed mills) 523.685-058
DRIER ATTENDANT (garment) 581.686-018
DRIER, BELT CONVEYOR (food prep., nec) 529.485-018
DRIER FEEDER (rubber reclaim.) 559.686-014
DRIER HELPER (chemical) 553.687-010
DRIER, LONG GOODS (food prep., nec) 523.585-022
drier-machine hand (soap & rel.) 553.685-098
drier operator (brick & tile) 573.362-010
drier operator (cement; chemical; mine & quarry) 573.382-010
DRIER OPERATOR (chemical; pharmaceut.) 553.685-042
DRIER OPERATOR (food prep., nec) 523.362-014
drier operator (laundry & rel.) 369.685-034
DRIER OPERATOR (mine & quarry) 543.682-014
Drier Operator (rubber reclaim.) 553.665-038
drier operator (smelt. & refin.) 511.565-014
drier operator (sugar & conf.) 529.682-010
DRIER OPERATOR (sugar & conf.) 529.682-022
drier operator (textile) 581.685-026
DRIER OPERATOR (utilities) 543.382-010
DRIER OPERATOR (can. & preserv.) 523.685-062
DRIER OPERATOR (can. & preserv., dairy products) 523.682-022
DRIER OPERATOR, DRUM (food prep., nec) 529.685-098
Drier Operator, Head (plastic-synth.) 559.132-042
DRIER-OPERATOR HELPER (chemical) 553.685-058
DRIER-OPERATOR HELPER (rubber reclaim.) 553.686-030
DRIER OPERATOR I (chemical) 553.665-026
DRIER OPERATOR I (plastic-synth.) 559.562-010
DRIER OPERATOR II (chemical) 553.582-010
DRIER OPERATOR II (plastic-synth.) 553.685-046
DRIER OPERATOR III (chemical) 553.685-050
DRIER OPERATOR III (plastic-synth.) 581.685-018
DRIER OPERATOR IV (chemical) 553.685-054
DRIER OPERATOR V (chemical) 553.686-026
DRIER OPERATOR VI (chemical) 553.685-118
DRIER, SHORT GOODS (food prep., nec) 523.587-010
DRIER-TAKE-OFF TENDER (elec. equip.) 921.685-034
DRIER TENDER (can. & preserv.) 523.685-066
DRIER TENDER (fabrication, nec) 543.685-014
DRIER TENDER (grain-feed mills) 523.685-070
drier tender (knitting) 580.685-014
Drier Tender (rubber goods) 553.665-038
DRIER TENDER (smelt. & refin.) 511.565-014
drier tender (soap & rel.) 553.585-018
drier tender (textile) 581.685-022
drier tender (textile) 580.685-066
DRIER TENDER (wood prod., nec) 563.585-010
DRIER TENDER I (oils & grease) 523.685-074
Drier Tender II (oils & grease) 529.685-106
Drier Tender, Naphthalene (steel & rel.) 551.665-010
drier unloader (nonmet. min.) 921.583-010
drifter (construction) 850.662-014
DRIFTER (steel & rel.) 503.685-018
drifting-machine operator (steel & rel.) 503.685-018
Drift Miner (mine & quarry) 939.281-010
DRILL-BIT SHARPENER (electron. comp.) 603.682-030
drill doctor (any industry) 630.281-010
DRILLER (jewelry-silver.) 700.684-026
DRILLER (optical goods) 716.685-014
driller (petrol. & gas) 930.382-018
driller (petrol. & gas) 930.382-026
driller (stonework) 771.684-010
driller (stonework) 676.682-014
DRILLER AND BROACHER (clock & watch) 715.685-022
DRILLER AND DEBURRER, REFLECTOR (light. fix.) 676.686-014
DRILLER-AND-REAMER, AUTOMATIC (musical inst.) 606.382-010
DRILLER, BRAKE LINING (nonmet. min.) 676.685-010
driller, fine-diamond dies (machine tools) 770.381-018
DRILLER, HAND (any industry) 809.684-018
DRILLER, HAND (button & notion) 754.684-026
DRILLER HELPER (construction; mine & quarry) 930.666-010
driller helper (petrol. & gas) 930.684-026
DRILLER, MACHINE (construction; mine & quarry) 930.382-010
DRILLER, MACHINE (glass products) 676.685-014
driller, multiple spindle (glass products) 676.682-010
driller operator (construction; mine & quarry) 930.382-010
driller, portable (any industry) 809.684-018
Drilling Engineer (petrol. & gas) 010.061-018
drilling inspector (petrol. & gas) 930.167-010
DRILLING-MACHINE OPERATOR (mine & quarry) 930.482-010
DRILLING-MACHINE OPERATOR, AUTOMATIC (clock & watch) 606.685-030
DRILL OPERATOR, AUTOMATIC (glass products) 676.682-010
Drill Operator, Pneumatic (stonework) 676.682-014
drill-press operator (jewelry-silver.) 700.684-026
DRILL-PRESS OPERATOR (machine shop) 606.682-014
DRILL-PRESS OPERATOR, ACOUSTICAL TILE (wood prod., nec) 649.682-018
DRILL-PRESS OPERATOR, NUMERICAL CONTROL (machine shop) 606.362-010
DRILL-PRESS OPERATOR, PRINTED CIRCUIT BOARDS (electron. comp.) 676.382-010
DRILL-PRESS SET-UP OPERATOR, MULTIPLE SPINDLE (machine shop) 606.380-010
DRILL-PRESS SET-UP OPERATOR, RADIAL (machine shop) 606.380-014
DRILL-PRESS SET-UP OPERATOR, RADIAL, TOOL (machine shop) 606.380-018
DRILL-PRESS SET-UP OPERATOR, SINGLE SPINDLE (machine shop) 606.682-018
DRILL PRESS TENDER (machine shop) 606.685-026
DRILL-PUNCH OPERATOR (paper goods; print. & pub.) 649.685-034
drill-runner helper (any industry) 930.687-014
drill sergeant (military ser.) 378.227-014
drill sharpener (electron. comp.) 603.682-030
Drill Sharpener (machine shop) 603.280-038
drill-sharpener operator (any industry) 601.682-010
DRIP-BOX TENDER (grain-feed mills) 521.687-038
DRIP PUMPER (pipe lines; utilities) 953.583-010
DRIVE-IN THEATER ATTENDANT (amuse. & rec.) 349.673-010
drive-in waiter/waitress (hotel & rest.) 311.477-010
Driver (agriculture) 404.131-010
DRIVER (auto. mfg.; automotive ser.) 919.683-014
driver (domestic ser.) 359.673-010
DRIVER (motor trans.) 913.663-018
driver helper (any industry) 905.687-010
DRIVER HELPER, SALES ROUTE (retail trade; wholesale tr.) 292.667-010
DRIVER, SALES ROUTE (retail trade; wholesale tr.) 292.353-010
DRIVERS'-CASH CLERK (motor trans.) 211.462-030
DRIVER'S LICENSE EXAMINER (government ser.) 168.267-034
DRIVER, STARTING GATE (amuse. & rec.) 919.683-030
DRIVER SUPERVISOR (motor trans.) 909.137-010
DRIVER-UTILITY WORKER (auto. mfg.; automotive ser.) 919.663-018
Drive-Shaft-And-Steering-Post Repairer (automotive ser.) 620.261-010
drop-board operator (any industry) 379.362-014
drop clipper (millwork-plywood) 663.685-050
DROPHAMMER OPERATOR (aircraft mfg.; forging) 610.362-010
Drop-Hammer-Operator Helper (forging) 619.686-034
Drop-Hammer-Pile-Driver Operator (construction) 859.682-018
Drophammer Setter-Up (forging) 612.360-010
Drop-Machine Operator (bakery products) 520.682-034
dropper (beverage) 529.685-246
Dropper, Dehairing Machine (meat products) 525.685-018
DROPPER, FERMENTING CELLAR (beverage) 522.685-054
dropper, tank storage (beverage) 529.685-246
drop-pit worker (railroad equip.) 622.381-014
DROP TESTER (ordnance) 737.387-010

DROP-WIRE ALIGNER (textile) 689.685-062
DROP-WIRE BUILDER (textile) 689.687-034
DROP-WIRE HANGER (textile) 683.687-014
drop-wire stringer (textile) 689.687-034
DROSS SKIMMER (smelt. & refin.) 519.683-010
druggist (medical ser.) 074.161-010
drug-room clerk (any industry) 550.684-014
DRUM ATTENDANT (leather mfg.; tex. prod., nec) 582.685-050
Drum-Barker Operator (paper & pulp) 669.485-010
drum carrier (chemical) 559.687-050
drum chainer (petrol. refin.) 599.687-034
Drum Cleaner (beverage) 529.687-066
DRUM CLEANER (petrol. refin.) 599.687-034
DRUM DRIER (grain-feed mills) 523.682-026
DRUM-DRIER OPERATOR (chemical) 553.665-030
drum-drier operator (chemical; pharmaceut.) 553.685-042
DRUM-DRIER OPERATOR (plastic-synth.) 581.685-082
drum-dyeing-machine operator (knitting) 582.685-170
Drum Filler (beverage) 522.687-010
Drum Filler (chemical) 559.687-050
drum filler (chemical) 559.565-010
drum filler (rubber reclaim.) 914.665-010
DRUM LOADER AND UNLOADER (beverage) 522.685-058
Drummer (amuse. & rec.) 152.041-010
DRUMMER (hat & cap) 589.685-034
Drummer (leather mfg.) 589.686-022
drum operator (any industry) 699.587-010
drum plater (electroplating) 500.362-014
drum-reel cutter (tex. prod., nec) 690.682-026
drum sander (pen & pencil) 662.685-030
drum sander (woodworking) 662.682-014
drum-sander offbearer (woodworking) 662.686-014
Drum-Sander Setter (woodworking) 669.280-010
Drum-Saw Operator (saw. & plan.) 667.682-022
Drum Sealer (beverage) 529.687-066
Drum-Shell Maker (musical inst.) 730.381-042
Drum Stenciler (beverage) 920.687-178
Drum-Stock Clerk (clerical) 222.387-058
DRUM STRAIGHTENER I (any industry) 619.685-034
Drum Straightener II (any industry) 619.685-046
drum tender (leather mfg.) 582.482-018
DRUM TESTER (petrol. refin.) 599.687-038
dry box (any industry) 358.687-010
dry-box operator (chemical) 553.685-022
Dry-Cans Back-Tender (textile) 589.686-010
DRY-CANS OPERATOR (textile) 581.685-022
DRY-CELL-ASSEMBLY-MACHINE TENDER (elec. equip.) 692.665-018
DRY-CELL TESTER (elec. equip.) 727.381-018
Dry-Chain Offbearer (saw. & plan.) 669.686-018
DRY-CHARGE-PROCESS ATTENDANT (elec. equip.) 590.685-026
DRY CLEANER (knitting) 589.685-038
DRY CLEANER (laundry & rel.) 362.382-014
DRY-CLEANER APPRENTICE (laundry & rel.) 362.382-010
dry cleaner, furniture, hand (laundry & rel.) 362.684-022
DRY CLEANER, HAND (laundry & rel.) 362.684-010
DRY-CLEANER HELPER (laundry & rel.) 362.686-010
dry-cleaning-machine operator (laundry & rel.) 362.382-014
dry-cleaning-machine-operator apprentice (laundry & rel.) 362.382-010
dry-cleaning-machine-operator helper (laundry & rel.) 362.686-010
dry-clipper tender (millwork-plywood) 663.685-050
DRY CURER (meat products) 525.687-026
DRY-END OPERATOR (plastic-synth.) 559.665-014
Dry-End Tester (paper & pulp) 539.364-010
dryer feeder (hat & cap) 581.686-022
dry-felt splicer (fabrication, nec) 692.687-010
dry folder, cloth (knitting; textile) 589.685-058
Dry-Heat-Cabinet Attendant (personal ser.) 335.677-014
Dry-Heat-Room Attendant (personal ser.) 335.677-014
DRY-HOUSE ATTENDANT (chemical) 553.585-014
DRY-HOUSE ATTENDANT (woodworking) 563.685-018
dry-house operator (chemical) 559.685-046
DRY-HOUSE TENDER (ordnance) 559.585-010
Drying-Equipment Operator (elec. equip.) 599.682-014
Drying-Machine Back-Tender (knitting; textile) 589.686-010
drying-machine operator (chemical) 529.382-030
drying-machine operator (knitting) 580.685-014
drying-machine operator (knitting) 581.686-038
drying-machine operator (laundry & rel.) 369.685-034
drying-machine operator (plastic-synth.) 581.685-018
drying-machine operator (textile) 581.685-054
DRYING-MACHINE OPERATOR, PACKAGE YARNS (textile) 581.685-026
drying-machine receiver (textile) 589.686-010
drying-machine tender (any industry) 581.685-038
drying-machine tender (knitting) 581.686-014
Drying-Machine Tender (motion picture) 976.685-018
drying machine tender (textile) 581.685-022
drying-machine tender (textile) 589.686-010
drying-machine tender (textile) 580.685-066
DRYING-MACHINE TENDER (textile) 581.685-030
DRYING-OVEN ATTENDANT (hat & cap) 581.686-022
drying-oven tender (tobacco) 523.685-118
DRYING-RACK CHANGER (boot & shoe) 581.686-026
DRYING-ROOM ATTENDANT (hat & cap) 581.687-014
DRYING-ROOM ATTENDANT (soap & rel.) 553.585-018
DRYING-ROOM ATTENDANT (tobacco) 523.587-014
drying-room operator (plastic-synth.) 581.685-018
Drying-Room Supervisor (chemical) 559.132-122
drying-tumbler operator (laundry & rel.) 369.685-034
DRYING-UNIT-FELTING-MACHINE OPERATOR (tex. prod., nec) 581.685-034
DRYING-UNIT-FELTING-MACHINE-OPERATOR HELPER (tex. prod., nec) 581.687-018
dry janitor (any industry) 358.687-010
Dry-Kiln Burner (brick & tile) 573.682-010
DRY-KILN OPERATOR (brick & tile) 573.362-010
dry-kiln operator (woodworking) 563.382-010
DRY-KILN OPERATOR HELPER (brick & tile) 573.687-014
Dry-Lumber Grader (woodworking) 669.687-030
dry-mill operator (brick & tile) 570.665-010
Dry-Mill Worker (leather mfg.) 582.685-050
dry mixer (chemical) 550.665-018
dry mixer (ordnance) 550.565-010
dry-mop maker (tex. prod., nec) 739.687-078
DRY-PAN CHARGER (brick & tile) 570.683-010
dry-pan feeder (brick & tile) 570.683-010
DRY-PAN OPERATOR (brick & tile) 570.665-010
DRY-PLACER-MACHINE OPERATOR (mine & quarry) 939.382-010
DRY-PRESS OPERATOR (brick & tile) 575.662-010
DRY-PRESS-OPERATOR HELPER (brick & tile) 575.686-010
Dry Roaster (can. & preserv.) 529.685-174
Dry Roller (leather mfg.) 583.685-094
dry-room helper (rubber reclaim.) 553.686-030
dry-room operator (chemical) 553.665-026
dry sander (stonework) 673.666-010
dry-slasher tender (textile) 681.585-010
DRY-STARCH OPERATOR (grain-feed mills) 520.362-014
DRY-STARCH OPERATOR, AUTOMATIC (grain-feed mills) 529.362-014
dry-talc racker (build. mat., nec) 549.686-014
DRY-WALL APPLICATOR (construction; mfd. bldgs.) 842.684-014
DRY-WALL APPLICATOR (construction) 842.361-030
dry-wall finisher (construction; mfd. bldgs.) 842.664-010
dry-wall installations mechanic (construction) 842.361-030
dry-wall installer (construction) 842.361-030
dry-wall nailer (construction; mfd. bldgs.) 842.684-014
DRY-WALL SPRAYER (mfd. bldgs.) 842.684-010
DUAL-HOSE CEMENTER (rubber goods) 690.685-134
DUBBING-MACHINE OPERATOR (motion picture; radio-tv broad.) 962.665-010
Dubbing-Machine Operator (recording) 194.362-010
Duck-Bill Operator (mine & quarry) 850.683-030
Duck Farmer (agriculture) 411.161-018
Duct Installer (construction; mfd. bldgs.) 869.664-014
duct layer (construction; utilities) 869.361-010
Duct-Layer Helper (construction; utilities) 821.667-010
Duct-Layer Supervisor (construction; utilities) 899.131-010
DUCT MAKER (construction; mfd. bldgs.) 809.687-010
DUDE WRANGLER (amuse. & rec.) 353.364-010
dukey rider (any industry) 932.664-010
dulite-machine bluer (heat treating) 504.682-022
Dull-Coat-Mill Operator (tex. prod., nec) 584.382-010
Duller (furniture) 742.684-010
dull shoe repairer (boot & shoe) 788.684-022
DULSER (fishing & hunt.) 447.687-010
Dumbwaiter Operator (hotel & rest.) 311.677-018
DUMPER (any industry) 921.667-018
dumper (beverage) 921.662-010
Dumper (beverage) 529.687-066
Dumper (can. & preserv.) 529.686-014
DUMPER (chemical) 922.686-010
Dumper (food prep., nec) 523.685-102
DUMPER-BAILER OPERATOR (petrol. & gas) 931.684-010
dumper-bulk system (any industry) 921.686-014
Dumper, Central-Concrete-Mixing Plant (construction) 579.665-014
Dumper, Mold Cleaner (foundry) 514.685-014
Dump Grader (construction) 869.687-026
DUMPING-MACHINE OPERATOR (can. & preserv.; wholesale tr.) 529.685-102
DUMP OPERATOR (any industry) 921.685-038
DUMP-TRUCK DRIVER (any industry) 902.683-010
Dump-Truck Driver, Off-Highway (any industry) 902.683-010

Duplicate Maker (garment) 785.361-018
DUPLICATING-MACHINE OPERATOR I (clerical) 207.682-010
DUPLICATING-MACHINE OPERATOR II (clerical) 207.682-014
duplicating-machine operator (machine shop) 605.280-018
Duplicating-Machine Servicer (any industry) 633.281-018
duplicator (any industry) 809.381-014
DUPLICATOR-PUNCH OPERATOR (any industry) 615.482-014
durable medical equipment repairer (protective dev.; retail trade) 639.281-022
DUST BOX WORKER (build. mat., nec) 574.667-010
DUST-BRUSH ASSEMBLER (house. appl.) 739.687-074
DUST-COLLECTOR ATTENDANT (mine & quarry) 511.685-022
DUST-COLLECTOR OPERATOR (smelt. & refin.) 511.482-018
DUST-COLLECTOR OPERATOR (soap & rel.) 551.685-050
DUST COLLECTOR, ORE CRUSHING (smelt. & refin.) 511.682-010
DUST COLLECTOR-TREATER (smelt. & refin.) 511.687-014
DUSTER (hat & cap) 587.685-026
duster (pottery & porc.) 574.684-010
DUSTING-AND-BRUSHING-MACHINE OPERATOR (rubber goods) 559.685-054
DUSTLESS OPERATOR (chemical) 550.685-058
DUST-MILL OPERATOR (tex. prod., nec) 581.686-030
DUST MIXER (smelt. & refin.) 510.685-010
DUST-MOP MAKER (tex. prod., nec) 739.687-078
dust operator (smelt. & refin.) 511.482-018
DUST PULLER (smelt. & refin.) 519.687-014
DUST SAMPLER (mine & quarry) 939.585-010
Dust-Truck Driver (any industry) 902.683-010
dwarf tree grower (agriculture) 405.161-010
dx board operator (any industry) 379.362-014
DYE AUTOMATION OPERATOR (textile) 582.362-014
dye-beck-reel operator (textile) 582.665-014
dye blender (chemical) 550.685-014
Dye-Boarding-Machine Operator (knitting) 589.685-010
DYED-YARN OPERATOR (textile) 582.685-058
dye feeder (textile) 582.582-010
dye-house supervisor (knitting; tex. prod., nec; textile) 582.131-014
DYE-HOUSE SUPERVISOR (leather mfg.) 582.131-010
DYE-HOUSE WORKER (leather mfg.) 582.686-010
Dyeing-Machine Back-Tender (textile) 589.686-010
dyeing-machine feeder (textile) 582.582-010
DYEING-MACHINE OPERATOR (knitting) term
dyeing-machine tender (textile) 582.685-102
Dyeing Supervisor (leather mfg.) 582.131-010
DYE-LAB TECHNICIAN (knitting) 582.384-010
dye-machine tender (textile) 582.685-130
dye-machine-tender helper (tex. prod., nec; textile) 582.686-030
dye maker (any industry) 550.684-014
dye mixer (leather mfg.) 582.482-010
Dye Mixer (photo. appar.) 550.685-090
dye-padder operator (textile) 582.685-106
DYER (button & notion) 582.687-014
DYER (chemical) 554.384-010
DYER (fabrication, nec) 599.685-034
dyer (hat & cap) 582.685-034
dyer (knitting) 582.685-170
DYER (laundry & rel.) 364.361-010
DYER (woodworking) 562.687-010
dyer and washer (leather mfg.) 582.482-010
dye-range feeder (textile) 582.582-010
DYE-RANGE OPERATOR, CLOTH (textile) 582.582-010
dyer assistant (any industry) 550.684-014
dyer assistant (knitting) 582.261-010
dyer assistant (laundry & rel.) 364.687-010
DYE-REEL OPERATOR (textile) 582.665-014
DYE-REEL-OPERATOR HELPER (textile) 582.686-014
DYER HELPER (hat & cap) 589.685-042
DYER HELPER (laundry & rel.) 364.687-010
dye-room helper (laundry & rel.) 364.687-010
dye-room helper (textile) 582.686-014
DYER, SUPERVISOR (knitting; tex. prod., nec; textile) 582.131-014
DYE-STAND LOADER (textile) 589.687-062
DYE TANK TENDER (tex. prod., nec) 582.685-054
Dye Tester (pottery & porc.) 774.687-026
DYE-TUB OPERATOR (knitting) 582.685-170
dye-tub operator (textile) 582.665-014
DYE WEIGHER (any industry) 550.684-014
dye weigher (leather mfg.) 582.482-010
DYE-WEIGHER HELPER (any industry) 550.687-018
dye-winch operator (textile) 582.665-014
dynamic-balancer set-up worker (any industry) 809.382-010
DYNAMITE-CARTRIDGE CRIMPER (chemical) 692.685-078
DYNAMITE-PACKING-MACHINE FEEDER (chemical) 692.686-038
DYNAMITE-PACKING-MACHINE OPERATOR (chemical) 692.662-010
dynamiter (mine & quarry) 931.261-010
DYNAMITE RECLAIMER (chemical) 551.687-018
Dynamometer Assembler And Tester (office machines) 710.281-010
Dynamometer Repairer (elec. equip.) 729.281-026
Dynamometer Tester, Chassis (auto. mfg.) 806.281-010
DYNAMOMETER TESTER, MOTOR (auto. mfg.) 806.281-010
Dynamometer Tuner (automotive ser.) 620.281-066
dynamo operator (utilities) see GENERATOR OPERATOR
Dynamotor Repairer (any industry) 721.281-018

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Ear-Flap Binder (hat & cap) 787.682-010
EAR-MOLD LABORATORY TECHNICIAN (plastic prod.) 777.361-010
EAR-MUFF ASSEMBLER (hat & cap) 784.687-022
EARRING MAKER (jewelry-silver.) 700.684-030
earth-auger operator (construction; utilities) 859.682-010
EARTH-BORING-MACHINE OPERATOR (construction; utilities) 859.682-010
earth burner (petrol. refin.) 573.685-014
Easter Bunny (any industry) 299.647-010
Ecclesiastical-Art-Metal Worker (jewelry-silver.; metal prod., nec) 619.260-014
ecg technician (medical ser.) 078.362-018
ECHOCARDIOGRAPH TECHNICIAN (medical ser.) 078.364-014
ECOLOGIST (profess. & kin.) term
ecologist (profess. & kin.) see ENVIRONMENTALIST
economic analyst (profess. & kin.) 050.067-010
ECONOMIC DEVELOPMENT COORDINATOR (government ser.) 188.117-102
Economic Officer (government ser.) 188.117-106
ECONOMIST (profess. & kin.) 050.067-010
EDDY-CURRENT INSPECTOR (steel & rel.) 619.381-014
EDGE BANDER, HAND (furniture) 762.684-038
EDGE BANDER, MACHINE (furniture; millwork-plywood) 762.685-010
EDGE-BANDING-MACHINE OFFBEARER (furniture; millwork-plywood) 762.686-010
Edge Baster (garment) 786.682-030
edge beader (boot & shoe) 690.685-174
edge blacker, machine (boot & shoe) 690.685-234
edge burnisher (boot & shoe) 690.685-146
EDGE BURNISHER, UPPERS (boot & shoe) 690.685-138
edge dyer (boot & shoe) 690.685-234
EDGE-GLUE-MACHINE TENDER (millwork-plywood) 569.685-034
Edge Gluer (millwork-plywood) 569.685-062
EDGE GRINDER (plastic prod.) 690.685-142
edge grinder, machine (glass products) 775.684-062
Edge Inker (boot & shoe) 788.684-066
Edge Inker, Heels (boot & shoe) 788.684-066
Edge Inker, Uppers (boot & shoe) 788.684-066
edge kitter (boot & shoe) 690.685-146
Edge Maker (garment) 782.684-058
edge plugger (millwork-plywood) 769.685-010
Edge Polisher (boot & shoe) 788.687-018
Edge Polisher (glass products) 775.684-058
edger (boot & shoe) 690.685-138
edger (paper goods; wood. container) 795.684-014
EDGER, AUTOMATIC (saw. & plan.) 667.682-026
EDGER, HAND (glass mfg.; glass products) 775.684-014
EDGER-MACHINE HELPER (stonework) 673.686-018
EDGER-MACHINE OPERATOR (stonework) 673.682-018
Edger Machine Setter (machine shop) 601.280-022
EDGE ROLLER (furniture) 780.684-058
Edge-Round Tender (electron. comp.) 673.685-094
EDGER, TOUCH-UP (glass products) 775.684-018
Edge Sander (woodworking) 761.682-014
EDGE SETTER (boot & shoe) 690.685-146
Edge Setter, Heel Lift (boot & shoe) 690.685-146
edge skiver (boot & shoe; rubber goods) 690.685-378
EDGE STAINER I (leather prod.) 589.685-046
EDGE STAINER II (leather prod.) 749.684-022
edge stainer, machine (boot & shoe) 690.685-234
Edge Stitcher (boot & shoe) 690.682-082
Edge Stitcher, Lockstitch (garment) 786.682-238
EDGE STRIPPER (paper goods; wood. container) 795.684-014
EDGE TRIMMER (boot & shoe) 690.685-150
edge trimmer (leather mfg.) 585.684-010
edge-trimming-machine operator (boot & shoe) 690.685-150
edging-machine catcher (optical goods) 673.686-014
EDGING-MACHINE FEEDER (glass mfg.) 673.686-022
edging-machine feeder (optical goods) 673.686-014
edging-machine operator (any industry) see SERGING-MACHINE OPERATOR
EDGING-MACHINE SETTER (glass products) 673.380-010
editing-machine operator (motion picture) 962.382-014
editor (radio-tv broad.) 131.267-022
EDITOR, BOOK (print. & pub.) 132.067-014

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EDITOR, CITY (print. & pub.) 132.037-014
editor, continuity and script (radio-tv broad.) 132.037-010
EDITOR, DEPARTMENT (print. & pub.) 132.037-018
EDITOR, DICTIONARY (profess. & kin.) 132.067-018
Editor, Farm Journal (print. & pub.) 132.037-022
EDITOR, GREETING CARD (print. & pub.) 132.067-022
Editor, House Organ (print. & pub.) 132.037-022
EDITORIAL ASSISTANT (print. & pub.) 132.267-014
Editorial Cartoonist (print. & pub.) 141.061-010
EDITORIAL WRITER (print. & pub.) 131.067-022
editor-in-chief, newspaper (print. & pub.) 132.017-014
EDITOR, INDEX (print. & pub.) 132.367-010
Editor, Magazine (print. & pub.) 132.037-022
EDITOR, MANAGING, NEWSPAPER (print. & pub.) 132.017-010
EDITOR, MAP (profess. & kin.) 018.261-018
EDITOR, NEWS (print. & pub.) 132.067-026
EDITOR, NEWSPAPER (print. & pub.) 132.017-014
EDITOR, PUBLICATIONS (print. & pub.) 132.037-022
EDITOR, SCHOOL PHOTOGRAPH (photofinishing) 976.687-010
editor, sound (motion picture) 962.382-014
EDITOR, TECHNICAL AND SCIENTIFIC PUBLICATIONS (profess. & kin.) 132.017-018
EDITOR, TELEGRAPH (print. & pub.; radio-tv broad.) 132.267-010
Editor, Trade Journal (print. & pub.) 132.037-022
editor, wire (print. & pub.; radio-tv broad.) 132.267-010
educational/development assistant (medical ser.) 076.364-010
EDUCATIONAL RESOURCE COORDINATOR (museums) 099.167-030
EDUCATIONAL SPECIALIST (education) 099.167-022
education department registrar (museums) 238.367-034
EDUCATION SUPERVISOR, CORRECTIONAL INSTITUTION (education) 099.117-014
Education Supervisor, Penal Institution (education) 099.117-014
Education Supervisor, Youth Authority (education) 099.117-014
eeg technologist (medical ser.) 078.362-022
EFFERVESCENT-SALTS COMPOUNDER (pharmaceut.) 559.685-058
efficiency expert (profess. & kin.) 012.167-070
Egg-And-Spice Mixer (food prep., nec) 520.685-154
EGG BREAKER (any industry) 521.687-042
EGG-BREAKING-MACHINE OPERATOR (can. & preserv.) 521.685-114
EGG CANDLER (any industry) 529.687-074
Egg Grader (any industry) 529.687-074
Egg Packer (agriculture; wholesale tr.) 920.687-134
EGG PASTEURIZER (agriculture) 529.682-038
EGG PROCESSOR (pharmaceut.) 559.687-034
egg room supervisor (can. & preserv.; wholesale tr.) 529.137-042
Egg Smeller (any industry) 521.687-042
EGG WASHER, MACHINE (agriculture; wholesale tr.) 529.686-030
Eight-Section Blower (hat & cap) 680.685-046
ekg technician (medical ser.) 078.362-018
Elastic Assembler (protective dev.) 712.684-010
ELASTIC ATTACHER, CHAINSTITCH (garment) 786.682-086
ELASTIC ATTACHER, COVERSTITCH (garment) 786.682-090
ELASTIC ATTACHER, OVERLOCK (garment) 786.682-094
ELASTIC ATTACHER, ZIGZAG (garment) 786.682-098
Elastic Cutter (garment) 699.685-014
Elastic Cutter, Hand (any industry) 781.687-026
Elastic Sewer (tex. prod., nec) 787.682-066
ELASTIC-TAPE INSERTER (garment) 782.687-022
elastic-yarn twister (textile) 681.685-038
elastic-yarn-twister helper (textile) 681.685-042
ELECTION ASSISTANT (government ser.) 188.167-050
ELECTION CLERK (government ser.) 205.367-030
election supervisor (government ser.) 188.167-050
electrical and electronics development mechanic (any industry) 726.261-010
ELECTRICAL AND RADIO MOCK-UP MECHANIC (aircraft mfg.) 693.381-026
ELECTRICAL-APPLIANCE PREPARER (any industry) 827.584-010
ELECTRICAL-APPLIANCE REPAIRER (any industry) 723.381-010
ELECTRICAL-APPLIANCE SERVICER (any industry) 827.261-010
ELECTRICAL-APPLIANCE-SERVICER APPRENTICE (any industry) 827.261-014
ELECTRICAL-APPLIANCE-SERVICER SUPERVISOR (any industry) 827.131-010
electrical-appliance service supervisor (utilities) 187.167-010
ELECTRICAL ASSEMBLER (aircraft mfg.) 729.384-026
Electrical Checkout Mechanic (aircraft mfg.) 806.261-050
ELECTRICAL-CONTROL ASSEMBLER (comm. equip.; elec. equip.) 729.684-026
ELECTRICAL-DESIGN ENGINEER (profess. & kin.) 003.061-018
ELECTRICAL-DISCHARGE-MACHINE OPERATOR, PRODUCTION (machine shop) 609.482-010
ELECTRICAL-DISCHARGE-MACHINE SET-UP OPERATOR (machine shop) 609.380-010
ELECTRICAL ENGINEER (profess. & kin.) 003.061-010
electrical engineer, geophysical prospecting (profess. & kin.) 003.061-022
ELECTRICAL ENGINEER, POWER SYSTEM (utilities) 003.167-018
ELECTRICAL-EQUIPMENT TESTER (aircraft mfg.) 729.381-010
ELECTRICAL INSPECTOR (aircraft mfg.; air trans.) 825.381-026
Electrical Inspector (automotive ser.) 620.281-030
Electrical Inspector (railroad equip.) 807.381-026
ELECTRICAL-INSTALLATION SUPERVISOR (utilities) 821.131-010
ELECTRICAL-INSTRUMENT REPAIRER (any industry) 729.281-026
electrical-laboratory technician (profess. & kin.) 003.161-010
ELECTRICAL-LINE SPLICER (petrol. & gas) 728.684-014
electrical-logging engineer (petrol. & gas) 010.261-014
ELECTRICAL-PROSPECTING ENGINEER (profess. & kin.) 003.061-022
electrical-prospecting operator (petrol. & gas) 010.261-014
Electrical Prospector (petrol. & gas) 024.061-026
electrical repairer (any industry) 829.261-018
Electrical Repairer, Internal Combustion Engines (automotive ser.; engine-turbine) 825.281-022
ELECTRICAL-RESEARCH ENGINEER (profess. & kin.) 003.061-026
ELECTRICAL SUPERVISOR (petrol. & gas) 826.131-010
ELECTRICAL TECHNICIAN (profess. & kin.) 003.161-010
ELECTRICAL TEST ENGINEER (profess. & kin.) 003.061-014
ELECTRICAL TESTER (utilities) term
electrical tester, battery (elec. equip.) 727.384-010
Electrical-Tests Supervisor (utilities) 184.167-218
electrical-transmission engineer (utilities) 003.167-050
Electrical-Unit Rebuilder (automotive ser.) 825.281-022
Electric-Arc-Furnace Operator (foundry; smelt. & refin.; steel & rel.) 512.362-018
electric-bath attendant (personal ser.) 335.677-014
ELECTRIC BLANKET WIRER (tex. prod., nec) 789.684-054
electric-blasting-cap assembler (ordnance) 737.687-018
Electric-Cable Diagrammer (elec. equip.) 003.281-010
ELECTRIC-CELL TENDER (chemical) 558.565-014
ELECTRIC-CONTAINER TESTER (elec. equip.) 727.687-050
electric deicer inspector (rubber goods) 729.387-010
electric-detector operator (construction) 862.687-014
ELECTRIC-DISTRIBUTION CHECKER (construction; utilities) 824.281-014
electric-distribution engineer (utilities) 003.167-046
Electric-Dragline Operator (any industry) 850.683-018
Electric-Fan Assembler (house. appl.) 723.684-010
ELECTRIC-FORK OPERATOR (agriculture) 921.685-042
Electric-Freight-Car Operator (r.r. trans.) 921.683-050
Electric-Frying-Pan Repairer (house. appl.) 723.584-010
ELECTRIC-GOLF-CART REPAIRER (amuse. & rec.; automotive ser.) 620.261-026
Electric-Heater Assembler (house. appl.) 723.684-010
Electric-Hoist Operator (mine & quarry) 921.663-026
ELECTRICIAN (construction) 824.261-010
ELECTRICIAN (mfd. bldgs.) 824.681-010
ELECTRICIAN (ship-boat mfg.) 825.381-030
ELECTRICIAN (water trans.) 825.281-014
ELECTRICIAN, AIRCRAFT (aircraft mfg.; air trans.) 825.261-018
ELECTRICIAN APPRENTICE (construction) 824.261-014
ELECTRICIAN APPRENTICE (ship-boat mfg.) 825.381-034
electrician apprentice, elevator maintenance (any industry) 825.281-034
ELECTRICIAN APPRENTICE, POWERHOUSE (utilities) 820.261-010
ELECTRICIAN, AUTOMOTIVE (automotive ser.) 825.281-022
Electrician, Bus (automotive ser.) 825.281-022
electrician, cable-splicing (construction; tel. & tel.; utilities) 829.361-010
ELECTRICIAN, CHIEF (motion picture) 824.137-010
Electrician, Chief (water trans.) 825.281-014
electrician-constructor supervisor (utilities) 821.131-026
Electrician, Control Equipment (railroad equip.) 825.281-026
Electrician, Crane Maintenance (any industry) 829.261-018
Electrician, Deck (water trans.) 825.281-014
electrician, elevator-maintenance (any industry) 825.281-030
electrician, front (amuse. & rec.) 962.381-014
ELECTRICIAN HELPER (any industry) 829.684-022
ELECTRICIAN HELPER (ship-boat mfg.) 829.684-026
electrician helper (utilities) 821.667-010
ELECTRICIAN HELPER, AUTOMOTIVE (automotive ser.) 825.684-010
Electrician Helper, Powerhouse (utilities) 821.667-010
ELECTRICIAN, LOCOMOTIVE (railroad equip.) 825.281-026
Electrician, Machine Shop (machine shop) 829.261-018
ELECTRICIAN, MAINTENANCE (any industry) 829.261-018
electrician, marine (ship-boat mfg.) 825.381-030
electrician, master (amuse. & rec.) 962.267-010
ELECTRICIAN, OFFICE (tel. & tel.) 822.261-010
electrician, outside (ship-boat mfg.) 825.381-030
ELECTRICIAN, POWERHOUSE (utilities) 820.261-014
ELECTRICIAN, RADIO (any industry) 823.281-014
Electrician, Rectifier Maintenance (utilities) 829.261-018
Electrician, Refinery (petrol. refin.) 829.261-018
ELECTRICIAN, RESEARCH (aircraft mfg.) 726.261-014
Electrician, Second (water trans.) 825.281-014
Electrician, Ship (ship-boat mfg.) 825.381-030

Electrician, Shop (ship-boat mfg.) 825.381-030
Electrician, Sound (water trans.) 825.281-014
electrician, station, assistant (tel. & tel.) 822.261-010
ELECTRICIAN, SUBSTATION (utilities) 820.261-018
ELECTRICIAN SUPERVISOR (any industry) 829.131-014
ELECTRICIAN SUPERVISOR (ship-boat mfg.) 825.131-010
Electrician Supervisor, Airplane (air trans.) 829.131-014
Electrician Supervisor, Automotive (automotive ser.) 829.131-014
Electrician Supervisor, Locomotive (railroad equip.) 829.131-014
Electrician Supervisor, Maintenance (any industry) 829.131-014
ELECTRICIAN SUPERVISOR, SUBSTATION (utilities) 820.131-010
electrician, telephone (any industry) 822.281-018
Electrician, Third (water trans.) 825.281-014
electrician, underground (utilities) 821.361-010
electrician, wiring (auto. mfg.; vehicles, nec) 829.684-014
Electrician, Yard (ship-boat mfg.) 825.381-030
Electric-Locomotive-Crane Operator (any industry) 921.663-038
electric-meter inspector (utilities) 821.364-010
Electric-Meter-Installer Helper (utilities) 821.667-010
ELECTRIC-METER INSTALLER I (utilities) 821.361-014
ELECTRIC-METER INSTALLER II (utilities) 821.684-010
Electric-Meter Reader (utilities) 209.567-010
ELECTRIC-METER REPAIRER (utilities) 729.281-014
ELECTRIC-METER-REPAIRER APPRENTICE (utilities) 729.281-018
Electric-Meter-Repairer Helper (utilities) 821.564-010
ELECTRIC-METER TESTER (utilities) 821.381-010
Electric-Meter-Tester Helper (utilities) 821.564-010
electric-meter tester, shop (utilities) 729.281-034
ELECTRIC-MOTOR ANALYST (any industry) 721.261-010
ELECTRIC-MOTOR-AND-GENERATOR ASSEMBLER (elec. equip.) 820.361-014
ELECTRIC-MOTOR ASSEMBLER (elec. equip.) 721.684-022
ELECTRIC-MOTOR ASSEMBLER AND TESTER (any industry) 721.281-014
ELECTRIC-MOTOR-CONTROL ASSEMBLER (elec. equip.) 721.381-014
ELECTRIC-MOTOR FITTER (railroad equip.) 721.381-010
electric-motor-repair clerk (retail trade; wholesale tr.) 271.354-010
ELECTRIC-MOTOR REPAIRER (any industry) 721.281-018
ELECTRIC MOTOR REPAIRING SUPERVISOR (any industry) 721.131-010
ELECTRIC-MOTOR WINDER (elec. equip.) 721.484-010
electric-needle specialist (personal ser.) 339.371-010
ELECTRIC-ORGAN ASSEMBLER AND CHECKER (musical inst.) 730.381-022
ELECTRIC-ORGAN INSPECTOR AND REPAIRER (musical inst.) 730.281-018
electric-organ technician (any industry) 828.261-010
Electric-Pile-Driver Operator (construction) 859.682-018
ELECTRIC POWERLINE EXAMINER (utilities) 959.367-010
Electric-Power-Shovel Operator (any industry) 850.683-030
Electric-Range Assembler (elec. equip.) 827.684-010
Electric-Range Preparer (any industry) 827.584-010
Electric-Range Servicer (any industry) 827.261-010
Electric-Razor Assembler (cutlery-hrdwr.) 701.687-010
Electric-Refrigerator Preparer (any industry) 827.584-010
Electric-Refrigerator Servicer (any industry) 827.261-010
electric-repair supervisor (utilities) 820.131-010
ELECTRIC-SEALING-MACHINE OPERATOR (any industry) 690.685-154
electric-sewer-cleaning-machine operator (business ser.) 899.664-014
ELECTRIC-SIGN ASSEMBLER (fabrication, nec) 729.684-022
electric-sorting-machine operator (can. & preserv.) 521.685-238
Electric-Switch Tester (elec. equip.) 729.684-058
Electric-Tape Slitter (rubber goods) 699.682-030
ELECTRIC-TOOL REPAIRER (any industry) 729.281-022
ELECTRIC-TRACK-SWITCH MAINTAINER (r.r. trans.) 825.261-010
Electric-Truck-Crane Operator (any industry) 921.683-050
Electric-Truck Operator (any industry) 921.683-050
ELECTRIFIER OPERATOR (textile) 585.685-042
Electrocardiograph Repairer (any industry) 729.281-030
ELECTROCARDIOGRAPH TECHNICIAN (medical ser.) 078.362-018
ELECTRODE CLEANER (elec. equip.) 729.687-014
ELECTRODE-CLEANING-MACHINE OPERATOR (elec. equip.) 559.685-062
ELECTRODE TURNER-AND-FINISHER (elec. equip.) 692.682-034
ELECTROENCEPHALOGRAPHIC TECHNOLOGIST (medical ser.) 078.362-022
ELECTROFORMER (electroplating) 500.684-010
electroformer (inst. & app.) 500.684-034
ELECTROGALVANIZING-MACHINE OPERATOR (electroplating) 500.362-010
ELECTROLESS PLATER (any industry) 505.684-010
ELECTROLESS PLATER, PRINTED CIRCUIT BOARD PANELS (electron. comp.) 501.685-022
ELECTROLOGIST (personal ser.) 339.371-010
ELECTROLYSIS-AND-CORROSION-CONTROL ENGINEER (profess. & kin.) 003.167-022
electrolysis engineer (profess. & kin.) 003.167-022
electrolysis investigator (profess. & kin.) 003.167-022
electrolysis operator (personal ser.) 339.371-010
Electrolytic De-Scaler (any industry) 503.362-010
Electromagnet-Crane Operator I (any industry) 921.663-058
Electromagnet-Crane Operator II (any industry) 921.663-062
electromechanical instrument mechanic (inst. & app.) 710.381-054
ELECTROMECHANICAL TECHNICIAN (inst. & app.) 710.281-018
ELECTROMEDICAL-EQUIPMENT REPAIRER (any industry) 729.281-030
electromedical service engineer (any industry) 729.281-030
ELECTROMYOGRAPHIC TECHNICIAN (medical ser.) 078.362-038
electron-beam operator (electron. comp.) 972.382-018
Electron Gun Assembler (electron. comp.) 725.384-010
Electron Gun Inspector (electron. comp.) 726.684-022
Electronic Color Correction Operator (print. & pub.) 979.282-010
Electronic-Communications Technician (profess. & kin.) 003.161-014
ELECTRONIC-COMPONENT PROCESSOR (electron. comp.) 590.684-014
ELECTRONIC EQUIPMENT REPAIRER (comm. equip.; electron. comp.) 726.381-014
ELECTRONIC EQUIPMENT SET-UP OPERATOR (electron. comp.) 726.380-010
Electronic-Eye-Thermal-Cutting-Machine Operator (welding) 816.482-010
ELECTRONIC FUNDS TRANSFER COORDINATOR (financial) 216.362-038
electronic gluer (woodworking) 569.685-050
electronic imaging system operator (print. & pub.) 979.282-010
electronic induction hardener (heat treating) 504.685-022
ELECTRONIC INTELLIGENCE OPERATIONS SPECIALIST (military ser.) 193.382-010
ELECTRONIC MASKING SYSTEM OPERATOR (print. & pub.) 972.282-018
Electronic-Organ Installer (any industry) 828.261-010
ELECTRONIC-ORGAN TECHNICIAN (any industry) 828.261-010
Electronic Page Makeup System Operator (print. & pub.) 979.282-010
electronic paint operator (any industry) 599.682-010
Electronic-Piano Installer (any industry) 828.261-010
electronic plotting system operator (print. & pub.) 972.282-018
ELECTRONIC PREPRESS SYSTEM OPERATOR (print. & pub.) 979.282-010
ELECTRONIC-PRODUCTION-LINE-MAINTENANCE MECHANIC (electron. comp.) 629.261-022
ELECTRONIC-SALES-AND-SERVICE TECHNICIAN (profess. & kin.) 828.251-010
ELECTRONICS ASSEMBLER (electron. comp.) 726.684-018
ELECTRONICS ASSEMBLER, DEVELOPMENTAL (any industry) 726.261-010
Electronic-Scale Assembler And Tester (office machines) 710.281-010
ELECTRONIC-SCALE SUBASSEMBLER (office machines) 726.684-014
electronic scanner operator (print. & pub.) 972.282-010
ELECTRONICS-DESIGN ENGINEER (profess. & kin.) 003.061-034
ELECTRONICS ENGINEER (profess. & kin.) 003.061-030
electronics-equipment mechanic (any industry) 828.261-022
ELECTRONICS INSPECTOR (comm. equip.; electron. comp.; inst. & app.) 726.381-010
ELECTRONICS INSPECTOR (electron. comp.) 726.684-022
ELECTRONICS MECHANIC (any industry) 828.261-022
ELECTRONICS-MECHANIC APPRENTICE (any industry) 828.261-026
Electronics Mechanic, Computer (any industry) 828.261-022
electronic-sound technician (any industry) 823.261-010
ELECTRONICS-RESEARCH ENGINEER (profess. & kin.) 003.061-038
electronics specialist (any industry) 828.261-022
electronics supervisor (petrol. & gas) 710.131-034
electronics-system mechanic (any industry) 828.261-022
electronics technician (any industry) 823.281-018
electronics technician (any industry) 828.261-022
ELECTRONICS TECHNICIAN (profess. & kin.) 003.161-014
electronics-technician apprentice (any industry) 828.261-026
Electronics Technician, Nuclear Reactor (profess. & kin.) 003.161-014
ELECTRONICS-TEST ENGINEER (profess. & kin.) 003.061-042
ELECTRONICS TESTER (any industry) 726.261-018
ELECTRONICS TESTER (electron. comp.) 726.684-026
ELECTRONICS UTILITY WORKER (comm. equip.; electron. comp.) 726.364-018
ELECTRONICS WORKER (electron. comp.) 726.687-010
ELECTRO-OPTICAL ENGINEER (profess. & kin.) 023.061-010
electroplater (electroplating) 500.380-010
electroplater apprentice (electroplating) 500.380-014
electroplater, automatic (electroplating) 500.685-014
electroplater helper (electroplating) 500.686-010
Electrotype Caster (print. & pub.) 974.381-010
Electrotype Molder (print. & pub.) 974.381-010
ELECTROTYPER (print. & pub.) 974.381-010
ELECTROTYPER APPRENTICE (print. & pub.) 974.381-014
Electrotyper Helper (print. & pub.) 979.684-026
ELECTROTYPE SERVICER (print. & pub.) 659.462-010
Electro-Winning Operator (smelt. & refin.) 519.362-014
Element Setter (elec. equip.) 727.687-038
ELEMENT WINDING MACHINE TENDER (elec. equip.; inst. & app.) 724.685-010
Elephant Keeper (amuse. & rec.) 412.674-010

ELEVATING-GRADER OPERATOR (construction) 850.663-014
elevator builder (construction) 825.361-010
ELEVATOR CONSTRUCTOR (construction) 825.361-010
Elevator Constructor, Electric (construction) 825.361-010
ELEVATOR-CONSTRUCTOR HELPER (construction) 825.664-010
Elevator Constructor, Hydraulic (construction) 825.361-010
ELEVATOR-CONSTRUCTOR SUPERVISOR (construction) 825.131-014
elevator dispatcher (any industry) 388.367-010
elevator erector (construction) 825.361-010
elevator-erector helper (construction) 825.664-010
ELEVATOR EXAMINER-AND-ADJUSTER (any industry) 825.261-014
elevator inspector (any industry) 825.261-014
elevator installer (construction) 825.361-010
elevator mechanic (any industry) 825.281-030
elevator mechanic (construction) 825.361-010
ELEVATOR OPERATOR (any industry) 388.663-010
ELEVATOR OPERATOR, FREIGHT (any industry) 921.683-038
elevator operator, service (any industry) 921.683-038
ELEVATOR REPAIRER (any industry) 825.281-030
ELEVATOR-REPAIRER APPRENTICE (any industry) 825.281-034
ELEVATOR-REPAIRER HELPER (any industry) 825.684-014
elevator-repair mechanic (any industry) 825.281-030
ELEVATOR STARTER (any industry) 388.367-010
elevator supervisor (any industry) 388.367-010
elevator tender (grain-feed mills) 921.365-010
ELIGIBILITY-AND-OCCUPANCY INTERVIEWER (government ser.) 168.267-038
ELIGIBILITY WORKER (government ser.) 195.267-010
EMBALMER (personal ser.) 338.371-014
EMBALMER APPRENTICE (personal ser.) 338.371-010
embalmer assistant (personal ser.) 339.361-010
Embedder (elec. equip.) 575.684-042
EMBLEM DRAWER-IN (tex. prod., nec) 689.380-010
Emblem-Fuser Tender (garment; knitting) 583.685-046
EMBOSSER (any industry) 583.685-030
EMBOSSER (boot & shoe) 690.685-158
EMBOSSER (leather mfg.; leather prod.) 690.682-030
EMBOSSER (optical goods) 713.684-022
embosser (print. & pub.) 659.682-014
EMBOSSER (print. & pub.) 659.382-010
Embosser (print. & pub.) 652.682-030
embosser operator (clerical) 208.682-010
EMBOSSER OPERATOR (paper goods) 649.682-022
embossing-calender operator (any industry) 583.685-030
embossing clerk (tobacco) 529.567-014
embossing-machine operator (any industry) 583.685-030
embossing-machine operator (leather mfg.; leather prod.) 690.682-030
EMBOSSING-MACHINE OPERATOR (nonfer. metal) 617.685-018
EMBOSSING-MACHINE OPERATOR (ordnance) 619.685-038
EMBOSSING-MACHINE OPERATOR (tex. prod., nec) 583.685-034
EMBOSSING-MACHINE OPERATOR (wood prod., nec) 669.682-046
embossing-machine-operator helper (paper goods) 640.685-070
EMBOSSING-MACHINE-OPERATOR HELPER (plastic-synth.) 583.685-038
Embossing-Machine-Operator Helper (tex. prod., nec) 589.687-026
EMBOSSING-MACHINE OPERATOR I (clerical) 208.582-014
EMBOSSING-MACHINE OPERATOR II (clerical) 208.682-010
EMBOSSING-MACHINE TENDER (paper goods) 649.685-038
Embossing-Press Operator (elec. equip.) 652.682-030
embossing-press operator (leather mfg.; leather prod.) 690.682-030
EMBOSSING-PRESS OPERATOR (print. & pub.) 659.682-014
EMBOSSING-PRESS-OPERATOR APPRENTICE (print. & pub.) 659.682-018
EMBOSSING-PRESS OPERATOR, MOLDED GOODS (fabrication, nec) 690.682-034
EMBOSSING TOOLSETTER (ordnance) 616.260-010
EMBOSSOGRAPH OPERATOR (any industry) 652.682-014
EMBROIDERER, HAND (tex. prod., nec) 782.684-018
EMBROIDERY-MACHINE OPERATOR (any industry) 787.682-022
EMBROIDERY-MACHINE OPERATOR (garment) 786.685-018
EMBROIDERY PATTERNMAKER (retail trade; wholesale tr.) 782.361-014
Embroidery Supervisor (tex. prod., nec) 787.132-010
EMBROIDERY SUPERVISOR (tex. prod., nec) 689.130-010
Emergency-Crew Supervisor (utilities) 821.131-014
Emergency-Detail Driver (government ser.) 375.263-014
EMERGENCY MEDICAL SERVICES COORDINATOR (medical ser.) 079.117-010
EMERGENCY MEDICAL TECHNICIAN (medical ser.) 079.374-010
Emery-Wheel Molder (nonmet. min.) 575.685-010
emg technician (medical ser.) 078.362-038
employee relations administrator (profess. & kin.) 166.117-010
EMPLOYEE RELATIONS SPECIALIST (motor trans.) 166.267-042
employee-service officer (profess. & kin.) 166.117-014
EMPLOYER RELATIONS REPRESENTATIVE (profess. & kin.) 166.257-010
EMPLOYMENT-AND-CLAIMS AIDE (government ser.) 169.367-010
EMPLOYMENT CLERK (clerical) 205.362-014
Employment Counselor (government ser.) 045.107-010
EMPLOYMENT INTERVIEWER (profess. & kin.) 166.267-010
employment supervisor (profess. & kin.) 166.167-030
emt-paramedic (medical ser.) 079.364-026
Emulsification Operator (oils & grease) 558.685-062
Emulsion Operator (chemical) 559.382-034
enamel burner (paint & varnish) 553.685-082
enamel cracker (jewelry-silver.) 770.687-030
Enamel Dipper (any industry) 599.685-026
enamel drier (plumbing-heat.) 509.684-010
ENAMELER (jewelry-silver.) 740.684-018
enameler (leather mfg.) 584.687-010
ENAMELER (plumbing-heat.) 509.684-010
Enameler (pottery & porc.) 741.684-026
Enamel-Machine Operator (elec. equip.) 599.685-046
enamel pulverizer (jewelry-silver.) 770.687-030
Enamel Shader (paint & varnish) 550.381-014
Enamel Sprayer I (any industry) 741.684-026
Enamel Sprayer II (any industry) 741.687-018
ENCAPSULATOR (aircraft mfg.) 556.684-014
ENCAPSULATOR (elec. equip.; electron. comp.) 726.687-022
Enchilada Maker (food prep., nec) 520.687-046
ENDBAND CUTTER, HAND (hat & cap) 784.687-026
endbander (hat & cap) 784.687-026
endband sizer (hat & cap) 784.687-026
END FINDER, FORMING DEPARTMENT (textile) 681.687-010
END FINDER, ROVING DEPARTMENT (glass mfg.) 689.687-038
END FINDER, TWISTING DEPARTMENT (textile) 689.687-042
END FRAZER (fabrication, nec) 665.685-014
ENDING-MACHINE OPERATOR (paper goods) 641.685-042
end-lathe operator (hat & cap) 585.685-074
Endless-Bed-Drum Sander (woodworking) 662.682-014
endless-belt finisher (narrow fabrics; textile) 782.684-062
Endless-Steamer Tender (textile) 582.585-010
ENDODONTIST (medical ser.) 072.101-014
end operator (wood. container) 669.685-054
Endorsement Clerk (insurance) 203.582-066
end packer (tinware) 509.666-010
END POLISHER (clock & watch) 715.685-026
Ends-Down Checker (textile) 221.367-034
END STAPLER (wood. container) 669.685-054
END-TOUCHING-MACHINE OPERATOR (wood prod., nec) 662.686-010
end trimmer (pen & pencil) 669.685-062
end trimmer (pen & pencil) 662.685-030
end user consultant (profess. & kin.) 032.262-010
ENERGY-CONSERVATION REPRESENTATIVE (utilities) 959.367-018
ENERGY-CONTROL OFFICER (education) 199.167-018
engine assembler (engine-turbine) 806.481-014
engine buildup mechanic (aircraft mfg.) 806.381-022
ENGINE DISPATCHER (r.r. trans.) 910.367-018
Engine Emission Technician (profess. & kin.) 029.261-014
ENGINEER (profess. & kin.) term
ENGINEER (water trans.) 197.130-010
engineer, automated equipment (machinery mfg.) 638.261-010
engineer, booster and exhauster (utilities) 953.382-010
engineer, byproduct (steel & rel.) 950.362-010
engineer, chief (radio-tv broad.) 003.167-034
Engineer, Chief (water trans.) 197.130-010
Engineer, Design-And-Construction (utilities) 003.167-018
ENGINEER, EXHAUSTER (steel & rel.) 950.362-010
Engineer, First Assistant (water trans.) 197.130-010
Engineer, Fishing Vessel (water trans.) 197.130-010
engineer, gas-pumping station (utilities) 953.382-010
engineer, geophysical laboratory (profess. & kin.) 024.167-010
ENGINEER-IN-CHARGE, STUDIO OPERATIONS (radio-tv broad.) 003.167-030
ENGINEER-IN-CHARGE, TRANSMITTER (radio-tv broad.) 003.167-034
engineering aide (profess. & kin.) see TECHNICIAN
ENGINEERING ASSISTANT, MECHANICAL EQUIPMENT (profess. & kin.) 007.161-018
engineering clerk (any industry) 229.267-010
ENGINEERING-DOCUMENT-CONTROL CLERK (aircraft mfg.; electron. comp.) 206.367-010
Engineering Geologist (profess. & kin.) 024.061-018
engineering illustrator (profess. & kin.) 017.281-034
engineering laboratory technician (aircraft mfg.) 019.281-010
Engineering Librarian (library) 100.167-026
ENGINEERING MANAGER, ELECTRONICS (profess. & kin.) 003.167-070
ENGINEERING MODEL MAKER (inst. & app.) 693.260-018
engineering-release clerk (aircraft mfg.; electron. comp.) 206.367-010
engineering technician (profess. & kin.) 007.161-026
engineering technician, parking (government ser.) 199.261-014
engineering test mechanic (aircraft mfg.) 710.361-014
engineering test pilot (aircraft mfg.) 196.263-042
ENGINEER OF SYSTEM DEVELOPMENT (utilities) 003.167-026
Engineer, Operations-And-Maintenance (utilities) 003.167-018

Engineer, Remote Control, Diesel (r.r. trans.) 910.363-018
Engineer, Second Assistant (water trans.) 197.130-010
ENGINEER, SOILS (profess. & kin.) 024.161-010
engineer, steam (ship-boat mfg.) 623.281-030
Engineer, Third Assistant (water trans.) 197.130-010
Engine-Generator Assembler (engine-turbine) 820.361-014
Engine-Head Repairer (automotive ser.) 620.261-010
Engine Inspector (automotive ser.) 620.281-030
Engine Lathe Operator, Numerical Control (machine shop) 604.362-010
ENGINE-LATHE SET-UP OPERATOR (machine shop) 604.380-018
ENGINE-LATHE SET-UP OPERATOR, TOOL (machine shop) 604.280-010
engine-lathe tender (machine shop) 604.685-026
Engine Repairer (auto. mfg.) 620.381-022
ENGINE REPAIRER, PRODUCTION (engine-turbine) 625.381-010
ENGINE REPAIRER, SERVICE (engine-turbine) 625.281-018
Engine-Repair Mechanic, Bus (automotive ser.) 620.261-010
Engine-Room Cleaner (any industry) 381.687-018
engine supervisor (r.r. trans.) 910.137-022
ENGINE TESTER (aircraft mfg.; air trans.) 621.261-014
engine tester (auto. mfg.) 806.281-010
ENGINE-TESTING SUPERVISOR (engine-turbine) 625.131-010
ENGINE TURNER (jewelry-silver.) 704.381-018
engraved-roller inspector (textile) 979.381-026
ENGRAVER (glass products) 775.381-010
engraver (glass products) 775.584-010
ENGRAVER APPRENTICE, DECORATIVE (engraving) 704.381-022
ENGRAVER, AUTOMATIC (clock & watch) 609.685-014
ENGRAVER, BLOCK (print. & pub.) 979.281-014
Engraver, Copperplate (print. & pub.) 979.381-010
Engraver, Flatware (engraving) 704.381-030
ENGRAVER, HAND, HARD METALS (engraving) 704.381-026
ENGRAVER, HAND, SOFT METALS (engraving) 704.381-030
ENGRAVER I (print. & pub.) 979.381-010
ENGRAVER II (print. & pub.) 979.684-014
Engraver, Jewelry (engraving) 704.381-030
Engraver, Letter (print. & pub.) 979.281-018
Engraver, Lettering (engraving) 704.381-030
ENGRAVER, MACHINE (print. & pub.) 979.382-014
ENGRAVER, MACHINE I (engraving) 704.682-010
ENGRAVER, MACHINE II (engraving) 704.582-010
Engraver, Optical Frames (engraving) 704.381-030
Engraver, Ornamental Design (engraving) 704.381-030
ENGRAVER, PANTOGRAPH I (engraving) 704.382-010
ENGRAVER, PANTOGRAPH II (engraving) 704.682-014
ENGRAVER, PICTURE (print. & pub.) 979.281-018
ENGRAVER, RUBBER (pen & pencil) 733.381-010
ENGRAVER, RUBBER (print. & pub.) 979.581-010
ENGRAVER, SEALS (pen & pencil) 704.381-034
engraver, signature (pen & pencil) 733.381-010
Engraver, Steel Plate (print. & pub.) 979.381-010
ENGRAVER TENDER (glass products) 673.685-050
ENGRAVER, TIRE MOLD (machine shop) 605.382-014
engraver, wood (print. & pub.) 979.281-014
engraving operator (print. & pub.) 971.381-022
engraving photographer (electron. comp.; print. & pub.) 971.382-014
ENGRAVING-PRESS OPERATOR (print. & pub.) 651.382-010
Engravings Polisher (glass products) 775.684-058
ENGRAVING SUPERVISOR (engraving) 704.131-010
ENGROSSER (profess. & kin.) 970.661-010
enologist (beverage) 183.161-014
enrober (bakery products) 524.685-026
enrober tender (sugar & conf.) 524.686-010
ENROBING-MACHINE CORDER (sugar & conf.) 524.684-018
ENROBING-MACHINE FEEDER (sugar & conf.) 524.686-010
ENROBING-MACHINE OPERATOR (bakery products) 524.685-026
ENROBING-MACHINE OPERATOR (bakery products; sugar & conf.) 524.382-014
ENTERTAINER (amuse. & rec.; motion picture; radio-tv broad.) term
enthone solder stripper (ordnance) 503.685-046
ENTOMOLOGIST (profess. & kin.) 041.061-046
entrance guard (government ser.) 205.367-038
entry clerk (laundry & rel.) 369.687-026
Entry-Driver Operator (mine & quarry) 930.683-014
Entry Examiner (clerical) 209.687-010
Entry Miner (mine & quarry) 939.281-010
envelope addresser (clerical) 209.587-010
Envelope Cutter (paper products) 699.682-018
envelope folder (paper goods) 794.687-022
ENVELOPE-FOLDING-MACHINE ADJUSTER (paper goods) 641.380-010
envelope-fold operator (paper goods) 649.685-042
ENVELOPE-MACHINE OPERATOR (paper goods) 649.685-042
Envelope-Press Operator I (print. & pub.) 651.362-010
Envelope-Press Operator II (print. & pub.) 651.362-018
Envelope-Sealing-Machine Operator (clerical) 208.685-026
envelope-stamping-machine operator (clerical) 208.685-026
ENVIRONMENTAL ANALYST (government ser.) 199.167-022
ENVIRONMENTAL ANALYST (profess. & kin.) 029.081-010
environmental-control-system installer-servicer (construction) 637.261-014
ENVIRONMENTAL ENGINEER (profess. & kin.) term
ENVIRONMENTAL EPIDEMIOLOGIST (government ser.) 041.167-010
ENVIRONMENTALIST (profess. & kin.) term
environmental planner (profess. & kin.) 001.061-018
Environmental-Research Test Technician (profess. & kin.) 003.261-010
environmental scientist (profess. & kin.) 029.081-010
environmental technician (profess. & kin.) 029.261-014
EPITAXIAL REACTOR OPERATOR (electron. comp.) 590.382-018
EPITAXIAL REACTOR TECHNICIAN (electron. comp.) 590.282-010
equalizer (saw. & plan.) 667.682-074
equalizer operator (saw. & plan.) 667.682-074
Equalizing-Saw Operator (woodworking) 667.682-022
EQUAL OPPORTUNITY OFFICER (any industry) 168.267-114
EQUAL-OPPORTUNITY REPRESENTATIVE (government ser.) 168.167-014
EQUESTRIAN (amuse. & rec.) 159.344-010
EQUIPMENT CLEANER (any industry) 599.684-010
Equipment Cleaner (paint & varnish) 559.685-110
EQUIPMENT CLEANER-AND-TESTER (smelt. & refin.) 630.584-010
equipment inspector (r.r. trans.) 910.387-014
EQUIPMENT INSPECTOR (tel. & tel.) 822.261-014
EQUIPMENT INSTALLER (any industry) 828.381-010
equipment installer (tel. & tel.) 822.361-014
EQUIPMENT INSTALLER (tel. & tel.) 822.381-010
equipment installer (tel. & tel.) 822.381-022
EQUIPMENT MECHANIC (tel. & tel.) term
EQUIPMENT MONITOR, PHOTOTYPESETTING (print. & pub.) 650.682-010
equipment processer, storage (government ser.) 929.367-010
Equipment-Records Supervisor (construction) 222.137-038
equipment scheduler (air trans.) 221.362-010
equipment-service engineer (any industry) 620.281-018
Equipment Specialist (profess. & kin.) 096.121-014
Equipment Sterilizer (dairy products) 599.684-010
equipment washer (any industry) 381.687-022
erector (engine-turbine; machinery mfg.) 638.261-014
erector (machine shop) 706.684-018
erector (ship-boat mfg.) 806.261-014
erector appentice (ship-boat mfg.) 806.261-018
erector operator (construction) 850.682-010
Escalator Constructor (construction) 825.361-010
escapement matcher (clock & watch) 715.381-018
ESCORT (any industry) 353.667-010
ESCORT (personal ser.) 359.367-010
escort, blind (personal ser.) 359.573-010
escort, patients (medical ser.) 355.677-014
ESCORT-VEHICLE DRIVER (motor trans.) 919.663-022
Escrow Clerk (financial) 249.362-014
ESCROW OFFICER (profess. & kin.) 119.367-010
ESTATE PLANNER (insurance) 186.167-010
ESTIMATOR (profess. & kin.) 169.267-038
ESTIMATOR AND DRAFTER (utilities) 019.261-014
estimator, automobile damage (business ser.; insurance) 241.267-014
Estimator, Binding (print. & pub.) 221.367-014
ESTIMATOR, JEWELRY (jewelry-silver.) 221.387-022
estimator, lumber (wood. container) 221.482-014
ESTIMATOR, PAPERBOARD BOXES (paper goods) 221.362-018
Estimator, Printing-Plate-Making (print. & pub.) 221.367-014
ESTIMATOR, PRINTING (print. & pub.) 221.367-014
ETCHED-CIRCUIT PROCESSOR (electron. comp.) 590.684-018
etcher (cutlery-hrdwr.) 500.685-010
ETCHER (electron. comp.) 590.685-078
ETCHER (engraving) 704.684-010
etcher, aircraft (aircraft mfg.) 704.381-014
etcher apprentice (print. & pub.) 971.381-010
ETCHER APPRENTICE, PHOTOENGRAVING (print. & pub.) 971.381-010
ETCHER, ELECTROLYTIC (cutlery-hrdwr.) 500.685-010
etcher, enameling (jewelry-silver.) 735.687-010
ETCHER, HAND (cutlery-hrdwr.) 704.687-014
etcher, hand (engraving) 704.684-014
ETCHER, HAND (print. & pub.) 971.261-010
ETCHER HELPER, HAND (print. & pub.) 971.687-010
ETCHER, MACHINE (cutlery-hrdwr.) 619.685-042
ETCHER, PHOTOENGRAVING (print. & pub.) 971.381-014
Etcher, Printed Circuit Boards (electron. comp.) 590.685-082
ETCHER-STRIPPER, SEMICONDUCTOR WAFERS (electron. comp.) 590.684-026
ETCH OPERATOR, SEMICONDUCTOR WAFERS (electron. comp.) 590.685-074
Ethnographer (profess. & kin.) 055.067-022
ETHNOLOGIST (profess. & kin.) 055.067-022
Ethylbenzene-Compressor Utility Operator (chemical) 559.682-066
Ethylbenzene-Converter Helper (chemical) 558.585-010

Ethylbenzene-Converter Operator (chemical) 558.362-010
Ethylbenzene-Cracking Supervisor (chemical; petrol. refin.) 559.132-07?
Ethylbenzene Hydrogenator (chemical) 558.362-010
Ethylbenzene Oxidizer (chemical) 558.362-010
Ethyl Blender (petrol. refin.) 540.462-010
Ethylene-Compressor Operator (chemical) 950.382-014
Ethylene-Oxide Panelboard Operator (chemical) 559.382-018
Ethylene-Plant Helper (chemical) 558.585-010
Ethylene-Plant Operator (chemical) 558.362-010
Etymologist (profess. & kin.) 059.067-010
EVALUATOR (education) 094.267-010
EVALUATOR (nonprofit org.) 249.367-034
Evaluator, Transfer Students (education) 205.367-010
EVAPORATIVE-COOLER INSTALLER (any industry) 637.381-010
EVAPORATOR OPERATOR (can. & preserv.; dairy products; sugar & conf.) 521.382-010
EVAPORATOR OPERATOR (paper & pulp) 532.685-018
EVAPORATOR OPERATOR I (chemical) 553.382-018
EVAPORATOR OPERATOR II (chemical) 553.682-018
Evaporator Operator, Molasses (can. & preserv.) 521.382-010
Evaporator Repairer (chemical) 891.687-030
EXAMINATION PROCTOR (government ser.) 199.267-018
EXAMINER (fabrication, nec) 739.687-082
EXAMINER (glove & mit.) 789.687-042
EXAMINER (government ser.) 169.267-014
examiner (knitting) 684.687-010
EXAMINER (print. & pub.) 979.687-010
examiner (tex. prod., nec) 789.687-050
Examiner-Mender (tex. prod., nec) 787.682-030
EXAMINER, QUESTIONED DOCUMENTS (government ser.) 199.267-022
examiner-rating clerk (insurance) 214.482-018
Examining-Chair Assembler (furniture) 706.381-026
EXCAVATOR (any industry) 850.684-010
excelsior-machine feeder (saw. & plan.) 663.685-014
EXCELSIOR-MACHINE TENDER (saw. & plan.) 663.685-014
Excelsior Picker (furniture) 680.685-078
EXECUTIVE CHEF (hotel & rest.) 187.161-010
executive-chef assistant (hotel & rest.) 313.131-026
executive, community planning (nonprofit org.) 187.167-234
Executive Director, Contract Shop (nonprofit org.) 187.117-026
EXECUTIVE DIRECTOR, NURSES' ASSOCIATION (medical ser.) 075.117-034
EXECUTIVE DIRECTOR, RED CROSS (nonprofit org.) 187.117-066
EXECUTIVE DIRECTOR, SHELTERED WORKSHOP (nonprofit org.) 187.117-026
EXECUTIVE HOUSEKEEPER (any industry) 187.167-046
EXECUTIVE PILOT (any industry) 196.263-030
Executive Producer (radio-tv broad.) 159.117-010
EXECUTIVE PRODUCER, PROMOS (radio-tv broad.) 159.167-022
executive secretary (any industry) 169.167-014
Executive Secretary (profess. & kin.) 189.117-010
executive secretary, nurses' association (medical ser.) 075.117-034
executive secretary, social welfare (profess. & kin.) 195.117-010
EXECUTIVE SECRETARY, STATE BOARD OF NURSING (government ser.) 169.117-010
executive steward/stewardess (hotel & rest.) 310.137-018
EXECUTIVE TRAINEE (any industry) term
EXECUTIVE VICE PRESIDENT, CHAMBER OF COMMERCE (nonprofit org.) 187.117-030
EXERCISE PHYSIOLOGIST (medical ser.) 076.121-018
EXERCISER, HORSE (amuse. & rec.) 153.674-010
EXHAUST EQUIPMENT OPERATOR (electron. comp.) 599.382-014
exhaust operator (electron. comp.) 599.382-014
exhaust tender (any industry) 950.585-010
EXHIBIT ARTIST (museums) 149.261-010
EXHIBIT BUILDER (museums) 739.261-010
Exhibit Carpenter (museums) 739.261-010
Exhibit Cleaner (museums) 899.384-010
EXHIBIT DESIGNER (museums) 142.061-058
EXHIBIT-DISPLAY REPRESENTATIVE (any industry) 297.367-010
Exhibit Electrician (museums) 739.261-010
exhibition carver (hotel & rest.) 316.661-010
exhibition specialist (museums) 739.261-010
exhibit technician (museums) 739.261-010
EXPANDING MACHINE OPERATOR (steel & rel.) 617.685-022
EXPANSION ENVELOPE MAKER, HAND (paper goods) 794.684-018
EXPANSION-JOINT BUILDER (rubber goods) 759.664-014
expansion-joint finisher (rubber goods) 759.664-014
expediter (clerical) 221.367-042
EXPEDITER (clerical) 222.367-018
EXPEDITER CLERK (optical goods) 221.387-026
EXPEDITER, SERVICE ORDER (furniture) 222.367-070
EXPEDITION SUPERVISOR (fishing & hunt.) 461.134-010
EXPELLER OPERATOR (grain-feed mills; oils & grease) 529.685-106
Expenditure-Requisition Clerk (utilities) 216.382-022
Expense Clerk (clerical) 210.382-010
expense clerk (clerical) 216.382-034
experimental aircraft and engine mechanic, field and hangar (aircraft mfg.) 621.261-022
EXPERIMENTAL AIRCRAFT MECHANIC (aircraft mfg.) 621.261-022
EXPERIMENTAL ASSEMBLER (any industry) 739.381-026
EXPERIMENTAL-BOX TESTER (wood. container) 761.281-014
experimental-display builder (fabrication, nec) 739.361-010
Experimental Electronics Developer (aircraft mfg.) 003.161-014
Experimental Fabricator-And-Installer (metal prod., nec) 709.381-046
experimental flight test mechanic (aircraft mfg.) 621.261-022
experimental mechanic (aircraft mfg.) 693.261-014
EXPERIMENTAL MECHANIC (motor-bicycles) 600.260-014
EXPERIMENTAL MECHANIC, ELECTRICAL (motor-bicycles) 806.281-014
EXPERIMENTAL MECHANIC, OUTBOARD MOTORS (engine-turbine) 623.261-010
Experimental Mechanic, Spacecraft (aircraft mfg.) 621.261-022
Experimental Plastics Fabricator (aircraft mfg.) 754.381-018
experimental preflight mechanic (aircraft mfg.) 621.261-022
EXPERIMENTAL-ROCKET-SLED MECHANIC (aircraft mfg.) 825.281-038
experimental technician (profess. & kin.) 007.161-026
explosive-actuated-tool operator (construction) see STUD-DRIVER OPERATOR
EXPLOSIVE HANDLER (chemical) term
Explosive Operator, Bomb (ordnance) 737.687-046
Explosive Operator, Fuse (ordnance) 737.687-046
Explosive Operator, Grenade (ordnance) 737.687-046
EXPLOSIVE OPERATOR I (ordnance) 737.687-042
EXPLOSIVE OPERATOR II (ordnance) 737.687-046
EXPLOSIVE-OPERATOR SUPERVISOR (ordnance) 694.132-010
explosives operator (chemical) 694.685-038
EXPLOSIVES-TRUCK DRIVER (ordnance) 903.683-010
Export Clerk (clerical) 214.467-010
Exporter (wholesale tr.) 185.157-018
exposure machine operator (electron. comp.) 976.684-030
EXPRESS CLERK (motor trans.; r.r. trans.) 222.367-022
Extended-Insurance Clerk (insurance) 216.382-050
extension agent (government ser.) 096.127-010
EXTENSION CLERK (utilities) 219.362-030
EXTENSION EDGER (paper goods) 641.685-046
extension-service agent (government ser.) 096.127-010
EXTENSION SERVICE SPECIALIST (government ser.) 096.127-014
extension supervisor (government ser.) 096.167-010
extension worker (government ser.) 096.127-010
EXTERMINATOR (business ser.) 389.684-010
EXTERMINATOR HELPER (any industry) 383.684-010
EXTERMINATOR HELPER, TERMITE (business ser.) 383.687-010
EXTERMINATOR, TERMITE (business ser.) 383.364-010
external-cylindrical-grinder operator (machine shop) 603.280-010
External-Grinder Tender (machine shop) 603.685-062
external grinder, tool (machine shop) 603.280-010
EXTRA (amuse. & rec.; motion picture; radio-tv broad.) 159.647-014
extraction supervisor (petrol. refin.) 549.132-030
extract operator (can. & preserv.) 521.685-262
extractor (any industry) 581.685-038
extractor (chemical) 553.665-018
extractor (hat & cap) 581.685-070
extractor (knitting) 589.485-010
EXTRACTOR-AND-WRINGER OPERATOR (chemical) 551.685-066
EXTRACTOR LOADER AND UNLOADER (chemical) 551.686-014
EXTRACTOR-MACHINE OPERATOR (can. & preserv.) 521.665-014
EXTRACTOR OPERATOR (any industry) 581.685-038
EXTRACTOR OPERATOR (beverage) 521.685-118
extractor operator (leather mfg.; tex. prod., nec) 589.685-098
EXTRACTOR OPERATOR (pharmaceut.) 551.685-058
EXTRACTOR OPERATOR (tex. prod., nec) 582.685-062
EXTRACTOR OPERATOR (textile) 581.685-042
EXTRACTOR OPERATOR (chemical) 552.682-018
EXTRACTOR OPERATOR (chemical; oils & grease) 551.685-054
EXTRACTOR-OPERATOR HELPER (chemical) 552.686-010
EXTRACTOR OPERATOR, SOLVENT PROCESS (chemical) 551.685-062
EXTRACTOR-PLANT OPERATOR (chemical; oils & grease) 559.665-018
Extractor Puller (oils & grease) 551.686-018
Extractor Tender, Raw Stock (textile) 581.685-038
extract wringer (leather mfg.; tex. prod., nec) 589.685-098
extra-gang supervisor (construction) 869.134-022
EXTRUDER OPERATOR (forging) 614.482-014
EXTRUDER OPERATOR (grain-feed mills) 520.682-018
extruder operator (rubber goods; rubber tire) 690.662-014
EXTRUDER OPERATOR (wood prod., nec) 569.685-038
Extruder-Operator Helper (forging) 619.686-034
EXTRUDER-OPERATOR HELPER (plastic prod.; plastic-synth.) 557.564-010
Extruder Operator, Horizontal (wood prod., nec) 569.685-038
Extruder Operator, Multiple (wood prod., nec) 569.685-038
EXTRUDER OPERATOR (plastic prod.; plastic-synth.) 557.382-010

Extruder Operator, Vertical (wood prod., nec) 569.685-038
EXTRUDER TENDER (rubber goods) 557.685-014
EXTRUDING-MACHINE OPERATOR (nonfer. metal) 691.382-010
extruding-machine operator (sugar & conf.) 520.682-014
EXTRUDING-MACHINE OPERATOR (tex. prod., nec) 557.565-010
extruding-press operator (nonfer. metal) 691.382-014
EXTRUDING-PRESS OPERATOR (ordnance) 614.685-010
EXTRUSION BENDER (ship-boat mfg.) 804.684-014
EXTRUSION-DIE REPAIRER (nonfer. metal) 705.381-014
EXTRUSION-PRESS ADJUSTER (elec. equip.) 614.380-010
extrusion-press operator (forging) 614.482-014
EXTRUSION-PRESS OPERATOR I (elec. equip.) 614.482-018
EXTRUSION-PRESS OPERATOR II (elec. equip.) 614.685-014
extrusion press supervisor (forging) 614.132-014
EYE-DROPPER ASSEMBLER (glass products) 739.687-086
EYEGLASS-FRAME TRUER (optical goods) 713.684-026
EYEGLASS-LENS CUTTER (optical goods) 716.682-010
Eyeglass-Lens Generator (optical goods) 716.682-014
Eyeglass-Lens Grinder (optical goods) 716.382-018
eyelet cutter (hat & cap) 686.685-038
EYELET-MACHINE OPERATOR (any industry) 699.685-018
eyelet maker (any industry) 699.685-018
EYELET-PUNCH OPERATOR (furniture) 699.685-022
eyelet riveter (any industry) 699.685-018
Eyelet-Row Marker (boot & shoe) 788.584-014
eyeletter (any industry) 699.685-018
eye specialist (medical ser.) 070.101-058

F

FABRIC-AND-ACCESSORIES ESTIMATOR (garment) 221.482-010
fabric assembler (furniture) 709.667-010
fabricating-machine operator (any industry) 616.380-018
Fabrication And Structures Development Mechanic (aircraft mfg.) 693.261-014
Fabrication Supervisor (construction) 899.131-010
Fabrication Supervisor (toy-sport equip.) 732.130-010
fabricator (plastic prod.) 754.684-010
FABRICATOR, ARTIFICIAL BREAST (protective dev.) 712.684-042
FABRICATOR-ASSEMBLER, METAL PRODUCTS (any industry) 809.381-010
FABRICATOR, FOAM RUBBER (any industry) 780.684-062
FABRICATOR, INDUSTRIAL FURNACE (machinery mfg.) 826.381-010
FABRICATOR, SHOWER DOORS AND PANELS (struct. metal) 739.381-030
Fabricator, Special Items (any industry) 804.281-010
FABRIC-COATING SUPERVISOR (tex. prod., nec) 589.130-014
fabric inspector (textile) 781.687-014
FABRIC-LAY-OUT WORKER (textile) 589.687-022
FABRIC-MACHINE OPERATOR I (furniture) 616.362-010
FABRIC-MACHINE OPERATOR II (furniture) 616.685-022
FABRIC NORMALIZER (rubber goods) 559.685-066
fabric separator operator (rubber reclaim) 551.365-010
FABRIC STRETCHER (furniture) 709.667-010
Face-And-Fill Packer (agriculture) 920.687-134
face cleaner (glass products) 779.687-022
face layer (millwork-plywood) 762.687-066
FACER (clock & watch) 770.582-010
facer (jewelry-silver.) 705.682-014
facer (toy-sport equip.) 761.684-010
Facer, Buffing Wheel (tex. prod., nec) 585.685-086
facer operator (woodworking) 665.682-022
Facial Operator (personal ser.) 332.271-010
FACILITIES-FLIGHT-CHECK PILOT (government ser.) 196.263-034
FACILITIES PLANNER (any industry) 019.261-018
FACILITY EXAMINER (tel. & tel.) 959.367-014
FACING BASTER, JUMPBASTING (garment) 786.682-102
Facing-Cutting-Machine Operator (garment) 686.685-066
Facing-End Trimmer (knitting) 781.687-070
facing grinder (nonmet. min.) 673.685-010
FACING-MACHINE OPERATOR (clock & watch) 604.685-014
Facing-Slitter (garment; knitting) 699.682-030
facsimile operator (print. & pub.; tel. & tel.) 193.362-010
FACTOR (financial) 186.167-082
factory engineer (profess. & kin.) 007.167-014
FACTORY HELPER (sugar & conf.) 529.686-034
FACTORY LAY-OUT ENGINEER (profess. & kin.) 012.167-018
faculty dean (education) 090.117-010
FACULTY MEMBER, COLLEGE OR UNIVERSITY (education) 090.227-010
Faculty Member, Technical Institute (education) 090.227-010
Fagoting-Machine Operator (garment) 786.682-278
FALLER I (logging) 454.384-010
FALLER II (logging) 454.684-014
Falsework Builder (construction) 860.381-042
family counselor (social ser.) 195.107-018
Family-Dinner Service Specialist (domestic ser.) 305.281-010
family physician (medical ser.) 070.101-026
FAMILY PRACTITIONER (medical ser.) 070.101-026
Fan Balancer (elec. equip.) 724.384-014
FAN-BLADE ALIGNER (elec. equip.) 706.687-018
fan-blade truer (elec. equip.) 706.687-018
Fancy Packer (retail trade; wholesale tr.) 920.587-018
Fancy Sewer (leather prod.) 783.682-014
Fancy Stitcher (boot & shoe) 690.682-082
Fancy-Stitch Marker (boot & shoe) 788.584-014
FANCY-WIRE DRAWER (jewelry-silver.) 700.381-014
Fan-Mail Clerk (amuse. & rec.) 209.362-034
farebox repairer (r.r. trans.) 710.681-018
FARE-REGISTER REPAIRER (motor trans.) 729.384-014
farm adviser (government ser.) 096.127-010
farm agent (government ser.) 096.127-010
farm butcher (agriculture) 525.664-010
farm-crew leader (agriculture) 180.167-050
FARM-EQUIPMENT-MECHANIC APPRENTICE (agric. equip.) 624.281-014
FARM-EQUIPMENT MECHANIC I (agric. equip.) 624.281-010
FARM-EQUIPMENT MECHANIC II (agric. equip.) 624.381-014
FARMER (agriculture) term
FARMER, CASH GRAIN (agriculture) 401.161-010
FARMER, CONTRACT (agriculture) term
FARMER, DIVERSIFIED CROPS (agriculture) 407.161-010
FARMER, DRY LAND (agriculture) term
FARMER, FIELD CROP (agriculture) 404.161-010
FARMER, FRUIT CROPS, BUSH AND VINE (agriculture) 403.161-014
FARMER, GENERAL (agriculture) 421.161-010
FARMER, TENANT (agriculture) term
FARMER, TREE-FRUIT-AND-NUT CROPS (agriculture) 403.161-010
FARMER, VEGETABLE (agriculture) 402.161-010
farm-labor contractor (agriculture) 409.117-010
farm laborer (agriculture) 421.687-010
FARM-MACHINE OPERATOR (agriculture) 409.683-010
Farm-Machinery-And-Equipment-Rental Clerk (business ser.) 295.467-022
FARM-MACHINERY SET-UP MECHANIC (agric. equip.) 624.381-018
FARM-MACHINE TENDER (agriculture) 409.685-010
Farm-Management Agent (government ser.) 096.127-010
farm mechanic (agric. equip.) 624.381-014
farm mechanic (agric. equip.) 624.281-010
farm-mechanic apprentice (agric. equip.) 624.281-014
farm-seed specialist (profess. & kin.) 040.361-014
FARMWORKER (agriculture) term
farmworker, animal (any industry) 410.674-010
Farmworker, Berry (agriculture) 403.687-010
Farmworker, Brooder Farm (agriculture) 411.584-010
FARMWORKER, BULBS (agriculture) 405.683-010
Farmworker, Chicken Farm (agriculture) 411.584-010
Farmworker, Cranberry (agriculture) 403.687-010
FARMWORKER, DAIRY (agriculture) 410.684-010
FARMWORKER, DIVERSIFIED CROPS I (agriculture) 407.663-010
FARMWORKER, DIVERSIFIED CROPS II (agriculture) 407.687-010
Farmworker, Egg-Producing Farm (agriculture) 411.584-010
FARMWORKER, FIELD CROP I (agriculture) 404.663-010
FARMWORKER, FIELD CROP II (agriculture) 404.687-010
FARMWORKER, FRUIT I (agriculture) 403.683-010
FARMWORKER, FRUIT II (agriculture) 403.687-010
Farmworker, Fryer Farm (agriculture) 411.584-010
Farmworker, Fur (agriculture) 410.674-010
FARMWORKER, GENERAL I (agriculture) 421.683-010
FARMWORKER, GENERAL II (agriculture) 421.687-010
FARMWORKER, GRAIN I (agriculture) 401.683-010
FARMWORKER, GRAIN II (agriculture) 401.687-010
FARMWORKER, LIVESTOCK (agriculture) 410.664-010
FARMWORKER, MACHINE (agriculture) 409.686-010
FARMWORKER, POULTRY (agriculture) 411.584-010
Farmworker, Pullet Farm (agriculture) 411.584-010
FARMWORKER, RICE (agriculture) 401.683-014
FARMWORKER, SEASONAL (agriculture) term
Farmworker, Turkey Farm (agriculture) 411.584-010
FARMWORKER, VEGETABLE I (agriculture) 402.663-010
FARMWORKER, VEGETABLE II (agriculture) 402.687-010
FASHION ARTIST (retail trade) 141.061-014
Fashion Consultant (profess. & kin.) 096.121-014
FASHION COORDINATOR (retail trade) 185.157-010
FASHION DESIGNER (profess. & kin.) 142.061-018
fashion model (garment; retail trade; wholesale tr.) 297.667-014
fashion stylist (retail trade) 185.157-010
fast-brim pouncer (hat & cap) 585.685-010
fastener (boot & shoe) 690.685-162
Fastener Attacher (any industry) 699.685-01[illegible]
FASTENER, MACHINE (boot & shoe) 690.685-162
FASTENER-SEWING-MACHINE OPERATOR (any industry) 787.685-010
fastener-sewing-machine operator (garment) 786.685-010
FASTENER TECHNOLOGIST (nut & bolt) 612.260-010

FAST-FOODS WORKER (hotel & rest.) 311.472-010
Fatback Trimmer (meat products) 525.684-054
FAT-PURIFICATION WORKER (oils & grease) 551.685-070
Fats And Oils Loader (soap & rel.) 914.667-010
Feather Baler (tex. prod., nec) 920.685-010
Feather Boner (button & notion) 734.684-010
feather-crushing-machine operator (tex. prod., nec) 589.686-018
FEATHER-CURLING-MACHINE OPERATOR (tex. prod., nec) 589.686-018
FEATHER-CUTTING-MACHINE FEEDER (tex. prod., nec) 585.586-010
FEATHER-DRYING-MACHINE OPERATOR (tex. prod., nec) 581.686-034
FEATHER-DUSTER WINDER (tex. prod., nec) 734.684-014
featheredge-machine operator (boot & shoe) 690.685-166
FEATHEREDGER AND REDUCER, MACHINE (boot & shoe) 690.685-166
featherer (cutlery-hrdwr.) 701.687-030
Feather Grader (tex. prod., nec) 929.687-062
FEATHER MIXER (tex. prod., nec) 589.685-050
FEATHER RENOVATOR (laundry & rel.) 362.685-010
feather renovator (tex. prod., nec) 589.685-082
FEATHER SAWYER (toy-sport equip.) 732.685-014
FEATHER SEPARATOR (tex. prod., nec) 589.685-054
FEATHER SHAPER (button & notion) 734.684-010
FEATHER STITCHER (toy-sport equip.) 732.684-050
Feather Trimmer (button & notion) 734.684-010
FEATHER WASHER (tex. prod., nec) 582.685-066
FEATURED PLAYER (amuse. & rec.) term
FEDERAL AID COORDINATOR (government ser.) 188.167-054
Federal-Housing-Administration-Loan Auditor (insurance) 210.382-010
FEED AND FARM MANAGEMENT ADVISER (agriculture; retail trade) 096.127-018
feed-and-pellet operator (grain-feed mills) 520.685-178
FEED BLENDER (grain-feed mills) 520.685-094
feed-cup-sewing-machine operator (garment) 786.682-122
Feed-Drier Tender (grain-feed mills) 523.685-058
feed elevator worker (grain-feed mills) 920.685-058
feeder (garment; glove & mit.) 781.687-010
feeder (hat & cap) 586.686-018
feeder (nonmet. min.) 570.685-050
feeder (optical goods) 575.686-014
FEEDER (print. & pub.) 651.686-014
FEEDER-CATCHER, TOBACCO (tobacco) 529.686-038
feeder loader (grain-feed mills) 520.686-018
feeder operator (concrete prod.) 575.664-010
feeder operator (grain-feed mills) 520.685-098
Feeder Operator, Automatic (grain-feed mills) 520.685-098
FEEDER-SWITCHBOARD OPERATOR (utilities) 952.362-014
feeder tender (tex. prod., nec; textile) 680.686-018
feeder worker power-unit operator (construction; retail trade; wholesale tr.) 863.685-010
FEED GRINDER (grain-feed mills) 521.685-122
Feed Inspection Supervisor (government ser.) 168.167-090
Feed-in Tender, Dehairing Machine (meat products) 525.685-018
FEED-IN WORKER (grain-feed mills) 929.686-022
feed miller (grain-feed mills) 521.682-026
FEED MIXER (grain-feed mills) 520.685-098
FEED-MIXER HELPER (grain-feed mills) 520.686-018
Feed-Preparation Operator (mine & quarry) 511.685-050
FEED-RESEARCH AIDE (agriculture) 049.364-010
FEED WEIGHER (grain-feed mills) 920.685-058
FELLED-SEAM OPERATOR, CHAINSTITCH (garment) 786.682-106
feller (garment) 786.682-126
Feller-Buncher Operator (logging) 454.683-010
Feller, Hand (garment) 782.684-058
feller operator (logging) 454.683-010
felling-machine operator (garment) 786.682-106
FELT CARBONIZER (tex. prod., nec) 586.687-010
felt cementer (toy-sport equip.) 795.687-030
felt-coating-and-mixing supervisor (tex. prod., nec) 589.130-014
felt coverer (toy-sport equip.) 795.687-026
FELT CUTTER (ordnance) 686.685-026
FELT-CUTTING-MACHINE OPERATOR (tex. prod., nec) 686.682-018
Felt-Dyeing-Machine Tender (tex. prod., nec) 582.685-070
felter (furniture; tex. prod., nec) 680.685-054
felter, tennis balls (toy-sport equip.) 795.687-026
felt finisher (tex. prod., nec) 586.685-038
Felt-Finishing Supervisor (tex. prod., nec) 589.130-014
FELT-GOODS SUPERVISOR, NEEDLE PROCESS (tex. prod., nec) 689.130-014
FELT HANGER (build. mat., nec) 549.686-014
Felt-Hat-Flanging Operator (hat & cap) 784.684-026
Felt-Hat Inspector And Packer (hat & cap) 784.687-042
Felt-Hat-Mellowing-Machine Operator (hat & cap) 585.685-066
felt-hat-pouncing operator, hand (hat & cap) 784.687-018
FELT-HAT STEAMER (hat & cap) 582.687-018
felting-machine operator (furniture; tex. prod., nec) 680.685-054
FELTING-MACHINE OPERATOR (tex. prod., nec) 586.662-010
FELTING-MACHINE-OPERATOR HELPER (tex. prod., nec) 586.686-014
FELTMAKER AND WEIGHER (tex. prod., nec) 586.685-022
Felt-Pad Cutter (button & notion) 781.687-030
Felt-Pad Cutter (tex. prod., nec) 585.687-014
felt puller (hat & cap) 580.684-010
FELT-STRIP FINISHER (tex. prod., nec) 586.685-018
FELT-TIPPING-MACHINE TENDER (pen & pencil) 686.686-010
FELT-WASHING-MACHINE TENDER (tex. prod., nec) 582.685-070
Female Impersonator (amuse. & rec.) 159.047-018
FENCE ERECTOR (construction) 869.684-022
FENCE-ERECTOR SUPERVISOR (construction) 869.134-010
Fence-Gate Assembler (construction) 869.684-022
FENCE-MAKING MACHINE OPERATOR (metal prod., nec) 616.582-010
Fence-Post Cutter (agriculture) 454.684-026
Fence Setter (construction) 869.684-022
Fence Stretcher (construction) 869.684-022
FERMENTATION OPERATOR (beverage) 522.382-014
FERMENTATION OPERATOR (chemical) 558.682-018
Fermenter, Champagne (beverage) 522.685-062
fermenter helper (food prep., nec) 522.686-014
FERMENTER OPERATOR (pharmaceut.) 559.685-070
FERMENTER, WINE (beverage) 522.685-062
Ferris-Wheel Operator (amuse. & rec.) 342.663-010
ferruler (fabrication, nec) 739.687-014
FERRYBOAT CAPTAIN (water trans.) 197.163-010
Ferryboat Deckhand (water trans.) 911.687-022
ferryboat helper (water trans.) 911.667-010
FERRYBOAT OPERATOR (water trans.) 911.363-010
FERRYBOAT OPERATOR, CABLE (water trans.) 911.664-010
FERRYBOAT-OPERATOR HELPER (water trans.) 911.667-010
ferry operator (water trans.) 911.664-010
ferry operator (water trans.) 911.363-010
ferry-terminal agent (water trans.) 911.137-026
FERTILIZER MIXER (chemical) 550.665-018
FETTLER (brick & tile) 779.684-018
fettler (pottery & porc.) 774.684-018
fettler (nonfer. metal; smelt. & refin.; steel & rel.) 512.684-014
fiber-drier operator (textile) 581.685-046
FIBERGLASS-BONDING-MACHINE TENDER (glass mfg.) 574.665-010
FIBERGLASS-CONTAINER-WINDING OPERATOR (glass products) 579.584-010
FIBERGLASS-DOWEL-DRAWING-MACHINE OPERATOR (plastic prod.) 575.682-010
FIBERGLASS LAMINATOR (ship-boat mfg.; vehicles, nec) 806.684-054
FIBERGLASS-MACHINE OPERATOR (glass products) 574.682-010
Fiber-Heel-Piece Shaper (boot & shoe) 690.685-162
FIBER-MACHINE TENDER (glass mfg.) 575.685-030
Fiber Picker (furniture) 680.685-078
FIBER TECHNOLOGIST (profess. & kin.) 040.061-026
Fidelity-And-Surety-Bonds-Claim Adjuster (business ser.; insurance) 241.217-010
FIELD ARTILLERY CREWMEMBER (military ser.) 378.684-018
FIELD ARTILLERY OPERATIONS SPECIALIST (military ser.) 378.367-014
FIELD ARTILLERY SENIOR SERGEANT (military ser.) 378.132-010
FIELD-ASSEMBLY SUPERVISOR (mfd. bldgs.) 869.131-018
field attendant (amuse. & rec.) 349.673-010
Field Auditor (government ser.) 160.167-038
field captain (amuse. & rec.) 153.267-018
FIELD CASHIER (construction) 219.137-010
Field Clerk (clerical) 219.362-010
field clerk (utilities) 229.367-010
Field-Coil Enameler (any industry) 599.685-030
Field-Coil Repairer (elec. equip.) 721.281-018
Field-Coil Winder (any industry) 724.381-014
Field-Coil Winder (elec. equip.) 724.684-026
FIELD-CONTACT TECHNICIAN (dairy products) 162.117-026
FIELD CONTRACTOR (any industry) 162.117-022
field control inspector (government ser.) 375.267-026
field director (social ser.) 195.167-022
field engineer (machinery mfg.; machine tools) 638.261-018
FIELD ENGINEER (radio-tv broad.) 193.262-018
FIELD ENGINEER, SPECIALIST (petrol. & gas) 010.261-010
field-equipment-maintenance mechanic, farm (agric. equip.) 624.381-014
field gauger (petrol. & gas; petrol. refin.; pipe lines) 914.384-010
FIELD HAULER (agriculture) 409.683-014
field inspector (government ser.) 373.267-010
field inspector (utilities) 869.387-010
field inspector (utilities) 959.361-010
FIELD INSPECTOR, DISEASE AND INSECT CONTROL (agriculture) 408.687-010
Field-Kiln Burner (brick & tile) 573.682-010
FIELD-MAP EDITOR (profess. & kin.) 018.262-010
Field Mechanic (petrol. & gas) 629.381-014
FIELD-MECHANICAL-METER TESTER (petrol. refin.; pipe lines; utilities) 953.281-010

field operating superintendent (petrol. refin.; retail trade) 181.117-010
Field Operator (petrol. & gas) 710.381-022
field operator (petrol. & gas) 914.382-022
field-party manager (petrol. & gas) 181.167-010
FIELD RECORDER (utilities) 229.367-010
FIELD REPRESENTATIVE (business ser.; wholesale tr.) 163.267-010
FIELD REPRESENTATIVE (profess. & kin.) 189.267-010
field representative (retail trade; wholesale tr.) 168.267-026
field return repairer (inst. & app.) 710.381-050
FIELD-RING ASSEMBLER (elec. equip.) 721.484-014
field seismologist (petrol. & gas) 010.161-018
FIELD-SERVICE ENGINEER (aircraft mfg.) 002.167-014
FIELD-SERVICE ENGINEER (photo. appar.) 826.261-010
FIELD SERVICE ENGINEER (profess. & kin.) 828.261-014
FIELD-SERVICE REPRESENTATIVE (aircraft mfg.) 621.221-010
field service representative (profess. & kin.) 828.261-014
field servicer (machinery mfg.; machine tools) 638.261-018
FIELD SERVICE TECHNICIAN (machinery mfg.) 638.261-026
FIELD SERVICE TECHNICIAN, POULTRY (agriculture) 411.267-010
field supervisor (agriculture) 402.131-010
field supervisor (any industry) 899.133-010
field supervisor (clerical) 295.137-014
FIELD SUPERVISOR, BROADCAST (radio-tv broad.) 193.167-014
FIELD SUPERVISOR, OIL-WELL SERVICES (petrol. & gas) 930.131-010
FIELD SUPERVISOR, SEED PRODUCTION (agriculture) 180.167-014
field technical assistant (profess. & kin.) 828.261-014
field technician (any industry) 162.117-010
field technician (radio-tv broad.) 193.262-018
Fig-Bar-Machine Operator (bakery products) 520.682-034
FIG CAPRIFIER (agriculture) 403.687-014
Fig Sorter (agriculture; can. & preserv.; wholesale tr.) 529.687-186
FIGURE REFINISHER AND REPAIRER (retail trade) 739.381-034
Fig Washer (food prep., nec) 521.685-110
Filament-Coil Winder (electron. comp.) 724.684-026
Filament-Wound Parts Fabricator (aircraft mfg.) 754.381-018
Filbert Grower (agriculture) 403.161-010
File Clerk, Correspondence (clerical) 206.387-034
FILE CLERK I (clerical) 206.387-034
FILE CLERK II (clerical) 206.367-014
FILE CUTTER (cutlery-hrdwr.) 605.685-014
file-drawer finisher (furniture) 706.684-050
filer (any industry) 701.381-014
FILER (jewelry-silver.) 700.684-034
FILER AND SANDER (woodworking) 705.684-018
FILER, FINISH (ordnance) 705.481-010
FILER, HAND, TOOL (machine shop) 705.484-010
filer, metal patterns (foundry) 693.281-018
Filer Repairer (ordnance) 705.481-010
FILING-AND-POLISHING SUPERVISOR (ordnance) 603.137-010
Filing Writer (insurance) 203.582-066
Filler (any industry) 920.587-018
filler (beverage) 920.665-014
filler (boot & shoe) 788.684-022
filler (chemical) 559.565-010
Filler (elec. equip.; electron. comp.) 726.687-022
FILLER (fabrication, nec) 739.687-090
filler (paper & pulp) 533.685-010
FILLER (tex. prod., nec) 780.684-066
filler (tex. prod., nec) 789.687-130
filler and sander (wood prod., nec) 769.687-022
Filler And Trimmer (leather prod.) 783.687-010
filler blender (tobacco) 520.687-030
FILLER-BLOCK INSERTER-REMOVER (furniture) 652.687-018
FILLER FEEDER (tobacco) 529.686-042
filler-in tinter (any industry) 970.381-022
filler-leaf cutter, long (tobacco) 521.687-014
filler mixer (bakery products) 520.685-114
FILLER MIXER (tobacco) 520.687-030
filler opener (tobacco) 521.687-110
Filler Picker (tobacco) 521.687-098
FILLER ROOM ATTENDANT (tobacco) 522.687-022
filler shaker (tobacco) 521.687-110
FILLER-SHREDDER HELPER (tobacco) 529.687-078
FILLER SHREDDER, MACHINE (tobacco) 529.685-110
filler-shredding-machine loader (tobacco) 529.687-078
filler-sifter helper (tobacco) 529.687-078
filler sifter, machine (tobacco) 529.685-110
FILLER SPREADER (tobacco) 521.687-046
filler stemmer, hand (tobacco) 521.687-134
Filler Wiper (furniture) 742.687-010
FILLING-AND-STAPLING-MACHINE OPERATOR (fabrication, nec) 692.682-038
Filling Hauler, Weaving (textile) 929.687-030
filling inspector (glass mfg.; plastic-synth.; textile) 681.687-030
filling inspector (tex. prod., nec; textile) 681.687-026
Filling-Machine Feeder (can. & preserv.) 521.686-034
Filling-Machine Operator (any industry) 920.685-078
filling-machine operator (bakery products) 524.682-010
FILLING-MACHINE OPERATOR (nonfer. metal) 699.685-038
FILLING-MACHINE OPERATOR (pen & pencil) 733.685-014
FILLING-MACHINE SET-UP MECHANIC (food prep., nec) 920.680-010
FILLING MACHINE TENDER (bakery products) 524.685-030
filling separator (textile) 689.687-086
filling sorter and hauler (textile) 689.687-086
filling-station attendant (automotive ser.) 915.467-010
filling winder (textile) 681.685-074
Film Booker (amuse. & rec.) 191.117-014
film booker (business ser.; retail trade) 295.367-018
FILM-CASTING OPERATOR (plastic-synth.) 559.682-022
film cutter (any industry) 979.681-022
film cutter (photofinishing) 976.685-010
FILM DEVELOPER (motion picture; photofinishing) 976.382-018
FILM FLAT INSPECTOR (print. & pub.) 972.284-010
film inspector (electron. comp.) 726.384-014
Film Inspector (motion picture) 976.684-014
FILM INSPECTOR (photofinishing) 976.362-010
FILM LABORATORY TECHNICIAN (motion picture; photofinishing) 976.684-014
FILM LABORATORY TECHNICIAN I (motion picture) 976.381-010
FILM LABORATORY TECHNICIAN II (motion picture) 976.685-018
film librarian (library) 100.167-010
Film Librarian (motion picture) 222.367-026
FILM LOADER (motion picture) 962.687-014
film machine operator (photofinishing) 976.685-014
film masker (print. & pub.) 971.684-010
Film Numberer (motion picture) 976.685-018
film numberer (photofinishing) 976.687-018
FILM-OR-TAPE LIBRARIAN (clerical) 222.367-026
FILM OR VIDEOTAPE EDITOR (motion picture; radio-tv broad.) 962.262-010
film painter (print. & pub.) 971.684-010
FILM PRINTER (motion picture) 976.682-010
Film Recordist (motion picture) 962.382-010
FILM-RENTAL CLERK (business ser.; retail trade) 295.367-018
FILM-REPLACEMENT ORDERER (motion picture) 976.567-010
film sorter (photofinishing) 976.687-018
Film Splicer (motion picture) 976.684-014
FILM SPOOLER (photo. appar.) 692.685-082
film technician (motion picture; photofinishing; radio-tv broad.) 976.131-014
FILM TOUCH-UP INSPECTOR (electron. comp.) 726.684-050
FILM-VAULT SUPERVISOR (motion picture) 222.137-010
Filter-Bed Placer (construction) 869.687-026
FILTER CHANGER (beverage) 521.687-050
filter changer (plastic-synth.) 559.687-038
Filter-Cigarette-Making-Machine Operator (tobacco) 529.685-066
FILTER CLEANER (plastic-synth.) 559.687-038
Filter-Cloth Maker (tex. prod., nec) 787.682-058
filterer (plastic-synth.) 559.687-038
FILTER HELPER (chemical) 551.685-074
FILTERING-MACHINE TENDER (grain-feed mills) 521.685-138
Filter Inspector (electron. comp.) 726.684-022
filter-machine operator (beverage) 521.582-010
FILTER OPERATOR (any industry) 551.685-078
filter operator (beverage) 522.382-018
FILTER OPERATOR (beverage; sugar & conf.) 521.685-126
filter operator (chemical) 550.685-018
FILTER OPERATOR (grain-feed mills) 521.682-018
filter operator (plastic-synth.) 551.582-010
filter operator (waterworks) 954.382-014
FILTER-PLANT SUPERVISOR (smelt. & refin.) 511.135-010
FILTER-PRESS OPERATOR (any industry) 551.685-082
filter-press operator (beverage) 521.565-014
filter-press pumper (oils & grease) 559.685-146
Filter-Press Supervisor (chemical) 559.132-122
FILTER-PRESS TENDER (beverage) 521.685-130
FILTER-PRESS TENDER (beverage; chemical) 599.685-042
FILTER-PRESS TENDER, HEAD (grain-feed mills) 521.665-018
filter-pulp washer (beverage; chemical) 599.685-038
FILTER-SCREEN CLEANER (beverage) 521.687-054
FILTER-TANK OPERATOR (chemical) 551.585-010
FILTER-TANK-TENDER HELPER, HEAD (grain-feed mills) 521.685-134
FILTER TENDER (grain-feed mills) 522.665-010
FILTER TENDER, JELLY (can. & preserv.) 529.685-114
FILTER WASHER (chemical) 559.687-042
FILTER WASHER AND PRESSER (beverage; chemical) 599.685-038
FILTRATION OPERATOR, POLYETHYLENE CATALYST (chemical) 551.562-010
filtration-plant mechanic (waterworks) 630.281-038
Filtrose Crusher (chemical) 555.685-034
final-application reviewer (insurance) 209.687-018

FINAL ASSEMBLER (garment) 789.687-046
FINAL ASSEMBLER (office machines) 706.381-018
FINAL ASSEMBLER (optical goods) 713.687-018
final assembler (ordnance) 736.381-010
final assembler, boat (ship-boat mfg.) 806.684-146
Final Assembler, Brass-Wind Instruments (musical inst.) 730.684-010
Final-Block-Press Operator (chemical) 556.685-014
final cigar and box examiner (tobacco) 529.687-042
Final Cleaner (electron. comp.) 599.685-134
Final-Coat Sprayer (leather mfg.) 584.687-014
FINAL-DRESSING CUTTER (meat products) 525.684-026
final finisher (mfd. bldgs.; vehicles, nec) 869.684-026
FINAL FINISHER, FORGING DIES (machine shop) 705.484-014
Final-Finish Supervisor (mfd. bldgs.; vehicles, nec) 869.131-030
Final-Inspection Supervisor (rubber reclaim.) 559.132-058
FINAL INSPECTOR (auto. mfg.) 806.687-018
FINAL INSPECTOR (boot & shoe) 753.687-018
FINAL INSPECTOR (clock & watch) 715.381-050
Final Inspector (cutlery-hrdwr.) 701.687-026
final inspector (elec. equip.) 729.387-018
FINAL INSPECTOR (elec. equip.) 727.687-054
final inspector (foundry) 514.687-010
final inspector (furniture) 763.687-026
FINAL INSPECTOR (glass products) 779.387-010
FINAL INSPECTOR (musical inst.) 730.367-010
Final Inspector (office machines) 706.387-014
Final Inspector (optical goods) 716.381-010
Final Inspector (ordnance) 736.387-010
final inspector (rubber tire) 750.684-030
final inspector (textile) 689.685-038
final inspector (wood. container) 764.687-022
final inspector and tester (rubber goods) 729.387-014
Final Inspector, Balance Wheel (clock & watch) 715.684-094
FINAL INSPECTOR, MOTORCYLES (motor-bicycles) 806.281-018
FINAL INSPECTOR, MOVEMENT ASSEMBLY (clock & watch) 715.684-094
FINAL INSPECTOR, PAPER (paper & pulp) 539.367-010
FINAL INSPECTOR, SHUTTLE (woodworking) 769.684-022
FINAL INSPECTOR, TRUCK TRAILER (auto. mfg.) 806.361-018
Final-Rail Cutter (meat products) 525.684-026
FINAL TESTER (elec. equip.) 721.261-014
final tester (wood. container) 764.687-022
final-touch-up painter (any industry) 749.684-038
FINANCIAL-AID COUNSELOR (education) 169.267-018
FINANCIAL-AIDS OFFICER (education) 090.117-030
Financial Economist (profess. & kin.) 050.067-010
FINANCIAL PLANNER (profess. & kin.) 250.257-014
finding fastener (jewelry-silver.) 735.687-022
FINE ARTS PACKER (museums) 102.367-010
fine-chemicals operator (chemical; plastic-synth.) 559.382-046
Fine-Grade-Bulldozer Operator (any industry) 850.683-010
Fine Grader (construction) 869.664-014
Fine Grinder (rubber reclaim.) 555.685-030
Fine Patcher (fabrication, nec) 739.687-146
FINER (clock & watch) 715.684-098
Fine Sander (fabrication, nec) 761.684-030
Fine-Wire Drawer (nonfer. metal) 614.382-010
Finger-Buff Sewer (tex. prod., nec) 787.682-058
FINGER COBBLER (boot & shoe) 788.684-046
Fingerer (glove & mit.) 784.682-010
FINGER-GRIP-MACHINE OPERATOR (glass products) 673.685-054
FINGERNAIL FORMER (personal ser.) 331.674-014
FINGERPRINT CLASSIFIER (government ser.) 375.387-010
FINGERPRINT CLERK I (government ser.) 209.367-026
FINGERPRINT CLERK II (government ser.) 206.387-014
fingerprint expert (government ser.) 375.387-010
Finger Waver (personal ser.) 332.271-010
Finish Carpenter (construction) 860.381-022
finish cleaner (furniture) 763.684-034
Finish-Coat-Mill Operator (tex. prod., nec) 584.382-010
finished-cigar maker (tobacco) 790.684-014
finished-cloth checker (textile) 781.687-014
Finished-Cloth Examiner (textile) 689.685-038
Finished-Garment Inspector (garment; knitting) 789.687-070
finished-goods inspector (agric. equip.) 801.381-018
Finished-Goods Stock Clerk (clerical) 222.387-058
Finished-Hardware Erector (construction) 860.381-022
finished-leather presser (leather mfg.; leather prod.) 690.682-030
FINISHED-STOCK INSPECTOR (furniture) 763.687-026
finished-wire inspector (metal prod., nec; nonfer. metal) 691.367-010
finished-yarn examiner (glass mfg.; plastic-synth.; textile) 681.687-030
finished-yarn examiner (textile) 689.687-082
finisher (any industry) 781.687-070
finisher (any industry) 705.687-014
finisher (bakery products) 524.684-022
finisher (boot & shoe) 690.685-058
finisher (brick & tile) 779.684-042
finisher (electron. comp.) 699.682-034
FINISHER (fabrication, nec) 731.687-014
finisher (furniture; wood prod., nec) 742.684-010
finisher (furniture) 616.685-018
finisher (glass mfg.) 573.685-018
Finisher (jewelry-silver.) 705.684-022
finisher (knitting) 580.485-010
FINISHER (nonmet. min.) 775.687-010
FINISHER (plastic-synth.) 554.586-010
FINISHER (pottery & porc.) 774.684-018
finisher (pottery & porc.) 774.687-022
finisher (protective dev.) 712.381-050
finisher (recording) 500.684-014
FINISHER (steel & rel.) 613.382-014
finisher (stonework) 673.382-018
finisher (sugar & conf.) 524.382-010
FINISHER (tex. prod., nec) 789.687-050
FINISHER (toy-sport equip.) 732.584-014
FINISHER (wood. container) 749.684-026
Finisher, Accordion (musical inst.) 730.281-010
FINISHER, BRUSH (fabrication, nec) 739.684-062
FINISHER-CARD TENDER (nonmet. min.; textile) 680.685-042
Finisher, Cold Rolling (steel & rel.) 613.382-014
FINISHER, DENTURE (protective dev.) 712.381-050
FINISHER, FIBERGLASS BOAT PARTS (ship-boat mfg.) 809.684-022
Finisher, Fine-Diamond Dies (machine tools) 770.381-018
finisher, hand (any industry) 363.684-018
finisher, hand (furniture) 780.684-070
Finisher, Hand (garment) 782.684-058
Finisher, Hand (laundry & rel.) 363.681-010
FINISHER, HAND (plastic prod.) 754.684-030
FINISHER, HAND (tex. prod., nec) 789.484-014
FINISHER, HAND (toy-sport equip.) 731.587-010
Finisher, Hot Strip (steel & rel.) 613.382-014
finisher, machine (any industry) 363.682-018
finisher, machine (bakery products) 524.685-034
FINISHER, MACHINE (plastic prod.) 690.685-170
finisher, map and chart (print. & pub.) 979.684-022
Finisher, Merchant Products (steel & rel.) 613.382-014
FINISHER OPERATOR (can. & preserv.) 521.685-142
Finisher, Plate (steel & rel.) 613.382-014
finisher-polisher (protective dev.) 712.381-050
finisher, screwdown (steel & rel.) 613.382-018
Finisher, Special Stocks (ordnance) 763.381-010
finisher-tailor apprentice (garment; retail trade) 785.361-026
finisher, wallboard and plasterboard (construction; mfd. bldgs.) 842.664-010
FINISHING-AREA OPERATOR (plastic-synth.) 559.362-014
FINISHING-AREA SUPERVISOR (plastic-synth.) 559.132-022
Finishing-Compound Mixer (chemical) 550.685-106
finishing department supervisor (photofinishing) 976.137-014
finishing inspector (clock & watch) 715.381-050
FINISHING INSPECTOR (elec. equip.) 729.387-018
Finishing Inspector (steel & rel.) 519.381-010
finishing machine operator (print. & pub.) 653.382-010
finishing machine operator (print. & pub.) 653.662-010
finishing machine operator (print. & pub.) 640.682-018
finishing-machine operator, automatic (glass mfg.) 677.562-010
FINISHING-MACHINE OPERATOR (narrow fabrics) 582.682-010
FINISHING-MACHINE OPERATOR (nonmet. min.) 674.682-010
FINISHING-MACHINE OPERATOR (paper goods) 649.686-022
finishing-pan operator (chemical; smelt. & refin.) 559.685-074
finishing-powder-press operator (chemical) 557.682-010
Finishing-Range Feeder (textile) 589.686-014
finishing-range operator (textile) 589.665-014
finishing range supervisor (textile) 589.562-010
finishing supervisor (carpet & rug; textile) 589.130-010
FINISHING SUPERVISOR (elec. equip.) 692.130-014
Finishing Supervisor (foundry) 519.131-010
Finishing Supervisor (rubber goods) 559.137-014
FINISHING SUPERVISOR, PLASTIC SHEETS (plastic-synth.) 554.137-010
finishing supervisor, weld-pipe continuous (steel & rel.) 619.130-038
FINISHING TRIMMER (boot & shoe) 788.687-042
finishing tunnel operator (garment) 582.685-150
finishing wire sawyer (stonework) 677.462-014
finish inspector (any industry) 741.687-010
Finish Inspector (furniture) 763.687-026
Finish Judge (amuse. & rec.) 153.267-018
FINISH-MACHINE TENDER (pottery & porc.) 673.685-058
Finish Mender (knitting) 782.684-030
Finish-Mill Operator (cement) 570.685-046
finish mixer (paint & varnish) 550.381-014
finish molder (foundry) 518.684-018
FINISH OPENER, JEWEL HOLE (clock & watch) 673.682-022

FINISH PATCHER (furniture) 763.684-034
finish remover (furniture) 749.687-030
finish repairer (any industry) 749.684-038
finish repairer (furniture) 763.684-034
finish roller (metal prod., nec) 613.682-022
Finish Sander (woodworking) 761.687-010
Finish Specialist (museums) 763.380-010
Finnish Rubber (personal ser.) 334.677-010
fire-alarm dispatcher (government ser.) 379.162-010
fire-and-safety helper (any industry) 739.687-094
fire-apparatus sprinkler inspector (any industry) 379.687-010
FIREARMS-ASSEMBLY SUPERVISOR (ordnance) 736.131-014
firearms expert (government ser.) 199.267-010
FIRE ASSISTANT (government ser.) 169.167-022
Firebrick-And-Refractory Tile Repairer (construction) 861.381-026
FIRE CAPTAIN (government ser.) 373.134-010
Fire Captain, Marine (government ser.) 373.134-010
FIRE CHIEF (government ser.) 373.117-010
Fire Chief (saw. & plan.) 373.167-018
Fire Chief, Deputy (government ser.) 373.117-010
FIRE CHIEF'S AIDE (government ser.) 373.363-010
fire-control assistant (government ser.) 169.167-022
FIRE-CONTROL MECHANIC (government ser.) 632.261-014
fire-control technician (government ser.) 632.261-014
fire crew worker (forestry) 452.687-014
fire deputy (government ser.) 169.167-022
Fire Drier (grain-feed mills) 523.685-058
Fire Eater (amuse. & rec.) 159.647-010
FIRE-EQUIPMENT INSPECTOR (any industry) 739.484-014
FIRE-EQUIPMENT-INSPECTOR HELPER (any industry) 739.687-094
FIRE-EXTINGUISHER REPAIRER (any industry) 709.384-010
FIRE-EXTINGUISHER-SPRINKLER INSPECTOR (any industry) 379.687-010
FIRE FIGHTER (any industry) 373.364-010
fire fighter, airport (air trans.) 373.663-010
FIRE FIGHTER, CRASH, FIRE, AND RESCUE (air trans.) 373.663-010
Firefighter, Marine (any industry) 373.364-010
FIRE-FIGHTING-EQUIPMENT SPECIALIST (government ser.) 638.281-010
FIRE-HOSE CURER (rubber goods) 553.685-062
FIRE INSPECTOR (any industry) 373.367-010
FIRE INSPECTOR (government ser.) 373.267-010
Fire-Insurance-Claim Adjuster (business ser.; insurance) 241.217-010
Fire-Insurance-Claim Examiner (business ser.; insurance) 241.267-018
FIRE-INVESTIGATION LIEUTENANT (government ser.) 373.267-018
Fire Lieutenant (government ser.) 373.134-010
Fire Lieutenant, Marine (government ser.) 373.134-010
FIRE LOOKOUT (forestry) 452.367-010
fire-loss-prevention engineer (profess. & kin.) 012.167-026
FIRE MARSHAL (any industry) 373.167-018
FIRE MARSHAL (government ser.) 373.267-014
Fire Marshal, Refinery (petrol. refin.) 373.167-018
Fire Patroller (logging) 372.667-034
FIRE-PREVENTION RESEARCH ENGINEER (profess. & kin.) 012.167-022
Fireproof-Door Assembler (struct. metal) 809.681-010
FIRE-PROTECTION ENGINEER (profess. & kin.) 012.167-026
FIRE-PROTECTION ENGINEERING TECHNICIAN (profess. & kin.) 019.261-026
firer (any industry) 859.261-010
Firer (electron. comp.) 590.684-014
firer (glass products) 573.685-010
FIRER (jewelry-silver.) 590.685-034
firer (mine & quarry) 931.261-010
FIRE RANGER (forestry) 452.367-014
Firer, Automatic Stoker (any industry) 951.685-010
Firer, Bisque Kiln (pottery & porc.) 573.662-010
firer, boiler (any industry) 950.382-010
firer, boiler (any industry) 951.685-010
Firer, Diesel Locomotive (r.r. trans.) 910.363-010
fire regulator (foundry) 512.667-010
Firer, Electric Locomotive (r.r. trans.) 910.363-010
Firer, Glost Kiln (pottery & porc.) 573.662-010
FIRER HELPER (paper & pulp) 553.665-034
FIRER, HIGH PRESSURE (any industry) 951.685-010
FIRER, KILN (pottery & porc.) 573.662-010
FIRER, KILN (sugar & conf.) 523.685-078
FIRER, LOCOMOTIVE (r.r. trans.) 910.363-010
Firer, Locomotive Crane (any industry) 951.685-010
FIRER, LOW PRESSURE (any industry) 951.685-014
FIRER, MARINE (water trans.) 951.685-018
Firer, Pile Driver (any industry) 951.685-010
Firer, Portable Boiler (any industry) 951.685-010
Firer, Powerhouse (any industry) 951.685-010
FIRER, RETORT (chemical) 553.685-066
Firer, Round Kiln (pottery & porc.) 573.662-010
Firer, Stationary Boiler (any industry) 951.685-010
Firer, Steam Shovel (any industry) 951.685-010
Firer, Tunnel Kiln (pottery & porc.) 573.662-010
Firer-Watertender (water trans.) 951.685-018
FIRESETTER (elec. equip.; electron. comp.; inst. & app.) 692.360-018
Fire-Truck Driver (petrol. & gas) 905.663-014
FIRE WARDEN (forestry) 452.167-010
fire watcher (any industry) 373.367-010
Firewood Cutter (logging) 454.684-026
FIREWORKS ASSEMBLER (chemical) 737.587-014
FIREWORKS DISPLAY SPECIALIST (chemical) 969.664-010
FIREWORKS MAKER (chemical) 737.684-018
Firing-Pin Gauger (chemical) 737.687-062
FIRST-AID ATTENDANT (any industry) 354.677-010
FIRST-BREAKER FEEDER (tex. prod., nec) 680.686-014
First-Coat Operator (tex. prod., nec) 584.382-010
First-Coat Sander (woodworking) 761.687-010
First Front Ventilator (fabrication, nec) 739.384-022
FIRST HELPER (steel & rel.) 512.362-010
first helper (sugar & conf.) 529.682-018
first press operator (print. & pub.) 651.382-042
fiscal clerk (clerical) 216.382-022
FISH AND GAME WARDEN (government ser.) 379.167-010
Fish-And-Game Warden, Marine Patrol (government ser.) 379.167-010
FISH BAILER (fishing & hunt.) 914.685-010
fish-bait picker (agriculture) 413.687-010
FISH-BIN TENDER (can. & preserv.) 529.687-082
Fish-Boning-Machine Feeder (can. & preserv.) 521.686-034
FISH-CAKE MAKER (food prep., nec) 529.685-122
Fish Checker (can. & preserv.) 221.587-030
FISH CHOPPER, GANG KNIFE (can. & preserv.) 521.687-058
FISH CLEANER (can. & preserv.; fishing & hunt.) 525.684-030
FISH CLEANER MACHINE TENDER (can. & preserv.) 529.685-118
fish culturist (fishing & hunt.) 180.167-030
fish cutter (can. & preserv.; fishing & hunt.) 525.684-030
Fish-Cutting-Machine Operator (can. & preserv.) 521.686-034
fish dresser (can. & preserv.; fishing & hunt.) 525.684-030
FISH DRIER (can. & preserv.) 523.687-014
FISH-EGG PACKER (can. & preserv.) 529.687-086
FISHER (fishing & hunt.) term
fisher (fishing & hunt.) 442.684-010
Fisher, Clam (fishing & hunt.) 446.684-014
Fisher, Crab (fishing & hunt.) 441.684-014
Fisher, Dip Net (fishing & hunt.) 441.684-010
Fisher, Diver Net (fishing & hunt.) 441.684-010
FISHER, DIVING (fishing & hunt.) 443.664-010
Fisher, Eel (fishing & hunt.) 441.684-014
Fisher, Eel Spear (fishing & hunt.) 443.684-010
Fisher, Gill Net (fishing & hunt.) 441.684-010
Fisher, Hand Line (fishing & hunt.) 442.684-010
Fisher, Haul, Drag, Or Beach Seine (fishing & hunt.) 441.684-010
Fisher, Hoop Net (fishing & hunt.) 441.684-010
Fisher, Lampara Net (fishing & hunt.) 441.684-010
FISHER, LINE (fishing & hunt.) 442.684-010
Fisher, Lobster (fishing & hunt.) 441.684-014
Fisher, Mussel (fishing & hunt.) 446.684-014
FISHER, NET (fishing & hunt.) 441.684-010
Fisher, Oyster (fishing & hunt.) 446.684-014
FISHER, POT (fishing & hunt.) 441.684-014
Fisher, Pound Net Or Trap (fishing & hunt.) 441.684-010
Fisher, Purse Seine (fishing & hunt.) 441.684-010
Fisher, Quahog (fishing & hunt.) 446.684-014
Fisher, Reef Net (fishing & hunt.) 441.684-010
Fisher, Scallop (fishing & hunt.) 446.684-014
fisher, seal (fishing & hunt.) 461.684-010
FISHER, SPEAR (fishing & hunt.) 443.684-010
FISHER, SPONGE (fishing & hunt.) term
fisher, sponge hooking (fishing & hunt.) 447.684-010
Fisher, Swordfish (fishing & hunt.) 443.684-010
FISHER, TERRAPIN (fishing & hunt.) 441.684-018
Fisher, Trammel Net (fishing & hunt.) 441.684-010
fisher, trap (fishing & hunt.) 441.684-022
Fisher, Trawl Line (fishing & hunt.) 442.684-010
Fisher, Trawl Net (fishing & hunt.) 441.684-010
Fisher, Troll Line (fishing & hunt.) 442.684-010
Fisher, Trot Line (fishing & hunt.) 442.684-010
FISHER, WEIR (fishing & hunt.) 441.684-022
FISH FARMER (fishing & hunt.) 446.161-010
Fish Filleter (can. & preserv.; fishing & hunt.) 525.684-030
fish flaker (can. & preserv.) 523.687-014
Fish Flipper (can. & preserv.) 521.686-034
Fish Grader (can. & preserv.) 529.687-098
fish hatchery assistant (fishing & hunt.) 446.684-010
fish hatchery attendant (fishing & hunt.) 446.684-010
Fish Hatchery Laborer (fishing & hunt.) 446.687-014
FISH HATCHERY WORKER (fishing & hunt.) 446.684-010
Fish Housekeeper (hotel & rest.) 525.684-030

fish-house worker (can. & preserv.) 920.687-086
Fish Icer (can. & preserv.; wholesale tr.) 922.687-046
FISHING ACCESSORIES MAKER (toy-sport equip.) 619.682-018
fishing captain (fishing & hunt.) 197.133-018
FISHING-LINE-WINDING-MACHINE OPERATOR (tex. prod., nec) 689.685-066
FISHING-LURE ASSEMBLER (toy-sport equip.) 732.684-058
FISHING-REEL ASSEMBLER (toy-sport equip.) 732.684-062
FISHING-ROD ASSEMBLER (toy-sport equip.) 732.684-066
FISHING-ROD MARKER (toy-sport equip.) 732.684-070
fishing-rod trimmer (toy-sport equip.) 732.684-066
Fishing-Tackle Repairer (any industry) 732.684-122
FISHING-TOOL TECHNICIAN, OIL WELL (petrol. & gas) 930.261-010
FISH-LIVER SORTER (can. & preserv.; fishing & hunt.) 521.687-062
FISH-MACHINE FEEDER (can. & preserv.) 521.686-034
FISH-NET STRINGER (tex. prod., nec) 782.684-026
FISH PACKER (can. & preserv.) 920.687-086
Fish Pickler (can. & preserv.) 522.684-010
fish pitcher (can. & preserv.) 922.687-062
Fish Protector (government ser.) 379.167-010
FISH ROE PROCESSOR (can. & preserv.) 522.687-046
FISH ROE TECHNICIAN (can. & preserv.) 522.384-010
Fish-Skinning-Machine Feeder (can. & preserv.) 521.686-034
FISH SMOKER (can. & preserv.) 522.685-066
Fish Straightener (can. & preserv.) 521.686-034
FISH-STRINGER ASSEMBLER (toy-sport equip.) 732.684-054
fish-worm grower (agriculture) 413.161-018
Fitted-Sheet Binder (tex. prod., nec) 787.682-010
fitter (boot & shoe) 690.682-082
Fitter (construction; pipe lines) 869.664-014
fitter (fabrication, nec) 739.684-190
fitter (jewelry-silver.) 700.684-034
FITTER (machine shop) 801.381-014
fitter (machinery mfg.; machine tools) 600.281-022
fitter (retail trade; wood prod., nec) 739.684-146
fitter (retail trade) 276.257-022
fitter (ship-boat mfg.) 806.381-046
fitter, factory (garment; glove & mit.) 781.687-010
fitter, hand (metal prod., nec) 709.381-042
FITTER HELPER (any industry) 801.687-014
fitter helper (construction) 862.684-022
FITTER I (any industry) 801.261-014
FITTER II (any industry) 706.684-054
FITTER-PLACER (rubber goods) 753.687-022
Fitter-Tacker (any industry) 801.261-014
Fitter, Type-Bar-And-Segment (office machines) 706.684-026
fitter-up (leather mfg.) 629.280-010
FITTER, VENTILATED RIB (ordnance) 736.381-014
fitting maker (brick & tile) 862.684-010
Fitting-Room Inspector (boot & shoe) 788.384-010
Fitting-Room Maintenance Mechanic (boot & shoe) 639.281-018
fitting room operator (boot & shoe) 788.685-018
Fitting-Room Supervisor (boot & shoe) 788.131-010
FITTINGS FINISHER (plumbing-heat.) 619.382-014
fittings tightener (plumbing-heat.) 706.684-086
Five-Piece-Expansion Maker, Hand (paper goods) 794.684-018
five-roll-refiner batch mixer (sugar & conf.) 520.685-150
FIXED-CAPITAL CLERK (utilities) 210.382-042
fixer (any industry) 638.281-014
fixer (narrow fabrics; nonmet. min.; textile) 683.260-018
fixer (textile) 689.260-010
FIXER, BOARDING ROOM (knitting) 580.380-010
fixer supervisor (narrow fabrics) 683.130-014
FIXING-MACHINE OPERATOR (toy-sport equip.) 732.685-018
Fixture Builder (machinery mfg.) 600.281-022
Fixture Designer (furniture) 142.061-022
FIXTURE MAKER (light. fix.) 600.380-010
fixture relamper (any industry) 389.687-018
FIXTURE REPAIRER-FABRICATOR (any industry) 630.384-010
flag decorator and designer (profess. & kin.) 142.051-010
FLAGGER (amuse. & rec.) 372.667-026
FLAGGER (construction) 372.667-022
Flagsetter (construction) 861.381-038
FLAKE-CUTTER OPERATOR (wood prod., nec) 564.682-014
flake drier (soap & rel.) 553.685-098
flake-miller helper (grain-feed mills) 526.585-010
FLAKE MILLER, WHEAT AND OATS (grain-feed mills) 521.682-022
flake-or-shred-roll operator (grain-feed mills) 520.685-102
flaker (can. & preserv.) 523.687-014
flaker operator (can. & preserv.) 523.685-062
Flaker Operator (chemical) 553.685-098
FLAKER OPERATOR (chemical; smelt. & refin.) 559.685-074
flaker tender (can. & preserv.) 523.687-014
flaking-machine operator (chemical; smelt. & refin.) 559.685-074
FLAKING-ROLL OPERATOR (grain-feed mills) 520.685-102
Flame-Annealing-Machine Operator (heat treating) 504.685-014
FLAME-ANNEALING-MACHINE SETTER (heat treating) 504.360-010
flame-brazing-machine operator (welding) 813.382-014
FLAME CHANNELER (construction; mine & quarry) 930.684-010
flame-cutting-machine operator (welding) 816.482-010
Flame-Cutting-Machine-Operator Helper (welding) 819.666-010
FLAME DEGREASER (automotive ser.) 503.685-022
flame gouger (welding) 816.464-010
FLAME-HARDENING-MACHINE OPERATOR (heat treating) 504.685-014
FLAME-HARDENING-MACHINE SETTER (heat treating) 504.380-010
flame planer (welding) 816.482-010
FLAMER (boot & shoe) 788.684-050
flamer, after lasting (boot & shoe) 788.684-130
flamer-sealer (elec. equip.) 727.684-030
Flame Scarfer (welding) 816.464-010
flame-spraying-machine operator, automatic (any industry) 505.382-010
flame-spray operator (any industry) 505.380-010
flange cutter (hat & cap; tex. prod., nec) 585.685-086
FLANGER (hat & cap) 784.684-026
FLANGER (inst. & app.) 712.684-018
flanging-machine operator (hat & cap) 690.686-058
flanging-machine operator (paper goods) 641.685-046
flanging operator (hat & cap) 784.684-026
FLANGING-ROLL OPERATOR (any industry) 619.362-010
Flap-Lining Binder (hat & cap) 787.682-010
FLARE BREAKER (boot & shoe) 788.685-010
flare chalker (boot & shoe) 788.687-010
flarer (wood. container) 619.682-034
Flare Stitcher (boot & shoe) 690.682-082
FLASH-DRIER OPERATOR (chemical) 553.462-010
FLASH-DRIER OPERATOR (grain-feed mills) 529.582-014
FLASHER ADJUSTER (light. fix.) 723.684-022
Flash-Oven Operator (elec. equip.) 554.685-014
FLASH RANGING CREWMEMBER (military ser.) 378.367-018
Flash-Welding-Machine Operator (welding) 812.682-010
Flask Carrier (foundry) 519.687-022
flask fitter (foundry) 518.684-018
flat-bed-press feeder (print. & pub.) 651.686-010
flatbed-press operator (print. & pub.) 651.362-010
Flatbed Stitcher (boot & shoe) 690.682-082
FLATCAR WHACKER (saw. & plan.) 807.667-010
FLAT CLOTHIER (textile) 628.382-010
FLAT DRIER (tex. prod., nec) 581.685-078
flat folder (boot & shoe) 788.687-050
flat-folding-machine operator (textile) 689.585-014
flat-grinder operator (clock & watch) 770.682-018
flat hammerer (jewelry-silver.) 700.381-022
Flat Knitter (knitting) 685.665-014
Flat-Knitter Helper (knitting) 685.686-014
FLATLOCK-SEWING-MACHINE OPERATOR (garment) 786.682-110
flat optical element maker (optical goods) 716.280-018
FLAT POLISHER (clock & watch) 603.685-054
flat-sheet maker (plastic-synth.) 556.684-018
flat-spring assembler (furniture) 709.667-010
FLAT SURFACER, JEWEL (clock & watch) 770.685-010
flattening-machine operator (any industry) 363.682-018
FLATWARE MAKER (jewelry-silver.) 700.682-010
Flatwork Assembler (laundry & rel.) 369.687-010
Flatwork Catcher (laundry & rel.) 363.686-010
Flatwork Feeder (laundry & rel.) 363.686-010
FLATWORK FINISHER (laundry & rel.) 363.686-010
Flatwork Finisher (pottery & porc.) 774.684-018
Flatwork Finisher, Hand (laundry & rel.) 363.684-018
Flatwork Folder (laundry & rel.) 363.686-010
Flatwork Supervisor (laundry & rel.) 361.137-010
FLATWORK TIER (laundry & rel.) 361.587-010
Flatwork Washer (laundry & rel.) 361.665-010
FLAVOR EXTRACTOR (grain-feed mills) 529.685-126
flavoring-machine operator (tobacco) 522.685-030
flavoring maker (tobacco) 520.685-054
FLAVORING OIL FILTERER (beverage) 521.685-382
flavor maker (tobacco) 520.685-082
FLAVOR ROOM WORKER (dairy products) 529.685-130
Flavor-Tank Tender (dairy products) 529.685-146
fleecer (knitting) 585.665-010
FLEECE TIER (agriculture) 410.687-010
FLESHER (leather mfg.) 585.681-010
Fleshing-Machine Operator (leather mfg.) 585.685-094
Fletcher (toy-sport equip.) 732.684-010
Flexible Machining System Machinist (machine shop) 600.280-022
Flexible-Shaft Winder (metal prod., nec) 619.482-010
flexigraphic printer (plastic prod.; tex. prod., nec) 651.382-026
Flexo-Folder-Gluer-Machine Helper (paper goods) 659.686-014
Flexo-Folder-Gluer Operator (paper goods) 659.662-010
flexographic-press helper (print. & pub.) 651.585-010

FLEXOGRAPHIC-PRESS OPERATOR (paper goods; print. & pub.) 651.682-010
FLIGHT ATTENDANT, RAMP (air trans.) 352.367-014
flight-control-tower operator (government ser.) 193.162-018
FLIGHT-CREW-TIME CLERK (air trans.) 215.362-018
FLIGHT ENGINEER (air trans.) 621.261-018
flight follower (air trans.) 209.367-050
FLIGHT-INFORMATION EXPEDITER (air trans.) 912.367-010
Flight-Line Mechanic (aircraft mfg.) 621.281-014
Flight Line Service Attendant (aircraft mfg.) 621.684-010
flight mechanic (air trans.) 621.261-018
flight-operations-dispatch clerk (air trans.) 248.367-010
FLIGHT-OPERATIONS INSPECTOR (government ser.) 196.163-010
FLIGHT OPERATIONS SPECIALIST (military ser.) 248.387-010
flight physiologist (medical ser.) 070.101-030
flight security specialist (air trans.) 372.667-010
FLIGHT SURGEON (medical ser.) 070.101-030
FLIGHT-TEST DATA ACQUISITION TECHNICIAN (aircraft mfg.) 002.262-010
flipping-machine operator (rubber goods) 690.685-450
Flitch Hanger (millwork-plywood) 663.686-022
Float Builder (any industry) 899.687-010
floating-derrick operator (water trans.) 921.683-034
floating-labor-gang supervisor (any industry) 899.133-010
Floatlight-Loading Supervisor (chemical) 737.131-010
Floatlight-Powder Mixer (chemical) 737.687-090
float remover (textile) 689.685-094
Float Sander (woodworking) 662.682-010
flocculator operator (plastic-synth.) 559.582-010
FLOCKER (tex. prod., nec) 789.687-054
FLOOR AND WALL APPLIER, LIQUID (construction) 864.684-010
Floor Assembler (mfd. bldgs.) 869.684-018
FLOOR ATTENDANT (amuse. & rec.) 343.467-014
FLOOR ATTENDANT (glass mfg.) 579.687-018
FLOOR BROKER (financial) 162.167-034
Floor Cashier (clerical) 211.462-010
Floor Cleaner (any industry) 381.687-018
floor clerk (clerical) 221.387-038
Floor Clerk (hotel & rest.) 238.367-038
floor coverer (construction; retail trade) 864.481-010
floor-coverer apprentice (construction; retail trade) 864.481-014
FLOOR-COVERING LAYER (railroad equip.) 622.381-026
Floor-Coverings Estimator (retail trade; wholesale tr.) 270.357-026
floor-covering-tile layer (construction; retail trade) 864.481-010
Floor Finisher (construction) 869.664-014
Floor Finisher (mfd. bldgs.; vehicles, nec) 869.684-010
Floor Finisher (vehicles, nec) 806.684-018
Floor-Finisher Helper (construction) 869.687-026
Floor Framer (mfd. bldgs.; vehicles, nec) 869.684-010
Floor Framer (vehicles, nec) 806.684-018
floor grinder (construction) 861.381-046
floor hand (tobacco) 529.687-070
floor housekeeper (hotel & rest.; medical ser.; real estate) 321.137-010
Flooring Grader (saw. & plan.) 669.687-030
Flooring-Machine Feeder (saw. & plan.) 669.686-030
Floor Inspector (glass mfg.) 579.384-018
FLOOR LAYER (construction; retail trade) 864.481-010
FLOOR-LAYER APPRENTICE (construction; retail trade) 864.481-014
Floor-Layer Helper (construction; retail trade) 869.687-026
floorleader (print. & pub.) 653.131-010
floor molder, sweep method (foundry) 518.361-018
floor plan adjuster (financial) 241.367-038
floor-press operator (any industry) 616.682-010
floor representative (financial) 162.167-034
floor runner (water trans.) 222.567-014
Floor-Sanding-Machine Operator (construction) 869.664-014
FLOOR SERVICE WORKER, SPRING (automotive ser.) 807.684-022
FLOOR-SPACE ALLOCATOR (tobacco; wholesale tr.) 222.367-030
floor steward/stewardess (hotel & rest.) 318.137-010
Floor Supervisor (hotel & rest.) 321.137-014
FLOOR SUPERVISOR, ENDLESS-BELT-WEAVING DEPARTMENT (narrow fabrics) 683.130-010
floor trader (financial) 162.167-034
FLOOR WINDER (textile) 681.685-050
floor worker (any industry) 929.687-030
floorworker (leather mfg.) 589.686-022
FLOOR WORKER (sugar & conf.) 920.687-090
FLOOR WORKER (wood prod., nec) 739.687-098
FLOORWORKER-DISTRIBUTOR (hat & cap) 784.687-030
FLOORWORKER, LASTING (boot & shoe) 788.687-046
Floor Worker, Transfer Bay (nonfer. metal) 921.667-022
FLOOR WORKER, WELL SERVICE (petrol. & gas) 930.684-014
Floral Arranger (retail trade) 142.081-010
FLORAL DESIGNER (retail trade) 142.081-010
florist (retail trade) 142.081-010
Flotation Supervisor (smelt. & refin.) 511.135-010
FLOTATION TENDER (smelt. & refin.) 511.685-026
FLOTATION-TENDER HELPER (smelt. & refin.) 511.687-018
FLOUR BLENDER (grain-feed mills) 520.685-106
Flour-Blender Helper (bakery products) 526.686-010
FLOUR-BLENDER HELPER (grain-feed mills) 520.686-022
flour distributor (food prep., nec) 921.382-010
flour mixer (bakery products) 520.585-010
FLOUR MIXER (grain-feed mills) 520.485-010
flour-mixer helper (grain-feed mills) 520.686-022
flour tester (grain-feed mills) 526.381-018
flower arranger (button & notion) 739.684-014
flower chenille (tex. prod., nec) 687.682-010
flower cutter (glass products) 775.381-010
Flower Grader (agriculture) 529.687-186
Flower Grower (agriculture) 405.161-014
FLOWER-MACHINE OPERATOR (tex. prod., nec) 687.682-010
FLOWER PICKER (agriculture) 405.687-010
FLOWER-POT-PRESS OPERATOR (pottery & porc.) 575.685-034
flow floor attendant (glass mfg.) 579.687-018
flow machine operator (glass mfg.) 575.382-014
Flowmeter Test And Certification Technician (inst. & app.) 710.281-022
flow-solder machine operator (comm. equip.; electron. comp.; inst. & app.; office machines) 726.362-014
Flue Cleaner (any industry) 891.687-030
flue-dust laborer (smelt. & refin.) 519.687-014
Flue-Lining Dipper (concrete prod.) 579.687-042
Flue-Tile-Press Operator (brick & tile) 575.462-010
FLUID JET CUTTER OPERATOR (aircraft mfg.) 699.382-010
FLUID-POWER MECHANIC (any industry) 600.281-010
Flume Maker (mine & quarry) 860.281-010
FLUMER (grain-feed mills) 521.686-038
FLUMER I (sugar & conf.) 922.665-010
Flume-Ride Operator (amuse. & rec.) 342.663-010
FLUMER II (sugar & conf.) 521.686-042
fluorescent lamp replacer (any industry) 389.687-018
fluoroscope operator (can. & preserv.; tobacco) 529.685-274
FLUOROSCOPE OPERATOR (nonfer. metal) 502.382-014
FLUSHER (chemical) 559.682-026
Flusher (fabrication, nec) 761.684-030
flusher (grain-feed mills) 529.687-210
Flush Tester (pottery & porc.) 774.687-026
Flux Brusher (welding) 819.666-010
FLUX MIXER (chemical) 550.584-010
FLUX-TUBE ATTENDANT (nonfer. metal; smelt. & refin.) 519.687-018
FLYER (amuse. & rec.; radio-tv broad.) 962.687-018
flyer builder (textile) 628.687-010
FLYER REPAIRER (textile) 628.687-010
FLYING-SHEAR OPERATOR (steel & rel.) 615.682-010
Fly Raiser, Lockstitch (garment) 786.682-238
Fly Setter (garment) 786.682-286
FLY TIER (toy-sport equip.) 732.684-074
fly winder (toy-sport equip.) 732.684-074
Foam Caster (nonmet. min.) 754.684-022
FOAM CHARGER (svc. ind. mach.) 827.585-010
FOAM DISPENSER (rubber goods) 554.684-014
foam fabricator (any industry) 780.684-062
FOAM-GUN OPERATOR (plastic prod.) 741.684-014
foaming machine operator (textile) 584.685-030
FOAM-MACHINE OPERATOR (plastic prod.; plastic-synth.) 559.685-078
Foam Molder (clock & watch) 754.684-022
FOCUSER (light. fix.) 725.687-018
Foil Cutter (any industry) 699.685-014
Foil Cutter (electron. comp.) 699.682-018
FOILING-MACHINE ADJUSTER (ordnance) 629.381-010
FOILING-MACHINE OPERATOR (ordnance) 692.685-086
folded-cloth taper (textile) 920.587-010
Folded-Towel-Machine Operator (paper goods) 649.685-046
folder (garment; glove & mit.) 781.687-010
folder (garment) 583.685-042
FOLDER (laundry & rel.) 369.687-018
FOLDER (narrow fabrics) 686.685-030
FOLDER (tex. prod., nec) 789.687-058
folder-and-notcher (musical inst.) 730.684-014
Folder-Gluer Operator (paper goods) 649.682-010
FOLDER, HAND (boot & shoe) 788.687-050
FOLDER, HAND (paper goods) 794.687-022
folder, hand (tex. prod., nec; textile) 589.687-014
folder inspector (any industry) 789.587-014
FOLDER, MACHINE (boot & shoe) 690.685-174
folder, machine (paper goods) 649.685-042
folder, machine (print. & pub.) 653.382-010
folder, machine (textile) 689.585-014
folder operator (clerical) 208.685-014
folder operator (knitting; textile) 589.685-058

folder operator (print. & pub.) 653.382-010
FOLDER-SEAMER, AUTOMATIC (any industry) 787.685-014
Folder-Stitcher Operator (paper goods) 649.682-010
Folder-Taper Operator (paper goods) 649.682-010
FOLDER-TIER (nonmet. min.) 759.684-034
FOLDING-MACHINE FEEDER (paper goods) 641.685-050
Folding-Machine Feeder (print. & pub.) 653.686-026
FOLDING-MACHINE FEEDER (tex. prod., nec) 920.686-018
folding-machine operator (boot & shoe) 690.685-074
folding-machine operator (boot & shoe) 690.685-174
FOLDING-MACHINE OPERATOR (clerical) 208.685-014
FOLDING-MACHINE OPERATOR (garment) 583.685-042
FOLDING-MACHINE OPERATOR (hat & cap) 690.686-034
FOLDING-MACHINE OPERATOR (knitting; textile) 589.685-058
folding-machine operator (knitting) 580.485-010
FOLDING-MACHINE OPERATOR (laundry & rel.) 369.686-010
FOLDING-MACHINE OPERATOR (leather prod.) 690.685-178
FOLDING-MACHINE OPERATOR (paper goods) 649.685-046
FOLDING-MACHINE OPERATOR (print. & pub.) 653.382-010
folding-machine operator (textile) 689.685-078
FOLDING-MACHINE OPERATOR (textile) 689.585-014
Folding-Machine Setter (print. & pub.) 653.360-018
FOLDING-MACHINE TENDER (boot & shoe) 788.685-014
fold skiver (boot & shoe) 788.685-014
foliage arranger (button & notion) 739.684-014
FOLLOW-UP CLERK (elec. equip.) 221.367-018
Fondant Cooker (sugar & conf.) 526.382-014
Fondant-Machine Operator (sugar & conf.) 521.585-018
Fondant-Puff Maker (sugar & conf.) 520.682-014
FOOD-AND-BEVERAGE CHECKER (hotel & rest.) 211.482-018
FOOD-AND-BEVERAGE CONTROLLER (hotel & rest.) 216.362-022
FOOD AND DRUG INSPECTOR (government ser.) 168.267-042
food assembler, commissary kitchen (hotel & rest.) 319.484-010
FOOD ASSEMBLER, KITCHEN (hotel & rest.) 319.484-010
FOOD CHECKER (hotel & rest.) 211.482-014
Food Demonstrator (retail trade; wholesale tr.) 297.354-010
FOOD-MANAGEMENT AIDE (government ser.) 195.367-022
FOOD MIXER (grain-feed mills) 520.687-034
Food-Mixer Assembler (house. appl.) 723.684-010
Food-Mixer Repairer (house. appl.) 723.584-010
FOOD ORDER EXPEDITER (hotel & rest.) 319.467-010
food preparer (amuse. & rec.; museums) 412.687-010
food scientist (profess. & kin.) 041.081-010
food-service agent (hotel & rest.) 906.683-010
food service coordinator (hotel & rest.) 313.131-018
FOOD-SERVICE DRIVER (hotel & rest.) 906.683-010
FOOD-SERVICE SUPERVISOR (hotel & rest.) 319.137-010
Food-Service Worker (hotel & rest.) 313.361-014
FOOD-SERVICE WORKER, HOSPITAL (medical ser.) 319.677-014
Food-Storeroom Clerk (hotel & rest.) 222.387-058
FOOD TECHNOLOGIST (profess. & kin.) 041.081-010
FOOD TESTER (any industry) 029.361-014
food-tray assembler (hotel & rest.) 319.484-010
Football Coach (amuse. & rec.) 153.227-010
Football-Pad Repairer (any industry) 732.684-122
Football Scout (amuse. & rec.) 153.117-018
Foot Cager (mine & quarry) 939.667-010
Foot Caster (glass mfg.) 772.381-018
Foot Cutter (meat products) 525.687-074
FOOT-MITER OPERATOR (wood prod., nec) 739.684-066
Foot-Piece Assembler (furniture) 706.684-082
foot specialist (medical ser.) 079.101-022
FOOT STRAIGHTENER (clock & watch) 715.687-030
foot tender (mine & quarry) 932.667-010
FOOT WORKER (chemical) 934.687-010
force dispatcher (tel. & tel.) 215.137-018
Forcer Maker (jewelry-silver.) 601.381-014
FORCE-VARIATION EQUIPMENT TENDER (rubber tire) 690.685-182
Foreclosure Clerk (financial) 249.362-014
foreign agent (any industry) 184.117-022
FOREIGN BANKNOTE TELLER-TRADER (financial) 211.362-014
FOREIGN-BROADCAST SPECIALIST (radio-tv broad.) term
Foreign-Car Mechanic (automotive ser.) 620.261-010
FOREIGN CLERK (clerical) 214.467-010
Foreign-Collection Clerk (financial) 216.362-014
Foreign Correspondent (print. & pub.; radio-tv broad.) 131.262-018
FOREIGN-EXCHANGE DEALER (financial) 186.117-082
FOREIGN-EXCHANGE-POSITION CLERK (financial) 210.367-014
foreign-exchange trader (financial) 186.117-082
Foreign-Language Stenographer (clerical) 202.362-014
FOREIGN-SERVICE OFFICER (government ser.) 188.117-106
FOREIGN-STUDENT ADVISER (education) 090.107-010
forensic artist (government ser.) 141.061-034
Forensic Pathologist (medical ser.) 070.061-010
FOREPART LASTER (boot & shoe) 690.685-186
Forepart Rasper (boot & shoe) 788.684-094
forepart reducer (boot & shoe) 690.685-166
forepart rounder (boot & shoe) 690.685-334
FOREST ECOLOGIST (profess. & kin.) 040.061-030
FOREST ENGINEER (forestry; logging) 005.167-018
FORESTER (profess. & kin.) 040.167-010
FORESTER AIDE (forestry) 452.364-010
Forest Fire Equipment Operator (government ser.) 850.683-010
FOREST-FIRE FIGHTER (forestry) 452.687-014
FOREST NURSERY SUPERVISOR (forestry) 451.137-010
FOREST-PRODUCTS GATHERER (agriculture; forestry) 453.687-010
forestry hunter (fishing & hunt.) 461.661-010
Forestry Supervisor (profess. & kin.) 040.167-010
forest technician (forestry) 452.364-010
FOREST WORKER (forestry) 452.687-010
FORGE HELPER (forging) 619.686-034
FORGE-SHOP-MACHINE REPAIRER (forging) 626.261-010
FORGE-SHOP SUPERVISOR (forging) 612.131-010
forging-die finisher (machine shop) 705.484-014
forging-die sinker (machine shop) 601.280-022
forging-machine operator (forging) 611.482-010
Forging-Press Lever Tender (forging) 612.685-010
FORGING-PRESS OPERATOR I (forging) 611.482-010
FORGING-PRESS OPERATOR II (forging) 611.685-010
Forging Press Setter-Up (forging) 612.360-010
FORGING-ROLL OPERATOR (forging) 612.682-014
Fork Assembler (motor-bicycles) 806.684-094
Fork-Lift-Truck Operator (any industry) 921.683-050
Fork Repairer (motor-bicycles) 620.684-026
Formal-Wear-Rental Clerk (retail trade) 295.357-010
Formation-Fracturing Operator (petrol. & gas) 939.462-010
Formation-Fracturing-Operator Helper (petrol. & gas) 939.684-018
FORMATION-TESTING OPERATOR (petrol. & gas) 930.261-014
Form Block Maker (aircraft mfg.) 693.281-030
FORM BUILDER (construction) 860.381-046
Form-Builder Helper (construction) 869.664-014
Form-Building Supervisor (construction) 860.131-018
FORM CLEANER (construction) term
FORM COVERER (fabrication, nec) 739.684-070
FORM DESIGNER (print. & pub.) 970.361-010
form drafter (print. & pub.) 970.361-010
former (elec. equip.) 691.685-018
former (oils & grease) 520.685-038
former (pottery & porc.) 575.685-026
FORMER, HAND (any industry) 619.361-010
FORMER HELPER, HAND (any industry) 619.684-010
former puller (oils & grease) 520.685-038
Former, Type-Bar-And-Segment (office machines) 706.684-026
Form-Finishing-Machine Operator (laundry & rel.) 363.681-010
FORM-GRADER OPERATOR (construction) 850.683-022
forming acid dumper (elec. equip.) 727.687-010
forming fixer (glass mfg.) 629.281-026
FORMING-MACHINE ADJUSTER (glass mfg.) 629.281-026
forming-machine operator (boot & shoe) 690.685-098
FORMING-MACHINE OPERATOR (button & notion) 559.665-022
FORMING-MACHINE OPERATOR (glass mfg.) 575.382-014
forming-machine operator (hat & cap) 586.685-030
forming-machine operator (ordnance) 617.585-010
Forming-Machine Operator (paper & pulp) 539.685-018
FORMING-MACHINE TENDER (glass mfg.) 575.685-038
FORMING-MACHINE UPKEEP MECHANIC (glass mfg.) 575.380-010
FORMING-MACHINE UPKEEP-MECHANIC HELPER (glass mfg.) 575.687-014
forming-mill operator (any industry) 616.685-042
forming operator (glass mfg.) 575.685-030
forming operator (wood. container) 669.685-046
forming-press operator (rubber goods; rubber tire; toy-sport equip.) 556.685-066
Forming-Press Operator I (any industry) 615.382-010
Forming-Press Operator II (any industry) 615.685-030
FORMING-PROCESS-LINE WORKER (elec. equip.) 727.687-058
FORMING-PROCESS WORKER (elec. equip.) 590.362-010
Forming-Roll Operator, Heavy Duty (any industry) 617.482-014
FORMING-ROLL OPERATOR I (any industry) 617.482-014
FORMING-ROLL OPERATOR II (any industry) 619.685-046
forming-tube selector (textile) 681.687-010
FORM MAKER, PLASTER (plastic prod.) 777.684-010
Form-Press Operator (laundry & rel.) 363.682-018
form puller (construction) see FORM STRIPPER
form remover (construction) see FORM STRIPPER
FORMS ANALYST (profess. & kin.) 161.267-018
form scraper (construction) see FORM CLEANER
Form-Setter Helper (construction) 869.687-026
Form Setter, Metal Road-Forms (construction) 869.664-014
Form Setter, Steel Forms (construction) 869.664-014
Form Setter, Steel-Pan Forms (construction) 869.664-014

Form-Setter Supervisor (construction) 869.131-014
Form Stripper (concrete prod.; construction) 869.687-026
FORM STRIPPER (construction) term
form tamper (construction) 869.683-010
FORM-TAMPER OPERATOR (construction) 869.683-010
form-tamping-machine operator (construction) 869.683-010
Formula Bottler (dairy products) 520.487-014
Formula Checker (tex. prod., nec; textile) 221.387-046
FORMULA CLERK (textile) 221.367-090
Formula Figurer (paint & varnish) 216.482-022
Formula Maker (dairy products) 520.487-014
FORMULA-ROOM WORKER (dairy products) 520.487-014
formulator (chemical) 559.665-026
FORMULA WEIGHER (pen & pencil) 559.685-082
FORMULA WEIGHER (rubber goods) 550.663-010
form wrecker (construction) see FORM STRIPPER
Fortune Cookie Maker (bakery products) 526.685-070
Fortune Teller (amuse. & rec.) 159.647-018
FORWARDER (print. & pub.) 794.687-026
FOSTER PARENT (domestic ser.) 309.677-014
FOUNDATION-DRILL OPERATOR (construction) 859.682-014
Foundation-Drill-Operator Helper (construction) 869.664-014
FOUNDATION MAKER (fabrication, nec) 739.384-014
FOUNDATION MAKER (hat & cap) 784.684-030
FOUNDRY LABORER, COREROOM (foundry) 518.687-014
FOUNDRY METALLURGIST (foundry) 011.061-010
FOUNDRY SUPERVISOR (foundry) 519.131-010
foundry technician (foundry) 011.061-010
FOUNDRY WORKER, GENERAL (foundry) 519.687-022
Fountain-Brush Assembler (pen & pencil) 733.687-010
fountain dispenser (hotel & rest.) 319.474-010
FOUNTAIN PEN TURNER (pen & pencil) 690.685-190
Fountain-Roller Assembler (pen & pencil) 733.687-010
FOUNTAIN SERVER (hotel & rest.) 319.474-010
Fourchette Sewer (glove & mit.) 784.682-010
FOUR-CORNER-STAYER-MACHINE OPERATOR (paper goods) 641.685-054
FOURDRINIER-MACHINE OPERATOR (paper & pulp; paper goods) 539.362-014
Fourdrinier-Paper-Machine Supervisor (paper & pulp) 539.132-010
FOUR-H CLUB AGENT (education) 096.127-022
Four-Horse Hitch Driver (any industry) 919.664-010
FOUR-SLIDE-MACHINE OPERATOR I (any industry) 619.382-018
FOUR-SLIDE-MACHINE OPERATOR II (any industry) 619.685-050
FOUR-SLIDE-MACHINE SETTER (any industry) 616.380-010
Fox Farmer (agriculture) 410.161-014
FOXING CUTTER, HOT KNIFE (boot & shoe; rubber goods) 751.684-022
FOXING-CUTTING-MACHINE OPERATOR, AUTOMATIC (boot & shoe) 690.682-038
FOXING PAINTER (rubber goods) 584.685-022
Fractional-Horsepower Motor Repairer (any industry) 721.281-018
fractionation operator, head (petrol. refin.) 549.132-030
fractionation supervisor (petrol. refin.) 549.132-030
frame aligner (motor-bicycles) 807.484-010
frame-and-scrap crusher (fabrication, nec) 555.685-022
Frame Assembler (mfd. bldgs.) 869.684-018
Frame Assembler (motor-bicycles) 806.684-094
frame assembler (optical goods) 713.684-014
Frame Assembler (struct. metal) 809.684-010
Frame Assembler (toy sport equip.) 732.384-010
FRAME BANDER (textile) 628.684-014
frame bender (tex. prod., nec) 809.484-010
frame builder, silk-screen (any industry) 709.484-010
FRAME CARVER, SPINDLE (optical goods) 713.684-030
frame catcher (textile) 589.686-010
FRAME CHANGER (textile) 689.686-026
frame cleaner (textile) 680.687-014
Frame Coverer (leather prod.) 783.687-010
frame crusher (fabrication, nec) 555.685-022
FRAME FEEDER (chemical) 553.686-034
frame-gate-mortiser operator (saw. & plan.) 667.482-014
FRAME HAND (tex. prod., nec) 689.687-046
Frame Maker (leather mfg.) 860.281-010
Frame Maker (saw. & plan.) 669.380-014
Frame Nailer (wood. container) 669.682-058
frame opener (leather prod.) 222.687-042
frame-pulley-mortising-machine operator (saw. & plan.) 666.482-010
framer (fabrication, nec) 739.684-162
FRAMER (glass products; wood prod., nec) 739.684-078
framer (leather prod.) 739.684-090
framer (mfd. bldgs.; vehicles, nec) 869.684-010
framer (textile) 689.687-026
framer (wood prod., nec) 669.662-014
FRAMER (wood prod., nec) 666.684-010
FRAME REPAIRER (furniture) 763.681-010
FRAME REPAIRER (glass products) 739.684-074
FRAME REPAIRER (motor-bicycles) 807.381-018
FRAME STRAIGHTENER (motor-bicycles) 807.484-010
FRAME STRIPPER (chemical) 559.687-046
FRAME STRIPPER (soap & rel.) 559.685-066
frame stripper and crusher (soap & rel.) 555.685-062
FRAME-TABLE OPERATOR (wood prod., nec) 669.662-014
FRAME-TABLE-OPERATOR HELPER (wood prod., nec) 669.685-058
FRAME TRIMMER I (wood prod., nec) 749.684-030
FRAME TRIMMER II (wood prod., nec) 769.687-022
FRAME WIRER (tel. & tel.) 822.684-010
...aing-machine tender (textile) 580.685-066
framing-mill operator (wood prod., nec) 669.662-014
framing-mill-operator helper (wood prod., nec) 669.685-058
frankfurter inspector (meat products) 529.587-014
Fraternity Adviser (education) 090.167-022
FRAZER (fabrication, nec) 664.685-022
Freelance Reporter (clerical) 202.362-010
freezer (dairy products) 529.482-010
freezer assistant (dairy products) 529.685-146
FREEZER OPERATOR (dairy products) 529.482-010
FREEZER TUNNEL OPERATOR (can. & preserv.) 523.685-082
FREEZING-MACHINE OPERATOR (pharmaceut.) 559.685-090
FREEZING-ROOM WORKER (can. & preserv.) 523.687-022
Freight-Air-Brake Fitter (railroad equip.) 862.281-022
freight and passenger agent (r.r. trans.) 910.137-038
FREIGHT-CAR CLEANER, DELTA SYSTEM (r.r. trans.) 910.687-022
freight checker (water trans.) 222.367-010
Freight Clerk (clerical) 222.387-050
freight clerk (water trans.) 248.167-010
freighter (any industry) 919.664-010
FREIGHT-LOADING SUPERVISOR (r.r. trans.) 910.137-026
freight-rate clerk (clerical) 214.362-038
Freight-Traffic Agent (air trans.; motor trans.; r.r. trans.; water trans.) 252.257-010
FREIGHT-TRAFFIC CONSULTANT (business ser.) 184.267-010
French-Binding Folder (boot & shoe) 788.684-018
french-binding folder (boot & shoe) 690.685-070
french-edge operator (paper goods) 641.685-046
french weaver (personal ser.) 782.381-022
frequency checker (textile) 221.367-034
fresh-meat grader (meat products) 529.687-106
FRESH-WORK INSPECTOR (tobacco) 529.687-090
fresh-work wrapper-layer (tobacco) 529.685-266
fret-saw operator (woodworking) 667.682-042
FRETTED-INSTRUMENT INSPECTOR (musical inst.) 730.684-034
FRETTED-INSTRUMENT MAKER, HAND (musical inst.) 730.281-022
FRETTED-INSTRUMENT REPAIRER (any industry) 730.281-026
frickertron checker (glass mfg.) 575.685-082
FRICTION-PAINT-MACHINE TENDER (fabrication, nec) 534.685-014
fried-cake maker (bakery products) 526.682-022
fringe-binder operator (carpet & rug; retail trade) 787.682-014
FRINGER (carpet & rug; tex. prod., nec) 789.687-062
Fringer (tex. prod., nec) 787.682-066
fringer, hand (tex. prod., nec) 782.684-050
FRINGING-MACHINE OPERATOR (knitting) 685.686-010
frit burner (brick & tile; pottery & porc.) 579.685-014
Frit Coater (electron. comp.) 725.684-022
frit maker (brick & tile; pottery & porc.) 570.685-098
FRIT-MIXER-AND-BURNER (brick & tile; pottery & porc.) 579.685-014
Frog Shaker (tobacco) 521.687-110
Front Desk Clerk (hotel & rest.) 238.367-038
FRONT-EDGE-TAPE SEWER, LOCKSTITCH (garment) 786.682-118
Front-Elevator Operator (hotel & rest.) 388.663-010
FRONT-END LOADER OPERATOR (any industry) 921.683-042
FRONT-END MECHANIC (automotive ser.) 620.281-038
FRONT MAKER, LOCKSTITCH (garment) 786.682-114
FRONT-SIGHT ATTACHER (ordnance) 736.684-030
front tender (textile) 582.582-010
froster (bakery products) 524.684-022
froster, machine (bakery products) 524.685-034
FROTHING-MACHINE OPERATOR (rubber goods) 550.362-010
FROZEN PIE MAKER (can. & preserv.) 529.684-010
FRUIT-BAR MAKER (sugar & conf.) 529.685-134
FRUIT-BUYING GRADER (can. & preserv.; wholesale tr.) 529.387-018
FRUIT COORDINATOR (can. & preserv.) 529.167-010
FRUIT CUTTER (sugar & conf.) 521.687-066
FRUIT DISTRIBUTOR (agriculture) 921.685-046
FRUIT-GRADER OPERATOR (agriculture; wholesale tr.) 529.665-010
fruit inspector (can. & preserv.; wholesale tr.) 529.387-018
Fruit Mixer (bakery products) 520.685-114
Fruit Packer, Face-And-Fill (agriculture; wholesale tr.) 920.687-134
Fruit Packer, Wrap-And-Place (agriculture; wholesale tr.) 920.687-134
fruit picker (agriculture) 403.687-018
FRUIT-PRESS OPERATOR (beverage; can. & preserv.) 521.685-146

Fruit Sorter (agriculture; can. & preserv.; wholesale tr.) 529.687-186
Fruit Stuffer (sugar & conf.) 524.687-014
FRUIT WORKER (agriculture) term
Fudge-Candy Maker (sugar & conf.) 529.361-014
fuel assembler (chemical) 709.381-010
FUEL ATTENDANT (any industry) 953.362-010
fuel-cell assembler (rubber goods) 752.684-046
fuel-cell repairer (rubber goods) 759.384-010
FUEL-HOUSE ATTENDANT (saw. & plan.) 951.686-010
FUEL-INJECTION SERVICER (any industry) 625.281-022
FUEL-OIL CLERK (clerical) 222.387-018
Fuel-Oil-Delivery Driver (petrol. refin.; retail trade; wholesale tr.) 903.683-018
FUEL-SYSTEM-MAINTENANCE SUPERVISOR (any industry) 638.131-010
FUEL-SYSTEM-MAINTENANCE WORKER (any industry) 638.381-010
Fuel Tank Sealer And Tester (aircraft mfg.) 806.384-038
Full-Decator Operator (textile) 582.685-042
FULLER (textile) 586.682-010
FULLING-MACHINE OPERATOR (tex. prod., nec) 586.382-010
fulling-mill operator (textile) 586.682-010
Full-Roll Inspector (photofinishing) 976.687-014
FUMIGATOR (business ser.) 383.361-010
FUMIGATOR AND STERILIZER (furniture) 582.685-074
FUNCTIONAL TESTER, TYPEWRITERS (office machines) 706.382-010
FUND RAISER I (nonprofit org.) 293.157-010
FUND RAISER II (nonprofit org.) 293.357-014
funds transfer clerk (financial) 203.562-010
FUNERAL ATTENDANT (personal ser.) 359.677-014
funeral driver (personal ser.) 359.673-014
funeral-home attendant (personal ser.) 339.361-010
Funeral-Limousine Driver (personal ser.) 359.673-014
Fun-House Attendant (amuse. & rec.) 376.667-010
FUN-HOUSE OPERATOR (amuse. & rec.) 342.665-010
Funnel Coater (electron. comp.) 725.684-022
Funnel Setter (plastic-synth.) 557.685-026
fur beater (fur goods; laundry & rel.; retail trade; wholesale tr.) 369.685-014
FUR BLENDER (leather mfg.) 783.681-010
Fur blower (hat & cap) 680.685-046
FUR BLOWER (retail trade) 369.685-010
FUR-BLOWER OPERATOR (hat & cap) 680.685-046
fur-blowing-machine attendant (hat & cap) 680.685-046
fur-blowing-machine operator (hat & cap) 680.685-046
FUR CLEANER (laundry & rel.) 362.684-014
FUR CLEANER, HAND (laundry & rel.) 362.684-018
FUR CLEANER, MACHINE (fur goods; laundry & rel.; retail trade; wholesale tr.) 369.685-014
Fur Clipper (leather mfg.) 589.686-022
FUR CUTTER (fur goods) 783.381-010
FUR-CUTTING-MACHINE OPERATOR (hat & cap) 585.685-046
FUR DESIGNER (fur goods) 142.081-014
FUR DRESSER (leather mfg.) 589.361-010
fur drummer (fur goods; laundry & rel.; retail trade; wholesale tr.) 369.685-014
fur dry-cleaner (fur goods; laundry & rel.; retail trade; wholesale tr.) 369.685-014
fur dry-cleaner (laundry & rel.) 362.684-014
fur dry-cleaner, hand (laundry & rel.) 362.684-018
fur dyer (leather mfg.) 783.681-010
FUR FARMER (agriculture) 410.161-014
fur feeder (hat & cap) 586.686-018
FUR FINISHER (fur goods) 783.381-014
Fur Finisher, Head (fur goods) 783.131-010
FUR-FLOOR WORKER (leather mfg.) 589.686-022
FUR GLAZER (fur goods) 369.684-010
FUR-GLAZING-AND-POLISHING-MACHINE OPERATOR (laundry & rel.) 369.685-022
fur glosser (fur goods) 369.684-010
fur grader (fur goods) 783.384-010
fur ironer (laundry & rel.) 369.685-022
FUR IRONER (laundry & rel.) 369.685-018
fur joiner (fur goods) 783.682-010
Fur Liner (fur goods) 783.381-014
FUR-MACHINE OPERATOR (fur goods) 783.682-010
FUR-MACHINE OPERATOR (garment) 786.682-122
fur matcher (fur goods) 783.384-010
fur mixer (hat & cap) 680.685-046
fur-mixer operator (hat & cap) 680.685-062
FURNACE-AND-WASH-EQUIPMENT OPERATOR (ordnance) 503.685-026
furnace attendant (glass mfg.) 572.382-010
FURNACE CHARGER (nonfer. metal; smelt. & refin.; steel & rel.) 512.684-014
furnace-charging-machine operator (steel & rel.) 512.683-010
FURNACE CLEANER (any industry) 891.687-014
furnace clerk (optical goods) 573.686-014
FURNACE-COMBUSTION ANALYST (glass mfg.) 572.360-010
Furnace Cooler (elec. equip.) 543.666-010
furnace feeder (heat treating) 504.685-018
FURNACE HELPER (chemical) 558.686-010
FURNACE HELPER (chemical) 553.687-014
FURNACE HELPER (heat treating) 504.686-014
FURNACE HELPER (nonfer. metal; smelt. & refin.) 512.666-010
FURNACE INSTALLER (utilities) 862.361-010
FURNACE-INSTALLER-AND-REPAIRER HELPER, HOT AIR (any industry) 869.687-030
FURNACE INSTALLER-AND-REPAIRER, HOT AIR (any industry) 869.281-010
Furnace Installer Helper (utilities) 862.684-022
Furnace Loader (elec. equip.) 543.666-010
furnace loader (heat treating) 504.685-018
Furnace Mason (construction) 861.381-026
FURNACE OPERATOR (chemical) 558.482-010
FURNACE OPERATOR (elec. equip.) 543.682-018
furnace operator (forging) 619.682-022
FURNACE OPERATOR (foundry; steel & rel.) 512.362-018
furnace operator (glass mfg.) 573.685-026
furnace operator (mine & quarry) 543.682-014
FURNACE OPERATOR (nonfer. metal) 613.462-014
FURNACE OPERATOR (nonfer. metal; smelt. & refin.) 512.362-014
FURNACE OPERATOR (petrol. refin.) 542.562-010
FURNACE OPERATOR (smelt. & refin.) 513.462-010
Furnace Operator, Oil Or Gas (foundry) 512.362-018
Furnace Packer (elec. equip.) 543.666-010
furnace repairer helper (any industry) 869.687-030
furnace-room supervisor (paint & varnish) 559.132-110
FURNACE-STOCK INSPECTOR (elec. equip.) 559.364-010
furnace tender (construction) 869.685-010
furnace tender (forging) 619.682-022
FURNACE TENDER (foundry; nonfer. metal) 512.685-010
furnace tender (foundry) 512.662-010
furnace tender (paint & varnish) 572.685-010
Furnace Unloader (elec. equip.) 543.666-010
furnace worker (any industry) 869.281-010
FURNACE WORKER (elec. equip.) 543.666-010
FUR NAILER (fur goods) 783.684-014
furnishings conservator (museums) 763.380-010
FURNITURE ASSEMBLER (furniture) 763.684-038
FURNITURE ASSEMBLER-AND-INSTALLER (retail trade) 739.684-082
furniture cleaner (furniture) 709.687-014
FURNITURE CLEANER (laundry & rel.) 362.684-022
FURNITURE DESIGNER (furniture) 142.061-022
FURNITURE FINISHER (woodworking) 763.381-010
FURNITURE-FINISHER APPRENTICE (woodworking) 763.381-014
furniture mover (motor trans.) 905.687-014
furniture-mover driver (motor trans.) 905.663-018
Furniture Packer (retail trade) 920.587-018
furniture refinisher (woodworking) 763.381-010
FURNITURE-RENTAL CONSULTANT (retail trade) 295.357-018
FURNITURE REPRODUCER (furniture) 149.281-010
FURNITURE RESTORER (museums) 763.380-010
furniture shampooer (laundry & rel.) 362.684-022
FURNITURE UPHOLSTERER (any industry) 780.381-018
FURNITURE-UPHOLSTERER APPRENTICE (any industry) 780.381-022
fur operator (fur goods) 783.682-010
FUR PLUCKER (leather mfg.) 585.681-014
Fur-Polishing-Machine Operator (laundry & rel.) 369.685-022
Fur Puller (leather mfg.) 589.686-022
fur repairer (fur goods) 783.261-010
FUR-REPAIR INSPECTOR (retail trade) 783.387-010
FURRIER (fur goods) 783.261-010
furrier (laundry & rel.) 362.684-014
fur scraper (leather mfg.) 585.681-010
fur sewer (fur goods) 783.682-010
fur sewer (fur goods) 783.381-014
FUR SORTER (fur goods) 783.384-010
FUR-STORAGE CLERK (retail trade) 369.367-010
Fur Stretcher (leather mfg.) 589.686-022
fur tailor (fur goods) 783.261-010
fur tailor (fur goods) 783.381-014
fur tinter (leather mfg.) 783.681-010
fur trapper (fishing & hunt.) 461.684-014
FUR TRIMMER (fur goods) 783.687-014
fur-trimming machine operator (hat & cap) 585.685-046
fur-vault attendant (retail trade) 369.367-010
fur weigher (hat & cap) 586.686-018
FUSE ASSEMBLER (ordnance) 737.684-022
FUSE-CUP EXPANDER (ordnance) 694.685-022
FUSE MAKER (chemical) 559.685-094
FUSING-FURNACE LOADER (optical goods) 573.686-014
Fusing-Line Inspector (optical goods) 716.687-018
FUSING-MACHINE FEEDER (garment) 583.686-014
FUSING-MACHINE TENDER (garment; knitting) 583.685-046
Fusion-Juncture Grinder (optical goods) 716.685-022

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Gaffer (fishing & hunt.) 443.684-010
gaffer (glass mfg.) 772.381-022
Gaging-Machine Operator (ordnance) 737.685-010
Gag-Press Straightener (steel & rel.) 617.482-026
Gag Writer (profess. & kin.) 131.067-026
GALLEY STRIPPER (print. & pub.) 973.681-010
galvanizer (any industry) 503.685-030
Galvanizer, Zinc (galvanizing) 501.685-010
galvanizing dipper (galvanizing) 501.685-010
Galvanometer Assembler (elec. equip.) 729.384-010
gambling broker (amuse. & rec.) 249.587-010
GAMBLING DEALER (amuse. & rec.) 343.464-010
GAMBLING MONITOR (amuse. & rec.) 343.367-014
GAMBRELER (meat products) 525.687-030
GAMBRELER HELPER (meat products) 525.687-034
game and fish protector (government ser.) 379.167-010
GAME ATTENDANT (amuse. & rec.) 342.657-014
GAME-BIRD FARMER (agriculture) 412.161-010
GAME-FARM HELPER (agriculture) 412.684-010
GAMEKEEPER (agriculture) 169.171-010
game operator (amuse. & rec.) 342.657-014
Game Protector (government ser.) 379.167-010
game show host/hostess (radio-tv broad.) 159.147-018
game warden (government ser.) 379.167-010
GAMMA-FACILITIES OPERATOR (profess. & kin.) 015.362-014
Gang-Bore Operator (woodworking) 666.382-010
gang boss (petrol. refin.) 899.137-018
gang boss (water trans.) 911.137-018
gang-drill-press operator (machine shop) 606.380-010
Gang-Hemstitching-Machine Operator (tex. prod., nec) 787.685-018
gang leader (any industry) see STRAW BOSS
gang-punch operator (boot & shoe) 690.685-114
gang pusher (petrol. refin.) 899.137-018
gang rider (any industry) 932.664-010
Gang-Ripsaw Operator (woodworking) 667.682-066
gang-saw operator (stonework) 670.362-010
GANG SAWYER (saw. & plan.) 667.682-030
GANG SAWYER, STONE (stonework) 670.362-010
gang supervisor, pipe lines (petrol. & gas) 862.131-022
Gang-Vibrator Operator (construction) 853.663-014
gang worker (petrol. & gas) 869.684-046
Gantry Crane Operator (any industry) 921.663-010
Garage-Door Hanger (construction) 860.381-022
garage mechanic (automotive ser.) 620.261-010
GARAGE SERVICER, INDUSTRIAL (any industry) 915.687-014
GARBAGE-COLLECTION SUPERVISOR (motor trans.) 909.137-014
GARBAGE COLLECTOR (motor trans.) 955.687-022
GARBAGE COLLECTOR DRIVER (motor trans.) 905.663-010
GARDE MANGER (hotel & rest.) 313.361-034
garde manger (water trans.) 315.381-014
gardener (any industry) 406.684-014
Gardener (domestic ser.) 301.687-018
gardener-florist (agriculture; museums) 406.684-018
GARDENER, SPECIAL EFFECTS AND INSTRUCTION MODELS (motion picture; museums) 406.381-010
garden farmer (agriculture) 402.161-010
Garden-Hose Tuber-Machine Operator (rubber goods) 690.662-014
garden worker (agriculture) 402.687-010
GARDEN WORKER (agriculture; museums) 406.684-018
GARLAND-MACHINE OPERATOR (fabrication, nec) 692.685-090
GARMENT-ALTERATION EXAMINER (retail trade) 789.687-078
garment examiner (laundry & rel.) 369.687-022
garment finisher (any industry) 782.684-058
GARMENT FITTER (retail trade) 785.361-014
GARMENT FOLDER (garment; knitting) 789.687-066
GARMENT INSPECTOR (any industry) 789.687-070
Garment Looper (knitting) 689.682-010
garment maker (garment) see CLOTHING MAKER
garment marker (laundry & rel.) 369.687-026
Garment-Parts Cutter, Hand (garment) 781.684-074
Garment-Parts Cutter, Machine (garment) 781.684-014
Garment Ripper, Alterations (garment) 782.687-038
garment sewer, hand (any industry) 782.684-058
GARMENT SORTER (garment) 222.687-014
GARMENT STEAMER (knitting) 582.685-078
Garment-Tag Stringer (paper goods) 794.687-054
GARMENT TURNER (garment; knitting) 789.687-074
Garment Weigher (knitting) 222.387-074
GARNETTER (furniture; tex. prod., nec) 680.685-054
garnetter (textile) 680.685-050
Garnett Feeder (tex. prod., nec) 680.686-018
Garnett Fixer (tex. prod., nec) 689.260-010
garnetting-machine operator (textile) 680.685-050
Garnett-Machine-Operator Helper (tex. prod., nec) 586.686-022
GARNETT-MACHINE OPERATOR (textile) 680.685-050
GARNISHER (sugar & conf.) 524.687-014
gas analyst (petrol. refin.) 029.261-022
gas-and-oil checker (motor trans.) 915.587-010
GAS-AND-OIL SERVICER (motor trans.) 915.587-010
gas-anneal feeder (heat treating) 504.685-014
GAS-APPLIANCE SERVICER (any industry) 637.261-018
GAS-APPLIANCE-SERVICER HELPER (any industry) 637.684-010
gasateria attendant (automotive ser.) 915.477-010
GAS CHARGER (svc. ind. mach.) 827.485-010
GAS-CHECK-PAD MAKER (ordnance) 736.684-034
GAS-COMPRESSOR OPERATOR (any industry) 950.382-014
gas-cutting-machine operator (welding) 816.482-010
gas-cylinder inspector (chemical) 953.387-010
Gas-Delivery Driver (petrol. refin., retail trade, wholesale tr.) 903.683-018
gas desulfurizer (steel & rel.) 541.362-010
GAS DISPATCHER (pipe lines; utilities) 953.167-010
GAS-DISTRIBUTION-AND-EMERGENCY CLERK (utilities) 249.367-042
gas-distribution supervisor (utilities) 862.137-010
gas-engine engineer (petrol. & gas) 950.382-022
GAS-ENGINE OPERATOR (any industry) 950.382-018
Gas-Engine Operator, Compressors (any industry) 950.382-018
Gas-Engine Operator, Generators (any industry) 950.382-018
GAS-ENGINE REPAIRER (any industry) 625.281-026
gas fitter (utilities) 953.364-010
gas-fitter helper (any industry) 637.684-010
Gas-Generator Operator (chemical) 559.382-018
Gas Inspector (mine & quarry) 168.267-074
GAS INSPECTOR (utilities) 168.264-018
Gas Inspector, Liquefied (government ser.) 168.264-018
Gasket Attacher (machinery mfg.) 795.687-014
GASKET INSPECTOR (nonmet. min.) 739.687-102
Gasket Molder (rubber goods) 556.685-066
Gasket Notcher (rubber goods) 690.680-010
GASKET SUPERVISOR (wood prod., nec) 569.130-010
GAS-LEAK INSPECTOR (pipe lines; utilities) 953.367-010
GAS-LEAK INSPECTOR HELPER (pipe lines; utilities) 953.667-010
GAS-LEAK TESTER (svc. ind. mach.) 827.584-014
gas-lift engineer (any industry) 950.382-014
GAS-MAIN FITTER (utilities) 862.361-014
GAS-MASK ASSEMBLER (protective dev.) 712.684-022
GAS-MASK INSPECTOR (protective dev.) 712.687-022
gas-meter adjuster (utilities) 710.281-022
GAS-METER CHECKER (utilities) 953.367-014
GAS-METER INSTALLER (utilities) 953.364-010
GAS-METER-INSTALLER HELPER (utilities) 953.687-010
GAS-METER MECHANIC I (utilities) 710.381-022
GAS-METER MECHANIC II (utilities) 710.684-026
GAS-METER PROVER (utilities) 710.281-022
Gas-Meter Reader (utilities) 209.567-010
gas-meter repairer (utilities) 710.684-026
GAS-METER TESTER (utilities) term
Gasoline-Dragline Operator (any industry) 850.683-018
Gasoline-Engine Assembler (engine-turbine) 806.481-014
Gasoline-Engine Inspector (engine-turbine) 806.261-010
gasoline finisher (petrol. refin.) 540.462-010
Gasoline-Locomotive-Crane Operator (any industry) 921.663-038
Gasoline-Power-Shovel Operator (any industry) 850.683-030
Gasoline-Tractor Operator (any industry) 929.683-014
Gasoline-Truck-Crane Operator (any industry) 921.663-062
Gasoline-Truck Operator (any industry) 921.683-050
gas-pit specialist (any industry) 638.381-010
GAS-PUMPING-STATION HELPER (utilities) 953.684-010
GAS-PUMPING-STATION OPERATOR (utilities) 953.382-010
GAS-PUMPING-STATION SUPERVISOR (utilities) 953.137-010
Gas-Refrigerator Servicer (any industry) 637.261-018
GAS-REGULATOR REPAIRER (petrol. refin.; pipe lines; utilities) 710.381-026
GAS-REGULATOR-REPAIRER HELPER (petrol. refin.; pipe lines; utilities) 710.384-010
Gas-Roller Operator (construction) 859.683-030
gas-scrubber operator (chemical) 551.362-010
GASSER (textile) 585.685-050
gas-station attendant (automotive ser.) 915.467-010
Gas-Stove Servicer (any industry) 637.261-018
Gas-Stove-Servicer Helper (any industry) 637.684-010
gas-substation operator (utilities) 953.382-010
gas tender (automotive ser.) 915.467-010
gas tender (steel & rel.) 519.683-014
gas tester (chemical) 549.364-010
GAS-TRANSFER OPERATOR (chemical) 914.585-010
GAS TREATER (any industry) 546.385-010
Gas-Turbine-Powerplant Mechanic (utilities) 631.261-014

Gas-Turbine-Powerplant-Mechanic Helper (utilities) 631.684-010
GAS USAGE METER CLERK (petrol. refin.; pipe lines; utilities) 216.685-010
GAS-WELDING-EQUIPMENT MECHANIC (any industry) 626.381-014
gas worker (chemical) 559.565-010
GATE AGENT (air trans.) 238.367-010
Gate Attendant (amuse. & rec.) 344.667-010
gate cutter (saw. & plan.) 667.482-014
GATE GUARD (any industry) 372.667-030
Gate Guard (r.r. trans.) 376.667-018
gatekeeper (any industry) 372.667-030
gate-mortiser operator (saw. & plan.) 667.482-014
Gate-Shear Operator I (any industry) 615.685-034
Gate-Shear Operator II (any industry) 615.682-018
gate tender (musical inst.) 690.686-042
gatherer (any industry) 787.682-078
GATHERER (glass mfg.) 575.684-026
Gathering-Machine Feeder (print. & pub.) 653.686-026
Gathering-Machine Setter (print. & pub.) 653.360-018
GAUGE-AND-WEIGH-MACHINE ADJUSTER (ordnance) 632.360-010
GAUGE-AND-WEIGH-MACHINE OPERATOR (ordnance) 737.685-010
gauge checker (machine shop) 601.281-018
Gauge Controller (clock & watch) 601.281-022
Gage Maker (machine shop) 601.281-026
GAUGE OPERATOR (fabrication, nec) 692.682-042
gauger (any industry) 609.684-010
GAUGER (beverage) 529.387-022
gauger (beverage) 529.587-010
GAUGER (clock & watch) 715.687-034
gauger (fabrication, nec) 590.685-022
GAUGER (petrol. & gas; petrol. refin.; pipe lines) 914.384-010
GAUGER (protective dev.) 712.687-018
GAUGER, CHIEF (petrol. & gas; petrol. refin.; pipe lines) 914.134-010
gauger, chief delivery (pipe lines) 914.132-022
Gauger, Delivery (pipe lines) 914.384-010
gauntlet pairer (glove & mit.) 784.687-034
gear-and-spline grinder (machine shop) 602.360-010
Gear Burnisher (machine shop) 602.482-010
Gearcase Assembler (engine-turbine) 706.481-010
Gear Cleaner (machine shop) 609.684-014
gear-coding machine operator (machine shop) 602.362-014
gear cutter (machine shop) 602.380-010
gear cutter (machine shop) 602.280-010
GEAR-CUTTING-MACHINE OPERATOR, PRODUCTION (machine shop) 602.685-010
GEAR-CUTTING-MACHINE SET-UP OPERATOR (machine shop) 602.380-010
GEAR-CUTTING-MACHINE SET-UP OPERATOR, TOOL (machine shop) 602.280-010
gear finisher (machine shop) 602.482-010
GEAR-GENERATOR SET-UP OPERATOR, SPIRAL BEVEL (machine shop) 602.382-014
GEAR-GENERATOR SET-UP OPERATOR, STRAIGHT BEVEL (machine shop) 602.382-018
gear-grinding-machine operator (machine shop) 602.382-034
GEAR HOBBER SET-UP OPERATOR (machine shop) 602.382-010
GEAR INSPECTOR (machine shop) 602.362-010
GEAR-LAPPING-MACHINE OPERATOR (machine shop) 602.482-010
gear-machine operator, general (machine shop) 602.380-010
GEAR-MILLING-MACHINE SET-UP OPERATOR (machine shop) 602.382-022
gear nicker (machine shop) 602.482-010
GEAR REPAIRER (water trans.) 623.381-010
Gear Roller (machine shop) 602.362-014
gear shaper (machine shop) 602.280-010
GEAR-SHAPER SET-UP OPERATOR (machine shop) 602.382-026
GEAR-SHAVER SET-UP OPERATOR (machine shop) 602.382-030
GEAR-SORTING-AND-INSPECTING MACHINE OPERATOR (machine shop) 602.362-014
Gear Straightener (auto. mfg.) 617.482-026
gear tester (auto. mfg.) 806.684-134
gear-tooth-grinding-machine operator (machine shop) 602.382-034
gear-tooth-lapping-machine operator (machine shop) 602.482-010
GELATIN-DYNAMITE-PACKING OPERATOR (chemical) 692.662-014
GELATIN MAKER, UTILITY (chemical) 529.382-022
Gelatin-Powder Mixer (beverage) 520.685-146
Gel-Coat Sprayer (ship-boat mfg.; toy-sport equip.) 741.684-026
GEM CUTTER (jewelry-silver.) 770.281-014
gem expert (jewelry-silver.) 199.281-010
GEMOLOGIST (jewelry-silver.) 199.281-010
GENEALOGIST (profess. & kin.) 052.067-018
General Agent (insurance) 250.257-010
GENERAL AGENT, OPERATIONS (air trans.; motor trans.; r.r. trans.) 184.167-042
General-Cargo Clerk (water trans.) 248.367-014
GENERAL CAR SUPERVISOR, YARD (r.r. trans.) 184.167-286
GENERAL CLAIMS AGENT (air trans.; motor trans.; r.r. trans.; water trans.) 186.117-030
General Extra (amuse. & rec.; motion picture; radio-tv broad.) 159.647-014
GENERAL-HANDLING SUPERVISOR (smelt. & refin.) 929.137-010
general helper (aircraft mfg.) 809.687-014
GENERAL HELPER (food prep., nec) 522.686-014
GENERAL HELPER (oils & grease) 529.687-094
GENERAL HELPER (sugar & conf.) 529.686-046
general-labor supervisor (any industry) 899.133-010
GENERAL LEDGER BOOKKEEPER (clerical) 210.382-046
general lot attendant (automotive ser.) 915.667-014
general-maintenance helper (any industry) 899.684-022
General Manager, Broadcasting (radio-tv broad.) 184.117-062
GENERAL MANAGER, FARM (agriculture; wholesale tr.) 180.167-018
general manager, industrial organization (any industry) 189.117-022
general manager, land department (petrol. & gas) 186.117-046
GENERAL MANAGER, ROAD PRODUCTION (amuse. & rec.) 187.117-034
general matcher (textile) 582.687-022
general-office dispatcher (petrol. & gas; petrol. refin.; pipe lines) 914.167-010
GENERAL PRACTITIONER (medical ser.) 070.101-022
general production worker (can. & preserv.; food prep., nec) 529.686-070
General Scrap Worker (nonfer. metal) 519.686-010
general secretary, social welfare (profess. & kin.) 195.117-010
GENERAL SUPERINTENDENT, MILLING (grain-feed mills) 183.167-014
general superintendent, power sales and service (utilities) 163.167-022
GENERAL SUPERVISOR (any industry) 183.167-018
GENERAL SUPERVISOR (beverage) 183.167-022
general teller (financial) 211.362-018
general utility helper (sugar & conf.) 529.686-034
general utility machine operator (sugar & conf.) 529.382-014
general utility worker (utilities) 952.687-010
GENERAL WORKER, LITHOGRAPHIC (print. & pub.) 979.687-034
general worker (tex. prod., nec) 586.686-022
generating-substation-operator assistant (utilities) 952.367-014
generation-mechanic helper (utilities) 631.684-010
GENERATOR OPERATOR (utilities) term
generator operator, straight-bevel gear (machine shop) 602.382-018
generator-switchboard operator (utilities) 952.362-034
Generator Tender, Portable (construction) 869.665-010
GENETICIST (profess. & kin.) 041.061-050
GEODESIST (profess. & kin.) 024.061-014
GEODETIC COMPUTATOR (profess. & kin.) 018.167-014
Geoduck Diver (fishing & hunt.) 443.664-010
GEOGRAPHER (profess. & kin.) 029.067-010
GEOGRAPHER, PHYSICAL (profess. & kin.) 029.067-014
GEOLOGICAL AIDE (petrol. & gas) 024.267-010
Geological Engineer (profess. & kin.) 024.061-018
GEOLOGIST (profess. & kin.) 024.061-018
GEOLOGIST, PETROLEUM (petrol. & gas) 024.061-022
Geomagnetician (profess. & kin.) 024.061-030
Geomorphologist (profess. & kin.) 024.061-018
GEOPHYSICAL-LABORATORY CHIEF (profess. & kin.) 024.167-010
geophysical operator (petrol. & gas) 010.161-018
GEOPHYSICAL PROSPECTOR (petrol. & gas) 024.061-026
GEOPHYSICIST (profess. & kin.) 024.061-030
Geothermal-Powerplant Mechanic (utilities) 631.261-014
Geothermal-Powerplant-Mechanic Helper (utilities) 631.684-010
Geothermal-Powerplant Supervisor (utilities) 631.131-010
Geriatric Nurse Assistant (medical ser.) 355.674-014
Germ Drier (grain-feed mills) 523.685-058
GERMINATION WORKER (beverage) 522.585-014
GETTERER (light. fix.) 725.687-022
getterer (light. fix.) 509.685-026
GETTERING-FILAMENT-MACHINE OPERATOR (light. fix.) 509.685-026
getter operator (light. fix.) 509.685-026
Gherkin Pickler (can. & preserv.) 522.684-010
Giant-Tire Repairer (automotive ser.) 915.684-010
GIFT WRAPPER (retail trade) 299.364-014
gigger (textile) 585.685-054
GIG TENDER (textile) 585.685-054
GILDER (any industry) 749.381-010
gilder (pottery & porc.) 740.681-010
Gill-Box Fixer (textile) 689.260-010
GILL-BOX TENDER (textile) 680.685-058
Gill-Net Stringer (tex. prod., nec) 782.684-026
gill tender (textile) 680.685-058
Gimp-Buttonhole-Machine Operator (garment) 786.685-014
gimp tacker (furniture) 780.684-126
GIN CLERK (agriculture) 221.467-010
gin feeder (furniture) 680.685-078
Gin Inspector (beverage) 522.667-010
GINNER (agriculture) 459.685-010
ginner (oils & grease) 521.685-198
Gin-Pole Operator (construction) 921.663-030
Ginseng Farmer (agriculture) 404.161-010

GIRDLER (jewelry-silver.) 770.261-014
Gizzard-Skin Remover (meat products) 525.687-074
glazing-machine tender (textile) 585.685-078
Glaciologist (profess. & kin.) 024.061-030
glass artist (glass mfg.; glass products) 740.381-010
glass-bead maker (jewelry-silver.) 770.381-010
glass bender (cutlery-hrdwr.) 573.686-018
GLASS BENDER (fabrication, nec) 772.381-010
glass bender (glass mfg.) 575.685-054
glass blower (fabrication, nec) 772.381-010
GLASS BLOWER (glass mfg.) 772.381-022
glass blower (jewelry-silver.) 770.381-010
GLASS BLOWER, LABORATORY APPARATUS (glass products; inst. & app.) 772.281-010
glass blower, machine forming (glass mfg.) 575.382-014
GLASS-BLOWING-LATHE OPERATOR (glass products) 772.482-010
glass breaker (glass mfg.) 779.684-054
glass breaker (glass products) 779.687-010
glass buffer (glass mfg.) 775.684-038
GLASS-BULB-MACHINE ADJUSTER (glass mfg.) 575.360-010
GLASS-BULB-MACHINE FORMER, TUBULAR STOCK (glass mfg.) 575.382-018
GLASS-BULB SILVERER (glass products) 779.687-018
GLASS CALIBRATOR (glass products) 775.584-010
GLASS CHECKER (optical goods) 716.687-014
GLASS-CLEANING-MACHINE TENDER (glass products) 579.685-018
glass crusher (glass mfg.) 570.685-026
glass curvature gauger (cutlery-hrdwr.) 701.687-022
GLASS-CUT-OFF SUPERVISOR (glass mfg.) 677.131-010
GLASS CUT-OFF TENDER (glass mfg.) 677.685-030
GLASS CUTTER (any industry) 775.684-022
glass cutter, hand (glass mfg.) 779.684-054
GLASS CUTTER, HAND (optical goods) 716.681-014
GLASS-CUTTER HELPER (any industry) 775.687-018
GLASS CUTTER, OVAL OR CIRCULAR (glass mfg.) 779.684-022
GLASS-CUTTING-MACHINE FEEDER (glass products) 677.686-014
GLASS-CUTTING-MACHINE OPERATOR, AUTOMATIC (glass mfg.) 677.562-010
glass-cylinder flanger (inst. & app.) 712.684-018
GLASS DECORATOR (glass mfg.; glass products) 775.381-014
Glass Deposition Tender (electron. comp.) 590.685-086
GLASS DRILLER (glass mfg.) 775.687-014
Glass Enamel Mixer (paint & varnish) 550.685-078
Glass Etcher (glass mfg., glass products) 775.381-014
glass etcher (optical goods) 716.681-022
glass-etcher helper (glass products) 779.687-038
GLASS FINISHER (glass products) 775.684-026
GLASS-FURNACE TENDER (paint & varnish) 572.685-010
glass grinder (cutlery-hrdwr.) 673.685-066
GLASS GRINDER (glass mfg.) 775.684-034
GLASS GRINDER (glass products) 775.684-030
GLASS GRINDER, LABORATORY APPARATUS (glass products; inst. & app.) 775.382-010
Glassine-Machine Tender (any industry) 920.685-078
glass inserter (woodworking) 865.684-014
GLASS INSPECTOR (any industry) 579.687-022
glass inspector (glass products) 779.687-022
GLASS INSTALLER (woodworking) 865.684-014
GLASS INSTALLER (automotive ser.) 865.684-010
GLASS-LATHE OPERATOR (electron. comp.) 674.382-010
GLASS-LINED TANK REPAIRER (beverage) 779.684-026
Glass-Loading-Equipment Tender (glass mfg.) 677.665-010
glass marker (cutlery-hrdwr.) 775.684-046
Glass-Mold Repairer (glass mfg.) 519.684-018
Glass-Novelty Maker (glass products) 770.381-010
GLASS POLISHER (glass mfg.) 775.684-038
glass-products inspector (glass mfg.) 579.687-030
glass pulverizer equipment operator (glass mfg.) 570.685-026
GLASS-RIBBON-MACHINE OPERATOR (glass mfg.) 575.362-014
GLASS-RIBBON-MACHINE-OPERATOR ASSISTANT (glass mfg.) 575.365-010
GLASS-ROLLING-MACHINE OPERATOR (glass mfg.) 575.382-022
glass sagger (glass mfg.) 575.685-054
GLASS SANDER, BELT (glass products) 775.684-042
Glass Scullion (water trans.) 318.687-014
glass setter (construction) 865.381-010
glass setter (cutlery-hrdwr.) 701.684-018
glass setter (woodworking) 865.684-014
glass smoother (glass mfg.) 775.684-038
glass technician (glass products) 006.261-010
glass technologist (glass mfg.) 772.687-010
glass technologist (glass products; inst. & app.) 772.281-010
glass technologist (glass products) 006.261-010
GLASS TINTER (glass products) 840.684-010
glass-tube bender (fabrication, nec) 772.381-010
GLASS-UNLOADING-EQUIPMENT TENDER (glass mfg.) 677.665-010
GLASS-VIAL-BENDING-CONVEYOR FEEDER (cutlery-hrdwr.) 573.686-018
glassware engraver (glass products) 775.381-010
glassware finisher (glass mfg.) 772.381-018
Glassware-Maker Demonstrator (retail trade) 297.354-010
Glass Washer And Carrier (hotel & rest.) 311.677-018
Glass Washer, Laboratory (any industry) 381.687-022
GLASS-WOOL-BLANKET-MACHINE FEEDER (glass products) 579.685-022
glassworker (construction) 865.381-010
GLASS-WORKER, PRESSED OR BLOWN (glass mfg.) 772.687-010
GLAZE HANDLER (brick & tile) 571.685-014
GLAZE MAKER (brick & tile; pottery & porc.) 570.685-098
glazer (sugar & conf.) 524.382-010
glazer (textile) 583.685-126
Glaze Sprayer (auto. mfg.) 741.684-026
GLAZE SUPERVISOR (brick & tile) 574.130-010
GLAZE SUPERVISOR (pottery & porc.) 574.132-010
Glaze Wiper (furniture) 742.687-010
glazier (automotive ser.) 865.684-010
GLAZIER (construction) 865.381-010
GLAZIER (inst. & app.) 712.684-026
glazier (woodworking) 865.684-014
GLAZIER APPRENTICE (construction) 865.381-014
glazier artist (glass products) 779.381-010
Glazier Helper (construction) 869.664-014
GLAZIER, METAL FURNITURE (furniture) 865.684-018
glazier, plate glass (construction) 865.381-010
GLAZIER, STAINED GLASS (glass products) 779.381-010
Glazier, Structural Glass (construction) 865.381-010
GLAZIER SUPERVISOR (construction) 865.131-010
GLAZING-MACHINE OPERATOR (glass mfg.) 573.685-018
Glazing-Machine Operator (leather mfg.) 583.685-094
glazing-machine operator (textile) 583.685-126
GLAZING OPERATOR, BLACK POWDER (chemical) 550.686-022
gleason-gear generator (machine shop) 602.382-014
GLOBE MOUNTER (print. & pub.) 795.684-018
glosser (sugar & conf.) 524.382-010
Glost-Kiln Drawer (pottery & porc.) 573.667-010
Glost-Kiln Placer (pottery & porc.) 573.686-026
Glost-Tile Burner (brick & tile) 573.382-018
glost-tile shader (brick & tile) 574.367-010
glost tile sorter (brick & tile) 573.687-038
GLOVE CLEANER, HAND (laundry & rel.) 362.687-010
Glove Cutter (glove & mit.; leather prod.) 781.687-030
glove finisher (glove & mit.; laundry & rel.) 363.687-010
GLOVE FORMER (glove & mit.; laundry & rel.) 363.687-010
GLOVE PAIRER (glove & mit.) 784.687-034
Glove-Parts Cutter (glove & mit.) 699.682-022
GLOVE-PARTS INSPECTOR (glove & mit.) 781.687-034
glove presser (glove & mit.; laundry & rel.) 363.687-010
GLOVE PRINTER (glove & mit.) 652.685-034
GLOVE SEWER (glove & mit.) 784.682-010
Glove Tagger (glove & mit.) 652.685-094
GLOVE TURNER (glove & mit.) 784.687-038
Glove Turner-And-Former (glove & mit.) 784.687-038
glove turner and former (glove & mit.; laundry & rel.) 363.687-010
GLOVE TURNER AND FORMER, AUTOMATIC (glove & mit.) 583.686-018
GLUCOSE-AND-SYRUP WEIGHER (sugar & conf.) 520.686-026
glue-bone crusher (chemical) 555.685-014
glue-bone drier (chemical) 553.685-022
glue-drier operator (chemical) 553.685-118
GLUED WOOD TESTER (woodworking) 762.384-010
Glue-Jointer Feeder (woodworking) 669.686-030
Glue-Jointer Operator (woodworking) 665.682-042
glue-machine feeder (leather prod.) 690.686-022
GLUE-MACHINE OPERATOR (pen & pencil) 692.685-094
GLUE MAKER, BONE (chemical) 559.382-022
GLUE-MILL OPERATOR (chemical) 559.685-098
GLUE MIXER (any industry) 550.685-062
glue mixer (chemical) 550.564-010
glue-mixer operator (wood prod., nec) 560.465-010
glue-plant operator (wood prod., nec) 560.465-010
GLUER (any industry) 795.687-014
gluer (boot & shoe) 788.687-030
gluer (print. & pub.) 795.684-022
GLUER (woodworking) 762.687-034
GLUER AND SLICER, HAND (paper goods) 794.687-030
GLUER-AND-WEDGER (woodworking) 762.687-038
GLUER, WET SUIT (plastic prod.) 795.687-018
GLUE-SIZE-MACHINE OPERATOR (furniture) 562.685-010
Glue Spreader (furniture) 795.687-014
glue spreader helper (millwork-plywood) 762.687-026
glue-spreader operator (millwork-plywood; wood prod., nec) 569.685-042
GLUE SPREADER, VENEER (millwork-plywood; wood prod., nec) 569.685-042
GLUE-SPREADING-MACHINE OPERATOR (leather prod.) 584.665-014

Gluing-Machine Adjuster (paper goods) 649.380-010
GLUING-MACHINE FEEDER (woodworking) 569.686-038
GLUING-MACHINE OFFBEARER (woodworking) 569.686-022
GLUING-MACHINE OPERATOR (rubber goods) 692.685-098
GLUING-MACHINE OPERATOR (woodworking) 569.685-046
GLUING-MACHINE OPERATOR, AUTOMATIC (print. & pub.) 641.682-014
GLUING-MACHINE OPERATOR, ELECTRONIC (woodworking) 569.685-050
GLUTEN-SETTLING TENDER (grain-feed mills) 521.685-150
Glycerin Operator (soap & rel.) 552.685-014
Glycol Service Operator (plastic-synth.) 914.682-010
Goal Umpire (amuse. & rec.) 153.267-018
Goat Farmer (agriculture) 410.161-018
GOAT HERDER (agriculture) 410.687-014
GOAT-TRUCK DRIVER (agriculture) term
Goggles Assembler (rubber goods) 752.684-038
Gold-And-Silver Assayer (profess. & kin.) 022.281-010
gold bander, striper (pottery & porc.) 679.682-010
GOLDBEATER (metal prod., nec) 700.381-018
GOLD BURNISHER (pottery & porc.) 775.687-022
gold charmer (any industry) 749.381-010
GOLD CUTTER (metal prod., nec) 700.684-038
gold-leaf gilder (any industry) 749.381-010
gold-leaf printer (any industry) 652.682-030
gold marker (any industry) 652.682-030
GOLD-NIB GRINDER (pen & pencil) 705.682-010
Gold Plater (electron. comp.) 500.684-026
Gold Plater (electroplating) 500.380-010
GOLD RECLAIMER (metal prod., nec) 709.685-010
Goldsmith (jewelry-silver.) 700.281-010
gold stamper (any industry) 652.682-030
GOLF-BALL-COVER TREATER (toy-sport equip.) 559.685-102
Golf Ball Molder (toy-sport equip.) 556.685-066
GOLF-BALL TRIMMER (toy-sport equip.) 732.587-010
Golf-Ball Winder (toy-sport equip.) 692.685-246
golf caddie (amuse. & rec.) 341.677-010
golf-cart mechanic (amuse. & rec.; automotive ser.) 620.261-026
GOLF-CLUB ASSEMBLER (toy-sport equip.) 732.684-078
GOLF-CLUB FACER (toy-sport equip.) 761.684-010
Golf-Club Finisher (toy-sport equip.) 732.381-022
GOLF-CLUB HEAD FORMER (toy-sport equip.) 732.381-018
Golf-Club Maker (toy-sport equip.) 732.381-022
golf-club matcher (toy-sport equip.) 732.587-014
GOLF-CLUB REPAIRER (toy-sport equip.) 732.381-022
GOLF-CLUB WEIGHER (toy-sport equip.) 732.587-014
GOLF-CLUB WEIGHTER (toy-sport equip.) 732.687-026
golf-course patroller (amuse. & rec.) 379.667-010
GOLF-COURSE RANGER (amuse. & rec.) 379.667-010
Golf-Course Starter (amuse. & rec.) 341.367-010
GOLF-RANGE ATTENDANT (amuse. & rec.) 341.683-010
GOLF-SHOE-SPIKE ASSEMBLER (boot & shoe) 788.687-054
golf-stud riveter (boot & shoe) 788.687-054
GOODS LAYER (textile) 781.687-038
GOODWILL AMBASSADOR (business ser.) 293.357-018
Gore Inserter (boot & shoe) 690.682-082
Gore Stapler (boot & shoe) 690.685-162
goring cutter (boot & shoe) 788.687-042
governor assembler (elec. equip.) 609.682-022
Governor Assembler (engine-turbine) 706.481-010
GOVERNOR ASSEMBLER, HYDRAULIC (elec. equip.) 721.381-018
grade and center marker (toy-sport equip.) 732.381-014
GRADE CHECKER (construction) 850.467-010
GRADER (can. & preserv.) 529.687-098
Grader (construction) 869.687-026
grader (leather mfg.) 585.684-010
grader (leather mfg.) 589.387-010
GRADER (woodworking) 669.687-030
GRADER, DRESSED POULTRY (meat products) 529.687-102
grade recorder (education) 219.467-010
GRADER, GREEN MEAT (meat products) 529.687-106
GRADER MARKER (garment) 781.381-034
GRADER, MEAT (meat products) 525.387-010
grader operator (any industry) 850.683-010
Grader, Sausage And Wiener (meat products) 920.587-018
GRADER TENDER (agriculture) 521.685-154
Grade Tamper (construction) 869.687-026
GRADING CLERK (education) 219.467-010
grading-machine feeder (can. & preserv.) 521.685-318
GRADUATE ASSISTANT (education) 090.227-014
graduate tucker (any industry) 787.682-082
grain blender (grain-feed mills) 520.485-014
grain cleaner (grain-feed mills) 521.685-254
Grain-Cleaner-And-Transfer Operator (beverage) 521.362-014
Grain Distributor (grain-feed mills) 921.662-018
GRAIN DRIER (beverage) 523.685-086
GRAIN-DRIER OPERATOR (grain-feed mills) 523.685-090
grain-elevator agent (grain-feed mills; wholesale tr.) 162.167-010
GRAIN ELEVATOR CLERK (beverage; grain-feed mills) 222.567-010
Grain-Elevator-Motor Starter (grain-feed mills) 921.685-026
Grain-Elevator Operator (grain-feed mills) 921.662-018
Grainer (jewelry-silver.) 700.687-058
GRAINER, MACHINE (any industry) 652.686-014
grain farmer (agriculture) 401.161-010
Graining-Machine Operator (leather mfg.) 583.685-094
Graining Operator (chemical) 555.685-066
GRAINING PRESS OPERATOR (chemical) 557.682-010
Grain Miller (beverage) 521.362-014
grain-miller helper (beverage) 521.687-082
GRAIN MIXER (grain-feed mills) 520.485-014
GRAIN PICKER (grain-feed mills) 529.687-110
GRAIN RECEIVER (grain-feed mills) 921.365-010
grain trader (financial; wholesale tr.) 162.157-010
Grain Unloader (grain-feed mills) 921.667-018
Grain Unloader, Machine (grain-feed mills) 921.685-038
GRAIN-WAFER-MACHINE OPERATOR (bakery products) 523.685-094
grain weigher (beverage; grain-feed mills) 222.567-010
Granite Carver (stonework) 771.281-014
granite cutter apprentice (stonework) 771.381-010
granite polisher apprentice (stonework) 673.382-022
Granite Polisher, Hand (stonework) 775.664-010
Granite Polisher, Machine (stonework) 673.382-018
granite sandblaster apprentice (stonework) 673.382-014
Granite Setter (construction) 861.381-038
GRANT COORDINATOR (profess. & kin.) 169.117-014
Granular Operator (chemical) 553.685-090
Granulated-Tobacco Screener (tobacco) 521.685-270
granulating blender (tobacco) 520.387-010
GRANULATING-MACHINE OPERATOR (tobacco) 521.685-158
granulator (pharmaceut.) 559.382-026
GRANULATOR-MACHINE OPERATOR (pharmaceut.) 559.382-026
granulator operator (chemical) 555.685-042
GRANULATOR OPERATOR (sugar & conf.) 523.685-098
granulator operator (tobacco) 521.685-158
GRANULATOR TENDER (steel & rel.) 519.665-010
granulizing-machine operator (food prep., nec) 521.685-078
grape crusher (beverage) 521.685-094
Grape Grower (agriculture) 403.161-014
graphic artist (profess. & kin.) 141.061-022
graphic arts technician (print. & pub.) 979.382-018
GRAPHIC DESIGNER (profess. & kin.) 141.061-018
Graphite-Disk Assembler (rubber goods) 752.684-038
graphite-mill operator (steel & rel.) 549.685-026
GRAPHITE PAN-DRIER TENDER (nonmet. min.) 549.685-014
GRAPHOLOGIST (profess. & kin.) 199.267-038
grapple operator (logging) 921.683-058
Grapple Operator Helper (logging) 921.687-022
Grapple-Yarder Operator (logging) 921.663-066
Grass Farmer (agriculture) 405.161-014
Grass-Farm Laborer (agriculture) 405.687-014
GRATED-CHEESE MAKER (dairy products) 521.685-162
grating-machine operator (dairy products) 521.685-162
gravedigger (real estate) 406.684-010
GRAVEL INSPECTOR (construction) 859.281-010
GRAVES REGISTRATION SPECIALIST (military ser.) 355.687-014
Gravity-Meter Observer (mine & quarry; petrol. & gas) 010.261-018
gravity-prospecting operator (petrol. & gas) 010.261-018
gravity-prospecting-operator helper (petrol. & gas) 939.663-010
Gravity Prospector (petrol. & gas) 024.061-026
GRAY-CLOTH TENDER, PRINTING (textile) 652.686-018
Gray Mixing Operator (tex. prod., nec) 680.850-010
gray tender (textile) 652.686-018
GREASE-AND-TALLOW PUMPER (oils & grease) 559.585-014
GREASE BUFFER (jewelry-silver.) 705.684-022
Grease-Machine Worker (smelt. & refin.) 519.565-014
GREASE MAKER (petrol. refin.) 549.682-010
GREASE MAKER, HEAD (petrol. refin.) 549.132-010
grease-press helper (oils & grease) 551.686-018
GREASER (agric. equip.) 624.684-010
greaser (any industry) 699.687-018
greaser (automotive ser.) 915.687-018
greaser (brick & tile) 575.665-014
Greaser (leather mfg.) 589.686-022
Greaser (metal prod., nec) 706.684-090
GREASER (ordnance) 736.687-010
greaser and oiler (any industry) 699.687-018
GREASE-REFINER OPERATOR (oils & grease) 551.685-086
grease remover (any industry) 503.685-030
GREASER OPERATOR (hat & cap) 582.685-082
Green-Chain Marker (saw. & plan.) 669.687-030
GREEN-CHAIN OFFBEARER (millwork-plywood) 663.686-018

Green-Chain Offbearer (saw. & plan.) 669.686-018
GREEN-COFFEE BLENDER (food prep., nec) 520.685-110
green-hide inspector (meat products) 525.687-042
Greenhouse Laborer (agriculture) 405.687-014
green house manager (agriculture) 405.131-010
Greenhouse Superintendent (agriculture) 405.131-010
Greenhouse Worker (agriculture) 405.684-014
GREEN INSPECTOR (elec. equip.) 726.367-010
Green-Lumber Grader (woodworking) 669.687-030
green-meat packer (meat products) 522.687-034
green-pipe inspector (brick & tile) 575.687-030
Green-Prize Packer (tobacco) 920.687-142
greenskeeper, head (any industry) 406.137-010
GREENSKEEPER I (any industry) 406.137-010
GREENSKEEPER II (any industry) 406.683-010
Greens Planter (motion picture) 406.381-010
GREENS TIER (wholesale tr.) 920.687-094
GREEN-TIRE INSPECTOR (rubber tire) 750.684-018
Greige-Goods Examiner (textile) 689.685-038
Greige-Goods Inspector (knitting) 789.687-070
GREIGE-GOODS MARKER (textile) 229.587-010
greige-goods worker (textile) see GREIGE-ROOM WORKER
Greige Mender (knitting) 782.684-030
GREIGE-ROOM WORKER (textile) term
grey inspector (knitting) 684.684-010
Grid Caster (elec. equip.) 502.684-010
grid-casting-machine-operator helper (elec. equip.) 502.686-010
Grid Inspector (elec. equip.) 502.687-018
grid-pasting-machine operator (elec. equip.) 505.482-010
grinder (office machines) 690.385-010
GRINDER (plastic prod.; plastic-synth.) 555.685-026
grinder (pottery & porc.) 774.684-010
Grinder (recording) 559.686-010
GRINDER (rubber goods; rubber reclaim.) 555.685-030
grinder (ship-boat mfg.) 809.684-022
grinder-and-honer operator, automatic (cutlery-hrdwr.) 603.685-058
grinder and plater (print. & pub.) 500.381-010
Grinder, Belt (any industry) 705.684-026
Grinder, Brake Lining (nonmet. min.) 579.687-010
GRINDER, CARBON PLANT (smelt. & refin.) 544.565-010
GRINDER-CHIPPER I (any industry) 705.684-030
GRINDER-CHIPPER II (any industry) 809.684-026
grinder-dresser (any industry) 705.684-030
GRINDER, GEAR (machine shop) 602.382-034
GRINDER, HAND (button & notion) 734.687-054
grinder, hand (machine shop) 603.280-014
grinder, hand (machine shop) 603.280-022
grinder, hand (machine shop) 603.280-010
GRINDER, HAND (optical goods) 716.685-018
GRINDER, HARDBOARD (wood prod., nec) 569.682-010
GRINDER I (any industry) 705.684-026
GRINDER I (clock & watch) 603.482-030
Grinder II (any industry) 705.684-030
GRINDER II (clock & watch) 715.685-030
Grinder III (any industry) 701.381-018
Grinder IV (any industry) 809.684-026
GRINDER, LAP (clock & watch) 603.685-066
Grinder, Lead (auto. mfg.) 705.684-026
GRINDER MACHINE SETTER (machine shop) 603.380-010
GRINDER-MILL OPERATOR (smelt. & refin.) 519.485-010
grinder, needle tip (comm. equip.) 770.382-014
grinder operator (cement) 570.685-046
GRINDER OPERATOR (chemical) 555.685-034
GRINDER OPERATOR (grain-feed mills) 521.682-026
GRINDER OPERATOR (grain-feed mills) 521.685-166
grinder operator (machine shop) 603.280-038
grinder operator (paint & varnish) see PAINT GRINDER
grinder operator (toy-sport equip.) 662.685-010
GRINDER OPERATOR, AUTOMATIC (cutlery-hrdwr.) 603.685-058
GRINDER OPERATOR, EXTERNAL, TOOL (machine shop) 603.280-010
GRINDER OPERATOR, SURFACE, TOOL (machine shop) 603.280-014
GRINDER OPERATOR, TOOL (machine shop) 603.280-018
grinder, outside diameter (clock & watch) 770.684-010
grinder, rough (any industry) 809.684-026
GRINDER SET-UP OPERATOR (machine shop) 603.382-
GRINDER SET-UP OPERATOR, CENTERLESS (machine shop) 603.382-014
Grinder Set-Up Operator, External (machine shop) 603.382-034
GRINDER SET-UP OPERATOR, GEAR, TOOL (machine shop) 602.360-010
Grinder Set-Up Operator, Internal (machine shop) 603.382-034
GRINDER SET-UP OPERATOR, INTERNAL (machine shop) 603.280-022
GRINDER SET-UP OPERATOR, JIG (machine shop) 603.280-026
Grinder Set-Up Operator, Surface (machine shop) 603.382-034
Grinder Set-Up Operator, Thread (machine shop) 603.382-034
GRINDER SET-UP OPERATOR, THREAD TOOL (machine shop) 603.260-010
GRINDER SET-UP OPERATOR, UNIVERSAL (machine shop) 603.280-030
grinder, watch parts (clock & watch) 603.482-030
Grinder, Wheel Or Disc (any industry) 705.684-026
grinding machine operator (electron. comp.) 673.382-026
grinding-machine operator (office machines) 690.385-010
GRINDING-MACHINE OPERATOR, AUTOMATIC (button & notion) 690.685-194
GRINDING-MACHINE OPERATOR, PORTABLE (r.r. trans.) 910.684-010
GRINDING MACHINE TENDER (machine shop) 603.685-062
grinding-mill operator (mine & quarry; smelt. & refin.) 939.362-014
GRINDING-MILL OPERATOR (mine & quarry; smelt. & refin.) 515.382-010
Grinding Operator (tex. prod., nec) 550.382-014
grinding operator (wood prod., nec) 662.685-026
Grinding-Room Inspector (rubber reclaim.) 559.132-058
Grinding-Room Supervisor (chemical) 559.132-122
GRINDING-WHEEL INSPECTOR (nonmet. min.) 776.487-010
GRIP (amuse. & rec.; radio-tv broad.) 962.684-014
GRIP (motion picture; radio-tv broad.) 962.687-022
GRIP ASSEMBLER (woodworking) 762.684-042
GRIP BOSS (motion picture) 962.137-010
grip checkerer, machine (ordnance) 665.685-034
gripper (toy-sport equip.) 732.684-082
Gripper Attacher (any industry) 699.685-018
GRIP WRAPPER (toy-sport equip.) 732.684-082
gristmiller (grain-feed mills) 521.682-026
Grit-Removal Operator (sanitary ser.) 955.362-010
Grit Station Attendant (sanitary ser.) 955.585-010
GRIZZLY WORKER (mine & quarry; smelt. & refin.) 933.687-010
Grocery Checker (retail trade) 211.462-014
Grocery Clerk (retail trade) 290.477-018
grocery packer (retail trade) 920.687-014
grommet-machine operator (any industry) 699.685-018
grommet maker (any industry) 699.685-018
groove-machine operator (glass mfg.; glass products) 673.682-026
GROOVER (any industry) 692.686-042
GROOVER (nonmet. min.) 673.685-062
Groover (optical goods) 713.684-018
GROOVER-AND-STRIPER OPERATOR (wood prod., nec) 669.685-102
GROOVER AND TURNER (boot & shoe) 690.685-198
groove turner (clock & watch) 715.685-014
GROOVING-LATHE TENDER (plastic prod.) 690.685-202
GROOVING-MACHINE OPERATOR (pen & pencil) 733.685-018
ground equipment mechanic (aircraft mfg.) 809.261-010
Ground Helper (tel. & tel.; utilities) 821.684-014
Ground Helper, Street Railway (r.r. trans.) 821.684-014
Grounding Engineer (utilities) 003.167-054
grounding-machine operator (paper & pulp; paper goods) 534.682-018
ground instructor, advanced (air trans.) 099.227-018
Ground Instructor, Advanced (education) 097.227-010
Ground Instructor, Basic (education) 097.227-010
Ground Instructor, Instrument (education) 097.227-010
GROUND LAYER (pottery & porc.) 574.684-010
GROUND MIXER (chemical) 550.685-066
Grounds Guard, Arboretum (any industry) 372.667-034
GROUNDSKEEPER, INDUSTRIAL-COMMERCIAL (any industry) 406.684-014
Groundskeeper, Parks And Grounds (government ser.) 406.687-010
Ground Wirer (construction) 869.664-014
ground-wood supervisor (paper & pulp) 530.132-022
group assembler (engine-turbine) 706.481-010
group burner, machine (elec. equip.) 727.662-010
Group-Contract Analyst (insurance) 169.267-034
grouper (elec. equip.) 729.687-026
GROUP LEADER (agriculture) 180.167-022
group leader (any industry) see STRAW BOSS
GROUP LEADER (any industry) term
group leader (auto. mfg.) 806.367-010
group leader (social ser.) 195.227-010
GROUP LEADER, PRINTED CIRCUIT BOARD ASSEMBLY (electron. comp.) 726.361-014
GROUP LEADER, PRINTED CIRCUIT BOARD QUALITY CONTROL (electron. comp.) 726.361-018
group leader, river-and-harbor soundings (any industry) 911.667-018
GROUP LEADER, SEMICONDUCTOR PROCESSING (electron. comp.) 590.362-018
GROUP LEADER, SEMICONDUCTOR TESTING (electron. comp.) 726.362-010
group leader, wafer polishing (electron. comp.) 673.364-010
GROUP-SALES REPRESENTATIVE (amuse. & rec.) 259.357-010
group supervisor, yard (any industry) 899.133-010
GROUP WORKER (social ser.) 195.164-010
Grouter Helper (construction) 869.687-026
GROUT-MACHINE TENDER (smelt. & refin.) 519.685-014
Grout-Pump Operator (construction) 849.665-010
Grout Supervisor (construction) 869.131-014
grove superintendent (agriculture) 180.167-058

GROWTH-MEDIA MIXER, MUSHROOM (agriculture) 405.683-014
guard (any industry) 372.667-030
guard (business ser.) 372.667-038
guard (government ser.) 372.667-018
Guard, Captain (any industry) 372.167-014
GUARD, CHIEF (any industry) 372.167-014
Guard, Convoy (any industry) 372.667-034
Guard, Dance Hall (amuse. & rec.) 376.667-010
Guard, Deputy (government ser.) 372.667-018
GUARD, IMMIGRATION (government ser.) 372.567-014
Guard, Lieutenant (any industry) 372.167-014
Guard, Museum (museums) 372.667-034
guard, range (government ser.) 379.167-010
GUARD, SCHOOL-CROSSING (government ser.) 371.567-010
GUARD, SECURITY (any industry) 372.667-034
Guard, Sergeant (any industry) 372.167-014
Guest-History Clerk (hotel & rest.) 203.362-010
Guidance Counselor (education) 045.107-010
GUIDE (personal ser.) 353.367-010
GUIDE, ALPINE (personal ser.) 353.164-010
GUIDE-BASE WINDER, MACHINE (toy-sport equip.) 732.685-022
GUIDE, CHIEF AIRPORT (air trans.) 353.137-010
Guide, Cruise (personal ser.) 353.167-010
Guide, Delegate (personal ser.) 353.367-010
Guide, Domestic Tour (personal ser.) 353.167-010
guide escort (personal ser.) 359.367-010
GUIDE, ESTABLISHMENT (any industry) 353.367-014
guide, excursion (personal ser.) 353.167-010
Guide, Foreign Tour (personal ser.) 353.167-010
GUIDE, HUNTING AND FISHING (amuse. & rec.) 353.161-010
Guide-Installer, Type-Bar-And-Segment (office machines) 706.684-026
guide, itinerary (personal ser.) 353.167-010
GUIDE, PLANT (any industry) 353.367-018
GUIDER (fabrication, nec) 590.686-014
Guide-Rail Cleaner (textile) 699.687-014
GUIDE SETTER (steel & rel.) 613.361-010
GUIDE, SIGHTSEEING (amuse. & rec.; personal ser.) 353.363-010
guide, tour (any industry) 353.367-014
guide, tour (personal ser.) 353.167-010
GUIDE, TRAVEL (personal ser.) 353.167-010
guide, visitor (personal ser.) 353.367-010
guide winder (toy-sport equip.) 732.685-022
GUIDE WINDER (toy-sport equip.) 732.684-086
guillotine cutter (stonework) 677.685-046
Guillotine Operator (pen & pencil) 699.685-014
guillotine operator (tex. prod., nec; textile) 680.686-018
Guinea-Pig Breeder (agriculture) 410.161-010
Guitar Maker, Hand (musical inst.) 730.281-022
Guitar Repairer (any industry) 730.281-026
Gum Coater (sugar & conf.) 524.382-010
Gum Maker (sugar & conf.) 526.382-014
gummed-tape-press operator (paper goods) 640.685-050
gummer (boot & shoe) 788.687-030
Gum Mixer (textile) 550.585-018
GUM PULLER (sugar & conf.) 520.687-038
gum-rolling-machine tender (sugar & conf.) 520.682-022
GUM-SCORING-MACHINE OPERATOR (sugar & conf.) 520.682-022
Gum Sprayer (leather mfg.) 584.687-014
Guncotton Packer (chemical) 920.587-018
GUN EXAMINER (ordnance) 736.281-010
Gun Examiner And Repairer (ordnance) 736.281-010
GUNNER (grain-feed mills) 523.382-010
gun numberer (ordnance) 652.582-010
gun perforator (petrol. & gas) 931.382-010
GUN-PERFORATOR LOADER (petrol. & gas) 931.384-010
GUN-REPAIR CLERK (ordnance) 222.387-022
Gun-Sealing-Machine Operator (electron. comp.) 725.684-022
GUNSMITH (any industry) 632.281-010
GUNSMITH, BALLISTICS LABORATORY (ordnance) 609.260-010
gunstock repairer (ordnance) 761.381-038
Gunstock-Spray-Unit Adjuster (ordnance) 599.382-010
Gunstock-Spray-Unit Feeder (ordnance) 599.686-014
gun striper (any industry) 741.687-022
GUN SYNCHRONIZER (ordnance) 632.381-010
gusset folder (leather prod.) 690.685-178
Gusset Maker (paper goods) 794.684-018
gusset ripper (boot & shoe) 788.687-042
Gut Puller (meat products) 525.687-010
Gut Sorter (meat products) 525.687-010
gutter (meat products) 525.687-010
Gutter-Mouth Cutter (construction) 861.381-038
gut winder (protective dev.) 712.687-034
guyline operator (construction) 850.683-042
GYNECOLOGIST (medical ser.) 070.101-034
gypsum dry-wall systems installer (construction) 842.361-030

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haberdasher (retail trade) 261.357-054
HACKER (brick & tile) 573.686-022
hackler (fabrication, nec) 739.684-086
HACKLER, DOLL WIGS (toy-sport equip.) 731.687-018
Hacksaw Inspector (cutlery-hrdwr.) 709.587-010
hack-saw operator (machine shop) 607.682-010
hair-and-scalp specialist (personal ser.) 339.371-014
Hair Baler (leather mfg.) 920.685-010
hair blender (fabrication, nec) 739.387-014
hair blender (fabrication, nec) 739.384-018
HAIR-BOILER OPERATOR (leather mfg.) 582.685-086
Hair-Brush-Boring-And-Filling-Machine Operator (fabrication, nec) 692.682-018
HAIR CLIPPER, POWER (leather mfg.) 789.684-022
Hair Colorist (personal ser.) 332.271-010
haircutter (personal ser.) 330.371-010
hairdresser (fabrication, nec; personal ser.) 332.361-010
hairdresser (personal ser.) 332.271-018
hair mixer (fabrication, nec) 739.387-014
Hair-Picking-Machine Operator (furniture; tex. prod., nec) 680.685-082
Hairpiece Stylist (fabrication, nec) 332.271-018
HAIR PREPARER (fabrication, nec) 739.384-018
hair-rooting-machine operator (fabrication, nec) 731.685-010
HAIR-SAMPLE MATCHER (fabrication, nec) 739.387-014
HAIR-SPINNING-MACHINE OPERATOR (leather mfg.) 689.686-030
HAIRSPRING ADJUSTER (clock & watch) 715.684-102
HAIRSPRING ASSEMBLER (clock & watch) 715.381-054
HAIRSPRING CUTTER I (clock & watch) 715.687-038
HAIRSPRING CUTTER II (clock & watch) 715.687-042
Hairspring Staker (clock & watch) 715.684-182
HAIRSPRING TRUER (clock & watch) 715.381-058
HAIRSPRING VIBRATOR (clock & watch) 715.381-062
Hairspring Winder (metal prod., nec) 616.685-070
HAIR STYLIST (personal ser.) 332.271-018
Hair Tinter (personal ser.) 332.271-010
HAIR WORKER (fabrication, nec) 739.684-086
Halal Butcher (meat products) 525.361-010
Half-Section Ironer (hat & cap) 583.685-098
Hall Cleaner (hotel & rest.) 381.687-014
hall cleaner (hotel & rest.) 323.687-018
Halver-Machine Operator (can. & preserv.) 521.685-018
Ham Boner (meat products) 525.684-010
Ham-Hock Mopper (meat products) 525.687-026
HAMMER ADJUSTER (clock & watch) 715.687-046
Hammer Driver (forging) 612.685-010
Hammerer, Tab (boot & shoe) 788.687-050
hammer heater (forging) 619.682-022
Hammer-Mill Operator (cement) 570.685-046
Hammer-Mill Operator (grain-feed mills) 521.685-122
HAMMER-MILL OPERATOR (nonmet. min.) 570.685-030
HAMMER-MILL OPERATOR (smelt. & refin.) 515.687-010
HAMMER OPERATOR (aircraft mfg.) 617.382-014
hammer repairer (forging) 626.261-010
Hammer-Shop Supervisor (forging) 612.131-010
Hammersmith (forging) 612.361-010
HAMMERSMITH (jewelry-silver.) 700.381-022
Hammersmith Helper (forging) 612.687-014
Ham Molder (meat products) 520.685-182
Hamper Maker (wood. container) 769.684-054
Hamper Maker, Machine (wood. container) 669.685-014
HAM-ROLLING-MACHINE OPERATOR (meat products) 529.685-138
Ham Sawyer (meat products) 525.684-018
hand assembler (boot & shoe) 788.684-010
Handbag Designer (leather prod.) 142.061-018
Handbag Finisher (leather prod.) 783.682-014
HANDBAG FRAMER (leather prod.) 739.684-090
Handbag-Parts Cutter (leather prod.) 699.682-022
Handbill Distributor (any industry) 230.687-010
hand blocker (glass mfg.; glass products) 673.685-026
hand-booked folder and stitcher (tex. prod., nec; textile) 589.687-014
hand carver (stonework) 771.281-014
hand clipper (any industry) 781.687-070
hand-cooper helper (wood. container) 764.687-050
hand decorator (brick & tile) 773.684-010
hand decorator (glass mfg.; glass products) 740.381-014
hand developer (photofinishing) 976.681-010
HANDER-IN (narrow fabrics; textile) 683.687-018
HAND FILER, BALANCE WHEEL (clock & watch) 715.684-106
hand finisher (leather mfg.) 584.687-010
Hand Finisher, Bowling Balls (toy-sport equip.) 690.685-038
hand folder (paper goods) 794.687-022
hand gluer (print. & pub.) 795.684-022

hand hardener (hat & cap) 784.684-034
Handhole-Machine Operator (wood. container) 665.682-030
HANDICAPPER, HARNESS RACING (amuse. & rec.) 219.267-010
hand inspector (textile) 689.387-010
Handkerchief Cutter (textile) 686.685-066
HANDKERCHIEF FOLDER (garment) 920.687-098
handkerchief ironer (laundry & rel.) 363.685-022
hand lacer (boot & shoe) 788.684-054
hand lacer (toy-sport equip.) 732.687-034
HANDLE-AND-VENT-MACHINE OPERATOR (furniture) 686.685-034
HANDLE ASSEMBLER (woodworking) 762.687-042
Handle Attacher (any industry) 690.685-014
Handle Attacher (leather prod.) 783.687-010
Handle-Bar Assembler (motor-bicycles) 806.684-094
Handle Bender (wood. container) 669.685-014
Handle Finisher (pottery & porc.) 774.684-018
Handle-Lathe Operator (woodworking) 664.382-010
HANDLE-MACHINE OPERATOR (paper goods) 649.685-050
Handle-Machine Operator (wood. container) 669.685-014
Handle Maker (leather prod.) 783.687-010
HANDLE MAKER (pottery & porc.) 575.684-030
handle maker (tex. prod., nec) 739.687-122
HANDLER (pottery & porc.) 774.684-022
Handle-Rounder Operator (woodworking) 665.682-010
Handle-Sander Operator (woodworking) 662.685-014
Handle Sewer (leather prod.) 783.682-014
handle sticker (pottery & porc.) 774.684-022
hand luggage repairer (any industry) 365.361-010
hand-miter operator (wood prod., nec) 739.684-066
Hand Molder, Meat (meat products) 520.685-174
hand packager (any industry) 920.587-018
hand painter (any industry) 740.684-026
hand pouncer (hat & cap) 784.687-018
hand roller (tobacco) 790.687-030
hands-and-dial inspector (clock & watch) 715.687-066
hand sander (fabrication, nec) 761.684-030
HANDS ASSEMBLER (clock & watch) 715.684-110
hand scraper (machine shop) 705.384-010
HAND SEWER, SHOES (boot & shoe) 788.684-054
hand shaker (tobacco) 521.687-110
hands hanger (tobacco) 529.686-010
hand shoe cutter (boot & shoe) 788.684-082
Hands Inspector (clock & watch) 715.384-022
hands parter (tex. prod., nec) 689.687-018
hand-spray operator (government ser.) 379.687-014
hands-size sorter (tobacco) 529.687-142
HAND STAMPER (any industry) 709.684-042
hand stitcher (any industry) 782.684-058
hand stitcher (toy-sport equip.) 732.684-034
hand tacker (any industry) 782.684-058
hand-tier (furniture) 780.684-106
hand trimmer (boot & shoe) 788.684-054
hand trimmer (hat & cap) 784.684-050
hand turner (fabrication, nec) 664.684-010
hand worker (paper goods) 794.687-054
Hand Worker (print. & pub.) 794.687-010
handwriting expert (government ser.) 199.267-022
hanger (meat products) 525.687-086
Hanger, Meat (meat products) 525.587-014
hanger-off (meat products) 525.687-030
HARBOR MASTER (government ser.) 375.167-026
Harbor-Police Captain (government ser.) 375.167-030
Harbor-Police Lieutenant (government ser.) 375.167-030
hardboard panel printer (furniture; wood prod., nec) 652.662-018
hard-candy batch-mixer (sugar & conf.) 520.685-046
Hard-Candy Maker (sugar & conf.) 529.361-014
hard-candy spinner (sugar & conf.) 520.682-030
HARDENER (clock & watch) 504.382-010
hardener (hat & cap) 586.685-026
HARDENER (hat & cap) 784.684-034
Hardener (oils & grease) 529.382-026
HARDENER HELPER (clock & watch) 504.686-018
hardening-machine operator (tex. prod., nec) 586.662-010
HARDENING-MACHINE OPERATOR (hat & cap) 586.685-026
hardening-machine-operator helper (tex. prod., nec) 586.686-014
HARDNESS INSPECTOR (heat treating) 504.387-010
HARDNESS TESTER (mine & quarry) 519.585-010
hardness tester (mine & quarry) 579.484-010
HARDWARE ASSEMBLER (furniture) 763.684-042
hardware assembler (leather prod.) 739.684-046
HARDWARE ASSEMBLER (wood. container) 762.687-046
HARDWARE ASSEMBLER (woodworking) 762.684-046
Hardware Installer (mfd. bldgs.; vehicles, nec) 869.684-026
Hardware Installer (struct. metal) 809.684-010
Hardware Press Operator (wood. container) 762.687-046
Hardwood-Floor Installer (construction) 860.381-022
Harmonic Tuner (musical inst.) 730.381-058
HARNESS-AND-BAG INSPECTOR (tex. prod., nec) 789.687-086
harness brusher (textile) 699.687-010
HARNESS BUILDER (textile) 683.380-010
HARNESS CLEANER (textile) 699.687-010
Harness Inspector (tex. prod., nec) 789.687-086
harness maker (elec. equip.; electron. comp.; office machines) 728.684-010
HARNESS MAKER (leather prod.; retail trade) 783.381-018
HARNESS PLACER (textile) 683.680-010
harness preparer (textile) 683.380-010
HARNESS PULLER (textile) 683.684-018
harness racer (amuse. & rec.) 153.244-014
Harness Repairer (leather prod.) 783.381-018
harness repairer (textile) 683.380-010
HARNESS RIGGER (tex. prod., nec) 789.687-082
harness tier (textile) 683.680-010
HARP-ACTION ASSEMBLER (musical inst.) 730.381-030
Harpist (amuse. & rec.) 152.041-010
HARP MAKER (musical inst.) 730.281-030
Harpooner (fishing & hunt.) 443.684-010
harpooner, fish (fishing & hunt.) 443.684-010
HARP REGULATOR (musical inst.) 730.381-026
Harp Repairer (any industry) 730.281-030
HARPSICHORD MAKER (musical inst.) 730.281-034
HARVEST CONTRACTOR (agriculture) 409.117-010
harvester (pharmaceut.) 559.687-034
HARVESTER OPERATOR (chemical) 930.683-022
harvesting manager (agriculture) 405.131-010
harvest supervisor (agriculture) 409.131-010
HARVEST WORKER, FIELD CROP (agriculture) 404.687-014
HARVEST WORKER, FRUIT (agriculture) 403.687-018
HARVEST WORKER, VEGETABLE (agriculture) 402.687-014
HASHER OPERATOR (meat products) 521.685-170
HASSOCK MAKER (tex. prod., nec) 780.687-018
Hat-And-Cap-Parts Cutter, Hand (hat & cap) 781.684-074
HAT-AND-CAP SEWER (hat & cap) 784.682-014
hat-band attacher (hat & cap) 784.684-078
hat-block bench hand (woodworking) 661.381-010
hat blocker (hat & cap) 580.684-010
HAT BLOCKER (laundry & rel.) 363.684-014
HAT-BLOCKING-MACHINE OPERATOR I (hat & cap) 580.685-026
HAT-BLOCKING-MACHINE OPERATOR II (hat & cap) 580.685-030
hat-blocking operator (hat & cap) 580.684-014
HAT-BLOCK MAKER (woodworking) 661.381-010
Hat-Body Inspector (hat & cap) 784.387-010
HAT-BODY SORTER (hat & cap) 784.587-010
HAT BRAIDER (hat & cap) 784.684-038
hat-brim-and-crown-laminating operator (hat & cap) 584.685-026
hat-brim curler (hat & cap) 784.684-014
hat-brim curler (hat & cap) 784.684-026
Hat Brusher, Machine (hat & cap) 587.685-026
Hat Buffer, Automatic (hat & cap) 585.685-014
Hat Checker (any industry) 358.677-010
hatchery helper (agriculture) 411.687-022
hatch supervisor (water trans.) 911.137-018
HATCH TENDER (water trans.) 911.667-014
HAT CONDITIONER (hat & cap) 784.687-086
Hat-Cone Inspector (hat & cap) 784.387-010
Hat Designer (hat & cap) 142.061-018
Hat-Designer Helper (hat & cap) 784.684-042
HAT FINISHER (hat & cap) 589.685-062
hat finisher (laundry & rel.) 363.684-014
HAT-FINISHING-MATERIALS PREPARER (hat & cap) 559.684-030
HAT-FORMING-MACHINE FEEDER (hat & cap) 586.686-018
HAT-FORMING-MACHINE OPERATOR (hat & cap) 586.685-030
Hat Lacer (hat & cap) 784.684-022
HAT-LINING BLOCKER (hat & cap) 583.685-050
HAT MAKER (hat & cap) 784.684-042
Hat Marker (hat & cap) 781.384-014
hat measurer (hat & cap) 784.387-010
Hat-Parts Cutter (leather prod.) 699.682-022
Hat-Parts Cutter, Machine (hat & cap) 781.684-014
Hat Sprayer (hat & cap) 741.684-026
HAT-STOCK-LAMINATING-MACHINE OPERATOR (hat & cap) 584.685-026
HATTER (hat & cap) term
HATTER (laundry & rel.) 369.384-010
hat trimmer (hat & cap) 784.684-022
HAT TRIMMER (laundry & rel.) 782.381-010
haulage boss (mine & quarry) 932.167-010
hauler (any industry) 919.664-010
hawker (retail trade) 291.457-018
Hay Farmer (agriculture) 404.161-010
HAY SORTER (toy-sport equip.) 732.686-010

HAZARDOUS-WASTE MANAGEMENT SPECIALIST (government ser.) 168.267-086
head (any industry) see STRAW BOSS
Head Animal Trainer (amuse. & rec.) 159.224-010
HEAD-BANDER-AND-LINER OPERATOR (print. & pub.) 653.682-018
head-bone grinder (meat products) 521.687-130
head boner (meat products) 525.684-034
Head Cager (mine & quarry) 939.667-010
Head Charrer (wood. container) 764.684-014
HEAD COACH (amuse. & rec.) 153.117-010
head cook, school (hotel & rest.) 313.131-018
head counselor (profess. & kin.) 045.107-018
HEAD DOFFER (textile) 689.366-010
Header (agriculture; wholesale tr.) 920.687-134
header (nonfer. metal; smelt. & refin.) 514.584-010
Header (tex. prod., nec) 787.682-026
HEADER (water trans.) 911.137-018
HEADER (wood prod., nec) 665.682-014
HEADER (wood. container) 764.687-058
header boss (construction) 859.137-018
Header, Dock (water trans.) 911.137-018
Header, Ship (water trans.) 911.137-018
header-up (wood. container) 764.687-058
head facer (fabrication, nec) 754.684-018
HEAD-GAUGE-UNIT OPERATOR (ordnance) 619.685-054
heading-and-priming operator (ordnance) 694.685-042
heading-and-priming tool setter (ordnance) 616.360-030
Heading-Machine Operator (elec. equip.) 692.482-010
HEADING-MACHINE OPERATOR (pen & pencil) 669.685-062
HEADING MATCHER AND ASSEMBLER (wood. container) 764.687-062
heading pinner (wood. container) 764.687-062
HEADING REPAIRER (wood. container) 764.687-066
HEADING-SAW OPERATOR (saw. & plan.) 667.682-038
HEAD INSPECTOR (wood. container) 764.387-010
Head-Inspector-And-Center Marker (wood. container) 764.387-010
head kiln operator (grain-feed mills) 523.662-010
HEAD-MACHINE FEEDER (meat products) 525.686-018
Head of Stock (retail trade) 222.137-034
HEAD OPERATOR, SULFIDE (chemical) 559.132-026
head-out worker (tobacco) 920.687-110
head paper tester (paper & pulp) 539.367-010
Head-Piece Assembler (furniture) 706.684-082
head resident, dormitory (education) 045.107-038
Head Rigger (logging) 921.664-014
head rose grader (agriculture) 405.137-010
head ruler, linoprint ruling machine operator (paper goods; print. & pub.) 659.682-022
HEAD-SAW OPERATOR, INSULATION BOARD (wood prod., nec) 677.682-010
HEAD SAWYER (saw. & plan.) 667.662-010
HEAD SAWYER, AUTOMATIC (paper & pulp; saw. & plan.) 667.682-034
Head Scorer (amuse. & rec.) 153.387-014
head setter (wood. container) 764.687-058
head-stock operator (paper & pulp) 539.132-018
head switcher (r.r. trans.) 910.137-022
HEAD TRIMMER (meat products) 525.684-034
Head-Turning-Machine Operator (wood. container) 667.685-066
Head-Up Operator (wood. container) 669.682-014
Head-Up-Operator Helper (wood. container) 669.685-010
HEADWAITER/HEADWAITRESS (water trans.) 350.137-010
head well-puller (petrol. & gas) 939.131-018
HEALER (medical ser.) term
HEALTH-EQUIPMENT SERVICER (medical ser.) 359.363-010
HEALTH OFFICER, FIELD (government ser.) 168.167-018
HEALTH PHYSICIST (profess. & kin.) 015.021-010
health-physics technician (profess. & kin.) 199.167-010
health unit clerk (medical ser.) 245.362-014
HEARING-AID REPAIRER (inst. & app.) 719.381-014
HEARING AID SPECIALIST (retail trade) 276.354-010
hearing instrument specialist (retail trade) 276.354-010
HEARING OFFICER (government ser.) 119.107-010
Hearings Reporter (clerical) 202.362-010
hearing-test technician (profess. & kin.) 078.362-010
Hearse Driver (personal ser.) 359.673-014
heart specialist (medical ser.) 070.101-014
HEAT CURER (textile) 581.586-010
HEATER (forging) 619.682-022
heater, furnace (forging) 619.682-022
Heater Helper, Forge (forging) 619.686-034
HEATER HELPER (steel & rel.) 613.685-014
heater helper (steel & rel.) 542.665-010
HEATER I (steel & rel.) 613.362-010
HEATER II (steel & rel.) 542.362-010
Heater Operator (wood. container) 669.682-014
heater operator (construction) 853.683-014
Heater Operator Helper (wood. container) 669.685-010
HEATER-PLANER OPERATOR (construction) 853.683-014
heater tender (oils & grease) 523.685-034
HEATER TENDER (rubber goods; rubber reclaim.; rubber tire) 553.665-038
heater tender (rubber goods) 553.585-022
heater worker (construction) 869.685-010
HEATING-AND-AIR-CONDITIONING INSTALLER-SERVICER (construction) 637.261-014
HEATING-AND-AIR-CONDITIONING INSTALLER-SERVICER HELPER (construction) 637.664-010
heating-and-air-conditioning mechanic (construction) 637.261-014
heating-and-air-conditioning-mechanic helper (construction) 637.664-010
HEATING-AND-BLENDING SUPERVISOR (chemical) 559.132-030
heating-and-ventilating tender (any industry) 950.585-010
heating-element builder (rubber goods) 739.684-058
Heating-Element Repairer (house. appl.) 723.584-010
HEATING-ELEMENT WINDER (elec. equip.; house. appl.) 723.685-010
heating-equipment repairer (any industry) 805.361-010
heating-fixture tender (optical goods) 713.687-042
heating mechanic (construction) 637.261-014
HEATING-PLANT SUPERINTENDENT (any industry) 959.131-010
Heating Technician (profess. & kin.) 007.181-010
heating worker (any industry) 869.281-010
HEAT READER (forging) 612.687-010
heat-seal operator (any industry) 690.685-154
HEAT-TRANSFER TECHNICIAN (profess. & kin.) 007.181-010
HEAT TREATER (electron. comp.) 504.686-022
heat treater (jewelry-silver.) 504.687-010
HEAT-TREATER APPRENTICE (heat treating) 504.382-018
heat treater, head (heat treating) 504.131-010
HEAT-TREATER HELPER (heat treating) 504.685-018
HEAT TREATER I (heat treating) 504.382-014
HEAT TREATER II (heat treating) 504.682-018
HEAT-TREATING BLUER (heat treating) 504.682-022
HEAT-TREAT INSPECTOR (heat treating) 504.281-010
heat-treat puller (heat treating) 504.685-018
HEAT-TREAT SUPERVISOR (heat treating) 504.131-010
heat treat worker (glass mfg.) 573.685-026
HEAT WELDER, PLASTICS (plastic prod.) 553.684-010
heavy-equipment mechanic (construction) 620.261-022
heavy-equipment operator (construction; mine & quarry) 859.683-010
heavy-equipment-operator apprentice (construction; mine & quarry) 859.683-014
HEAVY FORGER (forging) 612.361-010
HEAVY-FORGER HELPER (forging) 612.687-014
heavy-machinery assembler (engine-turbine; machinery mfg.) 638.261-014
HEAVY-MEDIA OPERATOR (mine & quarry) 541.685-010
HEDDLE CLEANER, MACHINE (textile) 689.685-070
HEDDLE-MACHINE OPERATOR (machinery mfg.) 616.685-026
HEDDLES TIER, JACQUARD LOOM (narrow fabrics; textile) 683.680-014
HEEL ATTACHER, WOOD (boot & shoe) 788.684-058
heel-boom operator (logging) 921.683-058
HEEL BREASTER, LEATHER (boot & shoe) 690.682-042
Heel Brusher (boot & shoe) 788.687-018
Heel Buffer (boot & shoe) 690.685-046
Heel Builder, Hand (boot & shoe) 788.687-030
HEEL BUILDER, MACHINE (boot & shoe) 690.685-206
Heel Burnisher (boot & shoe) 690.685-058
Heel Cementer (boot & shoe) 788.687-030
Heel Cementer, Machine (boot & shoe) 690.686-018
HEEL COMPRESSOR (boot & shoe) 690.685-210
Heel Coverer (boot & shoe) 788.687-030
Heel-Cover Softener (boot & shoe) 788.687-090
Heel-Cover Splitter (boot & shoe) 585.685-114
HEEL DIPPER (boot & shoe) 788.687-058
Heel Dipper, Insole (boot & shoe) 788.687-062
Heel-Edge Inker, Machine (boot & shoe) 690.685-234
Heel-Emery Buffer (boot & shoe) 690.685-046
Heeler, Machine (boot & shoe) 690.685-162
heel finisher (boot & shoe) 788.684-126
heel fitter, machine (boot & shoe) 690.682-046
heel former (boot & shoe) 690.685-206
HEEL GOUGER (boot & shoe) 690.685-214
Heel Grinder (wood prod., nec) 669.682-054
Heel Layer (boot & shoe) 690.685-074
Heel-Lift-Beam Cutter (boot & shoe) 699.682-022
Heel-Lift Gouger (boot & shoe) 690.685-214
Heel-Lining Paster (boot & shoe) 690.686-018
Heel Marker (boot & shoe) 788.584-014
heel molder (boot & shoe) 690.685-210
Heel Molder (rubber goods) 556.685-066
HEEL-NAILING-MACHINE OPERATOR (boot & shoe) 690.685-226
Heel-Nail Rasper (boot & shoe) 788.684-094
Heel Padder (boot & shoe) 788.687-030
HEEL PRICKER (boot & shoe) 690.685-218

Heel Reducer (boot & shoe) 690.685-166
Heel-Room Supervisor (boot & shoe) 788.131-010
Heel Sander, Rubber (boot & shoe) 690.685-046
HEEL SCORER (boot & shoe) 690.685-222
Heel-Seam Rubber (boot & shoe) 690.685-350
Heel-Seat Filler (boot & shoe) 690.685-162
HEEL-SEAT FITTER, HAND (boot & shoe) 788.684-062
HEEL-SEAT FITTER, MACHINE (boot & shoe) 690.682-046
Heel-Seat-Flap Stapler (boot & shoe) 690.685-162
HEEL-SEAT LASTER, MACHINE (boot & shoe) 690.685-230
Heel-Seat Pounder (boot & shoe) 690.685-314
Heel-Seat Sander (boot & shoe) 690.685-046
Heel-Seat Trimmer (boot & shoe) 690.685-434
Heel Slicker (boot & shoe) 690.685-046
HEEL SORTER (boot & shoe) 788.584-010
heel Splitter (boot & shoe) 585.685-114
heel sprayer, first (boot & shoe) 788.687-034
HEEL SPRAYER, MACHINE (boot & shoe) 590.685-038
heel stainer (boot & shoe) 690.685-234
Heel-Top-Lift Splitter (boot & shoe) 585.685-114
Heel Trimmer I (boot & shoe) 690.685-434
Heel Trimmer II (boot & shoe) 690.682-086
HEEL-WASHER-STRINGING-MACHINE OPERATOR (rubber goods) 619.685-058
Heel Wheeler (boot & shoe) 690.685-058
hefter (leather mfg.) 589.387-010
helicopter dispatcher (air trans.) 912.167-010
Helicopter Mechanic (air trans.) 621.281-014
HELICOPTER PILOT (any industry) 196.263-038
Helix-Coil Winder (elec. equip.; electron. comp.) 724.684-026
Helmet Binder (hat & cap) 787.682-010
Helmet-Brim Coverer (hat & cap) 689.685-074
HELMET COVERER (hat & cap) 689.685-074
Helmet-Crown Coverer (hat & cap) 689.685-074
Helmet-Hat-Brim Cutter (hat & cap) 699.682-022
Helmet-Hat Puncher (hat & cap) 686.685-038
Helmet-Hat-Sweatband Puncher (hat & cap) 686.685-038
Helminthologist (profess. & kin.) 041.061-070
help desk representative (profess. & kin.) 032.262-010
help desk supervisor (profess. & kin.) 032.132-010
HELPER (any industry) master
Helper, Animal Laboratory (pharmaceut.) 410.674-010
helper, chicken farm (agriculture) 411.584-010
HELPER, ELECTRICAL (utilities) 821.667-010
HELPER, LIQUEFACTION-AND-REGASIFICATION (utilities) 953.584-010
HELPER, MANUFACTURING (aircraft mfg.) 809.687-014
HELPER, METAL BONDING (aircraft mfg.) 806.687-022
HELPER, METAL HANGING (mfd. bldgs.) 806.667-010
helper, patcher (steel & rel.) 861.687-014
HELPER, SHEAR OPERATOR (steel & rel.) 615.687-010
helper, steel fabrication (any industry) 619.686-022
Hem Inspector (tex. prod., nec) 789.687-114
Hem Marker (garment; retail trade; tex. prod., nec) 781.687-042
HEMMER (any industry) 787.682-026
hemmer (rubber goods) 690.686-026
HEMMER, AUTOMATIC (tex. prod., nec) 787.685-018
HEMMER, BLINDSTITCH (garment) 786.682-126
HEMMER, CHAINSTITCH (garment) 786.682-130
HEMMER, LOCKSTITCH (garment) 786.682-134
HEMMER, OVERLOCK (garment) 786.682-138
HEMMING-AND-TACKING-MACHINE OPERATOR (furniture) 787.685-022
hemodialysis technician (medical ser.) 078.362-014
hemotherapist (medical ser.) 078.261-042
Hemstitching-Machine Operator (tex. prod., nec) 787.682-058
HEMSTITCHING-MACHINE OPERATOR (garment) 786.682-142
HERBARIUM WORKER (profess. & kin.) 041.384-010
herder (agriculture) 410.687-022
Herpetologist (profess. & kin.) 041.061-090
Hide Buffer (boot & shoe) 690.685-046
hide cleaner (leather mfg.) 585.681-010
hide-cooking operator (chemical) 553.665-018
hide examiner (leather mfg.) 783.687-018
hide grader (meat products) 525.687-042
HIDE HANDLER (meat products; oils & grease) 525.687-038
HIDE INSPECTOR (leather mfg.) 783.687-018
HIDE INSPECTOR (meat products) 525.687-042
hide-measuring-machine operator (leather mfg.) 589.685-070
HIDE PULLER (meat products) 525.685-022
Hide Salter (meat products; oils & grease) 525.687-038
hide selector (meat products; oils & grease) 525.687-038
Hide Shaker (meat products; oils & grease) 525.687-038
hide sorter (leather mfg.) 589.387-010
HIDE SPLITTER (leather mfg.) 690.580-010
Hide Spreader (meat products) 525.687-038
HIDE STRETCHER, HAND (leather mfg.) 580.687-014
HIDE TRIMMER (meat products; oils & grease) 525.687-046
hide washer (meat products) 582.685-134
highballer (construction) 869.667-014
HIGH-DENSITY FINISHING OPERATOR (wood prod., nec) 539.562-010
high-density-press operator (paper & pulp) 535.685-010
High-Density-Talc-Coater Operator (wood prod., nec) 534.682-022
HIGH-ENERGY-FORMING WORKER (aircraft mfg.) 619.380-010
High-Heel Builder (boot & shoe) 690.685-206
High-Lead Yarder (logging) 921.663-066
High-Lighter (furniture) 742.684-010
High-Pressure Devulcanizer Operator (rubber reclaim.) 558.585-026
High-Pressure-Kettle Operator (chemical) 558.382-038
High-Raw-Sugar Boiler (sugar & conf.) 522.382-034
HIGH RIGGER (amuse. & rec.; radio-tv broad.) 962.664-010
High Scaler (construction) 859.261-010
high school teacher (education) 091.227-010
HIGHWAY-ADMINISTRATIVE ENGINEER (government ser.) 005.167-022
Highway Engineer (government ser.) 005.061-038
Highway Inspector (construction) 182.267-010
Highway-Landscape Architect (profess. & kin.) 001.061-018
HIGHWAY-MAINTENANCE SUPERVISOR (government ser.) 899.134-010
HIGHWAY-MAINTENANCE WORKER (government ser.) 899.684-014
HIGHWAY SUPERVISOR (construction) term
highway worker (government ser.) 899.684-014
high-wire artist (amuse. & rec.) 159.347-022
hiker (utilities) 821.361-026
hired worker (agriculture) 421.683-010
histologic technologist (medical ser.) 078.261-030
histologist (medical ser.) 041.061-054
HISTOPATHOLOGIST (medical ser.) 041.061-054
HISTORIAN (profess. & kin.) 052.067-022
HISTORIAN, DRAMATIC ARTS (profess. & kin.) 052.067-026
Historical Archeologist (profess. & kin.) 055.067-018
HISTORIC-SITE ADMINISTRATOR (museums) 102.167-014
HISTORY-CARD CLERK (utilities) 209.587-022
HISTOTECHNOLOGIST (medical ser.) 078.261-030
hitcher (any industry) 921.667-022
hobbing-machine operator (machine shop) 602.382-010
HOBBING-PRESS OPERATOR (any industry) 617.682-018
Hob Grinder (machine shop) 603.280-038
hob mill operator (machine shop) 602.685-010
Hod Carrier (construction) 869.687-026
Hoer (agriculture) 409.687-018
HOG-CONFINEMENT-SYSTEM MANAGER (agriculture) 410.161-022
Hog Grader (meat products) 525.387-010
Hog-Head Singer (meat products) 525.687-098
hog operator (rubber goods; rubber reclaim.) 555.685-030
Hog Ribber (meat products) 525.684-010
hog-room supervisor (rubber reclaim.) 559.132-058
Hog Sawyer (meat products) 525.684-018
hogshead builder (wood. container) 764.687-074
HOGSHEAD COOPER I (wood. container) 764.684-026
HOGSHEAD COOPER II (wood. container) 764.687-070
HOGSHEAD COOPER III (wood. container) 764.687-074
Hogshead Dumper (tobacco) 929.687-030
hogshead filler (tobacco) 920.687-142
hogshead hand (tobacco) 920.687-102
hogshead head-matcher (wood. container) 667.685-010
HOGSHEAD HOOPER (wood. container) 764.687-078
HOGSHEAD INSPECTOR (tobacco) 529.367-014
hogshead liner (tobacco) 920.687-110
HOGSHEAD MAT ASSEMBLER (wood. container) 764.687-082
HOGSHEAD MAT INSPECTOR (wood. container) 764.687-086
HOGSHEAD OPENER (tobacco) 920.687-102
hogshead packer (tobacco) 920.687-142
hogshead-press operator (tobacco) 920.685-062
hogshead roller (tobacco) 922.687-026
Hogshead-Stock Clerk (tobacco) 222.387-058
hogshead stripper (tobacco) 920.687-102
hogshead unpacker (tobacco) 920.687-102
hogshead wrecker (tobacco) 920.687-102
Hog Sticker (meat products) 525.684-050
Hog Stomach Preparer (meat products) 529.687-034
HOG TENDER (woodworking) 564.685-018
Hoist-Cylinder Loader (chemical) 549.587-010
HOISTING ENGINEER (any industry) 921.663-030
hoisting engineer, pile driving (construction) 859.682-018
hoisting-machine operator (any industry) 921.663-030
HOIST OPERATOR (mine & quarry) 921.663-026
HOIST OPERATOR (petrol. & gas) 932.363-010
hoist worker (agriculture) 929 687-018
Holder, Pile Driving (construction) 869.664-014
hole-digger operator (construction; utilities) 859.682-010
Hole-Digger-Truck Driver (construction; tel. & tel.; utilities) 905.663-014
Hole Puncher, Strap (boot & shoe) 690.685-114

HOLIDAY-DETECTOR OPERATOR (construction) 862.687-014
Hollow-Core Door-Frame Assembler (wood prod., nec) 762.687-022
HOLLOW-HANDLE-KNIFE ASSEMBLER (jewelry-silver.) 700.684-042
Hollow-Tile-Partition Erector (construction) 861.381-018
Holster Maker (leather prod.) 783.684-026
HOLTER SCANNING TECHNICIAN (medical ser.) 078.264-010
holter technician (medical ser.) 078.264-010
home agent (government ser.) 096.121-010
home and school visitor (profess. & kin.) 195.107-038
HOME ATTENDANT (personal ser.) 354.377-014
home-demonstration agent (government ser.) 096.121-010
Home Economics Specialist (government ser.) 096.127-014
HOME ECONOMIST (profess. & kin.) 096.121-014
Home Economist, Consumer Service (profess. & kin.) 096.121-014
home-extension agent (government ser.) 096.121-010
Home Health Aide (medical ser.) 355.674-014
home health aide (personal ser.) 354.377-014
Home Health Nurse, Licensed Practical (medical ser.) 079.374-014
HOMEMAKER (social ser.) 309.354-010
HOME-SERVICE DIRECTOR (profess. & kin.) 096.161-010
Homicide-Squad Captain (government ser.) 375.167-010
Homicide-Squad Lieutenant (government ser.) 375.167-010
Homicide-Squad Sergeant (government ser.) 375.167-010
Homogenizer Operator (dairy products) 529.382-018
hone operator (machine shop) 603.382-018
honer (machine shop) 603.482-034
HONEYCOMB DECAPPER (food prep., nec) 521.687-070
HONEY EXTRACTOR (food prep., nec) 521.685-174
HONEY GRADER-AND-BLENDER (food prep., nec) 520.361-010
honey liquefier (food prep., nec) 520.361-010
HONEY PROCESSOR (food prep., nec) 522.685-070
honey producer (agriculture) 413.161-010
honing-machine operator (machine shop) 603.382-018
HONING-MACHINE OPERATOR, PRODUCTION (machine shop) 603.482-034
honing-machine operator, semiautomatic (machine shop) 603.482-034
honing-machine operator, tool (machine shop) 603.382-022
HONING-MACHINE SET-UP OPERATOR (machine shop) 603.382-018
HONING-MACHINE SET-UP OPERATOR, TOOL (machine shop) 603.382-022
Honing-Machine Try-Out Setter (machine tools) 600.360-010
HOOD MAKER (tex. prod., nec) 804.481-010
HOOF AND SHOE INSPECTOR (amuse. & rec.) 153.287-010
Hook-And-Eye Attacher (garment) 782.684-058
Hook-And-Eye Attacher, Machine (garment) 699.685-018
hook-and-eye-sewing-machine operator (any industry) 787.685-010
hooker (any industry) 921.667-022
hooker (logging) 921.131-010
hooker (fishing & hunt.) 447.684-010
HOOKER INSPECTOR (textile) 689.685-078
HOOKER-LASTER (boot & shoe) 753.684-018
hooker operator (textile) 689.685-078
HOOKING-MACHINE OPERATOR (clock & watch) 605.685-018
HOOKING-MACHINE OPERATOR (textile) 580.685-034
hooking-machine operator (textile) 689.585-014
Hook Loader (toy-sport equip.) 599.686-014
HOOK PULLER (narrow fabrics) 683.687-022
hook tender (any industry) 921.260-010
HOOK TENDER (logging) 921.131-010
hook-up driver (motor trans.) 909.663-010
HOOP BENDER, TANK (wood. container) 619.682-026
hoop-bending-machine operator (wood. container) 619.682-026
HOOP COILER (wood. container) 617.686-010
Hoop-Coiling-Machine Operator (wood. container) 669.685-014
Hoop-Driving-Machine Operator (wood. container) 669.682-014
Hoop-Driving-Machine-Operator Helper (wood. container) 669.685-010
hooper (wood. container) 764.687-078
HOOP-FLARING-AND-COILING-MACHINE OPERATOR (wood. container) 619.682-034
Hoop-Flaring-Machine Operator (wood. container) 619.682-030
Hoop-Flaring-Machine-Operator Helper (wood. container) 619.686-014
HOOP-MAKER HELPER, MACHINE (wood. container) 619.686-014
HOOP MAKER, MACHINE (wood. container) 619.682-030
Hoop-Punch-And-Coiler Operator (wood. container) 619.682-030
Hoop-Punch-And-Coiler-Operator Helper (wood. container) 619.686-014
Hoop-Punch-Operator Helper (wood. container) 619.687-014
Hoop-Riveting-Machine Operator (wood. container) 619.682-030
Hoop-Riveting-Machine-Operator Helper (wood. container) 619.686-014
hoop-rolls operator (wood. container) 617.686-010
Hoosier Pole Hand (construction) 869.687-026
Hop Grower (agriculture) 404.161-010
HOPPER ATTENDANT (sugar & conf.) 521.685-182
HOPPER FEEDER (oils & grease) 551.686-018
HOPPER FEEDER (ordnance) 619.686-018
hopper feeder (tex. prod., nec; textile) 680.686-018
hopper feeder (tobacco) 529.686-038
hopper loader (grain-feed mills) 520.686-018
hopper operator (plastic-synth.) 556.585-010
hop separator (beverage) 521.685-178
Hops Farmworker (agriculture) 404.687-010
Hop Sorter (agriculture) 529.687-186
HOP STRAINER (beverage) 521.685-178
HOP WEIGHER (beverage) 520.687-042
horizontal-boring-drilling-and-milling-machine operator (machine shop) 606.280-014
horizontal-boring-mill operator (machine shop) 606.280-014
horizontal-drill operator (mine & quarry) 930.482-010
HORIZONTAL-EARTH-BORING-MACHINE OPERATOR (construction) 850.662-010
HORIZONTAL-EARTH-BORING-MACHINE-OPERATOR HELPER (construction) 850.684-014
Horizontal-Resaw Operator (saw. & plan.) 667.682-058
Horizontal-Stick-Turning-Machine Operator (tex. prod., nec) 689.685-146
Horse-And-Wagon Driver (any industry) 919.664-010
HORSE-RACE STARTER (amuse. & rec.) 153.267-010
HORSE-RACE TIMER (amuse. & rec.) 153.367-014
horseradish grinder (can. & preserv.) 529.685-142
HORSERADISH MAKER (can. & preserv.) 529.685-142
Horse Rancher (agriculture) 410.161-018
HORSESHOER (agriculture) 418.381-010
Horse Tender (any industry) 410.674-022
HORSE TRAINER (agriculture) 419.224-010
Horticultural Agent (government ser.) 096.127-010
HORTICULTURAL-SPECIALTY GROWER, FIELD (agriculture) 405.161-014
HORTICULTURAL-SPECIALTY GROWER, INSIDE (agriculture) 405.161-018
HORTICULTURAL THERAPIST (medical ser.) 076.124-018
HORTICULTURAL WORKER I (agriculture) 405.684-014
HORTICULTURAL WORKER II (agriculture) 405.687-014
HORTICULTURIST (profess. & kin.) 040.061-038
hose builder (rubber goods) 752.684-030
hose cementer (rubber goods) 690.685-134
HOSE-COUPLING JOINER (rubber goods) 759.687-014
HOSE CUTTER, HAND (rubber goods) 751.687-010
HOSE CUTTER, MACHINE (rubber goods) 751.686-010
hose finisher (rubber goods) 690.685-134
hose handler (railroad equip.; retail trade; wholesale tr.) 863.664-010
Hose Inspector (rubber goods) 759.684-074
HOSE INSPECTOR AND PATCHER (rubber goods) 759.364-010
HOSE MAKER (rubber goods) 752.684-030
Hose-Suspender Cutter (garment) 699.685-014
Hose Tender (any industry) 899.664-010
Hose Tester (rubber goods) 759.684-074
HOSE-TUBING BACKER (rubber goods) 559.686-018
Hose Turner (knitting) 789.687-182
HOSE WRAPPER (rubber goods) 759.684-038
Hosiery Looper (knitting) 689.682-010
HOSIERY MENDER (knitting) 782.684-030
Hospital Administrator (medical ser.) 187.117-010
HOSPITAL-ADMITTING CLERK (medical ser.) 205.362-018
Hospital Collection Clerk (medical ser.) 241.357-010
hospital-insurance clerk (medical ser.) 214.362-022
HOSPITAL-INSURANCE REPRESENTATIVE (insurance) 166.267-014
hospital librarian (library) 100.167-022
hospital-receiving clerk (medical ser.) 205.362-018
HOSPITAL-TELEVISION-RENTAL CLERK (business ser.) 295.467-018
HOST/HOSTESS (any industry) 352.667-010
HOST/HOSTESS, DANCE HALL (amuse. & rec.) 349.667-010
HOST/HOSTESS, GROUND (air trans.) 352.377-010
HOST/HOSTESS, HEAD (amuse. & rec.) 349.667-014
host/hostess, railway (r.r. trans.) 352.677-010
HOST/HOSTESS, RESTAURANT (hotel & rest.) 310.137-010
hostler (any industry) 410.131-010
hostler (any industry) 699.687-018
HOSTLER (motor trans.) 909.663-010
HOSTLER (r.r. trans.) 910.683-010
hotbed operator (steel & rel.) 613.685-034
hotbed transfer operator (steel & rel.) 613.685-034
Hot-Billet-Shear Operator (smelt. & refin.; steel & rel.) 615.685-034
hot blaster (steel & rel.) 512.382-014
HOT BOX OPERATOR (metal prod., nec) 709.685-014
Hot-Bread Baker (hotel & rest.) 313.381-010
HOT-CAR OPERATOR (steel & rel.) 519.663-014
HOT-CELL TECHNICIAN (profess. & kin.) 015.362-018
Hot-Die Picker (boot & shoe) 690.682-050
Hot-Die-Press Feeder (boot & shoe) 690.682-050
HOT-DIE-PRESS OPERATOR (boot & shoe) 690.682-050
HOTEL CLERK (hotel & rest.) 238.367-038
Hot-Food Packer (hotel & rest.) 319.484-010
hot-frame tender (textile) 580.685-066

Hot-Header Operator (forging) 612.462-010
Hot-Head-Machine Operator (laundry & rel.) 363.681-010
HOTHOUSE WORKER (chemical) 549.687-014
hot-melt-machine operator (paper & pulp; paper goods) 534.682-026
Hot-Metal Charger (steel & rel.) 512.683-010
Hot-Metal Crane Operator I (foundry; nonfer. metal; steel & rel.) 921.663-010
Hot-Metal-Crane Operator II (foundry; smelt. & refin.; steel & rel.) 921.663-042
Hot-Mill Operator (nonfer. metal) 613.462-018
Hot-Mill Supervisor (nonfer. metal) 619.132-014
Hot-Plate Plywood-Press Feeder (millwork-plywood) 569.686-026
Hot-Plate Plywood-Press Offbearer (millwork-plywood) 569.686-026
HOT-PLATE-PLYWOOD-PRESS OPERATOR (millwork-plywood) 569.685-054
hot-plate-press operator (millwork-plywood) 569.685-054
HOT-PRESS OPERATOR (nonmet. min.) 575.685-042
hot-press operator (paper & pulp) 535.685-010
hot press operator (woodworking) 569.685-050
Hot-Roll Inspector (steel & rel.) 619.381-010
hot roll laminator (electron. comp.) 554.685-034
HOT-ROOM ATTENDANT (personal ser.) 335.677-014
Hot-Sealing-Machine Operator (any industry) 920.685-074
hot stamper (any industry) 652.682-030
HOT-STONE SETTER (button & notion) 734.687-058
Hot-Strip-Mill Inspector (steel & rel.) 619.381-010
HOT-TOP LINER (steel & rel.) 709.684-046
HOT-TOP-LINER HELPER (steel & rel.) 709.687-018
HOT-WIRE GLASS-TUBE CUTTER (glass products) 772.684-014
HOT-WORT SETTLER (beverage) 521.685-186
HOUSE BUILDER (construction) 869.281-014
House Carpenter (construction) 860.381-022
HOUSECLEANER (hotel & rest.) 323.687-018
Housecleaner, Floor (hotel & rest.) 323.687-018
house detective (amuse. & rec.) 376.667-010
house detective (hotel & rest.) 376.367-018
House-Furnishings Cutter, Machine (tex. prod., nec) 781.684-014
HOUSEHOLD-APPLIANCE INSTALLER (any industry) 827.661-010
housekeeper (any industry) 381.687-014
HOUSEKEEPER (hotel & rest.; medical ser.; real estate) 321.137-010
housekeeper, administrative (any industry) 187.167-046
housekeeper, head (any industry) 187.167-046
HOUSEKEEPER, HOME (domestic ser.) 301.137-010
housekeeper, home (domestic ser.) 301.474-010
housekeeper, hospital (medical ser.) 323.687-010
house manager (any industry) 187.167-186
house model (garment; retail trade; wholesale tr.) 297.667-014
HOUSE MOVER (construction) 869.261-010
HOUSE-MOVER HELPER (construction) 869.687-034
HOUSE-MOVER SUPERVISOR (construction) 869.131-022
HOUSE OFFICER (hotel & rest.) 376.367-018
house parent (any industry) 359.677-010
HOUSE-PIPING INSPECTOR (utilities) 953.367-018
HOUSE REPAIRER (construction) 869.381-010
HOUSE SITTER (domestic ser.) 309.367-010
housesmith (construction) 801.361-014
housesmith (construction) 809.381-022
house steward/stewardess (hotel & rest.) 310.137-018
house supervisor (agriculture; wholesale tr.) 920.137-010
Housewares Demonstrator (retail trade; wholesale tr.) 297.354-010
House Worker (domestic ser.) 301.687-010
HOUSE WORKER, GENERAL (domestic ser.) 301.474-010
HOUSING-MANAGEMENT OFFICER (government ser.) 188.117-110
hub cutter (jewelry-silver.) 601.381-014
hub-cutter apprentice (jewelry-silver.) 601.381-022
huckster (retail trade) 291.457-018
HULL AND DECK REMOVER (ship-boat mfg.) 809.667-010
Hull Builder (ship-boat mfg.) 860.361-010
huller operator (can. & preserv.) 521.687-118
HULLER OPERATOR (grain-feed mills) 521.682-030
HULL INSPECTOR (ship-boat mfg.) 806.264-010
Hull Molder (ship-boat mfg.) 806.684-054
hull sorter (can. & preserv.) 521.687-086
Humane Officer (government ser.) 379.673-010
human factors specialist (profess. & kin.) 045.061-014
Human Projectile (amuse. & rec.) 159.347-018
HUMAN RESOURCE ADVISOR (profess. & kin.) 166.267-046
human resources clerk (clerical) 209.362-026
HUMIDIFIER ATTENDANT (textile; tobacco) 950.485-010
humidifier-maintenance worker (textile; tobacco) 950.485-010
HUMIDIFIER OPERATOR (wood prod., nec) 562.682-010
humid-system operator (textile; tobacco) 950.485-010
hummer operator (textile) 585.685-042
HUMORIST (profess. & kin.) 131.067-026
hunter, skin diver (fishing & hunt.) 461.664-010
hurl shaker (fabrication, nec) 692.686-062
Hybrid Tester (electron. comp.) 726.684-078
Hydrant-And-Valve Setter (construction) 869.664-014
HYDRATE-CONTROL TENDER (smelt. & refin.) 511.585-010
hydrate-thickener operator (smelt. & refin.) 511.562-010
hydraulic and mechanical assembler (machinery mfg.) 801.261-010
Hydraulic And Plumbing Development Mechanic (aircraft mfg.) 693.261-014
hydraulic and plumbing installer (aircraft mfg.) 806.381-066
Hydraulic-Barker Operator (paper & pulp; saw. & plan.) 669.485-010
HYDRAULIC-BILLET MAKER (pen & pencil) 575.685-046
HYDRAULIC BLOCKER (hat & cap) 580.685-038
HYDRAULIC-BOOM OPERATOR (smelt. & refin.) 921.683-046
Hydraulic-Brim-Flanging-Machine Operator (hat & cap) 580.685-038
hydraulic-bull-riveter operator (any industry) 800.662-010
HYDRAULIC-CHAIR ASSEMBLER (furniture) 706.684-058
hydraulic-corrugating-machine operator (nonfer. metal) 611.685-014
Hydraulic Dredge Operator (fishing & hunt.) 446.663-010
HYDRAULIC ENGINEER (profess. & kin.) 005.061-018
hydraulic-hammer operator (construction) 869.683-018
HYDRAULIC-JACK ADJUSTER (construction) 869.361-014
hydraulic-jack operator (construction; mine & quarry) 910.663-010
Hydraulic Oil-Tool Operator (petrol. & gas) 930.382-030
hydraulic operator (construction) 850.682-010
HYDRAULIC OPERATOR (nonfer. metal) 611.685-014
hydraulic-press operator (any industry) 617.260-010
hydraulic-press operator (chemical) 555.685-042
HYDRAULIC PRESS OPERATOR (construction) 616.662-010
hydraulic-press operator (hat & cap) 580.685-038
HYDRAULIC-PRESS OPERATOR (knitting) 58[illegible].685-054
HYDRAULIC-PRESS OPERATOR (millwork-plywood) 569.685-058
hydraulic-press operator (pen & pencil) 733.687-026
HYDRAULIC-PRESS OPERATOR (tex. prod., nec) 583.685-058
HYDRAULIC-PRESS OPERATOR (tobacco) 920.685-062
Hydraulic Press Operator, First Pressing (hat & cap) 580.685-038
HYDRAULIC-PRESS SERVICER (ordnance) 626.381-018
hydraulic-press tender (paper & pulp) 532.685-026
HYDRAULIC-PRESSURE-AUTO-FRETTAGE-MACHINE OPERATOR (ordnance) 694.682-014
HYDRAULIC-PRESSURE-AUTO-FRETTAGE-MACHINE-OPERATOR SUPERVISOR (ordnance) 619.130-010
Hydraulic-Punch-Press Operator (rubber goods) 690.685-290
HYDRAULIC REPAIRER (any industry) 638.281-034
HYDRAULIC-RUBBISH-COMPACTOR MECHANIC (sanitary ser.) 638.281-030
hydraulic-steam-press operator (rubber goods; rubber tire; toy-sport equip.) 556.685-066
HYDRAULIC-STRAINER OPERATOR (plastic-synth.) 551.582-010
Hydraulic Tester (air trans.) 621.281-014
Hydrochloric-Acid Operator (chemical) 551.382-010
hydrochloric-manufacturing supervisor (chemical) 558.134-022
HYDROELECTRIC-MACHINERY MECHANIC (utilities) 631.261-010
HYDROELECTRIC-MACHINERY-MECHANIC HELPER (utilities) 631.364-010
HYDROELECTRIC-PLANT MAINTAINER (utilities) 952.687-010
Hydroelectric-Powerplant Supervisor (utilities) 631.131-010
HYDROELECTRIC-STATION OPERATOR (utilities) 952.362-018
HYDROELECTRIC-STATION OPERATOR, CHIEF (utilities) 952.137-014
HYDROGENATION OPERATOR (oils & grease) 529.382-026
hydrogen braze-furnace operator (welding) 813.685-010
Hydrogen-Cell Tender (chemical) 558.382-026
Hydrogen Treater (petrol. refin.) 549.362-014
HYDROGRAPHER (waterworks) 025.264-010
hydrologic engineer (profess. & kin.) 005.061-018
HYDROLOGIST (profess. & kin.) 024.061-034
HYDROMETER CALIBRATOR (inst. & app.) 710.381-030
hydrometer finisher (inst. & app.) 710.381-030
HYDRO-PNEUMATIC TESTER (any industry) 862.687-018
Hydroponics Grower (agriculture) 405.161-018
Hydroponics Worker (agriculture) 405.684-014
Hydropulper (paper & pulp; wood prod., nec) 530.685-014
HYDRO-SPRAYER OPERATOR (agriculture) 408.662-010
Hydrostatic Tester (any industry) 862.687-018
hydrostatic tester (chemical) 953.387-010
Hypercil-Core-Transformer Assembler (elec. equip.) 820.381-014
hypertrichologist (personal ser.) 339.371-010
HYPNOTHERAPIST (profess. & kin.) 079.157-010
Hypnotist (amuse. & rec.) 159.647-010
hypnotist (profess. & kin.) 079.157-010
hypoid-gear generator (machine shop) 602.382-014

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Ic Designer, Custom (profess. & kin.) 003.261-018
Ic Designer, Gate Arrays (profess. & kin.) 003.261-018
Ic Designer, Standard Cells (profess. & kin.) 003.261-018

Ice-Bag Assembler (rubber goods) 752.684-038
ICE-CREAM CHEF (hotel & rest.) 313.381-034
ice cream dispenser (hotel & rest.) 319.474-010
ice-cream freezer (dairy products) 529.482-010
ICE CREAM FREEZER ASSISTANT (dairy products) 529.685-146
Ice-Cream Vendor (retail trade) 291.457-018
Ice Crusher (any industry) 529.685-150
ICE CUTTER (food prep., nec) 529.685-150
ice-guard inspector (rubber goods) 729.387-010
ice-guard repairer (rubber goods) 759.684-026
Ice Guard, Skating Rink (amuse. & rec.) 376.667-010
ice-guard tester (rubber goods) 729.387-014
Ice Handler (chemical) 549.587-010
ICE MAKER (food prep., nec) 523.685-102
ICE MAKER, SKATING RINK (amuse. & rec.) 969.687-014
ice platform supervisor (food prep., nec) 299.137-022
Ice Puller (food prep., nec) 523.685-102
ICER (wholesale tr.) 922.687-046
icer, air conditioning (food prep., nec; meat products) 910.687-018
ICER, HAND (bakery products) 524.684-022
Icer Helper, Hand (bakery products) 526.686-010
ICER, MACHINE (bakery products) 524.685-034
ice seller (food prep., nec) 299.377-010
Ichthyologist (profess. & kin.) 041.061-090
ICICLE-MACHINE OPERATOR (dairy products) 920.482-010
Icing Cutter (sugar & conf.) 524.684-010
icing-machine operator (bakery products) 524.685-034
Icing Maker (sugar & conf.) 526.382-014
ICING MIXER (bakery products) 520.685-114
icing spreader (bakery products) 524.684-022
IDENTIFICATION CLERK (government ser.) 209.362-022
IDENTIFICATION CLERK (clerical) 205.362-022
IDENTIFICATION OFFICER (government ser.) 377.264-010
IDENTIFIER, HORSE (amuse. & rec.) 153.387-010
IGNITER CAPPER (ordnance) 737.687-050
Ignition-And-Carburetor Mechanic (automotive ser.) 825.281-022
Ignition Specialist (air trans.) 621.281-014
ILLUMINATING ENGINEER (profess. & kin.) 003.061-046
illuminator (profess. & kin.) 970.661-010
ILLUSTRATOR (profess. & kin.) 141.061-022
ILLUSTRATOR, MEDICAL AND SCIENTIFIC (profess. & kin.) 141.061-026
ILLUSTRATOR, SET (motion picture; radio-tv broad.) 141.061-030
image assembler (print. & pub.) 972.281-022
imager (electron. comp.) 976.684-030
imitation-marble mechanic (nonmet. min.) 556.484-010
imitator (amuse. & rec.) 159.047-018
IMMIGRATION INSPECTOR (government ser.) 168.167-022
Immigration Patrol Inspector (government ser.) 168.167-022
IMMUNOHEMATOLOGIST (medical ser.) 078.221-010
Impact Hammer Operator (forging) 610.362-010
IMPERSONATOR (amuse. & rec.) 159.047-018
IMPERSONATOR, CHARACTER (any industry) 299.647-010
Import Clerk (clerical) 214.467-010
Importer (retail trade; wholesale tr.) 185.157-018
IMPORT-EXPORT AGENT (any industry) 184.117-022
impregnating helper (elec. equip.; light. fix.) 599.685-050
IMPREGNATING-MACHINE OPERATOR (metal prod., nec) 590.362-014
impregnating-machine operator (plastic-synth.) 554.585-014
IMPREGNATING-TANK OPERATOR (any industry) 599.685-046
impregnating-tank operator (any industry) 599.685-030
Impregnation Inspector (elec. equip.) 726.367-010
IMPREGNATION OPERATOR (paper goods) 539.685-014
impregnator (any industry) 599.685-026
IMPREGNATOR (nonfer. metal; steel & rel.) 509.685-030
IMPREGNATOR (pen & pencil) 562.685-014
impregnator (plastic-synth.) 554.687-010
IMPREGNATOR AND DRIER (elec. equip.; electron. comp.) 599.682-014
IMPREGNATOR-AND-DRIER HELPER (elec. equip.; light. fix.) 599.685-050
Impregnator, Carbon Products (electron. comp.) 599.682-014
Impregnator, Electrolytic Capacitors (electron. comp.) 599.682-014
IMPREGNATOR OPERATOR (chemical) 559.685-106
impregnator operator (nonmet. min.) 579.665-010
Impresario (amuse. & rec.) 191.117-014
Impression Printer (print. & pub.) 979.381-034
Incendiaries Supervisor (chemical) 737.131-010
Incendiary-Powder Mixer (chemical) 737.687-090
INCINERATOR OPERATOR I (sanitary ser.) 955.685-010
INCINERATOR OPERATOR II (sanitary ser.) 955.362-014
INCINERATOR-PLANT-GENERAL SUPERVISOR (sanitary ser.) 184.167-046
INCINERATOR PLANT LABORER (sanitary ser.) 955.667-010
INCISING-MACHINE OPERATOR (wood prod., nec) 569.662-010
Inclined-Railway Operator (any industry) 921.663-030
income-tax-return preparer (business ser.) 219.362-070
INCOMING-FREIGHT CLERK (water trans.) 248.362-010
incubator helper (agriculture) 411.687-022
indexer (print. & pub.) 132.367-010
Indigo Mixer (textile) 550.684-014
Indigo-Vat Tender, Cloth (textile) 582.582-010
Indigo-Vat Tender, Warp (textile) 582.685-158
INDUCTION-COORDINATION POWER ENGINEER (utilities) 003.167-038
Induction-Furnace Operator (foundry) 512.362-018
INDUCTION-MACHINE OPERATOR (heat treating) 504.685-022
INDUCTION-MACHINE SETTER (heat treating) 504.380-014
Inductor Tester (electron. comp.) 726.684-078
industrial clerk (r.r. trans.) 910.667-018
INDUSTRIAL DESIGNER (profess. & kin.) 142.061-026
Industrial-Diamond Polisher (jewelry-silver.) 770.281-014
Industrial Economist (profess. & kin.) 050.067-010
Industrial Editor (print. & pub.) 132.037-022
INDUSTRIAL ENGINEER (profess. & kin.) 012.167-030
INDUSTRIAL ENGINEERING TECHNICIAN (profess. & kin.) 012.267-010
INDUSTRIAL-GAS FITTER (utilities) 862.381-014
INDUSTRIAL-GAS SERVICER (utilities) 637.261-022
INDUSTRIAL-GAS-SERVICER HELPER (utilities) 637.384-010
Industrial-Gas-Servicer Supervisor (utilities) 953.137-018
INDUSTRIAL-HEALTH ENGINEER (profess. & kin.) 012.167-034
industrial hygiene engineer (profess. & kin.) 012.167-034
INDUSTRIAL HYGIENIST (profess. & kin.) 079.161-010
Industrial-Illuminating Engineer (profess. & kin.) 003.061-046
Industrial-Locomotive Operator (any industry) 910.363-018
Industrial Occupational Analyst (profess. & kin.) 166.067-010
INDUSTRIAL-ORDER CLERK (clerical) 221.367-022
Industrial Relations Representative (government ser.) 166.167-034
Industrial Renderer (profess. & kin.) 970.281-014
industrial robot operator (aircraft mfg.) 806.382-026
INDUSTRIAL-SAFETY-AND-HEALTH TECHNICIAN (any industry) 168.161-014
industrial servicer (utilities) 862.381-014
Industrial Sociologist (profess. & kin.) 054.067-014
INDUSTRIAL THERAPIST (medical ser.) 076.167-010
INDUSTRIAL-TRUCK OPERATOR (any industry) 921.683-050
industrial x-ray operator (any industry) 199.361-010
Industrial-Yard Brake Coupler (any industry) 910.664-010
infant educator (social ser.) 195.227-018
INFANTRY INDIRECT FIRE CREWMEMBER (military ser.) 378.684-022
INFANTRY OPERATIONS SPECIALIST (military ser.) 378.367-022
INFANTRY UNIT LEADER (military ser.) 378.137-010
INFANTRY WEAPONS CREWMEMBER (military ser.) 378.684-026
Inflation Tester (rubber goods) 759.684-074
IN-FLIGHT REFUELING OPERATOR (military ser.) 912.662-010
IN-FLIGHT REFUELING SYSTEM REPAIRER (military ser.) 829.281-018
information and referral director (social ser.) 195.167-010
information broker (profess. & kin.) 109.067-010
information center specialist (profess. & kin.) 032.262-010
INFORMATION CLERK (clerical) 237.367-022
INFORMATION CLERK (motor trans.; r.r. trans.; water trans.) 237.367-018
INFORMATION CLERK, AUTOMOBILE CLUB (nonprofit org.) 237.267-010
information clerk, brokerage (financial) 237.367-046
INFORMATION CLERK-CASHIER (amuse. & rec.) 249.467-010
information manager (profess. & kin.) 109.067-010
Information Officer (government ser.) 188.117-106
information processing engineer (profess. & kin.) 033.167-010
information resources director (profess. & kin.) 109.067-010
information resources manager (profess. & kin.) 109.067-010
INFORMATION SCIENTIST (profess. & kin.) 109.067-010
information security (profess. & kin.) 033.162-010
Ingenue (amuse. & rec.) 150.047-010
ingot buggy operator (steel & rel.) 919.683-018
INGOT HEADER (nonfer. metal; smelt. & refin.) 514.584-010
Ingot Stripper I (steel & rel.) 921.663-010
Ingot Stripper II (steel & rel.) 921.663-042
Ingot Weigher (steel & rel.) 221.587-030
ingredient mixer (bakery products; dairy products) 529.684-014
INGREDIENT SCALER (bakery products; dairy products) 529.684-014
Ingredient-Scaler Helper (bakery products) 526.686-010
Initial Maker (garment) 782.684-018
injection-machine operator (meat products) 522.685-086
injection molder (plastic prod.) 556.382-014
injection molder, outer sole (boot & shoe) 690.685-406
INJECTION-MOLDING-MACHINE OFFBEARER (musical inst.) 690.686-042
INJECTION-MOLDING-MACHINE OFFBEARER (pen & pencil) 690.686-038
INJECTION-MOLDING-MACHINE OPERATOR (plastic prod.) 556.382-014
Injection-Molding-Machine Setter (plastic prod.) 556.380-010
INJECTION-MOLDING-MACHINE TENDER (plastic prod.; recording; rubber goods) 556.685-038
Injection-Wax Molder (foundry; jewelry-silver.) 549.685-038
INJECTOR ASSEMBLER (engine-turbine) 706.684-062
INKER (boot & shoe) 788.684-066
INKER (print. & pub.) 659.667-010

INKER AND OPAQUER (motion picture) 970.681-018
INKER, MACHINE (boot & shoe) 690.685-234
inking-machine tender (pen & pencil) 692.685-142
INK PRINTER (jewelry-silver.; leather prod.; plastic prod.) 652.685-038
INLAYER (print. & pub.) 977.684-014
Inlayer, Silver (plastic prod.) 692.685-070
INLETTER (ordnance) 669.682-050
inner-diameter grinder, tool (machine shop) 603.280-022
Inner-Layer Scrubber Tender (electron. comp.) 599.685-134
inner seamer (boot & shoe) 690.685-238
Inner-Tube Cutter (rubber tire) 690.685-446
INNER-TUBE INSERTER (rubber tire) 750.687-010
Inner-Tube Tester (rubber tire) 759.684-074
Inner-Tube Tuber-Machine Operator (rubber tire) 690.662-014
In-Process Inspector (electron. comp.) 726.381-010
in-Process Inspector (optical goods) 716.381-010
inseamer (boot & shoe) 690.682-078
inseam leveler (boot & shoe) 690.685-382
INSEAM TRIMMER (boot & shoe) 690.685-238
inseam-trimming-machine operator (boot & shoe) 690.685-238
INSECTICIDE MIXER (chemical) 550.685-070
Insect Sprayer, Mobile Unit (government ser.) 906.683-022
inseminator (agriculture) 418.384-010
Inserter (construction) 869.687-026
inserter (paper goods) 794.687-058
inserter (toy-sport equip.) 732.687-042
Inserter, Promotional Item (any industry) 920.587-018
INSERTING-MACHINE OPERATOR (clerical) 208.685-018
inserting-press operator (any industry) 692.685-062
INSERTION MACHINE TENDER, ELECTRONIC COMPONENTS (comm. equip.; electron. comp.; office machines) 726.685-014
insert-machine operator (paper goods; print. & pub.) 653.685-030
INSERVICE COORDINATOR, AUXILIARY PERSONNEL (medical ser.) 079.127-010
INSET CUTTER (fabrication, nec) 739.381-038
INSIDE-METER TESTER (utilities) 729.281-034
Inside-Panel Padder (furniture) 780.684-082
Inside-Plant Supervisor (tel. & tel.) 822.131-010
inside polisher (ordnance) 603.685-014
inside steward/stewardess (hotel & rest.) 318.137-010
inside tester (utilities) 729.281-034
INSOLE-AND-HEEL-STIFFENER (boot & shoe) 788.687-062
insole-and-outsole preparer (boot & shoe) 788.685-018
Insole-And-Outsole Splitter (boot & shoe) 585.685-114
INSOLE BEVELER (boot & shoe) 690.685-242
insole-bottom filler (boot & shoe) 788.684-026
Insole Buffer (boot & shoe) 690.685-046
insole-cloth trimmer (boot & shoe) 690.685-246
Insole Coverer (boot & shoe) 690.685-074
Insole Cutter, Machine (boot & shoe) 699.682-022
insole filler (boot & shoe) 788.684-026
insole gemmer (boot & shoe) 690.685-246
Insole-Lip Turner (boot & shoe) 690.685-074
Insole Rasper (boot & shoe) 788.684-094
INSOLE REINFORCER (boot & shoe) 690.685-246
insole rounder (boot & shoe) 690.685-338
Insole Sander (boot & shoe) 690.685-046
Insole Tacker (boot & shoe) 690.685-162
insole-tack-puller, hand (boot & shoe) 788.687-146
Insole Taper (boot & shoe) 690.685-074
Insole Tape Stitcher, Uco (boot & shoe) 690.682-082
Insole-Toe-Snipping-Machine Operator (boot & shoe) 690.685-222
INSPECTING-MACHINE ADJUSTER (ordnance) 632.380-010
INSPECTION CLERK (fabrication, nec) 739.587-010
inspection-machine tender (textile) 689.685-038
INSPECTION SUPERVISOR (chemical; nonfer. metal) 709.137-010
Inspection Supervisor (forging) 612.131-010
INSPECTION SUPERVISOR I (ordnance) 736.131-018
INSPECTION SUPERVISOR II (ordnance) 737.134-010
INSPECTION SUPERVISOR (machine shop) 609.131-010
Inspection Supervisor (metal prod., nec; nonfer. metal) 691.130-014
Inspection Supervisor (nonfer. metal) 691.130-010
INSPECTOR (boot & shoe) 788.384-010
inspector (brick & tile) 573.687-034
INSPECTOR (build. mat., nec) 549.367-010
INSPECTOR (chemical) 709.687-022
inspector (cutlery-hrdwr.) 701.687-026
INSPECTOR (cutlery-hrdwr.) 709.587-010
INSPECTOR (elec. equip.) 727.687-062
inspector (engine-turbine) 806.261-010
inspector (fabrication, nec) 739.687-146
INSPECTOR (forging) 612.261-010
inspector (foundry) 518.684-026
inspector (furniture) 763.684-010
INSPECTOR (hat & cap) 784.387-010
INSPECTOR (hotel & rest.) 321.137-014
INSPECTOR (house. appl.) 729.387-022
INSPECTOR (jewelry-silver.) 700.687-034
INSPECTOR (laundry & rel.) 369.687-022
INSPECTOR (mfd. bldgs.) 869.687-038
inspector (mine & quarry) 779.687-026
inspector (narrow fabrics) 689.687-022
INSPECTOR (nonmet. min.) 776.667-010
inspector (nonprofit org.) 379.137-010
INSPECTOR (office machines) 710.384-014
INSPECTOR (paper & pulp) 649.487-010
INSPECTOR (pen & pencil) 733.687-042
inspector (petrol. refin.) 549.261-010
INSPECTOR (pharmaceut.) 559.387-014
inspector (photofinishing) 976.687-014
INSPECTOR (plastic prod.; plastic-synth.) 559.381-010
inspector (print. & pub.) 970.361-014
inspector (print. & pub.) 653.667-010
Inspector (protective dev.) 789.687-070
Inspector (rubber goods) 759.684-074
INSPECTOR (steel & rel.) 619.381-010
inspector (stonework) 670.384-010
INSPECTOR (sugar & conf.) 529.687-114
INSPECTOR (toy-sport equip.) 732.684-130
INSPECTOR (woodworking) 769.687-026
INSPECTOR-ADJUSTER, OFFICE-MACHINE COMPONENTS (office machines) 706.384-010
Inspector, Advanced Composit (aircraft mfg.) 806.261-046
INSPECTOR, AGRICULTURAL COMMODITIES (government ser.) 168.287-010
INSPECTOR, AIR-CARRIER (government ser.) 168.264-010
INSPECTOR, AIRCRAFT LAUNCHING AND ARRESTING SYSTEMS (government ser.) 806.264-014
INSPECTOR, ALINING (office machines) 706.687-022
INSPECTOR, ALUMINUM BOAT (ship-boat mfg.) 806.687-026
INSPECTOR AND ADJUSTER, GOLF CLUB HEAD (toy-sport equip.) 732.384-014
inspector and clerk (utilities) 821.367-010
inspector and clipper (any industry) 789.587-014
inspector and clipper (knitting) 684.684-010
inspector and counter (paper & pulp) 649.687-010
INSPECTOR AND HAND PACKAGER (plastic prod.) 559.687-074
inspector and mender (tex. prod., nec) 782.487-010
inspector and patch worker (furniture) 763.684-070
Inspector And Shaper, End Windings (elec. equip.) 724.364-010
INSPECTOR AND SORTER (leather mfg.) 589.387-010
INSPECTOR AND TESTER (agric. equip.) 624.361-010
inspector and tester (engine-turbine) 806.261-010
Inspector And Tester (rubber goods) 759.684-074
INSPECTOR AND TESTER (struct. metal) 809.687-018
inspector-and-unloader (metal prod., nec) 709.687-038
INSPECTOR, ASSEMBLIES AND INSTALLATIONS (aircraft mfg.) 806.261-030
inspector, assembly (aircraft mfg.) 806.261-030
INSPECTOR, ASSEMBLY (furniture) 669.364-010
INSPECTOR, ASSEMBLY (ordnance) 736.387-010
INSPECTOR, AUTOMATIC TYPEWRITER (office machines) 706.387-010
INSPECTOR, BALANCE-BRIDGE (clock & watch) 715.687-058
INSPECTOR, BALANCE TRUING (clock & watch) 715.687-050
INSPECTOR, BALANCE WHEEL MOTION (clock & watch) 715.687-054
INSPECTOR, BALL POINTS (nonfer. metal) 733.687-046
INSPECTOR, BARREL ASSEMBLY (clock & watch) 715.684-114
INSPECTOR, BARREL (ordnance) 736.687-014
INSPECTOR, BENCH ASSEMBLY (aircraft mfg.) 806.281-026
INSPECTOR, BICYCLE (motor-bicycles) 806.687-030
INSPECTOR, BOILER (profess. & kin.) 168.167-026
inspector, brake lining (nonmet. min.) 776.667-010
INSPECTOR, BUILDING (government ser.) 168.167-030
INSPECTOR, BULLET SLUGS (ordnance) 737.687-058
INSPECTOR, CANNED FOOD RECONDITIONING (can. & preserv.) 529.687-118
Inspector, Canvas Products (tex. prod., nec) 789.587-014
INSPECTOR, CASING (clock & watch) 715.687-062
INSPECTOR, CHIEF (elec. equip.) 729.131-010
INSPECTOR, CHIEF (foundry) 514.131-010
inspector, chief (machine shop) 609.131-010
INSPECTOR, CHIEF (ordnance) 737.137-010
INSPECTOR, CHIEF (utilities) 956.267-010

INSPECTOR, CIRCUITRY NEGATIVE (electron. comp.) 726.384-014
INSPECTOR, CLIP-ON SUNGLASSES (optical goods) 713.667-010
Inspector, Coated Fabrics (tex. prod., nec) 689.685-038
INSPECTOR, COLD WORKING (ordnance) 612.384-010
inspector, component parts (electron. comp.) 726.684-022
INSPECTOR, CONTAINER FINISHING (elec. equip.) 727.687-066
Inspector, Conveyor Line (office machines) 706.381-022
INSPECTOR, CRYSTAL (electron. comp.) 726.684-054
INSPECTOR, DIALS (clock & watch) 715.687-066
Inspector, Electrical And Electronic Installations (aircraft mfg.) 806.261-030
inspector, electrical bench (aircraft mfg.; air trans.) 825.381-026
INSPECTOR, ELECTRICAL (government ser.) 168.167-034
INSPECTOR, ELECTROMECHANICAL (inst. & app.) 729.361-010
INSPECTOR, ELEVATORS (government ser.) 168.167-038
Inspector, Engines And Components Assembly (aircraft mfg.) 806.261-030
INSPECTOR, EXHAUST EMISSIONS (auto. mfg.) 806.364-010
Inspector, Experimental Assembly (aircraft mfg.) 806.261-030
INSPECTOR, EYEGLASS (optical goods) 713.384-014
INSPECTOR, EYEGLASS FRAMES (optical goods) 713.687-022
INSPECTOR, FABRIC (any industry) 789.587-014
INSPECTOR, FABRICATION (aircraft mfg.) 806.361-022
INSPECTOR, FIBROUS WALLBOARD (wood prod., nec) 539.487-010
Inspector, Filters (auto. mfg.) 609.684-010
INSPECTOR, FILTER TIP (tobacco) 529.667-010
Inspector, Final Assembly (aircraft mfg.) 806.261-030
INSPECTOR, FINAL ASSEMBLY (pen & pencil) 733.687-050
Inspector, Final Assembly-Conveyor Line (office machines) 706.381-022
Inspector, Final Assembly - Electrical (aircraft mfg.) 806.261-030
Inspector, Final Assembly - Mechanical (aircraft mfg.) 806.261-030
inspector, finished machines and bundles (agric. equip.) 801.667-010
INSPECTOR, FINISHING (tex. prod., nec) 589.387-022
INSPECTOR, FIREARMS (ordnance) 632.381-014
INSPECTOR, FIREWORKS (chemical) 737.687-062
INSPECTOR, FLOOR (machine shop) 609.361-010
Inspector, Floor Sub-Assembly (office machines) 706.381-022
Inspector, Fuel Hose (rubber goods) 759.684-074
INSPECTOR, FURNITURE AND BEDDING (government ser.) 168.267-046
INSPECTOR, FURNITURE DECALS (furniture) 979.687-030
INSPECTOR, GAUGE AND INSTRUMENT (machine shop) 601.281-018
INSPECTOR, GENERAL (any industry) 609.684-010
INSPECTOR, GLASS OR MIRROR (glass products) 779.687-022
INSPECTOR, GOLF BALL (toy-sport equip.) 732.567-010
INSPECTOR, GOVERNMENT PROPERTY (government ser.) 168.267-050
INSPECTOR-GRADER, AGRICULTURAL ESTABLISHMENT (agriculture) 409.687-010
INSPECTOR, GRAIN MILL PRODUCTS (grain-feed mills) 529.387-026
INSPECTOR, HAIRSPRING I (clock & watch) 715.381-066
INSPECTOR, HAIRSPRING II (clock & watch) 715.684-122
INSPECTOR, HAIRSPRING TRUING (clock & watch) 715.684-118
INSPECTOR, HANDBAG FRAMES (leather prod.) 222.687-042
INSPECTOR, HEALTH CARE FACILITIES (government ser.) 168.167-042
INSPECTOR, HEATING AND REFRIGERATION (government ser.) 168.167-046
Inspector, Hot Forgings (forging) 612.261-010
INSPECTOR I (concrete prod.) 779.387-014
INSPECTOR I (fabrication, nec) 739.687-106
INSPECTOR I (furniture) 780.687-066
INSPECTOR I (nonfer. metal) 619.364-010
INSPECTOR I (ordnance) 737.387-014
INSPECTOR I (pottery & porc.) 575.687-034
INSPECTOR II (concrete prod.) 579.664-014
INSPECTOR II (fabrication, nec) 590.367-010
INSPECTOR II (furniture) 780.687-022
Inspector II (nonfer. metal) 519.686-010
INSPECTOR II (ordnance) 737.687-054
INSPECTOR II (pottery & porc.) 774.384-010
INSPECTOR III (furniture) 739.687-110
INSPECTOR III (ordnance) 737.367-010
INSPECTOR, INDUSTRIAL WASTE (government ser.) 168.267-054
inspector-in-process (optical goods) 716.687-022
INSPECTOR, INSULATION (nonfer. metal) 691.387-010
INSPECTOR, INTEGRATED CIRCUITS (electron. comp.) 726.684-058
INSPECTOR IV (ordnance) 559.387-010
inspector, jewels (clock & watch) 770.687-022
inspector, line (tel. & tel.) 822.267-010
INSPECTOR, LIVE AMMUNITION (ordnance) 736.687-018
inspector, machine-cut glass (glass mfg.) 579.687-030
Inspector, Machined Parts (aircraft mfg.) 806.361-022
Inspector, Magnetic Particle (any industry) 709.364-010
INSPECTOR, MAGNETIC PARTICLE AND PENETRANT (any industry) 709.364-010
inspector, manufactured parts (office machines) 706.381-022
INSPECTOR, MATERIAL DISPOSITION (aircraft mfg.) 806.261-034
inspector, materials and processes (ordnance) 737.364-010
inspector, mechanical (office machines) 706.381-022
INSPECTOR, MECHANISM (clock & watch) 715.384-014
INSPECTOR, METAL CAN (tinware) 709.367-010
INSPECTOR, METAL FABRICATING (any industry) 619.261-010
INSPECTOR, MISSILE (aircraft mfg.) 806.261-038
Inspector, Missile Final Assembly (aircraft mfg.) 806.261-038
INSPECTOR, MOTORS AND GENERATORS (elec. equip.) 721.361-010
INSPECTOR, MOTOR VEHICLES (government ser.) 168.267-058
INSPECTOR, MULTIFOCAL LENS (optical goods) 716.687-018
INSPECTOR OF DREDGING (water trans.) 850.387-010
INSPECTOR, OPEN DIE (cutlery-hrdwr.) 701.684-014
inspector, optical elements (optical goods) 716.381-010
INSPECTOR, OPTICAL INSTRUMENT (optical goods) 711.281-010
INSPECTOR, OUTSIDE PRODUCTION (aircraft mfg.) 806.261-042
inspector, outside steam-distribution (utilities) 862.361-022
Inspector-Packager (any industry) 920.587-018
INSPECTOR, PACKAGING MATERIALS (pharmaceut.) 920.387-010
inspector-packer, glass container (glass mfg.) 579.687-030
INSPECTOR-PACKER (hat & cap) 784.687-042
INSPECTOR, PAPER PRODUCTS (paper goods) 649.367-010
Inspector, Pawnshop Detail (government ser.) 375.267-030
Inspector, Penetrant (any industry) 709.364-010
INSPECTOR, PHOTOGRAPHIC EQUIPMENT (photo. appar.) 714.381-014
INSPECTOR, PICTURE FRAMES (wood prod., nec) 769.687-030
INSPECTOR, PLASTICS AND COMPOSITES (aircraft mfg.) 806.261-046
Inspector, Plastics Fabrication-Developmental (aircraft mfg.) 806.261-046
INSPECTOR, PLATING (electroplating) 500.287-010
inspector, plug seam (tobacco) 529.667-010
INSPECTOR, PLUMBING (government ser.) 168.167-050
INSPECTOR, POISING (clock & watch) 715.384-018
INSPECTOR, PRECISION (optical goods) 716.381-010
inspector, precision (photo. appar.) 714.381-014
inspector, precision electrical assembly (aircraft mfg.; air trans.) 825.381-026
inspector, precision electrical assembly (aircraft mfg.) 729.381-010
INSPECTOR, PRINTED CIRCUIT BOARDS (electron. comp.) 726.684-062
inspector, process (elec. equip.) 829.361-018
INSPECTOR, PROCESSING (aircraft mfg.) 806.381-074
INSPECTOR, PROCESSING (sugar & conf.) 529.687-226
Inspector, Production Plastic Parts (aircraft mfg.) 806.261-046
INSPECTOR, PUBLICATIONS (print. & pub.) 653.667-010
Inspector, Purchased Parts (office machines) 706.381-022
INSPECTOR, QUALITY ASSURANCE (government ser.) 168.287-014
Inspector, Radar And Electronics (aircraft mfg.) 722.381-014
inspector, rag sorting (paper & pulp) 530.687-010
INSPECTOR, RAILROAD (government ser.) 168.287-018
Inspector, Raw Quartz (electron. comp.) 726.381-010
INSPECTOR, RECEIVING (aircraft mfg.; elec. equip.; electron. comp.) 222.384-010
INSPECTOR-REPAIRER (button & notion) 734.684-018
INSPECTOR-REPAIRER (leather prod.) 783.684-018
INSPECTOR-REPAIRER, SANDSTONE (stonework) 779.684-030
INSPECTOR, RETURNED MATERIALS (auto. mfg.) 806.384-014
inspector, rough castings (machine shop) 600.281-014
INSPECTOR, RUBBER-STAMP DIE (pen & pencil) 733.687-054
INSPECTOR, SALVAGE (ordnance) 737.684-026
inspector, scales (office machines) 710.381-014
INSPECTOR, SCREEN PRINTING (print. & pub.) 979.667-010
INSPECTOR, SEMICONDUCTOR WAFER (electron. comp.) 726.684-066
INSPECTOR, SEMICONDUCTOR WAFER PROCESSING (electron. comp.) 726.384-018
INSPECTOR, SET-UP AND LAY-OUT (machine shop) 601.261-010
Inspector, Sheet Metal Parts (aircraft mfg.) 806.361-022
INSPECTOR, SHELLS (ordnance) 737.687-066
INSPECTOR, SHIPPING (agric. equip.) 801.667-010
INSPECTOR, SLIDE FASTENERS (button & notion) 734.687-062
INSPECTOR, SOLDERING (clock & watch) 715.687-070
Inspector, Station Assembly-Conveyor Line (office machines) 706.381-022
Inspector, Structural Bonding (aircraft mfg.) 806.261-046
Inspector, Structures (aircraft mfg.) 806.261-030
Inspector, Subassemblies (electron. comp.) 726.381-010
Inspector, Subassembly (aircraft mfg.) 806.261-030
INSPECTOR, SURGICAL GARMENT (protective dev.) 712.487-010
INSPECTOR, SURGICAL INSTRUMENTS (inst. & app.) 712.684-050
inspector technician (grain-feed mills) 529.387-026
INSPECTOR, TIMERS (clock & watch) 715.687-074
INSPECTOR, TIMING (clock & watch) 715.685-034
INSPECTOR, TOOL (machine shop) 601.281-022
INSPECTOR, TOYS (toy-sport equip.) 731.687-022
inspector trimmer (glove & mit.) 789.687-042
Inspector, Tubes (electron. comp.) 726.381-010
INSPECTOR, TYPE (office machines) 706.687-026
INSPECTOR, TYPEWRITER ASSEMBLY AND PARTS (office machines) 706.381-022
INSPECTOR, WATCH ASSEMBLY (clock & watch) 715.381-070
INSPECTOR, WATCH PARTS (clock & watch) 715.384-022
INSPECTOR, WATCH TRAIN (clock & watch) 715.381-074

INSPECTOR, WATER-POLLUTION CONTROL (government ser.) 168.267-090
Inspector, Weights And Measures (government ser.) 168.267-062
Inspector, Welded Parts (aircraft mfg.) 806.361-022
INSPECTOR, WHEEL AND PINION (clock & watch) 715.684-126
INSPECTOR, WIRE (metal prod., nec; nonfer. metal) 691.367-010
INSPECTOR, WIRE PRODUCTS (metal prod., nec) 709.687-026
Inspector, Wire Rope (metal prod., nec) 691.367-010
INSPECTOR, WOODWIND INSTRUMENTS (musical inst.) 730.684-038
INSPECTOR, WREATH (fabrication, nec) 739.687-118
INSTALLATION ENGINEER (profess. & kin.) term
installation helper (construction; retail trade; tex. prod., nec) 869.687-010
INSTALLATION SUPERINTENDENT, PIN-SETTING MACHINE (construction) 829.131-018
Installation Supervisor (tel. & tel.) 822.131-014
installation supervisor (tel. & tel.) 822.131-010
installation worker, draperies (retail trade) 869.484-014
installer (business ser.) 822.361-018
INSTALLER (mfd. bldgs.; vehicles, nec) 869.684-026
INSTALLER (museums) 922.687-050
installer (retail trade) 869.484-014
INSTALLER, DOOR FURRING (railroad equip.) 806.687-034
INSTALLER, ELECTRICAL, PLUMBING, MECHANICAL (ship-boat mfg.) 806.381-062
INSTALLER-INSPECTOR, FINAL (vehicles, nec) 806.684-066
INSTALLER, INTERIOR ASSEMBLIES (aircraft mfg.) 806.381-078
INSTALLER, METAL FLOORING (railroad equip.) 806.684-070
installer, molding and trim (mfd. bldgs.) 869.684-066
INSTALLER, MOVABLE BULKHEAD (railroad equip.) 806.684-074
INSTALLER, SOFT TOP (automotive ser.) 807.684-026
Installment-Account Checker (clerical) 209.687-010
INSTANTIZER OPERATOR (dairy products) 523.685-106
Instant-Powder Supervisor (dairy products) 529.131-014
INSTANT PRINT OPERATOR (print. & pub.) 979.362-010
institutional-nutrition consultant (profess. & kin.) 077.127-018
INSTITUTION LIBRARIAN (library) 100.167-022
instructional technology specialist (profess. & kin.) 149.061-010
INSTRUCTOR (boot & shoe) 788.222-010
Instructor (education) 090.227-010
instructor (textile) 789.222-010
INSTRUCTOR (textile) 689.324-010
INSTRUCTOR, APPAREL MANUFACTURE (textile) 789.222-010
Instructor, Ballroom Dancing (education) 151.027-014
Instructor, Braille (education) 094.224-018
INSTRUCTOR, BRIDGE (education) 159.227-010
INSTRUCTOR, BUSINESS EDUCATION (education) 090.222-010
INSTRUCTOR, BUS, TROLLEY, AND TAXI (motor trans.; r.r. trans.) 919.223-010
INSTRUCTOR, CORRESPONDENCE SCHOOL (education) 099.227-014
Instructor, Creeler (textile) 689.324-010
INSTRUCTOR, DANCING (education) 151.027-014
INSTRUCTOR, DECORATING (pottery & porc.) 740.221-010
instructor, dramatic arts (education) 150.027-014
INSTRUCTOR, DRIVING (education) 099.223-010
INSTRUCTOR, EXTENSION WORK (education) 090.227-018
INSTRUCTOR, FLYING I (education) 196.223-010
INSTRUCTOR, FLYING II (education) 097.227-010
INSTRUCTOR, GROUND SERVICES (air trans.) 099.227-018
Instructor, Hairspring (clock & watch) 715.221-010
Instructor, Illustration (education) 149.021-010
Instructor, Industrial Design (education) 149.021-010
instructor, kindergarten (education) 092.227-014
Instructor, Knitting (textile) 689.324-010
Instructor, Looping (textile) 689.324-010
INSTRUCTOR, MACHINE (any industry) term
INSTRUCTOR, MILITARY SCIENCE (education) 099.227-022
INSTRUCTOR, MODELING (education) 099.227-026
instructor of blind (education; medical ser.; nonprofit org.) 076.224-014
INSTRUCTOR, PAINTING (retail trade) 297.451-010
INSTRUCTOR, PHYSICAL (amuse. & rec.; education) 153.227-014
INSTRUCTOR, PHYSICAL EDUCATION (education) 099.224-010
INSTRUCTOR, PILOT (air trans.) 196.223-014
instructor, private (education) 099.227-034
Instructor, Product Inspection (textile) 689.324-010
Instructor, Programmable Controllers (education) 166.221-010
INSTRUCTOR, PSYCHIATRIC AIDE (education) 075.127-010
Instructor, Robotics (education) 166.221-010
instructor, self-improvement (education) 099.227-026
INSTRUCTOR, SPORTS (amuse. & rec.; education) 153.227-018
Instructor, Tap Dancing (education) 151.027-014
INSTRUCTOR, TECHNICAL TRAINING (education) 166.221-010
INSTRUCTOR-TRAINER, CANINE SERVICE (government ser.) 379.227-010
instructor, training (retail trade) see SPONSOR
INSTRUCTOR, VOCATIONAL TRAINING (education) 097.221-010
Instructor, Warper (textile) 689.324-010
INSTRUCTOR, WASTEWATER-TREATMENT PLANT (sanitary ser.) 955.222-010
INSTRUCTOR, WATCH ASSEMBLY (clock & watch) 715.221-010
INSTRUCTOR, WEAVING (textile) 683.222-010
INSTRUMENT ASSEMBLER (inst. & app.) 710.684-046
INSTRUMENTATION ENGINEER (profess. & kin.) term
INSTRUMENTATION TECHNICIAN (profess. & kin.) 003.261-010
instrument calibrator (inst. & app.) 710.381-042
instrument-case finisher (leather prod.) 739.684-034
Instrument Fitter (construction) 862.281-022
INSTRUMENT INSPECTOR (inst. & app.) 710.684-050
INSTRUMENT INSPECTOR (aircraft mfg., air trans.) 722.381-014
Instrument-Lens Generator (optical goods) 716.682-014
Instrument-Lens Grinder (optical goods) 716.382-018
instrument-lens-grinder apprentice (optical goods) 716.382-022
Instrument-Lens Inspector (optical goods) 716.381-010
instrument maker (any industry) 729.281-026
INSTRUMENT MAKER (any industry) 600.280-010
INSTRUMENT-MAKER AND REPAIRER (petrol. & gas) 600.280-014
INSTRUMENT-MAKER APPRENTICE (any industry) 600.280-018
INSTRUMENT MECHANIC (any industry) 710.281-026
INSTRUMENT MECHANIC, WEAPONS SYSTEM (inst. & app.) 711.281-014
instrument repairer (any industry) 710.281-026
instrument repairer (any industry) 729.281-026
INSTRUMENT REPAIRER (any industry) 710.261-010
INSTRUMENT REPAIRER (tel. & tel.) 722.281-010
INSTRUMENT-REPAIRER HELPER (any industry) 710.384-018
Instrument Repairer, Steam Plant (utilities) 710.281-030
instrument repair supervisor (any industry) 710.131-014
INSTRUMENT-SHOP SUPERVISOR (tel. & tel.) 722.131-010
INSTRUMENT TECHNICIAN (utilities) 710.281-030
INSTRUMENT-TECHNICIAN APPRENTICE (utilities) 710.281-042
INSTRUMENT-TECHNICIAN HELPER (utilities) 710.684-030
insulating-machine operator (any industry) 599.685-046
INSULATING-MACHINE OPERATOR (nonfer. metal) 691.682-018
INSULATION CUTTER AND FORMER (elec. equip.) 721.484-018
Insulation Installer (construction) 869.664-014
INSULATION-POWER-UNIT TENDER (construction; retail trade; wholesale tr.) 863.685-010
insulation supervisor (construction) 863.134-010
INSULATION WORKER (construction) 863.364-014
INSULATION-WORKER APPRENTICE (construction) 863.364-010
insulation worker, interior surface (construction) 863.381-010
Insulator (elec. equip.) 724.684-026
insulator apprentice (construction) 863.364-010
Insulator Cutter And Former (elec. equip.) 724.684-026
INSULATOR TESTER (utilities) 729.387-026
insurance adjustor (business ser.; insurance) 241.217-010
insurance agent (insurance) 250.257-010
insurance and benefits clerk (clerical) 205.567-010
insurance and risk manager (any industry) 186.117-066
Insurance Application Investigator (insurance) 241.267-030
INSURANCE ATTORNEY (insurance) 110.117-014
Insurance Broker (insurance) 250.257-010
INSURANCE CHECKER (insurance) 219.482-014
insurance-claim approver (business ser.; insurance) 241.267-018
insurance-claim auditor (business ser.; insurance) 241.267-018
insurance-claim representative (business ser.; insurance) 241.217-010
INSURANCE CLERK (clerical) 219.387-014
Insurance Clerk (financial) 249.362-014
INSURANCE CLERK (financial; insurance) 219.367-014
INSURANCE CLERK (medical ser.) 214.362-022
Insurance Collector (insurance) 241.367-010
insurance counsel (insurance) 110.117-014
insurance investigator (business ser.; insurance) 241.217-010
Insurance Licensing Supervisor (government ser.) 168.167-090
intake worker (social ser.) 195.107-010
Integral Tank Sealer (aircraft mfg.) 806.384-038
INTEGRATED CIRCUIT FABRICATOR (electron. comp.) 590.684-042
INTEGRATED CIRCUIT LAYOUT DESIGNER (profess. & kin.) 003.261-018
INTELLIGENCE CLERK (military ser.) 249.387-014
INTELLIGENCE RESEARCH SPECIALIST (profess. & kin.) 059.167-010
INTELLIGENCE SPECIALIST (government ser.) 059.267-010
INTELLIGENCE SPECIALIST (military ser.) 059.267-014
Intercell-Connector Placer (elec. equip.) 727.687-070
interceptor operator (business ser.) 235.662-026
inter-com installer (any industry) 829.281-022
inter-com servicer (any industry) 829.281-022
inter-fold roll cutter (pen & pencil) 640.685-066
Interior Decorator (profess. & kin.) 142.051-014
INTERIOR DESIGNER (profess. & kin.) 142.051-014
interior horticulturist (agriculture) 408.364-010
interior paneler, partition setter (mfd. bldgs.) 869.684-038
Interior Wall Assembler (mfd. bldgs.) 869.684-018

INTERLACER (boot & shoe) 788.684-070
INTERLINE CLERK (motor trans.; r.r. trans.) 214.382-022
Interlocking Tower Operator (r.r. trans.) 910.362-010
intermediate-card tender (nonmet. min.; textile) 680.665-018
INTERNAL CARVER (plastic prod.) 754.381-010
INTERNAL-COMBUSTION-ENGINE INSPECTOR (engine-turbine) 806.261-010
INTERNAL-COMBUSTION-ENGINE SUBASSEMBLER (engine-turbine) 706.481-010
Internal-Grinder Tender (machine shop) 603.685-062
internal grinder, tool (machine shop) 603.280-022
internal-grinding-machine hand (machine shop) 603.280-022
internal-grinding-machine operator (machine shop) 603.280-022
internal medicine specialist (medical ser.) 070.101-042
International Banking Officer (financial) 186.267-018
International-Trade Economist (profess. & kin.) 050.067-010
INTERNIST (medical ser.) 070.101-042
Interpretative Dancer (amuse. & rec.) 151.047-010
INTERPRETER (profess. & kin.) 137.267-010
INTERPRETER, DEAF (profess. & kin.) 137.267-014
interviewer (clerical) 205.367-054
interviewer (clerical) 205.362-014
Interviewer (radio-tv broad.) 166.167-010
Inventory-Audit Clerk (clerical) 210.382-010
inventory clerk (clerical) 219.387-030
INVENTORY CLERK (clerical) 222.387-026
Inventory Clerk, Physical (clerical) 222.387-026
inventory control clerk (clerical) 219.387-030
Inventory Transcriber (business ser.) 216.482-022
Invertebrate Zoologist (profess. & kin.) 041.061-090
Inverter-And-Clipper (leather prod.) 789.687-182
Investigation Division Captain (government ser.) 375.167-014
Investigation Division Lieutenant (government ser.) 375.167-014
Investigation Division Sergeant (government ser.) 375.167-014
investigator (any industry) 376.367-014
investigator (business ser.) 376.267-022
INVESTIGATOR (clerical) 241.267-030
INVESTIGATOR (government ser.) 168.267-062
INVESTIGATOR (utilities) 376.367-022
INVESTIGATOR, CASH SHORTAGE (retail trade) 376.267-010
Investigator, Claims (government ser.) 168.267-062
investigator, communicable disease (government ser.) 168.167-018
INVESTIGATOR, DEALER ACCOUNTS (financial) 241.367-038
INVESTIGATOR, FRAUD (retail trade) 376.267-014
INVESTIGATOR, INTERNAL AFFAIRS (government ser.) 375.267-034
Investigator, Internal Revenue (government ser.) 168.267-062
INVESTIGATOR, NARCOTICS (government ser.) 375.267-018
investigator operator (business ser.) 376.367-010
INVESTIGATOR, PRIVATE (business ser.) 376.267-018
INVESTIGATOR, UTILITY-BILL COMPLAINTS (utilities) 241.267-034
INVESTIGATOR, VICE (government ser.) 375.267-022
Investigator, Welfare (government ser.) 168.267-062
INVESTMENT ANALYST (financial; insurance) 160.267-026
investment executive (financial) 250.257-018
Invoice-Classification Clerk (clerical) 210.382-030
invoice clerk (clerical) 214.382-014
INVOICE-CONTROL CLERK (clerical) 214.362-026
invoicing-machine operator (clerical) 214.482-010
inweaver (personal ser.) 782.381-022
ION EXCHANGE OPERATOR (beverage) 521.685-190
ION-EXCHANGE OPERATOR (chemical) 558.685-034
ION-EXCHANGE OPERATOR (pharmaceut.) 558.685-038
ION-EXCHANGE OPERATOR (smelt. & refin.) 558.685-030
ION IMPLANT MACHINE OPERATOR (electron. comp.) 590.382-022
IRISH-MOSS BLEACHER (fishing & hunt.) 447.687-014
IRISH-MOSS GATHERER (fishing & hunt.) 447.687-018
IRISH-MOSS OPERATOR (chemical) 529.382-030
iron-and-steel-work supervisor (construction) 809.131-018
ironer (boot & shoe) 788.684-130
IRONER (button & notion) 590.685-042
IRONER (domestic ser.) 302.687-010
ironer (glove & mit.; laundry & rel.) 363.687-010
ironer (hat & cap) 584.685-026
ironer (hat & cap) 583.685-022
ironer (knitting) 583.685-070
ironer (wood prod., nec) 739.684-098
iron erector (construction) 801.361-014
ironer, hand (any industry) 363.684-018
ironer, machine (any industry) 363.682-018
IRONER, SOCK (laundry & rel.) 363.687-014
IRON-LAUNDER OPERATOR (smelt. & refin.) 511.565-018
IRON-PLASTIC BULLET MAKER (ordnance) 590.365-010
ironworker (construction) 801.361-014
ironworker apprentice (construction) 801.361-018
ironworker apprentice, shop (any industry) 619.361-018
Ironworker Helper, Shop (any industry) 619.686-022
IRONWORKER-MACHINE OPERATOR (any industry) 615.482-018
ironworker, wire-fence erector (construction) 869.684-022
IRRADIATED-FUEL HANDLER (chemical) 921.663-034
irradiation technician (profess. & kin.) 015.362-018
Irrigating-Pump Operator (agriculture) 914.682-010
IRRIGATION ENGINEER (profess. & kin.) 005.061-022
IRRIGATION SYSTEM INSTALLER (construction) 851.383-010
IRRIGATOR, GRAVITY FLOW (agriculture) 409.687-014
IRRIGATOR, HEAD (agriculture) 409.137-010
irrigator, overhead (agriculture) 409.685-014
IRRIGATOR, SPRINKLING SYSTEM (agriculture) 409.685-014
IRRIGATOR, VALVE PIPE (agriculture) 409.684-010
Islamic Butcher (meat products) 525.361-010
Isobutylene Operator, Chief (chemical) 559.132-078
Isolation-Washer (laundry & rel.) 361.665-010
isotope-production technician (profess. & kin.) 015.362-022

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jacker feeder (millwork-plywood; paper & pulp; saw. & plan.) 921.686-022
Jacket Changer (foundry) 519.687-022
JACKET PREPARER (print. & pub.) 221.387-030
JACKHAMMER OPERATOR (mine & quarry) 930.684-018
jackhammer-splitter operator (stonework) 677.685-042
JACK SETTER (mine & quarry) 939.684-010
jackspooler (narrow fabrics; textile) 681.685-142
Jack-Strip Assembler (comm. equip.; elec. equip.) 729.684-026
Jack-Tamp Operator (construction) 910.683-018
jacquard-lace weaver (tex. prod., nec) 683.682-026
Jacquard-Loom Fixer (textile) 683.260-018
JACQUARD-LOOM WEAVER (narrow fabrics) 683.682-022
JACQUARD-LOOM WEAVER (textile) 683.662-010
jacquard-pattern servicer (textile) 683.685-014
JACQUARD-PLATE MAKER (knitting) 685.381-010
JACQUARD TWINE-POLISHER OPERATOR (tex. prod., nec) 583.685-062
jagger (personal ser.) 339.571-010
JAILER (government ser.) 372.367-014
JAILER, CHIEF (government ser.) 372.167-018
jail keeper (government ser.) 372.367-014
Jalousie Installer (construction) 860.381-022
JAMMER OPERATOR (logging) 921.683-054
Jammer Operator Helper (logging) 921.687-022
JANITOR (any industry) 382.664-010
janitor (any industry) 381.687-018
janitor (any industry) 381.687-014
janitor, church (nonprofit org.) 389.667-010
janitor, head (any industry) 381.137-010
Japanner (any industry) 740.684-022
japanner (leather mfg.) 584.687-010
Jawbone Breaker (meat products) 525.684-034
jeeper operator (construction) 862.687-014
Jersey Knitter (knitting) 685.665-014
jet channeler (construction; mine & quarry) 930.684-010
JET-DYEING-MACHINE TENDER (textile) 582.685-090
JET HANDLER (plastic-synth.) 557.684-010
jet-piercer operator (construction; mine & quarry) 930.684-010
JET WIPER (plastic-synth.) 557.684-014
JEWEL-BEARING BROACHER (clock & watch) 770.682-010
JEWEL-BEARING DRILLER (clock & watch) 770.682-014
JEWEL-BEARING FACER (clock & watch) 770.682-018
JEWEL-BEARING GRINDER (clock & watch) 770.685-018
JEWEL-BEARING MAKER (clock & watch) 770.381-030
JEWEL-BEARING POLISHER (clock & watch) 770.685-022
JEWEL-BEARING TURNER (clock & watch) 770.682-022
JEWEL BLOCKER AND SAWYER (clock & watch) 770.381-026
JEWEL-CORNER-BRUSHING-MACHINE OPERATOR (clock & watch) 770.685-026
JEWEL-CUPPING-MACHINE OPERATOR (clock & watch) 770.685-030
Jewel-Diameter Gauger (clock & watch) 770.687-018
JEWELER (jewelry-silver.) 700.281-010
JEWELER APPRENTICE (jewelry-silver.) 700.281-014
JEWEL GAUGER (clock & watch) 770.687-018
JEWEL GRINDER I (clock & watch) 770.685-014
JEWEL GRINDER II (clock & watch) 770.684-010
JEWEL-HOLE CORNERER (clock & watch) 770.684-014
JEWEL-HOLE DRILLER (clock & watch) 770.682-026
jewel-hole finish opener (clock & watch) 673.682-022
Jewel-Hole Gauger (clock & watch) 770.687-018
jewel-hole rough opener (clock & watch) 770.684-018
JEWEL INSERTER (clock & watch) 715.684-130
JEWEL INSPECTOR (clock & watch) 770.687-022
jewel-oliving-machine operator (clock & watch) 770.381-034
jewel polisher (clock & watch) 770.685-010

jewelry-casting-model maker (jewelry-silver.) 709.381-018
jewelry-casting-model-maker apprentice (jewelry-silver.) 709.381-022
JEWELRY COATER (jewelry-silver.) 590.685-046
Jewelry-Engraving Supervisor (engraving) 704.131-010
jewelry jobber (jewelry-silver.) 700.281-010
jewelry repairer (jewelry-silver.) 700.281-010
jewelry-repairer apprentice (jewelry-silver.) 700.281-014
jewelry setter (jewelry-silver.; optical goods) 700.381-054
Jewelry Sorter (nonprofit org.) 222.387-054
jewel sawyer (clock & watch) 770.381-026
Jewel Sorter (clock & watch) 770.687-014
JEWEL STAKER (clock & watch) 715.684-134
JEWEL STRINGER (clock & watch) 770.687-026
JEWEL STRIPPER (clock & watch) 605.685-022
JEWEL SUPERVISOR (clock & watch) 770.131-010
Jig And Fixture Builder (aircraft mfg.) 693.281-030
Jig-And-Fixture Maker (machine shop) 601.281-026
jig and form maker (plastic prod.) 754.381-014
jig-borer (machine shop) 606.280-010
JIG-BORING MACHINE OPERATOR, NUMERICAL CONTROL (machine shop) 606.382-014
JIG BUILDER (metal prod., nec) 761.684-014
JIG BUILDER (wood. container) 761.381-014
jig fitter (any industry) 801.261-014
JIG FITTER (machinery mfg.) 801.684-010
JIGGER (jewelry-silver.) 705.687-010
JIGGER (textile) 582.665-018
Jigger-Brim-Pouncing-Machine Operator (hat & cap) 585.685-010
JIGGER-CROWN-POUNCING-MACHINE OPERATOR (hat & cap) 585.685-058
jigger operator (pottery & porc.) 774.382-010
jig grinder (machine shop) 603.280-026
jig-grinding-machine operator (machine shop) 603.280-026
jig operator (textile) 582.665-018
jigsaw operator (jewelry-silver.) 700.684-046
JIGSAW OPERATOR (woodworking) 667.682-042
JIGSAWYER (jewelry-silver.) 700.684-046
JINRIKISHA DRIVER (amuse. & rec.) 349.477-010
JOB ANALYST (profess. & kin.) 166.267-018
job checker (clerical) 221.387-034
Job Compositor (print. & pub.) 973.381-010
JOB DEVELOPMENT SPECIALIST (profess. & kin.) 166.267-034
job honer (machine shop) 603.382-022
job-order clerk (clerical) 221.387-046
JOB-PRESS OPERATOR (print. & pub.) term
JOB PRINTER (print. & pub.) 973.381-018
JOB-PRINTER APPRENTICE (print. & pub.) 973.381-022
JOB PUTTER-UP AND TICKET PREPARER (boot & shoe) 788.587-010
JOB SETTER (electron. comp.) 616.380-014
JOB SETTER, HONING (machine shop) 603.280-034
JOB SETTER, SPLINE-ROLLING MACHINE (machine shop) 617.480-010
Job Setter, Thread-Rolling Machine (machine shop) 617.480-010
job spotter (clerical) 221.387-034
JOB TRACER (clerical) 221.387-034
JOCKEY (amuse. & rec.) 153.244-010
JOCKEY AGENT (amuse. & rec.) 191.117-026
JOCKEY-ROOM CUSTODIAN (amuse. & rec.) 346.667-010
JOCKEY VALET (amuse. & rec.) 346.677-010
JOGGER (print. & pub.) 651.686-018
jogger operator (paper & pulp; paper goods; print. & pub.) 649.685-066
joiner (boot & shoe) 690.682-082
joiner (boot & shoe) 690.685-074
joiner (boot & shoe) 690.685-250
JOINER (glass mfg.) 673.687-010
Joiner (glass products) 779.381-010
joiner (rubber goods) 690.686-026
JOINER (ship-boat mfg.) 860.381-050
joiner (tex. prod., nec) 787.682-066
JOINER APPRENTICE (ship-boat mfg.) 860.381-054
JOINER HELPER (ship-boat mfg.) 860.664-014
JOINT-CLEANING-AND-GROOVING-MACHINE OPERATOR (construction) 853.683-018
joint-cleaning-machine operator (construction) 853.683-018
joint creaser (print. & pub.) 977.684-018
JOINT CUTTER, MACHINE (boot & shoe) 690.685-250
jointer, machine (boot & shoe) 690.685-250
Jointer Offbearer (woodworking) 669.686-034
JOINTER OPERATOR (woodworking) 665.682-042
Jointer, Submarine Cable (tel. & tel.; utilities) 829.361-010
Joint Filler (construction) 869.687-026
Joint-Machine Operator (construction) 853.663-014
joint maker, machine (boot & shoe) 690.685-250
Joint Sander (boot & shoe) 690.685-046
joint supervisor (construction) 843.134-010
Joist Setter, Adjustable Steel (construction) 869.664-014
jollier (boot & shoe) 690.685-314
Jollier (pottery & porc.) 774.382-010
journal-box inspector (r.r. trans.) 910.387-014
Journal-Entry-Audit Clerk (clerical) 210.382-010
JOURNEY WORKER (any industry) term
Jowl Trimmer (meat products) 525.684-034
judge (amuse. & rec.) 153.267-018
JUDGE (government ser.) 111.107-010
JUGGLER (amuse. & rec.) 159.341-010
Jukebox Coin Collector (business ser.) 292.483-010
Juke-Box Servicer (business ser.) 639.281-014
JUMPBASTING-MACHINE OPERATOR (garment) 786.682-146
Jump-Iron-Machine Presser (garment) 363.682-018
jump-roll operator (saw. & plan.) 921.682-022
JUNCTION MAKER (brick & tile) 862.684-010
justice (government ser.) 111.107-010
justice-court judge (government ser.) 111.107-014
justice of the peace (government ser.) 111.107-014
Justowriter Operator (print. & pub.) 203.582-062
Jute-Bag Clipper (tex. prod., nec) 789.687-030
Jute-Bag-Cutting-Machine Operator (tex. prod., nec) 686.585-010
Jute-Bag Sewer (tex. prod., nec) 787.682-058
Juvenile (amuse. & rec.) 150.047-010
Juvenile-Court Judge (government ser.) 111.107-010

K

Kamborian Operator (boot & shoe) 690.685-174
KAPOK-AND-COTTON-MACHINE OPERATOR (tex. prod., nec) 689.685-082
Keel Assembler (ship-boat mfg.) 860.361-010
keeper, head (amuse. & rec.) 412.137-010
keg inspector (wood. container) 764.687-022
keg-lathe operator, inside (wood. container) 664.682-010
keg raiser (wood. container) 764.684-018
KEG VARNISHER (wood. container) 749.687-014
KELP CUTTER (fishing & hunt.) 447.687-022
Kennel Attendant (agriculture) 410.674-010
KENNEL MANAGER, DOG TRACK (amuse. & rec.) 349.367-010
KENO WRITER (amuse. & rec.) 343.467-022
KERFER-MACHINE OPERATOR (furniture) 667.685-042
kersey-department supervisor (tex. prod., nec) 689.130-014
kettle chipper (chemical; plastic-synth.) 559.687-062
KETTLE OPERATOR (beverage) 522.682-010
KETTLE OPERATOR (plastic-synth.) 558.382-042
kettle operator (plastic-synth.) 558.382-050
KETTLE OPERATOR (smelt. & refin.) 519.685-018
kettle operator, head (plastic-synth.) 559.132-042
KETTLE OPERATOR I (chemical) 558.382-038
Kettle Operator II (chemical) 559.682-018
Kettle-Room Helper (chemical) 559.687-050
KETTLE TENDER (any industry) term
KETTLE TENDER (beverage) 526.665-014
KETTLE TENDER (construction) 869.685-010
KETTLE TENDER (sugar & conf.) 520.685-118
kettle tender (textile) 582.685-130
kettle-tender helper (tex. prod., nec; textile) 582.686-030
KETTLE TENDER I (smelt. & refin.) 519.685-022
KETTLE TENDER II (smelt. & refin.) 511.685-030
KETTLE TENDER, PLATINUM AND PALLADIUM (smelt. & refin.) 511.685-034
KETTLE WORKER (soap & rel.) 553.685-070
Key-Bed Installer (musical inst.) 763.684-058
KEYBOARD-ACTION ASSEMBLER (musical inst.) 730.684-042
Keycase Assembler (leather prod.) 783.684-010
Key Clerk (hotel & rest.) 238.367-038
KEY CUTTER (any industry) 709.684-050
KEYING-MACHINE OPERATOR (print. & pub.) 652.685-042
keyliner (print. & pub.) 972.381-030
key maker (any industry) 709.684-050
KEYMODULE-ASSEMBLY-MACHINE TENDER (office machines) 692.685-274
KEYSEATING-MACHINE SET-UP OPERATOR (machine shop) 605.382-018
keysmith (any industry) 709.684-050
key worker (any industry) 709.684-050
Kick-Plate Installer (struct. metal) 809.684-010
KICK-PRESS OPERATOR (protective dev.) 692.685-102
KICK-PRESS OPERATOR I (any industry) 616.682-026
Kick-Press Operator II (any industry) 690.685-014
KICK PRESS SETTER (button & notion) 617.380-010
kier drier (textile) 581.685-026
Kieselguhr-Regenerator Operator (sugar & conf.) 573.685-034
KILN BURNER (brick & tile) 573.682-010
kiln burner (chemical) 563.682-010

kiln burner (pottery & porc.) 573.662-010
KILN-BURNER HELPER (brick & tile) 573.687-026
Kiln Car Unloader (brick & tile) 929.687-030
KILN CLEANER (concrete prod.) 573.687-018
KILN-DOOR BUILDER (brick & tile) 573.684-010
KILN DRAWER (brick & tile) 929.687-014
KILN DRAWER (pottery & porc.) 573.667-010
Kiln Feeder (cement) 570.685-010
kiln firer (concrete prod.) 573.462-010
kiln-firer helper (concrete prod.) 573.685-022
KILN-FURNITURE CASTER (pottery & porc.) 579.684-018
Kiln Furniture, Saw Tender (brick & tile) 677.685-034
kiln-head house operator (smelt. & refin.) 511.565-010
KILN LOADER (beverage) 523.687-018
kiln loader (beverage) 921.682-010
kiln maintenance laborer (pottery & porc.) 573.687-022
kiln operator (glass mfg.) 575.362-010
kiln operator (jewelry-silver.) 590.685-034
kiln operator (mine & quarry) 543.682-014
kiln operator (paint & varnish) 553.685-030
kiln operator (pottery & porc.) 573.662-010
KILN OPERATOR (smelt. & refin.) 513.565-010
KILN OPERATOR (steel & rel.) 509.565-010
KILN OPERATOR (woodworking) 563.382-010
KILN OPERATOR HELPER (concrete prod.) 573.685-022
KILN-OPERATOR HELPER (smelt. & refin.) 513.587-010
KILN OPERATOR, MALT HOUSE (beverage) 523.682-030
KILN PLACER (pottery & porc.) 573.686-026
kiln repairer (brick & tile) 861.381-014
kiln setter (brick & tile) 573.684-014
kiln setter (pottery & porc.) 573.686-026
kiln-setter helper (brick & tile) 573.687-030
kiln stacker (brick & tile) 573.684-014
Kiln Stacker (woodworking) 922.687-070
kiln tender (paint & varnish) 553.685-082
KILN-TRANSFER OPERATOR (woodworking) 569.683-010
kiln unloader (chemical) 569.686-034
KILN WORKER (pottery & porc.) 573.687-022
kindergartner (any industry) 359.677-026
King Maker (sugar & conf.) 526.382-014
kinker (tinware) 703.685-010
Kiss Mixer (sugar & conf.) 520.685-122
KISS SETTER, HAND (sugar & conf.) 529.687-122
kitchen chef (hotel & rest.) 313.131-014
KITCHEN CLERK (hotel & rest.) 222.587-022
kitchen hand (hotel & rest.) 318.687-010
KITCHEN HELPER (hotel & rest.) 318.687-010
kitchen porter (hotel & rest.) 318.687-010
kitchen runner (hotel & rest.) 318.687-010
KITCHEN STEWARD/STEWARDESS (hotel & rest.) 318.137-010
KITCHEN SUPERVISOR (hotel & rest.) 319.137-030
Kitter (aircraft mfg.) 754.684-042
knee bolter (saw. & plan.) 667.685-022
Knife And Spur Grinder (saw. & plan.) 603.664-010
knife changer (paper & pulp) 564.684-010
KNIFE CHANGER (tobacco) 638.684-010
knife cutter (rubber goods) 751.684-014
Knife Glazer (jewelry-silver.) 603.685-062
Knife Grinder (any industry) 603.664-010
KNIFE GRINDER (machine shop) 603.382-038
KNIFE-MACHINE OPERATOR (textile) 584.685-030
KNIFE OPERATOR (concrete prod.) 579.382-018
KNIFE SETTER (saw. & plan.) 663.380-010
KNIFE SETTER (sugar & conf.) 638.684-014
knife setter (tobacco) 638.684-010
KNIFE SETTER, GRINDER MACHINE (paper & pulp) 564.684-010
Knit-Goods Cutter, Hand (knitting) 781.684-074
KNIT-GOODS WASHER (knitting) 582.685-094
Knitted-Cloth Examiner (knitting) 689.685-038
knitted-garment finisher (laundry & rel.) 363.684-010
knitted-goods shaper (laundry & rel.) 363.684-010
knitter (knitting) 685.665-014
knitter (knitting) 685.665-018
knitter (knitting) 684.685-010
KNITTER, FULL-FASHIONED GARMENT (knitting) 685.665-010
KNITTER, HAND (tex. prod., nec) 782.684-034
knitter helper (knitting) 685.686-014
knitter, machine (knitting) 685.665-014
knitter, machine (knitting) 685.380-010
KNITTER MECHANIC (knitting) 685.360-010
KNITTER, WIRE MESH (metal prod., nec) 616.685-030
Knitting Inspector (knitting) 684.684-010
KNITTING-MACHINE FIXER (knitting) 689.260-026
KNITTING-MACHINE FIXER, HEAD (knitting) 689.130-018
KNITTING-MACHINE OPERATOR (knitting) 685.665-014
knitting-machine operator (metal prod., nec) 616.685-030
KNITTING-MACHINE OPERATOR (tex. prod., nec) 685.685-010
knitting-machine operator, automatic (knitting) 685.380-010
knitting-machine operator, automatic (knitting) 684.685-010
KNITTING-MACHINE OPERATOR, FULL-FASHIONED HOSIERY, AUTOMATIC (knitting) 684.682-010
KNITTING-MACHINE OPERATOR HELPER (knitting) 685.686-014
knitting-machine operator, seamless hosiery (knitting) 684.685-010
Knitting-Machine Tender (rubber goods) 692.665-010
knitting-order distributor (knitting) 221.667-010
Knit-Tubing Dyer (textile) 582.665-014
knit-wrist cutter (glove & mit.) 686.685-018
Knobber (musical inst.) 730.684-010
knocker (oils & grease) 521.686-014
knocker-off (paper goods) 794.687-050
KNOCK-OUT HAND (plastic prod.) 754.684-034
KNOCK-UP ASSEMBLER (woodworking) 762.687-050
knot picker, cloth (carpet & rug; textile) 689.684-010
knotter (tex. prod., nec) 789.684-030
knotter, hand (tex. prod., nec) 789.684-030
KNOTTING-MACHINE OPERATOR (paper goods) 649.685-054
knotting-machine operator, portable (narrow fabrics; textile) 683.685-034
knot-tying operator (narrow fabrics; textile) 683.685-034
Knuckle-Strap Sewer (glove & mit.) 784.682-010
KNURLING-MACHINE OPERATOR (ordnance) 604.685-018
Knurling-Machine Tender (pen & pencil) 604.685-026
Kosher Cutter And Searcher (meat products) 525.361-010
KOSHER INSPECTOR (dairy products) 529.687-126

L

LABEL CODER (any industry) 920.587-014
Label Cutter (garment; knitting) 699.685-014
Label Cutter (garment) 699.682-022
Label Cutter (narrow fabrics) 585.685-062
Label Cutter (textile) 789.687-150
LABEL-CUTTING-AND-FOLDING-MACHINE OPERATOR, AUTOMATIC (narrow fabrics) 689.685-086
LABEL DRIER (recording) 532.687-010
labeler (any industry) 920.687-126
labeler (textile) 229.587-018
Labeler, Machine (any industry) 920.685-078
Label-Fuser Tender (garment) 583.685-046
LABELING-MACHINE OPERATOR (recording) 920.685-066
label marker (any industry) 920.587-014
LABEL PINKER (narrow fabrics) 585.685-062
Label-Press Operator I (print. & pub.) 651.362-010
Label-Press Operator II (print. & pub.) 651.362-018
LABEL REMOVER (beverage) 920.687-106
Label Sewer (hat & cap) 784.682-014
Label Sewer, Hand (any industry) 782.684-058
label stamper (any industry) 652.685-098
Label Stitcher (boot & shoe) 690.682-082
Label Tacker (tex. prod., nec) 787.685-042
laboratory aide (any industry) 381.687-022
laboratory aide (pharmaceut.) 559.384-010
laboratory assistant (any industry) 381.687-022
laboratory assistant (medical ser.) 078.381-014
laboratory assistant (medical ser.; pharmaceut.) 599.687-026
laboratory assistant (paper & pulp; paper goods) 078.381-014
LABORATORY ASSISTANT (petrol. & gas) 024.381-010
laboratory assistant (profess. & kin.) 199.364-014
LABORATORY ASSISTANT (textile) 029.381-014
laboratory assistant (textile) 689.384-010
LABORATORY ASSISTANT (utilities) 029.361-018
LABORATORY ASSISTANT, BLOOD AND PLASMA (medical ser.; pharmaceut.) 078.687-010
LABORATORY ASSISTANT, CULTURE MEDIA (pharmaceut.) 559.384-010
LABORATORY ASSISTANT, LIAISON INSPECTION (steel & rel.) 169.167-026
LABORATORY ASSISTANT, METALLURGICAL (steel & rel.) 011.261-022
LABORATORY CHIEF (photofinishing) 976.131-010
LABORATORY CHIEF (profess. & kin.) term
LABORATORY CLERK (clerical) 222.587-026
laboratory contact supervisor (motion picture; photofinishing; radio-tv broad.) 976.131-014
laboratory coordinator (steel & rel.) 169.167-026
laboratory-development technician (profess. & kin.) 007.161-026
LABORATORY-EQUIPMENT INSTALLER (construction) 869.381-014
laboratory helper (any industry) 381.687-022
LABORATORY HELPER (utilities) 821.564-010
laboratory inspector (petrol. refin.) 029.261-022
LABORATORY MANAGER (education) 090.164-010
laboratory manager (photofinishing) 976.131-010

laboratory-mechanic helper (ordnance) 736.387-014
LABORATORY MILLER (grain-feed mills) 521.685-194
LABORATORY-SAMPLE CARRIER (any industry) 922.687-054
laboratory sampler (petrol. refin.) 549.587-014
LABORATORY SUPERVISOR (machine shop) 706.131-010
LABORATORY SUPERVISOR (profess. & kin.) 022.137-010
laboratory technician (utilities) 579.384-014
LABORATORY TECHNICIAN, ARTIFICIAL BREEDING (agriculture) 040.361-010
LABORATORY TECHNICIAN (auto. mfg.) 019.261-030
laboratory technician (chemical; plastic-synth.) 559.382-046
laboratory technician (glass mfg.) 579.384-014
laboratory technician (petrol. refin.) 029.261-022
laboratory technician (pharmaceut.) 559.382-042
LABORATORY TECHNICIAN PHARMACEUTICAL (pharmaceut.) 559.685-170
LABORATORY TESTER (any industry) 029.261-010
laboratory tester (petrol. & gas) 024.381-010
laboratory tester (petrol. refin.) 029.261-022
LABORATORY TESTER (plastic-synth.) 022.281-018
laboratory tester (textile) 029.381-014
LABORATORY TESTER (textile) 689.384-014
laboratory test mechanic (aircraft mfg.) 002.261-014
LABORATORY WORKER (any industry) term
LABOR-CREW SUPERVISOR (construction; utilities) 899.131-010
Labor Economist (profess. & kin.) 050.067-010
LABORER (fabrication, nec) 590.687-010
LABORER (meat products) 529.687-130
LABORER (petrol. & gas) 939.687-018
LABORER (pharmaceut.) 559.686-022
LABORER (toy-sport equip.) 732.687-030
Laborer, Adjustable Steel Joist (construction) 869.664-014
LABORER, AIRPORT MAINTENANCE (air trans.) 899.687-014
LABORER, AMMUNITION ASSEMBLY I (ordnance) 737.687-070
LABORER, AMMUNITION ASSEMBLY II (ordnance) 737.687-074
LABORER, AQUATIC LIFE (fishing & hunt.) 446.687-014
Laborer, Batching Plant (construction) 869.687-026
Laborer, Beam House (leather mfg.) 589.686-026
Laborer, Bituminous Paving (construction) 869.687-026
LABORER, BOOT AND SHOE (boot & shoe) 788.687-066
Laborer, Brooder Farm (agriculture) 411.687-018
LABORER, BRUSH CLEARING (any industry) 459.687-010
laborer, building maintenance (any industry) 381.687-014
LABORER, CANVAS SHOP (tex. prod., nec) 789.687-090
LABORER, CAR BARN (r.r. trans.) 910.583-010
Laborer, Carpentry (construction) 869.664-014
Laborer, Carpentry, Dock (construction) 869.664-014
Laborer, Cement-Gun Placing (construction) 869.687-026
LABORER, CHEESEMAKING (dairy products) 529.686-050
LABORER, CHEMICAL PROCESSING (chemical) 559.687-050
Laborer, Chicken Farm (agriculture) 411.687-018
LABORER, CONCRETE-MIXING PLANT (construction) 579.665-014
Laborer, Concrete Paving (construction) 869.687-026
LABORER, CONCRETE PLANT (concrete prod.) 579.687-042
LABORER, CONSTRUCTION OR LEAK GANG (utilities) 862.684-014
LABORER, COOK HOUSE (chemical) 551.687-022
Laborer, Corrugated-Iron-Culvert Placing (construction) 869.687-026
laborer, cutting tool (cutlery-hrdwr.) 701.687-018
laborer, dairy farm (agriculture) 410.684-010
Laborer, Drying Department (leather mfg.) 589.686-026
laborer, drying department (leather mfg.) 580.687-014
Laborer, Egg-Producing Farm (agriculture) 411.687-018
Laborer, Electric Power And Transmission Line (construction; utilities) 869.687-026
LABORER, ELECTROPLATING (electroplating) 500.686-010
laborer, excavation (construction) see DITCH DIGGER
Laborer, Filter Plant (petrol. refin.) 549.687-018
laborer, filter plant (waterworks) 954.587-010
Laborer, Fryer Farm (agriculture) 411.687-018
laborer, game farm (agriculture) 412.684-010
LABORER, GENERAL (brick & tile) 579.667-010
LABORER, GENERAL (leather mfg.) 589.686-026
LABORER, GENERAL (machine shop) 609.684-014
LABORER, GENERAL (motor trans.) 909.687-014
LABORER, GENERAL (nonfer. metal) 519.686-010
LABORER, GENERAL (paint & varnish) 559.685-110
LABORER, GENERAL (plastic prod.) 754.687-010
LABORER, GENERAL (plastic-synth.) 559.667-014
LABORER, GENERAL (rubber goods; rubber reclaim.; rubber tire) 559.686-026
LABORER, GENERAL (smelt. & refin.) 519.687-026
LABORER, GENERAL (steel & rel.) 509.687-026
LABORER, GENERAL (tex. prod., nec) 589.687-026
laborer, glue drying (chemical) 553.685-058
LABORER, GOLD LEAF (metal prod., nec) 700.687-038
laborer, golf course (any industry) 406.683-010
LABORER, GRINDING AND POLISHING (any industry) 705.687-014
Laborer, Heading (construction) 869.687-026
Laborer, Hide House (leather mfg.) 589.686-026
LABORER, HIGH-DENSITY PRESS (agriculture) 929.687-018
LABORER, HOISTING (any industry) 921.667-022
LABORER, HOT-PLATE PLYWOOD PRESS (millwork-plywood) 569.686-026
laborer, laboratory (any industry) 381.687-022
LABORER, LANDSCAPE (agriculture) 408.687-014
laborer, livestock (agriculture) 410.664-010
laborer, marine terminal (water trans.) 911.687-026
laborer, mine (mine & quarry) 939.687-014
laborer, mixing plant (construction) 579.665-014
Laborer, Orchard (agriculture) 403.687-010
LABORER, PETROLEUM REFINERY (petrol. refin.) 549.687-018
LABORER, PIE BAKERY (bakery products) 529.686-054
Laborer, Pile Driving, Ground Work (construction) 869.687-026
Laborer, Pipe-Line (construction) 869.687-026
LABORER, PIPE-LINES (pipe lines) 914.687-010
Laborer, Plumbing (construction) 869.687-026
laborer, pole crew (utilities) 821.687-010
LABORER, POULTRY FARM (agriculture) 411.687-018
LABORER, POULTRY HATCHERY (agriculture) 411.687-022
LABORER, POWERHOUSE (utilities) 952.665-010
LABORER, PRESTRESSED CONCRETE (concrete prod.) 575.687-018
Laborer, Pullet Farm (agriculture) 411.687-018
LABORER, RAGS (paper & pulp) 539.587-010
Laborer, Road (construction) 869.687-026
LABORER, SALVAGE (any industry) 929.687-022
laborer, sawmill (saw. & plan.) 669.687-018
Laborer, Shaft Sinking (construction) 869.687-026
LABORER, SHELLFISH PROCESSING (can. & preserv.) 529.687-230
LABORER, SHIPYARD (ship-boat mfg.) 809.687-022
Laborer, Shore Dredging (construction) 869.687-026
LABORER, SOLDER MAKING (nonfer. metal) 519.667-014
LABORER, STARCH FACTORY (grain-feed mills) 529.685-154
Laborer, Steel Handling (construction) 869.687-026
Laborer, Stone Block Ramming (construction) 869.687-026
LABORER, STORES (any industry) 922.687-058
LABORER, SYRUP MACHINE (grain-feed mills) 521.687-074
LABORER, TANBARK (logging) 454.687-014
Laborer, Tan House (leather mfg.) 589.686-026
LABORER, TIN CAN (tinware) 709.686-010
LABORER, TREE TAPPING (agriculture; forestry) 453.687-014
Laborer, Turkey Farm (agriculture) 411.687-018
LABORER, VAT HOUSE (chemical) 559.686-030
laborer, vegetable farm (agriculture) 402.687-010
Laborer, Vineyard (agriculture) 403.687-010
laborer, wash-and-dye house (textile) 582.686-014
LABORER, WHARF (can. & preserv.) 922.687-062
LABORER, WOOD-PRESERVING PLANT (wood prod., nec) 561.686-010
Laborer, Wrecking And Salvaging (construction) 869.687-026
Laborer, Yard (any industry) 929.687-030
LABOR EXPEDITER (construction) 249.167-018
labor-gang supervisor (motor trans.) 929.137-018
Labor Relations Consultant (profess. & kin.) 166.167-034
labor relations representative (profess. & kin.) 166.167-034
Labor Relations Supervisor (profess. & kin.) 166.167-034
labor supervisor (chemical) 382.137-010
Lace Breaker (tex. prod., nec) 689.665-014
Lace Inspector (knitting) 689.685-038
lace-machine operator (tex. prod., nec) 683.682-026
LACE-PAPER-MACHINE OPERATOR (paper goods) 649.685-058
Lace Pinner (garment; tex. prod., nec) 782.687-026
LACER (nonmet. min.) 774.687-014
LACER (protective dev.) 789.687-094
LACER (toy-sport equip.) 732.687-034
LACER AND TIER (elec. equip.) 724.687-010
LACER I (boot & shoe) 788.687-070
LACER II (boot & shoe) 690.685-254
LACE-ROLLER OPERATOR (leather prod.) 920.685-070
Lace Separator (tex. prod., nec) 689.665-014
Lace Stripper (tex. prod., nec) 689.665-014
LACE WINDER (tex. prod., nec) 685.687-018
Lacing Cutter (plastic-synth.) 781.687-026
lacing-machine operator, jacquard cards (narrow fabrics; textile) 683.685-018
Lacing Presser (tex. prod., nec) 739.685-010
LACING-STRING CUTTER (boot & shoe) 788.687-074
Lacquer Blender (paint & varnish) 550.685-078
Lacquer Coater (plastic prod.) 599.685-074
LACQUER-DIPPING-MACHINE OPERATOR (button & notion) 509.685-034
Lacquerer (button & notion) 599.686-014
LACQUERER (clock & watch) 715.684-138
LACQUERER (jewelry-silver.) 749.684-034

Lacquerer (machine shop) 740.684-022
LACQUERER (plastic prod.) 599.685-054
Lacquer Filterer (paint & varnish) 551.685-034
lacquer-machine feeder (ordnance) 694.685-046
LACQUER MAKER (paint & varnish) 559.682-030
lacquer mixer (paint & varnish) 559.682-030
LACQUER-PIN-PRESS OPERATOR (ordnance) 737.687-078
Lacquer Polisher (fabrication, nec) 739.684-026
lacquer-press adjuster (ordnance) 632.380-018
Lacquer Shader (paint & varnish) 550.381-014
Lacquer Sizer (hat & cap) 589.687-038
Lacquer Sprayer (electron. comp.) 725.684-022
Lacquer Sprayer I (any industry) 741.684-026
Lacquer Sprayer II (any industry) 741.687-018
Ladies'-Hat Trimmer (hat & cap) 784.684-022
ladle cleaner (foundry; smelt. & refin.) 519.684-010
ladle handler (foundry) 514.684-022
LADLE LINER (foundry; smelt. & refin.) 519.684-010
Ladle-Liner Helper (foundry) 519.687-022
ladle patcher (foundry; smelt. & refin.) 519.684-010
LADLE POURER (smelt. & refin.) 514.684-014
Ladle Pusher (foundry) 519.687-022
LAGGING-MACHINE OPERATOR (nonfer. metal) 691.685-014
LAG SCREWER (furniture) 763.684-046
LAMBER (agriculture) 410.364-010
Lambskin Trimmer (leather mfg.) 585.684-010
lamina searcher (tobacco) 521.687-098
LAMINATED-PLASTIC-TABLETOP-MOLDING WRAPPER (furniture) 692.686-046
LAMINATING-MACHINE FEEDER (wood prod., nec) 569.686-042
LAMINATING-MACHINE OFFBEARER (wood prod., nec) 569.686-046
LAMINATING-MACHINE OPERATOR (furniture) 692.685-106
LAMINATING-MACHINE OPERATOR (knitting; textile) 584.682-014
laminating-machine operator (paper & pulp; paper goods) 534.682-026
Laminating-Machine-Operator Helper (textile) 584.665-010
laminating machine tender (electron. comp.) 554.685-034
LAMINATING-MACHINE TENDER (rubber goods) 554.665-014
Laminating-Press Operator (plastic prod.) 690.682-062
LAMINATION ASSEMBLER (elec. equip.; electron. comp.) 729.684-066
LAMINATION ASSEMBLER, PRINTED CIRCUIT BOARDS (electron. comp.) 726.687-026
lamination inspector (elec. equip.) 729.687-018
LAMINATION SPINNER (elec. equip.) 729.687-018
Lamination Stacker, Hand (elec. equip.; electron. comp.) 729.684-066
lamination stacker, machine (any industry) 692.682-054
Lamination Stacker, Machine (elec. equip.; electron. comp.) 729.684-066
LAMINATOR (rubber goods) 899.684-018
laminator (ship-boat mfg.; vehicles, nec) 806.684-054
LAMINATOR (tex. prod., nec) 584.685-034
LAMINATOR (wood prod., nec) 554.685-030
laminator grader (wood prod., nec) 569.686-046
LAMINATOR, HAND (furniture) 763.684-050
LAMINATOR I (leather prod.) 690.685-258
LAMINATOR II (leather prod.) 783.685-022
LAMINATOR, PREFORMS (plastic prod.) 754.684-050
LAMINATOR, PRINTED CIRCUIT BOARDS (electron. comp.) 692.685-282
lamp cleaner, street-light (utilities) 952.667-010
lamp decorator (light. fix.) 749.684-018
LAMP-SHADE ASSEMBLER (fabrication, nec) 739.684-094
LAMP-SHADE JOINER (fabrication, nec) 692.685-110
LAMP-SHADE SEWER (fabrication, nec) 787.381-010
lamp wirer (light. fix.) 723.684-014
land agent (profess. & kin.) 186.117-058
land-and-leases supervisor (petrol. & gas) 186.117-046
land department head (petrol. & gas) 186.117-046
lander (mine & quarry) 939.667-010
Landing Scaler (logging) 455.487-010
land-lease-information clerk (government ser.) 237.367-026
LAND-LEASING EXAMINER (government ser.) 237.367-026
land planner (profess. & kin.) 001.061-018
land planner (profess. & kin.) 199.167-014
LANDSCAPE ARCHITECT (profess. & kin.) 001.061-018
LANDSCAPE CONTRACTOR (construction) 182.167-014
LANDSCAPE GARDENER (agriculture) 408.161-010
landscaper (agriculture) 408.161-010
LANDSCAPE SPECIALIST (government ser.) 406.687-010
LAND SURVEYOR (profess. & kin.) 018.167-018
LANE-MARKER INSTALLER (construction) 859.684-010
Lanolin-Plant Operator (pharmaceut.) 559.382-018
lap checker (amuse. & rec.) 153.387-014
LAP CUTTER-TRUER OPERATOR (optical goods) 604.685-022
Lapel Baster (garment) 782.684-058
Lapel Padder (garment; retail trade) 785.361-022
Lapel Padder (garment) 782.684-058
LAPEL PADDER, BLINDSTITCH (garment) 786.682-150
lap hand, tool (machine shop) 705.481-014
lapidary (jewelry-silver.) 770.281-014
lap-machine tender (paper & pulp) 539.685-030
lap-machine tender (textile) 680.685-086
lapper (electron. comp.) 673.685-094
Lapper (jewelry-silver.) 700.687-058
LAPPER (textile) 689.687-090
LAPPER, HAND, TOOL (machine shop) 705.481-014
LAPPING-MACHINE OPERATOR, PRODUCTION (machine shop) 603.685-070
LAPPING-MACHINE SET-UP OPERATOR (machine shop) 603.382-026
Lapping Machine Tender (electron. comp.) 673.685-094
lap polisher (clock & watch) 603.685-054
lap regulator (textile) 680.685-094
lap winder (textile) 680.685-086
lap-winding-machine operator (textile) 680.685-094
lard maker (meat products; oils & grease) 521.685-026
LARD REFINER (meat products; oils & grease) 529.685-158
lard trimmer (meat products) 521.687-106
Lard-Tub Washer (meat products) 599.684-010
larry-car operator (any industry) 919.663-014
LARRY OPERATOR (steel & rel.) 519.683-014
Laryngologist (medical ser.) 070.101-062
laser-beam-color-scanner operator (print. & pub.) 972.282-010
Laser-Beam Cutter (welding) 815.682-010
LASER-BEAM-MACHINE OPERATOR (welding) 815.682-010
LASER-BEAM-TRIM OPERATOR (electron. comp.) 726.682-010
LASERIST (amuse. & rec.) 159.042-010
LASER TECHNICIAN (electron. comp.; inst. & app.) 019.261-034
LAST CHALKER (boot & shoe) 788.687-078
LAST CLEANER (boot & shoe) 788.687-082
Last-Code Striper (wood prod., nec) 740.684-022
last dipper (boot & shoe) 788.687-078
LASTER (boot & shoe) 753.684-022
laster, hand (boot & shoe) 788.684-010
LASTER, HAND (boot & shoe) 788.684-074
Lastex-Thread Winder (textile) 681.685-098
last greaser (boot & shoe) 788.687-078
last grinder (wood prod., nec) 662.685-018
lasting-machine operator, bed (boot & shoe) 690.682-018
LASTING-MACHINE OPERATOR, HAND METHOD (boot & shoe) 788.684-078
Lasting-Room Supervisor (boot & shoe) 788.131-010
last inserter (boot & shoe) 788.684-106
LAST IRONER (wood prod., nec) 739.684-098
LAST MARKER (wood prod., nec) 739.684-102
LAST-MODEL MAKER (wood prod., nec) 761.381-018
LAST-PATTERN GRADER (wood prod., nec) 693.382-010
Last Polisher (wood prod., nec) 761.684-026
LAST PULLER (boot & shoe) 788.687-086
LAST PUTTER-AWAY (boot & shoe; rubber goods) 922.687-066
LAST REMODELER-REPAIRER (boot & shoe; wood prod., nec) 739.684-106
LAST REPAIRER (boot & shoe; wood prod., nec) 739.684-110
LAST-REPAIRER HELPER (boot & shoe) 739.684-114
LAST SAWYER (wood prod., nec) 690.685-262
LAST SCOURER (wood prod., nec) 662.685-018
LAST TRIMMER (wood prod., nec) 669.682-054
Last Turner (wood prod., nec) 664.685-018
last waxer (boot & shoe) 788.687-078
Latex Compounder (textile) 550.585-018
Latex Dipper (rubber goods) 556.685-030
LATEXER (carpet & rug) 584.684-010
LATEXER I (protective dev.) 584.685-038
Latexer II (protective dev.) 712.684-010
Latex-Paint Shader (paint & varnish) 550.381-014
LATEX-RIBBON-MACHINE OPERATOR (rubber goods) 559.682-034
LATEX SPOOLER (rubber goods) 559.685-114
Latex-Thread-Machine Operator (rubber goods) 559.682-034
LATHE HAND (jewelry-silver.) 700.682-014
lathe hand (woodworking) 664.382-010
LATHE OPERATOR (jewelry-silver.) 770.382-010
Lathe Operator (rubber goods) 690.680-010
lathe operator (rubber goods) 690.685-322
lathe operator (stonework) 674.662-010
lathe operator (wood. container) 664.682-014
LATHE OPERATOR, CONTACT LENS (optical goods) 716.382-010
LATHE OPERATOR, NUMERICAL CONTROL (machine shop) 604.362-010
LATHER (construction) 842.361-010
LATHER APPRENTICE (construction) 842.361-014
LATHE SANDER (woodworking) 761.682-010
Lathe Set-Up Operator, Large (machine shop) 604.280-010
LATHE SPOTTER (millwork-plywood) 663.686-022
LATHE TENDER (machine shop) 604.685-026
LATHE WINDER (metal prod., nec) 619.482-010
LATRINE CLEANER (mine & quarry) 939.687-022

LAUNCH COMMANDER, HARBOR POLICE (government ser.) 375.167-030
LAUNDERER, HAND (laundry & rel.) 361.684-010
LAUNDRY-BAG-PUNCH OPERATOR (paper goods) 649.685-062
LAUNDRY CLERK (clerical) 221.387-038
LAUNDRY HAND (laundry & rel.) term
LAUNDRY LABORER (laundry & rel.) 361.687-018
LAUNDRY-MACHINE MECHANIC (laundry & rel.) 629.261-010
LAUNDRY-MACHINE TENDER (tex. prod., nec) 589.685-066
Laundry-Marker Supervisor (laundry & rel.) 361.137-010
LAUNDRY OPERATOR (laundry & rel.) 369.684-014
Laundry Operator, Finishing (laundry & rel.) 369.684-014
Laundry Operator, Wash Room (laundry & rel.) 369.684-014
LAUNDRY PRICING CLERK (laundry & rel.) 216.482-030
LAUNDRY-TUB MAKER (concrete prod.) 575.684-034
LAUNDRY WORKER, DOMESTIC (domestic ser.) 302.685-010
LAUNDRY WORKER I (any industry) 361.684-014
LAUNDRY WORKER II (any industry) 361.685-018
LAUNDRY WORKER III (any industry) 369.387-010
Lautertub Tender (beverage) 521.565-014
lavatory attendant (any industry) 358.677-018
law clerk (profess. & kin.) 119.267-026
law examiner (profess. & kin.) 110.167-010
Law Librarian (library) 100.167-026
Lawnmower Mechanic (any industry) 625.281-034
LAWN-SERVICE WORKER (agriculture) 408.684-010
LAWN-SPRINKLER INSTALLER (construction) 869.684-030
law reporter (clerical) 202.362-010
LAWYER (profess. & kin.) 110.107-010
LAWYER, ADMIRALTY (profess. & kin.) 110.117-018
LAWYER, CORPORATION (profess. & kin.) 110.117-022
LAWYER, CRIMINAL (profess. & kin.) 110.107-014
LAWYER, PATENT (profess. & kin.) 110.117-026
LAWYER, PROBATE (profess. & kin.) 110.117-030
LAWYER, REAL ESTATE (profess. & kin.) 110.117-034
LAYAWAY CLERK (retail trade) 299.467-010
LAYBOY TENDER (paper & pulp; paper goods; print. & pub.) 649.685-066
layer (boot & shoe) 690.685-074
LAYER (glass mfg.) 673.686-026
layer-off (glove & mit.; laundry & rel.) 363.687-010
layer-out (profess. & kin.) 007.261-010
Layer-Out, Plate Glass (construction) 869.664-014
layer up (any industry) 781.685-010
layer-up (knitting; textile) 589.685-058
lay-out and detail drafter (utilities) 019.261-014
layout artist (profess. & kin.) 141.061-018
Lay-Out Carpenter (construction) 860.381-022
lay-out drafter (profess. & kin.) 007.261-010
LAY-OUT FORMER (business ser.) 970.381-018
Lay-Out Helper (any industry) 801.687-014
LAY-OUT INSPECTOR (machine shop) 600.281-014
Lay-Out Inspector (any industry) 619.261-010
LAY-OUT-MACHINE OPERATOR (tex. prod., nec) 781.684-034
lay-out maker (any industry) 809.381-014
Lay-Out Supervisor (any industry) 619.130-030
LAY-OUT TECHNICIAN (optical goods) 716.381-014
LAY-OUT WORKER (jewelry-silver.) 700.381-026
lay-out worker (machine shop) 600.281-014
LAY-OUT WORKER (machine shop) 600.281-018
LAY-OUT WORKER (mfd. bldgs.) 869.684-034
LAY-OUT WORKER I (any industry) 809.281-010
LAY-OUT WORKER II (any industry) 809.381-014
lay-up operator (plastic-synth.) 690.585-014
lay-up presser (tex. prod., nec) 586.662-010
LEACHER (paper & pulp) 551.685-090
LEACHER (smelt. & refin.) 511.582-010
lead assembler (elec. equip.) 691.685-018
lead bender (elec. equip.) 691.685-018
lead blender (petrol. refin.) 540.462-010
LEAD BURNER (elec. equip.) 727.684-022
LEAD BURNER (welding) 819.281-010
LEAD-BURNER APPRENTICE (welding) 819.281-014
LEAD-BURNER HELPER (elec. equip.) 727.687-070
LEAD BURNER, MACHINE (elec. equip.) 727.662-010
LEAD-BURNER SUPERVISOR (welding) 819.131-010
LEAD CASTER (elec. equip.) 502.684-010
LEAD-CASTER HELPER (elec. equip.) 502.687-018
Lead Coater (galvanizing) 501.485-010
leader (any industry) see SUPERVISOR
leader (any industry) see GROUP LEADER
leader assembler (toy-sport equip.) 732.687-038
leader, print rubber (rubber goods) 652.462-010
LEADER TIER (toy-sport equip.) 732.687-038
lead fabricator (plumbing-heat.) 619.382-014
LEAD FORMER (elec. equip.) 691.685-018
LEAD FORMER (pen & pencil) 575.685-050
LEAD HAND, INSPECTING AND TESTING (electron. comp.) 726.364-010
LEAD HANDLER (ordnance) 599.687-018
Leadite Heater (construction) 869.685-010
lead janitor (any industry) 381.137-010
lead-laying-and-gluing-machine operator (pen & pencil) 692.685-094
Lead Loader (smelt. & refin.) 921.683-050
leadman, turbine assembly (engine-turbine) 600.261-010
LEAD-NITRATE PROCESSOR (chemical) 558.585-030
LEAD OPERATOR (smelt. & refin.) 630.381-018
LEAD OPERATOR, AUTOMATIC VULCANIZING (rubber goods) 690.362-010
LEAD-OXIDE-MILL TENDER (elec. equip.) 558.685-042
LEAD PONY RIDER (amuse. & rec.) 153.674-014
lead presser (pen & pencil) 575.685-050
LEAD-PRESS OPERATOR (nonfer. metal) 691.382-014
lead printer (print. & pub.) 979.130-014
LEAD RECOVERER, CONTINUOUS-NAPHTHA-TREATING PLANT (petrol. refin.) 541.685-014
lead-relay tester (utilities) 729.131-014
lead rider (agriculture) 410.137-014
LEAD-SECTION SUPERVISOR (ordnance) 619.132-010
lead-sheet cutter (nonfer. metal) 502.684-014
lead-shop operator (chemical) 558.585-030
Lead-Supply Worker (elec. equip.) 502.687-018
lead ticket-sales agent (air trans.) 238.137-022
Lead Tinner (elec. equip.) 691.685-018
Lead-Tong Worker (petrol. & gas) 930.684-026
lead welder (welding) 819.281-010
LEAD WORKER, WAFER POLISHING (electron. comp.) 673.364-010
LEAD WORKER, WAFER PRODUCTION (electron. comp.) 590.364-010
leaf binner (tobacco) 922.687-010
leaf blender (tobacco) 520.387-010
LEAF CONDITIONER (tobacco) 522.687-026
LEAF-CONDITIONER HELPER (tobacco) 522.687-030
LEAF COVERER (smelt. & refin.) 519.684-014
Leaf-Fat Scraper (meat products) 525.687-010
LEAF-SIZE PICKER (tobacco) 529.687-142
LEAF SORTER (tobacco) 529.687-134
leaf stamper (any industry) 652.682-030
leaf stemmer, hand (tobacco) 521.687-134
leaf sticker (button & notion) 734.687-090
Leaf-Sucker Operator (government ser.) 919.683-022
LEAF TIER (tobacco) 529.687-138
leaf tinner (tobacco) 922.687-010
Leak-Gang Supervisor (utilities) 862.137-010
LEAK HUNTER (beverage) 764.687-090
leak locator (pipe lines; utilities) 953.367-010
Leak Operator, Paraffin Plant (petrol. refin.) 541.682-010
Leak Patcher (meat products) 525.687-010
LEAK TESTER, SEMICONDUCTOR PACKAGES (electron. comp.) 726.685-034
lease agent (petrol. & gas) 186.117-046
LEASE BUYER (mine & quarry; petrol. & gas) 191.117-030
LEASE-OUT WORKER (textile) 683.684-022
LEASE PICKER (textile) 689.684-018
leaser (mine & quarry; petrol. & gas) 191.117-030
leases-and-land supervisor (petrol. & gas) 186.117-046
lease supervisor (petrol. & gas) 939.131-014
LEASING AGENT, OUTDOOR ADVERTISING (business ser.) 254.357-010
LEASING AGENT, RESIDENCE (real estate) 250.357-014
LEASING-MACHINE TENDER (textile) 681.685-054
Leather Dyer (leather mfg.) 920.685-010
Leather-Belt-Loop Cutter (leather prod.) 690.685-266
LEATHER-BELT MAKER (leather prod.) 690.685-266
Leather-Belt Puncher (leather prod.) 690.685-266
Leather-Belt Shaper (leather prod.) 690.685-266
Leather-Cartridge-Belt Maker (leather prod.) 690.685-266
leather-case finisher (leather prod.) 739.684-034
LEATHER CLEANER (laundry & rel.) 362.684-026
LEATHER COATER (leather mfg.) 584.687-010
leather colorer (leather mfg.) 582.482-010
Leather Coverer (toy-sport equip.) 732.684-026
Leather Crafter (leather prod.) 142.061-018
Leather Cutter (glove & mit.; leather prod.) 789.382-010
LEATHER CUTTER (leather prod.) 783.684-022
leather dresser (leather mfg.) 584.687-010
LEATHER ETCHER (garment) 583.685-066
LEATHER FINISHER (laundry & rel.) 363.682-010
Leather Fitter (hat & cap) 784.682-014
Leather Flanger (hat & cap) 690.686-058
leather grader (boot & shoe) 788.387-010
LEATHER GRADER (glove & mit.) 784.387-014
leather leveler (leather mfg.) 690.686-054
Leather-Novelty-Parts Cutter (leather prod.) 699.682-022
leather patcher (leather mfg.) 585.687-022

leather-piece inspector (glove & mit.) 781.687-034
leather polisher (leather mfg.) 583.685-094
leather pourer (leather mfg.) 584.687-014
leather repairer (boot & shoe) 788.684-022
leather repairer (leather mfg.) 585.687-022
leather sander (leather mfg.) 585.685-018
LEATHER SOFTENER (boot & shoe) 788.687-090
Leather Softener, Drum (leather mfg.) 582.482-010
leather sorter (glove & mit.) 784.387-014
leather sorter (leather mfg.) 589.387-010
leather sprayer (leather mfg.) 584.687-014
LEATHER STAMPER (leather prod.) 781.381-018
leather-stripping-machine operator (leather prod.) 585.685-038
LEATHER TOOLER (furniture) 763.684-054
leather tooler (leather prod.) 781.381-018
LEATHER WORKER (leather prod.) 783.684-026
Leather Worker (protective dev.) 712.684-010
Lecturer (education) 090.227-010
legal aid (profess. & kin.) 119.267-026
legal assistant (profess. & kin.) 119.267-026
legal assistant (profess. & kin.) 119.267-022
LEGAL INVESTIGATOR (profess. & kin.) 119.267-022
LEGAL SECRETARY (clerical) 201.362-010
Legal Stenographer (clerical) 202.362-014
Legal Transcriber (clerical) 203.582-058
Leg Assembler (toy-sport equip.) 732.384-010
LEGEND MAKER (fabrication, nec) 979.684-018
Legger-Press Operator (laundry & rel.) 363.682-018
legislative advocate (profess. & kin.) 165.017-010
Legislative Aide (government ser.) 199.267-034
LEGISLATIVE ASSISTANT (government ser.) 169.167-066
Leg Skinner (meat products) 525.684-046
lehr attendant (glass mfg.) 573.685-026
Lehr Cutter (glass mfg.) 779.684-054
lehr operator (glass mfg.) 573.685-026
lehr stripper (glass mfg.) 573.685-026
LEHR TENDER (glass mfg.) 573.685-026
lei maker (retail trade) 291.454-010
LEI SELLER (retail trade) 291.454-010
Lemon Grower (agriculture) 403.161-010
length control tester (knitting) 684.684-014
leno sewer (carpet & rug; retail trade) 787.682-014
lens assorter (optical goods) 716.687-026
lens assorter (optical goods) 716.687-022
LENS-BLANK GAUGER (optical goods) 716.687-026
LENS-BLOCK GAUGER (optical goods) 716.687-030
lens cutter (optical goods) 716.682-010
Lens-Edge Grinder, Machine (optical goods) 716.685-022
LENS EXAMINER (optical goods) 716.687-022
LENS-FABRICATING-MACHINE TENDER (optical goods) 716.685-022
Lens-Generating-Machine Tender (optical goods) 716.685-022
lens grinder (optical goods) 716.382-018
lens-grinder apprentice (optical goods) 716.382-022
lens grinder, rough (optical goods) 673.685-074
LENS HARDENER (optical goods) 573.685-030
LENS INSERTER (optical goods) 713.687-026
lens inspector (optical goods) 716.687-022
lens inspector (optical goods) 716.381-010
LENS MATCHER (optical goods) 713.687-030
lens molder (glass mfg.) 575.685-054
LENS-MOLDING-EQUIPMENT OPERATOR (glass mfg.) 575.685-054
LENS-MOLD SETTER (optical goods) 713.381-010
Lens Mounter I (optical goods) 690.685-014
LENS MOUNTER II (optical goods) 713.681-010
LENS POLISHER, HAND (optical goods) 716.684-018
letter carrier (government ser.) 230.367-010
letterer (any industry) 979.684-034
letterer (any industry) 970.381-026
Letterer (garment) 787.682-022
LETTERER (machinery mfg.) 979.681-010
LETTERER (profess. & kin.) 970.661-014
lettering-machine operator (any industry) 652.682-030
LETTER-OF-CREDIT CLERK (financial) 219.367-050
LETTER-OF-CREDIT DOCUMENT EXAMINER (financial) 169.267-042
letter-stamping-machine operator (clerical) 208.685-026
Lettuce Trimmer (agriculture) 920.687-134
levee superintendent (construction) 851.137-010
leveler (boot & shoe) 690.685-382
Leveler Helper (wood. container) 669.685-010
LEVELER I (wood. container) 764.687-094
Leveler II (wood. container) 669.682-014
LEVEL-GLASS-FORMING-MACHINE OPERATOR (cutlery-hrdwr.) 679.665-010
LEVEL-GLASS-VIAL FILLER (cutlery-hrdwr.) 692.685-114
leveling-machine operator (boot & shoe) 690.685-382
LEVEL-VIAL CURVATURE GAUGER (cutlery-hrdwr.) 701.687-022
LEVEL-VIAL INSIDE GRINDER (cutlery-hrdwr.) 673.685-066
LEVEL-VIAL INSPECTOR-AND-TESTER (cutlery-hrdwr.) 701.687-026
LEVEL-VIAL MARKER (cutlery-hrdwr.) 775.684-046
LEVEL-VIAL SEALER (cutlery-hrdwr.) 779.684-034
LEVEL-VIAL SETTER (cutlery-hrdwr.) 701.684-018
LEVER MILLER (clock & watch) 605.685-026
LEVERS-LACE MACHINE OPERATOR (tex. prod., nec) 683.682-026
LEVER TENDER (forging) 612.685-010
lexicographer (profess. & kin.) 132.067-018
LIAISON ENGINEER (aircraft mfg.) 012.167-038
liaison officer (nonprofit org.) 187.167-198
LIBRARIAN (library) 100.127-014
librarian (radio-tv broad.) 100.367-022
librarian, head (library) 100.117-010
librarian, school (library) 100.167-030
LIBRARIAN, SPECIAL COLLECTIONS (library) 100.267-014
LIBRARIAN, SPECIAL LIBRARY (library) 100.167-026
LIBRARY ASSISTANT (library) 249.367-046
library assistant (library) 100.367-018
library attendant (library) 249.367-046
library clerk (library) 249.367-046
Library Clerk, Art Department (library) 249.367-046
LIBRARY CLERK, TALKING BOOKS (library) 209.387-026
LIBRARY CONSULTANT (library) 100.117-014
LIBRARY DIRECTOR (library) 100.117-010
library helper (library) 249.367-046
LIBRARY TECHNICAL ASSISTANT (library) 100.367-018
library technician (library) 100.367-018
LIBRETTIST (profess. & kin.) 131.067-030
LICENSE CLERK (government ser.) 205.367-034
LICENSE INSPECTOR (government ser.) 168.267-066
Lidder (agriculture; wholesale tr.) 920.687-134
Lidder (any industry) 920.587-018
Lidding-Machine Operator (any industry) 669.682-058
lie-detection examiner (profess. & kin.) 199.267-026
Lieutenant, Ballistics (government ser.) 199.267-010
LIFEGUARD (amuse. & rec.) 379.667-014
life-line attendant (any industry) 899.664-010
Life Tester, Outboard Motors (engine-turbine) 623.261-014
lift builder, whole (boot & shoe) 690.685-206
LIFT-SLAB OPERATOR (construction) 869.662-010
Lift-Truck Operator (water trans.) 911.663-014
LIGHT AIR DEFENSE ARTILLERY CREWMEMBER (military ser.) 378.684-030
LIGHT-BULB ASSEMBLER (light. fix.) 692.685-118
light-bulb replacer (any industry) 389.687-018
Light-Bulb Tester (elec. equip.; light. fix.) 729.684-058
light cleaner (any industry) 389.687-018
Light-Fixture Cleaner (any industry) 381.687-014
LIGHT-FIXTURE SERVICER (any industry) 389.687-018
LIGHTING-EQUIPMENT OPERATOR (amuse. & rec.) 962.381-014
Lightning-Rod Erector (construction) 869.664-014
light-oil operator (steel & rel.) 549.382-018
LIGHTOUT EXAMINER (beverage) 529.687-146
lights inspector (beverage) 529.687-058
LIGHT TECHNICIAN (motion picture; radio-tv broad.) 962.362-014
Limber (logging) 454.687-010
lime burner (concrete prod.) 573.462-010
lime hide inspector (leather mfg.) 585.687-010
LIME-KILN OPERATOR (concrete prod.) 573.462-010
LIME-KILN OPERATOR (paper & pulp) 559.685-118
lime mixer (concrete prod.) 570.685-034
LIME MIXER TENDER (steel & rel.) 514.685-022
lime-plant operator (concrete prod.) 570.685-034
Limer (chemical; leather mfg.) 582.482-014
Limer (grain-feed mills) 520.685-098
limerock tower loader (paper & pulp) 559.666-010
LIME SLAKER (concrete prod.) 570.685-034
lime slaker (paper & pulp) 559.685-118
LIME-SLUDGE KILN OPERATOR (paper & pulp) 553.685-074
LIME-SLUDGE MIXER (paper & pulp) 550.585-026
Lime Trimmer (leather mfg.) 585.684-010
Lime-Vat Tender (meat products) 582.685-126
Limnologist (profess. & kin.) 041.061-022
Limousine Rental Clerk (automotive ser.) 295.467-026
line-and-frame poler (utilities; wood prod., nec) 959.684-010
line assembler, aircraft (aircraft mfg.) 806.361-014
Line Cleaner (beverage; dairy products) 599.684-010
Line-Construction Supervisor (utilities) 821.131-014
line decorator (pottery & porc.) 740.681-010
LINE ERECTOR (construction; utilities) 821.361-018
LINE-ERECTOR APPRENTICE (construction; utilities) 821.361-030
line inspector (electron. comp.) 726.684-022
LINE INSPECTOR (tel. & tel.) 822.267-010

line inspector (utilities) 003.167-014
LINE INSTALLER-REPAIRER (tel. & tel.) 822.381-014
Line Installer-Repairer, City (tel. & tel.) 822.381-014
LINE INSTALLER, STREET RAILWAY (r.r. trans.) 821.361-022
line installer, trolley (r.r. trans.) 821.361-022
LINE MAINTAINER (any industry) 821.261-014
Line Maintainer, District (any industry) 821.261-014
Line Maintainer, Section (tel. & tel.) 822.381-014
LINE MOVER (railroad equip.) 921.664-010
linen checker (hotel & rest.; medical ser.) 222.387-030
linen clerk (hotel & rest.; medical ser.) 222.387-030
LINEN CONTROLLER (laundry & rel.) 299.357-010
linen-exchange attendant (hotel & rest.; medical ser.) 222.387-030
LINEN GRADER (laundry & rel.) 361.687-022
LINEN-ROOM ATTENDANT (hotel & rest.; medical ser.) 222.387-030
linen-room houseperson (hotel & rest.; medical ser.) 222.387-030
LINEN-ROOM SUPERVISOR (laundry & rel.) 222.137-014
Linen-Room Worker (hotel & rest.) 323.687-018
LINEN-SUPPLY LOAD-BUILDER (laundry & rel.) 920.687-118
Linen-Supply-Room Worker (laundry & rel.) 361.687-018
line operator (beverage) 920.687-042
LINE-OUT WORKER I (tobacco) 920.687-110
LINE-OUT WORKER II (tobacco) 920.687-114
LINER (glove & mit.) 784.687-046
liner (machinery mfg.) 759.684-050
LINER (pottery & porc.) 740.681-010
LINER ASSEMBLER (nonfer. metal) 613.567-010
LINE REPAIRER (utilities) 821.361-026
Line Repairer, Tower (utilities) 821.361-026
line rider (petrol. & gas; petrol. refin.; pipe lines) 869.564-010
LINER INSERTER (tobacco) 929.687-026
LINER-MACHINE OPERATOR (paper goods) 641.685-058
LINER-MACHINE-OPERATOR HELPER (paper goods) 641.686-022
LINER REPLACER (mine & quarry; smelt. & refin.) 801.664-010
LINER REROLL TENDER (rubber goods; rubber tire) 554.685-022
liner-roll changer (rubber goods; rubber tire) 554.686-018
Liner Sheeter (any industry) 699.682-018
LINE-SERVICE ATTENDANT (air trans.) 912.687-010
line servicer (utilities) 821.361-026
LINES TENDER (water trans.) 911.687-026
line supervisor (smelt. & refin.) 511.130-010
LINE SUPERVISOR (tel. & tel.) 822.131-018
LINE SUPERVISOR (utilities) 821.131-014
Line Supervisor, Tower (utilities) 821.131-014
line supply (any industry) 929.687-030
LINE TENDER, FLAKEBOARD (wood prod., nec) 569.382-010
Line Umpire (amuse. & rec.) 153.267-018
LINE-UP EXAMINER (print. & pub.) 979.381-014
line-up-machine operator (elec. equip.) 706.687-018
LINE-UP WORKER (auto. mfg.) 221.367-026
LINE WALKER (petrol. & gas; petrol. refin.; pipe lines) 869.564-010
LINGO CLEANER (textile) 683.687-026
linguist (profess. & kin.) 059.067-014
LINGUIST (profess. & kin.) term
LINING BASTER, JUMPBASTING (garment) 786.682-154
lining brusher (laundry & rel.) 362.687-014
LINING CEMENTER (hat & cap) 795.687-022
lining cleaner (laundry & rel.) 362.687-014
Lining Closer (boot & shoe) 690.682-082
Lining Cutter, Machine (boot & shoe) 699.682-022
LINING FELLER, BLINDSTITCH (garment) 786.682-158
Lining Finisher (garment) 782.684-058
Lining Finisher (laundry & rel.) 783.381-014
LINING INSERTER (toy-sport equip.) 732.687-042
Lining Inspector (boot & shoe) 788.384-010
Lining Ironer (boot & shoe) 788.684-130
LINING-MACHINE OPERATOR (concrete prod.) 575.565-010
lining-machine tender (any industry) 692.685-062
Lining Maker (hat & cap) 784.682-014
Lining Maker, Hand (jewelry-silver.) 739.687-138
LINING MAKER, LOCKSTITCH (garment) 786.682-162
Lining Marker (boot & shoe) 788.584-014
Lining-Parts Sewer (leather prod.) 783.682-014
Lining Presser (garment; laundry & rel.) 363.684-018
Lining Presser (laundry & rel.) 363.682-018
lining printer (hat & cap) 651.682-022
Lining Repairer (boot & shoe) 788.381-010
LINING SCRUBBER (laundry & rel.) 362.687-014
LINING SETTER, LOCKSTITCH (garment) 786.682-166
Lining Sewer (tex. prod., nec) 787.682-066
lining stamper (boot & shoe) 690.685-398
Lining Stitcher (boot & shoe) 690.682-082
Lining-Strap Closer (boot & shoe) 690.682-082
lining stuffer (toy-sport equip.) 732.687-042
Lining Vamper (boot & shoe) 690.682-082
LINK-AND-LINK-KNITTING-MACHINE OPERATOR (knitting) 685.380-010
Link Assembler (jewelry-silver.) 735.687-014
LINKER (jewelry-silver.) 735.687-014
LINKER (meat products) 529.687-150
linker-up (jewelry-silver.) 735.687-014
link-fabric-machine operator (furniture) 616.685-022
LINKING-MACHINE OPERATOR (meat products) 529.685-162
link-wire-fabric-machine operator (furniture) 616.362-010
link-wire-fabric-machine tender (furniture) 616.685-022
Linoleum Cutter (retail trade) 929.381-010
Linoleum-Floor Layer (construction; retail trade) 864.481-010
Linoleum Layer (construction; retail trade) 864.481-010
Linoleum-Tile-Floor Layer (construction; retail trade) 864.481-010
linotype-maintenance-mechanic apprentice (print. & pub.) 627.261-018
LINOTYPE OPERATOR (print. & pub.) 650.582-010
linseed-oil-mill tender (oils & grease) 559.685-122
LINSEED-OIL-PRESS TENDER (oils & grease) 559.685-122
LINSEED-OIL REFINER (oils & grease) 559.382-030
linter (oils & grease) 521.685-198
Linter-Drier Operator (chemical) 553.685-034
LINTER-SAW SHARPENER (oils & grease) 603.682-018
LINTER TENDER (oils & grease) 521.685-198
linting-machine operator (textile) 680.685-050
Lip-And-Gate Builder (glass mfg.) 861.381-026
Lipcoat Sprayer (any industry) 741.687-018
LIP CUTTER AND SCORER (boot & shoe) 690.685-270
LIP-OF-SHANK CUTTER (boot & shoe) 690.685-274
Lipstick Molder (pharmaceut.) 556.687-022
LIQUEFACTION-AND-REGASIFICATION-PLANT OPERATOR (utilities) 953.362-014
LIQUEFACTION-PLANT OPERATOR (chemical) 559.362-018
liquefier (chemical) 559.362-018
liquid-chlorine operator (chemical) 559.362-018
Liquid Compounder I (pharmaceut.) 559.382-042
Liquid Compounder II (pharmaceut.) 550.685-090
LIQUID-FERTILIZER SERVICER (agriculture) 906.683-014
Liquid-Hydrogen-Plant Operator (chemical) 552.362-014
liquid loader (any industry) 914.667-010
LIQUID-SUGAR FORTIFIER (sugar & conf.) 520.585-022
LIQUID-SUGAR MELTER (sugar & conf.) 520.382-014
LIQUOR BLENDER (beverage) 522.382-018
LIQUOR-BRIDGE OPERATOR (sugar & conf.) 521.565-010
LIQUOR-BRIDGE-OPERATOR HELPER (sugar & conf.) 521.687-078
liquor-gallery operator (sugar & conf.) 521.565-010
LIQUOR-GRINDING-MILL OPERATOR (sugar & conf.) 521.685-202
LIQUOR INSPECTOR (beverage) 522.667-010
liquor maker (paint & varnish) 553.685-026
liquor runner (sugar & conf.) 521.565-010
Liquor-Store Stock Clerk (retail trade) 299.367-014
LITERARY AGENT (business ser.) 191.117-034
LITHOGRAPHED-PLATE INSPECTOR (tinware) 651.687-010
lithographer apprentice (print. & pub.) 972.382-010
lithographer retoucher (print. & pub.) 972.281-010
lithographic-camera operator (print. & pub.) 972.382-014
LITHOGRAPHIC PLATEMAKER (print. & pub.) 972.381-010
LITHOGRAPHIC-PLATE-MAKER APPRENTICE (print. & pub.) 972.381-014
Lithographic-Press Feeder (print. & pub.) 651.686-010
lithographic-press operator (print. & pub.) 651.382-042
lithographic-press operator apprentice (print. & pub.) 651.382-046
lithographic-press-plate-maker apprentice, photomechanical (print. & pub.) 972.381-014
Lithographic Proofer (print. & pub.) 651.582-010
LITHOGRAPHIC-PROOFER APPRENTICE (print. & pub.) 651.582-014
lithographic retoucher apprentice (print. & pub.) 972.281-018
LITHOGRAPH-PRESS OPERATOR, TINWARE (tinware) 651.382-014
Liver Trimmer (meat products) 525.684-038
Livestock Agent (government ser.) 096.127-010
livestock breeder (agriculture) 410.161-018
Livestock Counter (agriculture) 221.587-030
livestock farmer (agriculture) 410.161-018
LIVESTOCK RANCHER (agriculture) 410.161-018
LIVESTOCK-YARD ATTENDANT (any industry) 410.674-018
load blocker (glass mfg.; glass products) 673.685-030
Load-Chain Welding-Machine Repairer (forging) 626.261-010
LOAD CHECKER (utilities) 952.367-010
load clerk (any industry) 929.687-058
LOAD DISPATCHER (utilities) 952.167-014
Load Dispatcher, Local (utilities) 952.167-014
loader (construction) see WHEELER
LOADER (mfd. bldgs.) 921.687-018
loader (mine & quarry) 932.687-010
Loader (mine & quarry) 939.687-014
loader and unloader (any industry) 929.687-030
LOADER-DEMOLDER (furniture) 556.684-030
loader-head operator (any industry) 921.683-014

LOADER HELPER (any industry) 914.687-014
Loader Helper, Sorting Yard (logging) 921.687-022
LOADER I (any industry) 914.667-010
Loader II (any industry) 929.687-030
loader, machine (mine & quarry) 932.683-014
LOADER, MAGAZINE GRINDER (paper & pulp) 530.686-014
LOADER, MALT HOUSE (beverage) 921.682-010
loader operator (any industry) 921.683-042
loader operator (mine & quarry) 932.683-018
LOADER, SEMICONDUCTOR DIES (electron. comp.) 726.687-030
LOADER-UNLOADER, SCREEN-PRINTING MACHINE (textile) 652.686-022
loading checker (clerical) 222.687-030
Loading Checker (steel & rel.) 509.687-026
LOADING INSPECTOR (r.r. trans.) 910.667-018
LOADING-MACHINE ADJUSTER (ordnance) 632.360-014
LOADING-MACHINE OPERATOR (mine & quarry) 932.683-014
LOADING-MACHINE OPERATOR (ordnance) 694.685-026
loading-machine operator (ordnance) 694.665-010
LOADING-MACHINE-OPERATOR HELPER (mine & quarry) 939.686-010
LOADING-MACHINE TOOL-SETTER (ordnance) 694.260-010
LOADING-RACK SUPERVISOR (petrol. refin.) 914.137-014
LOADING-SHOVEL OILER (mine & quarry) 932.667-014
loading supervisor (petrol. refin.) 549.137-018
LOADING-UNIT OPERATOR (ordnance) 694.685-030
Loading-Unit Operator, Crimping (ordnance) 694.685-030
Loading-Unit Operator, Powder Charging (ordnance) 694.685-030
Loading-Unit Operator, Seating (ordnance) 694.685-030
loading-unit plate filler (ordnance) 737.685-014
LOADING-UNIT TOOL-SETTER (ordnance) 632.380-014
load mixer (leather mfg.) 584.687-010
LOAD-OUT SUPERVISOR (mine & quarry) 921.133-014
load-out worker (tobacco) 922.687-026
load tallier (wood prod., nec) 221.167-022
LOAD TESTER (metal prod., nec) 616.685-034
LOAD-TEST MECHANIC (aircraft mfg.) 929.382-010
Loan-Application Clerk (financial) 205.367-022
Loan-Approval Agent (government ser.) 205.367-022
loan clerk (clerical) 205.367-022
loan closer (clerical) 219.362-038
Loan Counselor (education) 169.267-018
LOAN INTERVIEWER, MORTGAGE (financial) 241.367-018
loan officer (financial) 241.367-018
LOAN OFFICER (financial; insurance) 186.267-018
LOAN REVIEW ANALYST (financial) 186.267-022
loan-servicing officer (financial) 186.167-078
LOBBYIST (profess. & kin.) 165.017-010
Local Announcer (radio-tv broad.) 159.147-010
Local-Collection Clerk (financial) 216.362-014
LOCATION-AND-MEASUREMENT TECHNICIAN (clock & watch) 715.381-078
Location-And-Measurement Technician, Tool Room (clock & watch) 715.381-078
LOCATION MANAGER (motion picture; radio-tv broad.) 191.167-018
Lock-And-Dam Equipment Repairer (water trans.) 899.281-010
LOCK ASSEMBLER (cutlery-hrdwr.) 706.684-074
LOCK ASSEMBLER (furniture) 706.684-070
LOCK-CORNER-MACHINE OPERATOR (woodworking) 665.382-014
locker attendant (personal ser.) 358.677-014
LOCKER-PLANT ATTENDANT (retail trade; wholesale tr.) 922.684-010
LOCKER-ROOM ATTENDANT (personal ser.) 358.677-014
locker-room clerk (personal ser.) 358.677-014
LOCKET MAKER (jewelry-silver.) 700.381-030
lock expert (any industry) 709.281-010
LOCK INSTALLER (furniture) 706.684-078
LOCK MAINTENANCE SUPERVISOR (construction) 899.131-014
LOCK OPERATOR (water trans.) 911.362-010
LOCKSMITH (any industry) 709.281-010
LOCKSMITH APPRENTICE (any industry) 709.281-014
lock-stitch channeler (boot & shoe) 690.685-086
Lockstitcher (boot & shoe) 690.682-078
LOCKSTITCH-MACHINE OPERATOR (garment) 786.682-170
LOCKSTITCH-SEWING-MACHINE OPERATOR, COMPLETE GARMENT (garment) 786.682-174
LOCK TENDER, CHIEF OPERATOR (water trans.) 911.131-014
Lock Tender I (construction) 869.665-010
LOCK TENDER II (construction) 850.663-018
LOCOMOTIVE-CRANE OPERATOR (any industry) 921.663-038
Locomotive-Crane-Operator Helper (any industry) 921.667-022
locomotive engineer (r.r. trans.) 910.363-018
LOCOMOTIVE ENGINEER (r.r. trans.) 910.363-014
Locomotive Engineer, Diesel (r.r. trans.) 910.363-014
Locomotive Engineer, Electric (r.r. trans.) 910.363-014
Locomotive Engineer, Gasoline (any industry) 910.363-018
Locomotive-Engine Supervisor (any industry) 910.137-022
LOCOMOTIVE INSPECTOR (railroad equip.) 622.281-010
LOCOMOTIVE LUBRICATING-SYSTEMS CLERK (r.r. trans.) 221.367-030
LOCOMOTIVE OPERATOR HELPER (r.r. trans.) 910.367-022
Locomotive Repairer, Diesel (railroad equip.) 625.281-010
loft and lie inspector and adjuster (toy-sport equip.) 732.384-014
loft patternmaker (aircraft mfg.) 777.281-018
loft patternmaker (machine tools) 777.381-038
loft rigger (ship-boat mfg.) 806.261-014
LOFT WORKER (ship-boat mfg.) 661.281-010
LOFT WORKER APPRENTICE (ship-boat mfg.) 661.281-014
Loft Worker, Concrete-Mixing Plant (construction) 579.665-014
LOFT WORKER, HEAD (ship-boat mfg.) 661.131-010
Loft Worker, Pile Driving (construction) 869.687-026
log-chain feeder (millwork-plywood; paper & pulp; saw. & plan.) 921.686-022
LOG-CHIPPER OPERATOR (logging) 564.662-010
log clerk (radio-tv broad.) 249.387-010
LOG COOKER (wood. container) 562.665-010
log culler (saw. & plan.) 667.687-014
LOG-CUT-OFF SAWYER, AUTOMATIC (saw. & plan.) 667.682-090
log-deck tender (saw. & plan.) 921.685-014
LOGGER (logging) term
LOGGER, ALL-ROUND (logging) 454.684-018
Logging-Arch Operator (logging) 929.663-010
Logging Contractor (logging) 183.167-038
LOGGING-EQUIPMENT MECHANIC (logging) 620.281-042
LOGGING-OPERATIONS INSPECTOR (forestry; logging) 168.267-070
LOGGING-TRACTOR OPERATOR (forestry; logging; saw. & plan.) 929.663-010
Logging-Tractor Operator, Swamp (logging) 929.663-010
LOG GRADER (logging; saw. & plan.) 455.367-010
log handler (saw. & plan.) 677.687-010
LOG-HAUL CHAIN FEEDER (paper & pulp; saw. & plan.) 921.686-018
log hauler (logging) 904.683-010
Log Hooker (millwork-plywood; saw. & plan.) 921.667-022
LOG INSPECTOR (saw. & plan.) 667.687-014
LOGISTICS ENGINEER (profess. & kin.) 019.167-010
logistics specialist (profess. & kin.) 019.167-010
LOG LOADER (logging) 921.683-058
LOG LOADER HELPER (logging) 921.687-022
LOG MARKER (logging) 455.687-010
LOG MARKER (logging; millwork-plywood) 454.687-018
log operations coordinator (radio-tv broad.) 199.382-010
LOG PEELER (saw. & plan.) 569.684-010
Log Rider (saw. & plan.) 921.686-022
LOG ROLLER (saw. & plan.) 677.687-010
LOG SCALER (logging; millwork-plywood; paper & pulp; saw. & plan.) 455.487-010
LOG SORTER (logging) 455.684-010
Log-Stacker Operator (logging; saw. & plan.) 929.663-010
LOG-TRUCK DRIVER (logging) 904.683-010
LOG WASHER (saw. & plan.) 569.687-014
LOG-YARD CRANE OPERATOR (saw. & plan.) term
Log-Yard Derrick Operator (saw. & plan.) 921.663-022
Loin Boner (meat products) 525.684-010
Loin Trimmer (meat products) 525.684-054
lollypop-machine operator (sugar & conf.) 529.685-234
lollypop maker (sugar & conf.) 529.685-234
LONG-CHAIN BEAMER (textile) 681.685-058
long-chain-dyeing-machine operator (textile) 582.685-158
long-chain-quiller tender (textile) 681.685-070
Long-Distance Operator (tel. & tel.) 235.462-010
long-filler-cigar roller, machine (tobacco) 529.685-266
long-goods drier (food prep., nec) 523.585-022
LONG-GOODS HELPER, MACHINE (food prep., nec) 529.686-062
Long-Haul-Sleeper Driver (any industry) 904.383-010
Longitudinal-Float Operator (construction) 853.663-014
Long-Line Teamster (any industry) 919.664-010
longseam-machine operator (garment) 786.685-026
long-wall-mining-machine helper (mine & quarry) 930.666-014
LONG-WALL-MINING-MACHINE TENDER (mine & quarry) 930.665-010
LONG-WALL SHEAR OPERATOR (mine & quarry) 930.662-010
Loom Blower (textile) 699.687-014
LOOM CHANGEOVER OPERATOR (carpet & rug) 683.687-030
LOOM CHANGER (textile) 683.360-010
loom doffer (textile) 689.686-058
loom fixer (carpet & rug) 628.281-010
LOOM FIXER (narrow fabrics; nonmet. min.; textile) 683.260-018
LOOM-FIXER SUPERVISOR (narrow fabrics) 683.130-014
loom helper (metal prod., nec) 616.687-014
loom inspector (carpet & rug; textile) 683.684-034
loom operator apprentice (nonmet. min.; textile) 683.682-042
loom operator (furniture) 692.685-262
loom operator (nonmet. min.; textile) 683.682-038
Loom Operator (rubber goods) 692.665-010
loom operator (tex. prod., nec) 685.685-010

loom repairer (narrow fabrics; nonmet. min.; textile) 683.260-018
Loom Setter, Fourdrinier (metal prod., nec) 616.360-014
LOOM SETTER, WIRE WEAVING (metal prod., nec) 616.360-014
LOOM STARTER (textile) 683.360-014
Loom-Stop Checker (textile) 221.367-034
LOOM-WINDER TENDER (textile) 681.685-062
Loop-Drier Operator (textile) 581.685-030
LOOPER (knitting) 689.682-010
LOOPER (musical inst.) 730.685-010
Looper (smelt. & refin.) 519.565-014
looper (wood. container) 692.685-258
Looping Inspector (knitting) 684.684-010
Loop-Machine Operator (wood. container) 669.685-014
loop tender (fabrication, nec) 590.686-010
LOOSE-END FINDER, BOBBIN (knitting) 681.687-014
loose-hand packer (tobacco) 920.687-142
loss-claim clerk (insurance) 205.367-018
loss-control technician (insurance) 168.167-078
loss-prevention research engineer (profess. & kin.) 012.167-022
LOST-AND-FOUND CLERK (clerical) 222.367-034
LOST-CHARGE-CARD CLERK (clerical) 209.367-034
LOT ATTENDANT (retail trade) 915.583-010
lot boss (any industry) 410.131-010
lot caller (retail trade; wholesale tr.) 294.667-010
LOUNGE-CAR ATTENDANT (r.r. trans.) 291.457-014
Louver-Door Assembler (wood prod., nec) 762.687-022
Louver-Mortiser Operator (saw. & plan.) 665.482-014
Low-Chloride Soda Operator (chemical) 558.685-062
LOWERATOR OPERATOR (fabrication, nec) 922.686-014
Lower-in Supervisor (construction) 899.131-010
Low-Heel Builder (boot & shoe) 690.685-206
Low-Pressure-Kettle Operator (chemical) 558.382-038
Low-Raw-Sugar Cutter (sugar & conf.) 521.682-010
LOZENGE-DOUGH MIXER (sugar & conf.) 520.685-122
LOZENGE MAKER (sugar & conf.) 529.682-026
Lozenge-Maker Helper (sugar & conf.) 529.686-034
l-tacker (tex. prod., nec) 787.685-026
L-Type-Ruling-Machine Operator (print. & pub.) 659.682-022
LUBRICATING-MACHINE TENDER (ordnance) 509.685-038
LUBRICATION-EQUIPMENT SERVICER (any industry) 630.381-022
LUBRICATION SERVICER (automotive ser.) 915.687-018
lubrication technician (automotive ser.) 915.687-018
lubricator (any industry) 699.687-018
LUBRICATOR-GRANULATOR (nonfer. metal; steel & rel.) 509.685-042
Lug-Breaker-And-Wire-Puller (elec. equip.) 727.687-058
luggage checker (air trans.; motor trans.) 357.477-010
LUGGAGE MAKER (leather prod.) 783.381-022
LUGGAGE REPAIRER (any industry) 365.361-010
Lugger (agriculture) 929.687-030
Lugger (elec. equip.) 691.685-018
Lumber-Carrier Driver (saw. & plan.) 921.683-070
Lumber Checker (woodworking) 221.587-030
LUMBER ESTIMATOR (wood. container) 221.482-014
lumber guider (saw. & plan.) 669.687-018
LUMBER HANDLER (woodworking) 922.687-070
lumber inspector (woodworking) 669.687-030
lumber piler (woodworking) 922.687-070
lumber-piler operator (woodworking) 569.685-066
lumber puller (woodworking) 922.687-074
lumber racker (woodworking) 922.687-070
Lumber Salvager (any industry) 929.687-022
LUMBER SCALER (woodworking) 221.487-010
LUMBER SORTER (woodworking) 922.687-074
lumber sorter, machine (saw. & plan.) 921.685-054
lumber stacker (woodworking) 922.687-070
lumber sticker (woodworking) 922.687-070
LUMBER STRAIGHTENER (saw. & plan.) 669.687-018
lumber tallier (woodworking) 221.487-010
Lumber-Yard Worker (woodworking) 929.687-030
LUMITE INJECTOR (boot & shoe) 690.685-278
lumper (can. & preserv.) 922.687-062
lumper (stonework) 679.664-010
LUMPIA WRAPPER MAKER (food prep., nec) 526.684-014
LUMP INSPECTOR (tobacco) 790.687-018
lump receiver (tobacco) 790.687-018
LUNCH-TRUCK DRIVER (hotel & rest.) 292.463-010
lunch-truck operator (hotel & rest.) 292.463-010
Lunch-Wagon Operator (hotel & rest.) 292.463-010
Lung Splitter (meat products) 525.684-038
lurer (hat & cap) 784.684-062
LUSTER APPLICATOR (glass mfg.; glass products) 740.381-014
lusterer (textile) 584.685-014
luster repairer (boot & shoe) 788.687-038
luter (steel & rel.) 543.687-014
LYE-PEEL OPERATOR (can. & preserv.) 521.685-206
LYE TREATER (chemical; soap & rel.) 551.685-094
LYRICIST (profess. & kin.) 131.067-034
lyric writer (profess. & kin.) 131.067-034

M

macaroni-press operator (chemical) 557.682-010
Macerator Operator (chemical) 550.665-010
machine adjuster (print. & pub.) 653.360-010
Machine Adjuster (tobacco) 638.281-014
MACHINE ADJUSTER (any industry) term
machine-adjuster helper (any industry) 638.684-018
MACHINE-ADJUSTER LEADER (ordnance) 619.137-010
Machine-Adjuster Leader, Bullet Assembly (ordnance) 619.137-010
Machine-Adjuster Leader, Cannelure And Finish (ordnance) 619.137-010
Machine-Adjuster Leader, Case Trim (ordnance) 619.137-010
Machine-Adjuster Leader, Primer Assembly (ordnance) 619.137-010
machine assembler (boot & shoe) 690.685-010
MACHINE ASSEMBLER (machinery mfg.) 638.361-010
machine assembler (paper goods) 649.685-010
MACHINE-ASSEMBLER SUPERVISOR (machinery mfg.) 638.131-014
machine boss (mine & quarry) 939.137-018
machine brusher (any industry) 699.687-014
MACHINE BUILDER (machinery mfg.; machine tools) 600.281-022
machine captain (bakery products) 520.682-034
machine-casting operator and adjuster (ordnance) 502.382-010
MACHINE-CASTINGS PLASTERER (foundry) 519.687-030
MACHINE CLEANER (any industry) 699.687-014
MACHINE-CLOTHING REPLACER (paper & pulp) 629.361-010
MACHINE FEEDER (any industry) 699.686-010
MACHINE FEEDER (clock & watch) 715.686-014
MACHINE FEEDER (welding) 819.686-010
MACHINE FEEDER, RAW STOCK (tex. prod., nec; textile) 680.686-018
MACHINE FIXER (carpet & rug) 628.281-010
MACHINE FIXER (textile) 689.260-010
MACHINE HELPER (any industry) 619.687-014
machine helper (construction) 579.665-014
MACHINE HELPER (tex. prod., nec) 586.686-022
MACHINE HELPER (welding) 819.666-010
machine helper (welding) 819.686-010
machine hostler (any industry) 699.687-018
machine line molder (foundry) 518.682-010
Machine-Load Clerk (woodworking) 221.382-018
MACHINE-MADE-SHOE UNIT WORKER (boot & shoe) 753.584-010
machine-maintenance servicer (any industry) 638.281-014
MACHINE MOLDER (foundry) 518.682-010
Machine Molder, Roll-Over (foundry) 518.682-010
Machine Molder, Squeeze (foundry) 518.682-010
Machine Mover (construction) 921.260-010
Machine-Operations Inspector (any industry) 619.261-010
Machine-Operations Supervisor (any industry) 619.130-030
machine operator (print. & pub.) 653.662-010
machine operator, all around (machine shop) 600.380-018
MACHINE OPERATOR, CENTRIFUGAL-CONTROL SWITCHES (elec. equip.) 609.682-022
MACHINE OPERATOR, CERAMICS (pottery & porc.) 679.685-010
machine operator, general (machine shop) 600.380-018
MACHINE OPERATOR, GENERAL (paper goods) 649.685-070
machine-operator helper (any industry) 699.587-010
MACHINE OPERATOR I (any industry) 616.380-018
MACHINE OPERATOR II (any industry) 619.685-062
machine operator, packaging (any industry) 920.685-078
machine operator technician (electron. comp.) 679.362-010
machine overhauler (any industry) 638.281-014
MACHINE-PACK ASSEMBLER (ordnance) 920.687-122
machine pack-shaker lubricator (ordnance) 694.685-018
machine printer, hose (rubber goods) 690.685-042
Machine Rebuilder (forging) 626.261-010
machine repairer (any industry) 638.281-014
machine repairer (grain-feed mills) 629.281-030
machine repairer (machine shop) 600.280-042
machine repairer (textile) 689.260-010
MACHINE REPAIRER, MAINTENANCE (any industry) 638.261-030
machine riveter (furniture) 616.685-058
machine rubber (any industry) 699.687-014
MACHINE RUNNER (mine & quarry) term
Machinery Crater (machinery mfg.) 920.684-010
MACHINERY ERECTOR (engine-turbine; machinery mfg.) 638.261-014
Machinery Erector (ship-boat mfg.) 921.260-010
MACHINE SETTER (any industry) 616.360-022
MACHINE SETTER (button & notion) 690.380-010
MACHINE SETTER (clock & watch) 600.380-022
MACHINE SETTER (machine shop) 600.360-014
MACHINE SETTER (nonmet. min.) 692.260-010

MACHINE SETTER (woodworking) 669.280-010
MACHINE SETTER-AND-REPAIRER (plastic prod.) 690.380-014
Machine Setter, Automatic (clock & watch) 600.380-022
Machine Setter, Hand (clock & watch) 600.380-022
Machine Setter, Semiautomatic (clock & watch) 600.380-022
Machine Setter, Sheet Metal (any industry) 616.360-022
MACHINE SET-UP OPERATOR (machine shop) 600.380-018
MACHINE SET-UP OPERATOR, PAPER GOODS (paper goods) 649.380-010
machine-shop apprentice (machine shop) 600.280-026
machine shop production worker (machine shop) 609.685-018
MACHINE-SHOP SUPERVISOR, PRODUCTION (machine shop) 609.130-010
MACHINE-SHOP SUPERVISOR, TOOL (machine shop) 600.130-010
machine sizer (hat & cap) 589.687-038
MACHINE SNELLER (toy-sport equip.) 732.685-026
machine specialist (machine shop) 600.380-018
machine sprayer (any industry) 599.686-014
MACHINE-STOPPAGE-FREQUENCY CHECKER (textile) 221.367-034
machine stuffer, automatic (furniture) 780.684-054
machine supervisor (any industry) 619.130-030
MACHINE-TANK OPERATOR (wood. container) 667.662-014
MACHINE TESTER (machinery mfg.) 629.382-010
MACHINE TESTER (office machines) 706.387-014
Machine Tool Fixture Builder (aircraft mfg.) 693.281-030
machine-tool operator, general (machine shop) 601.280-054
machine tracer (boot & shoe) 690.685-282
MACHINE TRY-OUT SETTER (machine tools) 600.360-010
MACHINING-AND-ASSEMBLY SUPERVISOR (elec. equip.) 619.131-010
machinist (machine shop) 600.380-018
machinist (machine shop) 601.280-054
MACHINIST (machine shop) 600.280-022
machinist (railroad equip.) 622.381-014
MACHINIST APPRENTICE (machine shop) 600.280-026
machinist apprentice (railroad equip.) 622.381-022
machinist apprentice (utilities) 631.261-018
MACHINIST APPRENTICE, AUTOMOTIVE (automotive ser.) 600.280-030
MACHINIST APPRENTICE, COMPOSING ROOM (print. & pub.) 627.261-014
MACHINIST APPRENTICE, LINOTYPE (print. & pub.) 627.261-018
MACHINIST APPRENTICE, MARINE ENGINE (ship-boat mfg.) 623.281-018
MACHINIST APPRENTICE, OUTSIDE (ship-boat mfg.) 623.281-022
MACHINIST APPRENTICE, WOOD (woodworking) 669.380-010
MACHINIST, AUTOMOTIVE (automotive ser.) 600.280-034
machinist, bench (machinery mfg.; machine tools) 600.281-022
machinist, brake (automotive ser.) 620.682-010
MACHINIST, EXPERIMENTAL (machine shop) 600.260-022
machinist, first-class (machine shop) 600.280-022
machinist, general (machine shop) 600.280-022
machinist, general maintenance (machine shop) 600.280-042
machinist helper (railroad equip.) 622.684-014
machinist helper, marine (ship-boat mfg.) 623.687-010
MACHINIST HELPER, OUTSIDE (ship-boat mfg.) 623.687-010
machinist, installation (ship-boat mfg.) 623.281-030
machinist, job setter (machine shop) 600.360-014
MACHINIST, LINOTYPE (print. & pub.) 627.261-022
MACHINIST, MARINE ENGINE (ship-boat mfg.) 623.281-026
MACHINIST, MOTION-PICTURE EQUIPMENT (motion picture; photo. appar.) 714.281-018
MACHINIST, OUTSIDE (ship-boat mfg.) 623.281-030
MACHINIST SUPERVISOR, OUTSIDE (ship-boat mfg.) 623.131-010
MACHINIST, WOOD (woodworking) 669.380-014
made-to-measure tailor (garment; personal ser.; retail trade) 785.261-014
made-to-measure-tailor apprentice (garment; personal ser.; retail trade) 785.261-026
Magazine-Delivery Driver (wholesale tr.) 292.363-010
magazine filler (textile) 683.686-010
magazine hand (textile) 689.686-038
MAGAZINE KEEPER (clerical) 222.367-038
magazine loader (paper & pulp) 530.686-014
MAGAZINE REPAIRER (print. & pub.) 653.685-022
MAGAZINE SUPERVISOR (chemical; ordnance) 222.137-018
MAGICIAN (amuse. & rec.) 159.041-010
MAGISTRATE (government ser.) 111.107-014
MAGNESIUM-MILL OPERATOR (nonfer. metal) 607.686-010
Magnetic Prospector (petrol. & gas) 024.061-026
magnetic resonance imaging technologist (medical ser.) 078.362-058
MAGNETIC-TAPE-COMPOSER OPERATOR (print. & pub.) 203.382-018
MAGNETIC-TAPE WINDER (recording) 726.685-010
Magnetic Thermal-Cutting-Machine Operator (welding) 816.482-010
Magnetometer Operator (mine & quarry; petrol. & gas) 010.261-018
MAGNETO REPAIRER (any industry) 721.281-022
Magnet Placer (steel & rel.) 921.667-022
MAGNETO-VALVE ASSEMBLER (elec. equip.) 724.684-034
mail (any ind., any) 323.687-014
MAIL CARRIER (government ser.) 230.367-010
MAIL CENSOR (government ser.) 243.367-010
MAIL CLERK (clerical) 209.687-026
Mail Clerk, Bills (clerical) 209.687-026
MAIL-DISTRIBUTION-SCHEME EXAMINER (government ser.) 239.367-010
MAILER (print. & pub.) 222.587-030
MAILER APPRENTICE (print. & pub.) 222.587-032
MAIL HANDLER (government ser.) 209.687-014
Mailing-List Compiler (clerical) 209.387-014
MAILING-MACHINE OPERATOR (print. & pub.) 208.462-010
Mail-Order Biller (retail trade; wholesale tr.) 214.382-014
Mail-Order Clerk (clerical) 249.362-026
Mail-Order Sorter (retail trade) 222.387-038
MAIL-PROCESSING-EQUIPMENT MECHANIC (government ser.) 633.261-014
mailroom clerk (clerical) 209.687-026
MAILROOM SUPERVISOR (clerical) 209.137-010
MAILROOM SUPERVISOR (print. & pub.) 222.137-022
mail sorter (clerical) 209.687-026
Mail Sorter (r.r. trans.) 222.687-022
Mail-Truck Driver (any industry) 906.683-022
Main-Galley Scullion (water trans.) 318.687-014
main-line assembler (agric. equip.) 801.684-022
MAINS-AND-SERVICE SUPERVISOR (utilities) 862.137-010
Mainspring-Barrel-Assembly Cleaner (clock & watch) 715.687-126
MAINSPRING FORMER, ARBOR END (clock & watch) 715.687-078
MAINSPRING FORMER, BRACE END (clock & watch) 715.687-082
Mainspring-Reverse Winder (clock & watch) 715.685-038
Mainspring-Strip Gauger (clock & watch) 715.384-022
Mainspring-Strip Inspector (clock & watch) 715.384-022
mainspring-torque tester (clock & watch) 715.685-066
MAINSPRING WINDER AND OILER (clock & watch) 715.685-038
mainspring-winding-machine operator (clock & watch) 715.685-038
Mainstreaming Facilitator (education) 094.267-010
MAINTAINABILITY ENGINEER (profess. & kin.) 019.081-010
maintainer, central office (tel. & tel.) 822.381-022
maintainer, equipment (tel. & tel.) 822.381-022
maintainer, plant (tel. & tel.) 822.381-022
Maintainer, Sewer-And-Waterworks (construction) 862.281-022
maintenance advisor (any industry) 638.131-022
maintenance-and-utilities supervisor (any industry) 899.131-018
maintenance associate (any industry) 899.261-014
Maintenance Carpenter (museums) 899.384-010
maintenance chief (tel. & tel.) 822.131-010
maintenance clerk (clerical) 239.367-014
maintenance-crew supervisor (pipe lines) 869.134-018
MAINTENANCE DATA ANALYST (military ser.) 221.367-038
maintenance engineer (any industry) 828.261-022
maintenance engineer (any industry) 950.382-026
maintenance engineer (any industry) 382.664-010
maintenance engineer, oil field (any industry) 638.131-026
maintenance inspector (pipe lines; utilities) 953.367-010
maintenance inspector (r.r. trans.) 910.367-030
MAINTENANCE INSPECTOR (tel. & tel.) 822.261-018
MAINTENANCE MACHINIST (machine shop) 600.280-042
MAINTENANCE MECHANIC (any industry) 638.281-014
MAINTENANCE MECHANIC (construction; petrol. & gas; pipe lines) 620.281-046
MAINTENANCE MECHANIC (grain-feed mills) 629.281-030
MAINTENANCE MECHANIC (leather mfg.) 629.280-010
MAINTENANCE MECHANIC, COMPRESSED-GAS PLANT (chemical) 630.261-010
maintenance mechanic, elevators (any industry) 825.281-030
MAINTENANCE MECHANIC, ENGINE (water trans.) 623.281-034
maintenance mechanic helper (any industry) 899.684-022
MAINTENANCE-MECHANIC HELPER (any industry) 638.684-018
MAINTENANCE MECHANIC HELPER (construction; petrol. & gas; pipe lines) 620.664-014
Maintenance Mechanic, Record Processing Equipment (recording) 638.281-014
MAINTENANCE-MECHANIC SUPERVISOR (any industry) 638.131-022
MAINTENANCE MECHANIC, TELEPHONE (any industry) 822.281-018
maintenance-of-way supervisor (r.r. trans.) 184.167-234
maintenance-planning clerk (air trans.) 221.362-010
MAINTENANCE REPAIRER, BUILDING (any industry) 899.381-010
MAINTENANCE-REPAIRER HELPER, INDUSTRIAL (any industry) 899.684-022
MAINTENANCE REPAIRER, INDUSTRIAL (any industry) 899.261-014
maintenance supervisor (any industry) 638.131-022
MAINTENANCE SUPERVISOR (any industry) 891.137-010
maintenance supervisor (tel. & tel.) 822.131-014
MAINTENANCE SUPERVISOR (utilities) 184.167-050
maintenance supervisor (waterworks) 899.130-010
Maintenance Supervisor, Electrical (utilities) 184.167-050
MAINTENANCE SUPERVISOR, FIRE-FIGHTING-EQUIPMENT (government ser.) 638.131-018
Maintenance Supervisor, Mechanical (utilities) 184.167-050

MAINTENANCE SUPERVISOR, MOBILE BATTERY EQUIPMENT (mine & quarry) 638.131-034
MAINTENANCE WORKER (any industry) term
maintenance worker (museums) 899.384-010
maintenance worker, house trailer (retail trade) 899.484-010
MAINTENANCE WORKER, MUNICIPAL (government ser.) 899.684-046
maintenance worker, swimming pool (any industry) 891.684-018
major-appliance-servicer apprentice, electrical (any industry) 827.261-014
MAJOR-ASSEMBLY INSPECTOR (agric. equip.) 801.381-018
maker (boot & shoe) 690.682-082
make-ready apprentice (print. & pub.) 651.362-022
make-ready mechanic (automotive ser.; retail trade) 806.361-026
make-ready worker (print. & pub.) 651.384-010
maker-up, folding (tex. prod., nec; textile) 589.687-014
MAKE-UP ARRANGER (print. & pub.) 973.381-026
MAKE-UP ARTIST (amuse. & rec.; motion picture; radio-tv broad.) 333.071-010
makeup editor (print. & pub.) 132.067-026
Make-Up Market Worker, Truck Garden (agriculture) 920.687-134
MAKE-UP OPERATOR (chemical) 559.382-034
MAKE-UP OPERATOR HELPER (chemical) 550.587-010
MAKING-LINE WORKER (boot & shoe) 753.687-026
making-machine catcher (tobacco) 529.666-014
making-machine operator, filter (tobacco) 529.685-066
Male Impersonator (amuse. & rec.) 159.047-018
malted-milk masher (dairy products) 526.485-010
malted-milk mixer (dairy products) 521.685-222
malter operator (textile) 582.685-046
MALT-HOUSE OPERATOR (beverage) 522.685-074
malt loader (beverage) 921.682-010
MALT ROASTER (beverage) 526.682-026
MALT-SPECIFICATIONS-CONTROL ASSISTANT (beverage) 022.261-014
Mammal Keeper (amuse. & rec.) 412.674-010
Mammalogist (profess. & kin.) 041.061-090
MANAGEMENT AIDE (social ser.) 195.367-014
MANAGEMENT ANALYST (profess. & kin.) 161.167-010
MANAGEMENT TRAINEE (any industry) 189.167-018
manager (any industry) see SUPERVISOR
manager, administrative services (any industry) 169.167-034
MANAGER, ADVERTISING (any industry) 164.117-010
MANAGER, ADVERTISING (print. & pub.) 163.167-010
MANAGER, ADVERTISING AGENCY (business ser.) 164.117-014
MANAGER, AERIAL PLANTING AND CULTIVATION (agriculture) 180.167-062
MANAGER, AGRICULTURAL-LABOR CAMP (profess. & kin.) 187.167-050
MANAGER, AIRPORT (air trans.) 184.117-026
Manager, Airport-Property-And-Development (air trans.) 184.117-026
MANAGER, ANIMAL SHELTER (nonprofit org.) 187.167-218
Manager, Apartment House (hotel & rest.) 320.137-014
MANAGER, APARTMENT HOUSE (real estate) 186.167-018
MANAGER, AQUATIC FACILITY (amuse. & rec.) 187.167-054
manager, area (any industry) 183.117-010
MANAGER, AREA DEVELOPMENT (utilities) 184.117-030
MANAGER, ARMORED TRANSPORT SERVICE (business ser.) 372.167-022
MANAGER, ATHLETE (amuse. & rec.) 153.117-014
manager, athletic team (amuse. & rec.) 153.117-010
MANAGER, AUTOMOBILE SERVICE STATION (retail trade) 185.167-014
MANAGER, AUTOMOTIVE SERVICES (any industry) 184.117-034
MANAGER, AUTO SPECIALTY SERVICES (automotive ser.) 185.167-074
Manager, Aviation And Space (nonprofit org.) 187.167-042
MANAGER, BAKERY (bakery products) 189.117-046
Manager, Banquet (hotel & rest.) 187.167-106
MANAGER, BAR (hotel & rest.) term
MANAGER, BARBER OR BEAUTY SHOP (personal ser.) 187.167-058
Manager, Beer Parlor (hotel & rest.) 187.167-126
MANAGER, BENEFITS (profess. & kin.) 166.167-018
MANAGER, BOARDING HOUSE (hotel & rest.) 320.137-010
MANAGER, BOWLING ALLEY (amuse. & rec.) 187.167-222
Manager, Boxer (amuse. & rec.) 153.117-014
MANAGER, BRANCH (any industry) 183.117-010
Manager, Branch Bank (financial) 186.167-086
MANAGER, BRANCH OPERATION EVALUATION (hotel & rest.) 187.167-062
MANAGER, BRANCH STORE (laundry & rel.) 369.467-010
MANAGER, BROKERAGE OFFICE (financial) 186.117-034
manager, building (any industry) 187.167-190
MANAGER, BULK PLANT (petrol. refin.; retail trade) 181.117-010
manager, business promotion (hotel & rest.) 163.117-018
MANAGER, BUS TRANSPORTATION (motor trans.) 184.167-054
Manager, Cafeteria Or Lunchroom (hotel & rest.) 187.167-106
MANAGER, CAMP (amuse. & rec.) 329.161-010
MANAGER, CAMP (construction; logging) 187.167-066
MANAGER, CARDROOM (amuse. & rec.) 343.137-010
MANAGER, CARGO-AND-RAMP-SERVICES (air trans.) 184.167-058
MANAGER, CAR INSPECTION AND REPAIR (r.r. trans.) 184.117-086
MANAGER, CASINO (amuse. & rec.) 187.167-070
Manager, Catering (hotel & rest.) 187.167-106
MANAGER, CEMETERY (real estate) 187.167-074
manager, chamber of commerce (nonprofit org.) 187.117-030
Manager, Chicken Hatchery (agriculture) 180.167-046
MANAGER, CHRISTMAS-TREE FARM (forestry) 180.117-010
MANAGER, CIRCULATION (print. & pub.) 163.167-014
MANAGER, CITY (government ser.) 188.117-114
Manager, City Circulation (print. & pub.) 163.167-014
Manager, Classified Advertising (print. & pub.) 163.167-010
manager, club (hotel & rest.) 187.167-126
Manager, Cocktail Lounge (hotel & rest.) 187.167-126
Manager, Commercial Bank (financial) 186.167-086
Manager, Commercial Sales (utilities) 163.167-022
Manager, Commissary Service (air trans.) 184.167-082
Manager, Commodity Exchange Floor (financial) 186.117-086
MANAGER, COMMUNICATIONS STATION (tel. & tel.) 184.167-062
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Mangle Catcher (textile) 589.686-010
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MATERIAL COORDINATOR (clerical) 221.167-014
MATERIAL-CREW SUPERVISOR (construction; mfd. bldgs.) 921.137-014
material cutter (fabrication, nec) 690.485-010
MATERIAL EXPEDITER (clerical) 221.367-042
MATERIAL HANDLER (any industry) 929.687-030
MATERIAL-HANDLING SUPERVISOR (any industry) 921.133-018
Material Hauler (construction) 869.687-026
MATERIAL INSPECTOR (wood. container) 764.387-014
MATERIAL LISTER (construction) 229.387-010
MATERIAL MIXER (plastic prod.) 550.685-130
material planning and acquisition analyst (aircraft mfg.) 012.167-082
MATERIAL PREPARATION WORKER (electron. comp.) 590.684-030
Material Review Board Representative, Quality Control (aircraft mfg.) 806.261-034
MATERIAL SCHEDULER (aircraft mfg.) 012.167-082
MATERIALS ENGINEER (profess. & kin.) 019.061-014
materials-handling coordinator (nonfer. metal) 222.167-010
materials inspector (mine & quarry) 579.484-010
materials-make-up operator (chemical) 559.382-034
MATERIALS SCIENTIST (profess. & kin.) 029.081-014
Material Stockkeeper, Yard (petrol. & gas) 222.387-058
Mate, Second (water trans.) 197.133-022
MATE, SHIP (water trans.) 197.133-022
Mate, Third (water trans.) 197.133-022
MATHEMATICAL TECHNICIAN (profess. & kin.) 020.162-010
MATHEMATICIAN (profess. & kin.) 020.067-014
Mathematician, Applied (profess. & kin.) 020.067-014
Mathematician, Research (profess. & kin.) 020.067-014
mathematics improvement teacher (education) 099.227-042
MAT INSPECTOR (concrete prod.) 575.687-022
MAT-MACHINE OPERATOR (concrete prod.) 579.662-010
Mat-Machine Tender (wood. container) 669.685-014
MAT-MAKING MACHINE TENDER (furniture) 692.685-122
MAT PACKER (concrete prod.) 579.686-014
MAT PUNCHER (rubber goods) 690.685-286
MAT REPAIRER (rubber goods) 759.684-042
MATRIX-BATH ATTENDANT (recording) 500.384-014
MATRIX-DRIER TENDER (paper & pulp) 532.585-010
matrix inspector (recording) 194.387-010
MATRIX INSPECTOR (machinery mfg.) 654.687-010
MATRIX PLATER (recording) 500.384-010
MATRIX WORKER (recording) 500.684-014
mat selector (glass mfg.) 689.687-038
MAT SEWER (oils & grease) 529.687-154
Matte Cutter (motion picture) 976.684-010
MAT TESTER (concrete prod.) 579.387-010
Matting Inspector (rubber goods) 759.684-074
MATTING-PRESS TENDER (rubber goods) 556.685-042
MATTRESS-FILLING-MACHINE TENDER (furniture) 780.685-010
MATTRESS FINISHER (furniture) 780.684-070
Mattress Inspector (rubber goods) 759.684-074
MATTRESS MAKER (furniture) 780.684-074
Mattress Packer (furniture) 920.587-018
MATTRESS-SPRING ENCASER (furniture) 780.687-030
MATTRESS STRIPPER (furniture) 780.687-026
MATURITY CHECKER (can. & preserv.) 529.485-022
Matzo-Forming-Machine Operator (bakery products) 520.682-034
Mayonnaise Mixer (food prep., nec) 520.685-154
meal cook (oils & grease) 523.685-034
MEAL-GRINDER TENDER (grain-feed mills) 521.685-210
meal temperer (oils & grease) 523.685-034
measurement superintendent (petrol. & gas; pipe lines) 184.167-190
measurer (leather mfg.) 589.685-070
measurer (mine & quarry) 679.567-010
MEASURER (retail trade) 869.367-014
MEASURER (struct. metal) 869.487-010
measurer, machine (garment; textile) 589.685-022
MEASURING-MACHINE OPERATOR (leather mfg.) 589.685-070
measuring-machine tender (textile) 689.685-078
measuring percher-and-inspector (garment; textile) 589.685-022
Meat And Poultry Specialist Supervisor (government ser.) 168.167-090
MEAT BLENDER (can. & preserv.) 529.685-166
meat carver (hotel & rest.) 316.661-010
MEAT CLERK (retail trade) 222.684-010
Meat Counter Clerk (retail trade) 290.477-018
meat cutter (hotel & rest.) 316.681-010
MEAT CUTTER (retail trade; wholesale tr.) 316.684-018
MEAT-CUTTER APPRENTICE (retail trade; wholesale tr.) 316.684-022
Meat-Cutting-Block Repairer (any industry) 860.281-010
MEAT DRESSER (agriculture) 525.664-010
MEAT-GRADING-MACHINE OPERATOR (can. & preserv.) 521.685-218
MEAT GRINDER (meat products) 521.685-214
Meat Inspector (retail trade; wholesale tr.) 316.684-018
meat smoker (meat products) 525.682-010
Meat Stock Clerk (retail trade) 299.367-014
Meat Wrapper (retail trade) 920.587-018
mechanic (mine & quarry) 630.281-022
MECHANIC, AIRCRAFT RIGGING AND CONTROLS (aircraft mfg.) 806.261-050
mechanical adjuster (any industry) 638.281-014
mechanical artist (print. & pub.) 972.381-030
MECHANICAL-DESIGN ENGINEER, FACILITIES (profess. & kin.) 007.061-018
MECHANICAL-DESIGN ENGINEER, PRODUCTS (profess. & kin.) 007.061-022
mechanical design technician (profess. & kin.) 007.161-018
MECHANICAL ENGINEER (profess. & kin.) 007.061-014
MECHANICAL-ENGINEERING TECHNICIAN (profess. & kin.) 007.161-026
mechanical inspector (agric. equip.) 624.361-010
mechanical inspector (electron. comp.) 726.682-018
MECHANICAL INSPECTOR (petrol. refin.) 549.261-010
MECHANICAL-MAINTENANCE SUPERVISOR (any industry) 638.131-026
mechanical-meter tester (petrol. refin.; pipe lines; utilities) 953.281-010
MECHANICAL OXIDIZER (fabrication, nec) 590.662-014
mechanical-press operator (chemical) 555.685-042
MECHANICAL RESEARCH ENGINEER (profess. & kin.) 007.161-022
MECHANICAL-SHOVEL OPERATOR (mine & quarry) 932.683-018
mechanical-spreader operator (construction) 853.663-010
mechanical striper (any industry) 741.687-022
mechanical technician (any industry) 600.280-010
mechanical technician (profess. & kin.) 007.161-026
MECHANICAL TECHNICIAN, LABORATORY (clock & watch) 715.261-010
MECHANICAL-TEST TECHNICIAN (inst. & app.) 869.261-014
MECHANICAL-UNIT REPAIRER (automotive ser.; railroad equip.) 620.381-018
mechanic, chief (automotive ser.) 620.131-014
Mechanic, Electrical Operational Test (aircraft mfg.) 806.261-050
MECHANIC, ENDLESS TRACK VEHICLE (automotive ser.) 620.381-014
Mechanic, Experimental Structural Assembly (aircraft mfg.) 693.261-014
Mechanic, Field-Service (aircraft mfg.) 621.281-014
Mechanic, General Operational Test (aircraft mfg.) 806.261-050
mechanic helper (any industry) 630.684-022
mechanic helper (automotive ser.) 620.684-014
mechanic helper (construction; petr.l. & gas; pipe lines) 620.664-014
MECHANIC, INDUSTRIAL TRUCK (any industry) 620.281-050
mechanic, marine engine (water trans.) 197.130-010
mechanic, trouble-shooting (automotive ser.) 620.261-018
MECHANISM ASSEMBLER (clock & watch) 715.684-142
media center director, school (library) 100.167-030
MEDIA CLERK (business ser.) 247.382-010
media coordinator (radio-tv broad.) 199.382-010
MEDIA DIRECTOR (profess. & kin.) 164.117-018
MEDIA SPECIALIST, SCHOOL LIBRARY (library) 100.167-030
mediator (profess. & kin.) 169.207-010
Medical Anthropologist (profess. & kin.) 055.067-014
Medical-Apparatus Model Maker (inst. & app.) 693.260-018
MEDICAL ASSISTANT (medical ser.) 079.362-010
medical clerk (medical ser.) 205.362-018
MEDICAL COORDINATOR, PESTICIDE USE (government ser.) 041.067-010

MEDICAL-EQUIPMENT REPAIRER (protective dev.; retail trade) 639.281-022
medical examiner (government ser.) 168.161-010
medical-fee clerk (insurance) 214.482-018
medical laboratory manager (medical ser.) 078.161-010
MEDICAL-LABORATORY TECHNICIAN (medical ser.) 078.381-014
Medical Librarian (library) 100.167-026
Medical Officer (government ser.) 070.101-046
Medical Parasitologist (profess. & kin.) 041.061-070
medical pathologist (medical ser.) 070.061-010
Medical Photographer (medical ser.) 143.362-010
MEDICAL PHYSICIST (profess. & kin.) 079.021-014
Medical Physiologist (medical ser.) 041.061-078
MEDICAL RADIATION DOSIMETRIST (medical ser.) 078.261-034
MEDICAL-RECORD ADMINISTRATOR (medical ser.) 079.167-014
MEDICAL-RECORD CLERK (medical ser.) 245.362-010
Medical-Records Auditor (medical ser.) 210.382-010
MEDICAL RECORD TECHNICIAN (medical ser.) 079.362-014
MEDICAL SECRETARY (medical ser.) 201.362-014
MEDICAL-SERVICE TECHNICIAN (military ser.) 079.367-018
Medical Sociologist (profess. & kin.) 054.067-014
Medical Stenographer (clerical) 202.362-014
medical technician (medical ser.) 078.381-014
MEDICAL TECHNOLOGIST (medical ser.) 078.261-038
medical technologist, bacteriology (medical ser.; pharmaceut.) 078.261-014
medical technologist, chemistry (medical ser.) 078.261-010
MEDICAL TECHNOLOGIST, CHIEF (medical ser.) 078.161-010
MEDICAL TECHNOLOGIST, TEACHING SUPERVISOR (medical ser.) 078.121-010
Medical Transcriber (clerical) 203.582-058
MEDICAL-VOUCHER CLERK (insurance) 214.482-018
Medicinal-Plant Picker (agriculture) 453.687-010
Melangeur Operator (sugar & conf.) 520.685-130
MELLOWING-MACHINE OPERATOR (hat & cap) 585.685-066
Melon Packer (agriculture) 920.687-134
melter (foundry) 553.685-110
MELTER (jewelry-silver.) 700.687-042
melter (optical goods) 713.687-042
melter assistant (steel & rel.) 512.362-010
MELTER CLERK (foundry) 221.387-042
Melter Loader (meat products) 921.685-030
MELTER OPERATOR (sugar & conf.) 523.382-018
MELTER SUPERVISOR (steel & rel.) 512.132-010
Melter Supervisor, Electric-Arc Furnace (steel & rel.) 512.132-010
Melter Supervisor, Open-Hearth Furnace (steel & rel.) 512.132-010
Melter Supervisor, Oxygen Furnace (steel & rel.) 512.132-010
Melt-House Centrifugal Operator (sugar & conf.) 521.682-010
MELT-HOUSE DRAG OPERATOR (sugar & conf.) 529.687-158
MEMBERSHIP DIRECTOR (profess. & kin.) 189.167-026
MEMBERSHIP SECRETARY (nonprofit org.) 201.362-018
Membership Secretary (profess. & kin.) 189.117-010
MEMBERSHIP SOLICITOR (any industry) 293.357-022
memorandum-statement clerk (insurance) 203.382-014
MEMORIAL DESIGNER (stonework) 142.061-030
Memory-Unit Test Technician (electron. comp.) 726.261-018
menagerie caretaker (amuse. & rec.) 412.674-010
MENDER (any industry) 787.682-030
MENDER (carpet & rug; textile) 782.684-042
Mender (glove & mit.) 784.682-010
MENDER (hat & cap) 784.684-046
Mender (tex. prod., nec) 787.682-058
mender (tex. prod., nec) 782.487-010
mender (tex. prod., nec) 789.684-038
mender, hand (knitting) 782.684-030
MENDER, KNIT GOODS (garment; knitting) 782.684-046
mender, machine (knitting) 782.684-030
Men's Garment Fitter (retail trade) 785.361-014
Men's Leather-Dress-Belt Maker (leather prod.) 690.685-266
MENTAL-RETARDATION AIDE (medical ser.) 355.377-018
mercerizer (plastic-synth.) 551.687-034
mercerizer (textile) 584.685-058
mercerizer (textile) 584.685-054
mercerizer (textile) 584.685-014
mercerizer-machine operator (textile) 584.685-014
mercerizer-machine operator (textile) 584.685-054
mercerizer-machine operator (textile) 584.685-058
mercerizing-range controller (textile) 584.685-014
Mercerizing-Range Feeder (textile) 589.686-014
Merchandise-Adjustment Clerk (retail trade) 241.367-014
Merchandise Carrier (any industry) 929.687-030
MERCHANDISE DISTRIBUTOR (retail trade) 219.367-018
merchandise marker (retail trade; wholesale tr.) 209.587-034
merchandise supervisor (utilities) 187.167-010
merchandising representative (clerical) 205.367-054
MERCHANT PATROLLER (business ser.) 372.667-038
Mercury-Cell Cleaner (chemical) 826.684-014
MERCURY-CRACKING TESTER (ordnance) 737.687-086
MERCURY PURIFIER (chemical) 551.585-014
mercury recoverer (chemical) 551.685-098
MERCURY WASHER (chemical) 551.685-098
Merry-Go-Round Operator (amuse. & rec.) 342.663-010
MESH CUTTER (jewelry-silver.) 700.684-050
MESS ATTENDANT (water trans.) 350.677-010
Mess Attendant, Crew (water trans.) 350.677-010
Mess Attendant, Officers' Room (water trans.) 350.677-010
Mess Attendant, Officers' Salon (water trans.) 350.677-010
messenger (clerical) 230.663-010
MESSENGER, COPY (print. & pub.) 239.677-010
Messenger, Office (clerical) 239.567-010
Metal Baler (any industry) 920.685-010
METAL-BED ASSEMBLER (furniture) 706.684-082
METAL-BONDING CRIB ATTENDANT (chemical) 550.584-010
METAL-BONDING PRESS OPERATOR (aircraft mfg.) 553.382-026
metal-bonding worker (aircraft mfg.) 806.687-022
Metal Bond Inspector (aircraft mfg.) 806.261-046
metal bumper (automotive ser.) 807.381-010
metal cleaner (furniture) 709.687-014
METAL-CLEANER, IMMERSION (any industry) 503.685-030
METAL-CONTROL COORDINATOR (nonfer. metal) 222.167-010
METAL CONTROL WORKER (foundry) 512.487-010
Metal-Door Assembler (struct. metal) 809.681-010
Metal Expediter (nonfer. metal) 512.132-018
metal extrusion supervisor (forging) 614.132-014
METAL-FABRICATING-SHOP HELPER (any industry) 619.686-022
METAL FABRICATOR (any industry) 619.361-014
METAL-FABRICATOR APPRENTICE (any industry) 619.361-018
METAL FABRICATOR HELPER (any industry) 619.685-066
Metal-Fence Erector (construction) 869.684-022
METAL FINISHER (any industry) 705.684-034
METAL-FINISH INSPECTOR (any industry) 703.687-014
METAL-FINISH INSPECTOR (furniture) 703.687-018
Metal-Frame Inserter (optical goods) 713.681-010
metal-furniture assembler (furniture) 709.684-014
Metal Furrer (construction) 842.361-010
Metal-Hairpin Carder (any industry) 920.685-034
METAL HANGER (mfd. bldgs.; vehicles, nec) 809.684-030
metalizer, field operation (any industry) 843.482-010
metalizer, machined parts (any industry) 505.380-010
metalizing-machine operator, automatic (any industry) 505.382-010
Metal Lather (construction) 842.361-010
metal-leaf gilder (any industry) 749.381-010
metal-leaf layer (any industry) 749.381-010
METALLIC-YARN-SLITTING-MACHINE OPERATOR (nonfer. metal) 619.685-070
METALLIZATION EQUIPMENT TENDER, SEMICONDUCTORS (comm. equip.; electron. comp.; inst. & app.) 590.685-086
METALLOGRAPHER (profess. & kin.) 011.061-014
metallurgical analyst (steel & rel.) 011.261-022
metallurgical inspector (steel & rel.) 011.261-022
metallurgical-laboratory assistant (profess. & kin.) 011.261-010
METALLURGICAL TECHNICIAN (profess. & kin.) 011.261-010
metallurgical tester (profess. & kin.) 011.261-010
METALLURGIST, EXTRACTIVE (profess. & kin.) 011.061-018
METALLURGIST, PHYSICAL (profess. & kin.) 011.061-022
metallurgist, process (profess. & kin.) 011.061-018
Metal-Mine Inspector (mine & quarry) 168.267-074
metal mover (can. & preserv.) 529.167-010
Metal Polisher (any industry) 381.687-014
metal-polisher-and-buffer apprentice (any industry) 705.684-066
metal pourer (smelt. & refin.) 514.684-010
METAL-REED TUNER (any industry) 730.381-034
METAL SANDER AND FINISHER (furniture) 705.687-018
Metal-Sash Setter (construction) 809.381-022
Metal Screen, Storm Door, And Window Builder (struct. metal) 809.381-010
metal shrinker (automotive ser.) 807.381-010
Metal Sorter (any industry) 929.687-022
Metal-Spinning Supervisor (any industry) 619.130-030
METAL-SPONGE-MAKING-MACHINE OPERATOR (nonfer. metal) 616.685-038
METAL SPRAYER, CORROSION PREVENTION (any industry) 843.482-010
METAL SPRAYER, MACHINED PARTS (any industry) 505.380-010
METAL SPRAYER, PRODUCTION (any industry) 505.684-014
metal sprayer, protective coating (any industry) 843.482-010
METAL-SPRAYING-MACHINE OPERATOR, AUTOMATIC I (any industry) 505.382-010
METAL-SPRAYING-MACHINE OPERATOR, AUTOMATIC II (any industry) 505.685-014
Metal-Spraying-Machine Operator, Crucible Gun (any industry) 505.382-010
metal-spray operator (any industry) 505.380-010
Metal-Storage Worker (nonfer. metal) 921.683-050

metal-tile lather (construction) 860.381-010
Metal-Tile Setter (construction; retail trade) 861.381-034
metal-trim erector (construction) 809.381-022
METAL-WASHING-MACHINE OPERATOR (svc. ind. mach.) 503.685-034
Metal-Window-Screen Assembler (struct. metal) 809.681-010
metal worker (automotive ser.) 807.381-010
METEOROLOGICAL-EQUIPMENT REPAIRER (any industry) 823.281-018
meteorological technician (profess. & kin.) 025.267-014
METEOROLOGIST (profess. & kin.) 025.062-010
meter-and-service-line inspector (utilities) 953.367-014
Meter Assembler (photo. appar.) 714.684-010
Meter Attendant (government ser.) 375.587-010
meter-changes records clerk (utilities) 209.587-022
meter inspector (petrol. refin.; pipe lines; utilities) 953.281-010
METER INSPECTOR (utilities) 710.384-022
meter installer (utilities) 953.364-010
Meter Installer-And-Remover (utilities) 821.361-014
METER READER (utilities; waterworks) 209.567-010
METER READER, CHIEF (utilities; waterworks) 209.137-014
meter-record clerk (utilities) 209.587-022
METER REPAIRER (any industry) 710.281-034
meter repairer (utilities) 729.281-014
meter-repairer apprentice (utilities) 729.281-018
METER-REPAIRER HELPER (any industry) 710.684-034
meter shop superintendent (utilities) 184.167-194
meter tester (utilities) 710.381-022
meter tester (utilities) 821.381-010
Meter Tester, Demand Meters (utilities) 821.381-010
Meter Tester, Polyphase (utilities) 821.381-010
Meter Tester, Primary (utilities) 821.381-010
Meter Tester, Single Phase (utilities) 821.381-010
methods analyst, data processing (profess. & kin.) 033.167-010
methods-and-procedures analyst (profess. & kin.) 012.167-070
Methods-Study Analyst (profess. & kin.) 012.267-010
METROLOGIST (profess. & kin.) 012.067-010
metropolitan editor (print. & pub.) 132.037-014
MEXICAN-FOOD-MACHINE TENDER (food prep., nec) 524.685-038
MEXICAN FOOD MAKER, HAND (food prep., nec) 520.687-046
MICA INSPECTOR (mine & quarry) 779.687-026
MICA-LAMINATING-MACHINE FEEDER (mine & quarry) 579.686-018
Mica-Parts Sprayer (electron. comp.) 741.687-018
MICA PATCHER (mine & quarry) 579.687-026
MICA-PLATE LAYER (mine & quarry) 579.685-026
MICA-PLATE LAYER, HAND (mine & quarry) 579.684-022
MICA SIZER (mine & quarry) 779.687-030
MICA SPLITTER (mine & quarry) 779.681-010
MICA-WASHER GLUER (mine & quarry) 729.687-022
MICROBIOLOGIST (profess. & kin.) 041.061-058
MICROBIOLOGY TECHNOLOGIST (medical ser.; pharmaceut.) 078.261-014
MICROCOMPUTER SUPPORT SPECIALIST (profess. & kin.) 039.264-010
microelectronics processor (electron. comp.) 726.684-034
MICROELECTRONICS TECHNICIAN (electron. comp.) 590.362-022
MICROFICHE DUPLICATOR (business ser.) 976.381-014
MICROFILM-CAMERA OPERATOR (business ser.) 976.682-022
MICROFILM MOUNTER (clerical) 208.685-022
MICROFILM PROCESSOR (business ser.) 976.385-010
Micrographics-Services Supervisor (clerical) 207.137-010
microgrinder operator (tex. prod., nec) 586.685-018
micromatic-hone operator (machine shop) 603.685-070
Micropaleontologist (profess. & kin.) 024.061-042
MICROPHONE-BOOM OPERATOR (motion picture; radio-tv broad.) 962.384-010
Microwave Engineer (radio-tv broad) 193.262-018
MIDDLE-CARD TENDER (nonmet. min.; textile) 680.665-C18
Middle Stitcher (toy-sport equip.) 732.684-050
MIGRANT LEADER (agriculture) 180.167-050
MIGRANT WORKER (agriculture) term
Milanese-Knitting-Machine Operator (knitting) 685.665-018
Mileage Clerk (r.r. trans.) 216.382-062
MILK DRIVER (dairy products) 905.483-010
MILKER, MACHINE (agriculture) 410.685-010
milk hauler (dairy products) 905.483-010
milking-machine operator (agriculture) 410.685-010
MILKING-SYSTEM INSTALLER (agric. equip.; retail trade) 809.381-018
milk-of-lime slaker (concrete prod.) 570.685-034
MILK-POWDER GRINDER (dairy products) 521.685-222
MILK RECEIVER (dairy products) 222.585-010
MILK-RECEIVER, TANK TRUCK (dairy products) 222.485-010
MILK SAMPLER (agriculture) 410.357-010
MILL-AND-COAL-TRANSPORT OPERATOR (utilities) 544.665-010
MILL ATTENDANT I (chemical) 555.565-010
MILL ATTENDANT II (chemical) 555.685-038
mill attendant (leather mfg.; tex. prod., nec) 582.685-050
mill attendant (mine & quarry; smelt. & refin.) 939.362-014
Milled-Lumber Grader (woodworking) 669.687-030
milled-rice broker (grain-feed mills) 162.167-018
MILLED-RUBBER TENDER (rubber goods; rubber tire) 553.685-078
MILLER (any industry) term
MILLER (beverage) 521.585-014
MILLER (cement) 570.685-046
MILLER (mine & quarry) 570.685-038
MILLER, DISTILLERY (beverage) 521.362-014
miller, first (grain-feed mills) 521.130-010
miller, head (grain-feed mills) 521.130-010
MILLER, HEAD, ASSISTANT, WET PROCESS (grain-feed mills) 629.684-014
MILLER, HEAD, WET PROCESS (grain-feed mills) 629.261-014
MILLER HELPER, DISTILLERY (beverage) 521.687-082
MILLER I (chemical) 570.685-042
MILLER II (chemical) 555.682-010
Miller, Kiln-Dried Salt (chemical) 555.682-010
Miller, Rod-Mill (cement) 570.685-046
MILLER SUPERVISOR (grain-feed mills) 521.130-010
MILLER, WET PROCESS (grain-feed mills) 521.662-010
MILLER, WOOD FLOUR (woodworking) 564.682-018
MILL FEEDER (grain-feed mills) 520.685-134
MILL HAND (any industry) term
MILL HAND (grain-feed mills) term
MILL HAND, PLATE MILL (steel & rel.) 613.667-014
MILL HELPER (nonfer. metal) 502.684-014
MILLINER (retail trade) 784.261-010
milling-machine operator (machine shop) 605.282-018
milling-machine operator, gear (machine shop) 602.382-022
MILLING-MACHINE SET-UP OPERATOR I (machine shop) 605.280-010
MILLING-MACHINE SET-UP OPERATOR II (machine shop) 605.282-010
MILLING-MACHINE SET-UP OPERATOR, NUMERICAL CONTROL (machine shop) 605.380-010
MILLING-MACHINE TENDER (machine shop) 605.685-030
milling-planer operator (machine shop) 605.282-018
milling superintendent (grain-feed mills) 183.167-014
MILLING SUPERVISOR (brick & tile) 570.132-014
mill laborer (woodworking) 769.687-054
MILL-LABOR SUPERVISOR (smelt. & refin.) 519.131-014
MILL OPERATOR (any industry) 599.685-058
mill operator (bakery products) 520.585-010
MILL OPERATOR (brick & tile; pottery & porc.) 570.382-010
mill operator (chemical) 555.685-034
mill operator (grain-feed mills) 521.130-010
mill operator (grain-feed mills) 521.682-026
MILL OPERATOR (grain-feed mills) 521.685-226
mill operator (utilities) 544.665-010
mill operator, head (plastic-synth.) 559.132-042
MILL-OPERATOR HELPER (any industry) 599.686-010
MILL OPERATOR, ROLLS (any industry) 613.682-030
MILL PLATFORM SUPERVISOR (sugar & conf.) 521.132-010
Mill Recorder (nonfer. metal) 221.382-018
MILL RECORDER, COMPUTERIZED MILL (steel & rel.) 221.367-046
mill-roll operator (plastic-synth.) 554.682-018
MILL-ROLL REWINDER (plastic-synth.) 690.585-010
millroom supervisor (any industry) 921.137-010
Millroom Supervisor (mfd. bldgs.; vehicles, nec) 869.131-030
Millroom Supervisor (rubber goods) 559.137-014
Millroom Supervisor (rubber reclaim.) 559.132-058
Millroom Supervisor (rubber tire) 750.130-010
MILL STENCILER (steel & rel.) 659.685-026
MILL SUPERVISOR (nonmet. min.) 559.132-034
MILL SUPERVISOR (smelt. & refin.) 515.130-010
Mill Tender, Break-Down (rubber goods; rubber tire) 550.685-102
Mill Tender, Warm-Up (rubber goods; rubber tire) 550.685-102
Mill Tender, Washing (rubber goods; rubber tire) 550.685-102
MILL WORKER (any industry) term
MILLWRIGHT (any industry) 638.281-018
MILLWRIGHT APPRENTICE (any industry) 638.281-022
MILLWRIGHT HELPER (any industry) 638.484-010
MILLWRIGHT SUPERVISOR (any industry) 638.131-030
MIME (amuse. & rec.) 159.047-022
mimic (amuse. & rec.) 159.047-018
MINCEMEAT MAKER (can. & preserv.) 520.485-018
mincing-machine operator (meat products) 521.685-170
Mind Reader (amuse. & rec.) 159.647-018
mine captain (mine & quarry) 939.137-018
MINE-CAR REPAIRER (mine & quarry) 622.381-030
Mine Electrician (mine & quarry) 824.261-010
MINE INSPECTOR (mine & quarry) 168.267-074
Mine Inspector, Federal (government ser.) 168.267-074
Mine Inspector, State (government ser.) 168.267-074
Mine-Machinery Mechanic (mine & quarry) 620.261-022
MINER (construction) 850.381-010
MINERALOGIST (profess. & kin.) 024.061-038
Mineral-Wool-Insulation Supervisor (construction) 863.134-010

Miner Helper (construction) 869.687-026
MINER I (mine & quarry) 939.281-010
MINER II (mine & quarry) term
Miner, Pick (mine & quarry) 939.281-010
MINER, PLACER (mine & quarry) 939.684-014
MINE SUPERINTENDENT (mine & quarry) 181.117-014
MINGLER OPERATOR (sugar & conf.) 520.665-010
miniature-model maker (auto. mfg.) 693.380-014
miniature-set builder (motion picture) 962.381-018
MINIATURE-SET CONSTRUCTOR (motion picture) 962.381-018
Miniature Set Designer (motion picture; radio-tv broad.) 142.061-046
MINING ENGINEER (mine & quarry) 010.061-014
mining-machine operator (mine & quarry) see MACHINE RUNNER
minister (profess. & kin.) 120.107-010
Mink Farmer (agriculture) 410.161-014
Mint-Lozenge Mixer (sugar & conf.) 520.685-122
Mint-Machine Operator (sugar & conf.) 521.685-102
Mint-Wafer Depositor (sugar & conf.) 529.682-018
MIRROR-FINISHING-MACHINE OPERATOR (jewelry-silver.) 603.682-022
mirror inspector (glass products) 779.687-022
MIRROR INSTALLER (construction) 865.361-010
MIRROR-MACHINE FEEDER (glass products) 579.686-022
mirror silverer (glass products) 574.684-014
MIRROR SPECIALIST (glass products; wood prod., nec) 779.684-038
misdraw hand (textile) 683.384-010
Missile-Control Pilot (aircraft mfg.) 196.263-026
MISSILE FACILITIES REPAIRER (military ser.) 828.281-018
Missile Inspector, Preflight (aircraft mfg.) 806.261-038
Missionary (profess. & kin.) 120.107-010
miter cutter (glass products) 775.381-010
MITER GRINDER OPERATOR (glass mfg.; glass products) 673.682-026
Miter Sawyer (woodworking) 667.682-086
Mitten Stitcher (glove & mit.) 784.682-010
MIX-CRUSHER OPERATOR (elec. equip.) 544.585-010
mixer (any industry) 550.684-018
MIXER (brick & tile) 579.685-074
mixer (build. mat., nec; nonmet. min.) 550.382-030
mixer (chemical; pharmaceut.) 550.685-090
MIXER (food prep., nec) 520.685-138
MIXER (glass mfg.) 570.685-054
MIXER (hat & cap) 680.685-062
MIXER (nonfer. metal; steel & rel.) 510.685-018
MIXER (nonmet. min.) 570.685-050
MIXER (paint & varnish) 550.685-078
mixer (pottery & porc.) 570.685-086
MIXER-AND-BLENDER (food prep., nec) 520.685-154
mixer-and-scaler (grain-feed mills) 520.485-010
MIXER, CHILI POWDER (food prep., nec) 520.685-158
MIXER, DIAMOND POWDER (nonmet. min.) 570.484-010
MIXER, DRY-FOOD PRODUCTS (food prep., nec) 520.685-162
MIXER, FOAM RUBBER (rubber goods) 550.685-086
Mixer, Hand, Cement Gun (construction) 869.687-026
MIXER HELPER (build. mat., nec) 550.686-026
mixer helper (build. mat., nec; nonmet. min.) 550.686-038
MIXER HELPER (concrete prod.) 530.384-010
mixer helper (construction) 579.665-014
MIXER I (chemical) 559.665-025
MIXER I (tex. prod., nec) 550.685-074
MIXER II (chemical) 737.687-090
MIXER II (tex. prod., nec) 789.687-098
mixer-machine feeder (grain-feed mills) 520.686-018
MIXER OPERATOR (beverage) 520.685-146
Mixer Operator (brick & tile) 570.382-010
MIXER OPERATOR (chemical; electron. comp.) 550.685-082
MIXER OPERATOR (concrete prod.) 570.685-058
mixer operator (concrete prod.) 579.682-010
mixer operator (fabrication, nec) 550.665-014
mixer operator (grain-feed mills) 520.485-010
mixer operator (motion picture; radio-tv broad.; recording) 194.262-018
mixer operator (nonmet. min.) 570.485-010
mixer operator (smelt. & refin.; steel & rel.) 570.685-070
MIXER OPERATOR (sugar & conf.) 520.685-150
MIXER OPERATOR, CARBON PASTE (elec. equip.; smelt. & refin.) 540.585-010
MIXER OPERATOR HELPER, HOT METAL (steel & rel.) 509.566-010
MIXER OPERATOR, HOT METAL (steel & rel.) 509.362-010
MIXER OPERATOR I (chemical) 550.382-018
MIXER OPERATOR II (chemical) 520.685-142
Mixer Operator, Raw Salt (chemical) 520.685-142
MIXER OPERATOR, SNACK FOODS (food prep., nec) 520.685-230
Mixer Operator, Tablets (chemical) 520.685-142
Mixer Operator, Vacuum-Pan Salt (chemical) 520.685-142
mixer, pigment (leather mfg.; plastic-synth.; tex. prod., nec) 550.381-010
Mixer Tender (cement) 570.685-010
mixer tender (construction) 579.665-014
mixer tender (smelt. & refin.) 510.685-022
MIXER TENDER, BOARD (concrete prod.) 570.685-062
MIXER, WET POUR (concrete prod.) 579.682-010
MIXER, WHIPPED TOPPING (food prep., nec) 520.385-010
mix-house operator (glass mfg.) 570.685-054
MIX-HOUSE TENDER (smelt. & refin.) 510.685-014
mixing-and-dispensing supervisor (chemical) 559.132-030
mixing-and-molding-machine operator (pen & pencil) 570.685-066
mixing-house operator (chemical) 550.382-018
mixing-machine attendant (bakery products) 520.685-234
mixing-machine attendant (bakery products) 520.685-010
MIXING-MACHINE FEEDER (chemical) 550.686-030
MIXING-MACHINE OPERATOR (any industry) 550.382-022
MIXING-MACHINE OPERATOR (can. & preserv.) 520.685-166
MIXING-MACHINE OPERATOR (fabrication, nec) 680.685-066
MIXING-MACHINE OPERATOR (food prep., nec) 520.665-014
mixing-machine operator (hat & cap) 680.685-062
MIXING-MACHINE OPERATOR (plastic prod.; plastic-synth.) 550.685-134
MIXING-MACHINE TENDER (chemical; pharmaceut.) 550.685-090
MIXING-MACHINE TENDER (wood prod., nec) 560.585-010
Mixing-Machine Tender, Cork Gasket (wood prod., nec) 560.585-010
Mixing-Machine Tender, Cork Rod (wood prod., nec) 560.585-010
Mixing-Pan Tender (smelt. & refin.) 510.685-014
mixing-plant dumper (construction) 579.665-014
mixing-plant operator (chemical) 550.585-030
MIXING-ROLL OPERATOR (fabrication, nec) 590.662-018
MIXING SUPERVISOR (plastic prod.) 550.135-014
Mixing Supervisor (tex. prod., nec) 589.130-014
MIXING-TANK OPERATOR (oils & grease) 520.685-170
Mix Maker (dairy products) 529.382-018
Mix-Mill Tender (rubber goods; rubber tire) 550.685-102
mobile-crane operator (any industry) 921.663-062
MOBILE-HOME-LOT UTILITY WORKER (retail trade) 899.484-010
MOBILE-LOUNGE DRIVER (motor trans.) 913.663-014
moccasin sewer (boot & shoe) 788.684-054
mock-up assembler (vehicles, nec) 693.381-018
MOCK-UP BUILDER (aircraft mfg.) 693.361-014
MOCK-UP BUILDER (vehicles, nec) 693.381-018
MODEL-AND-MOLD MAKER (brick & tile) 777.381-014
MODEL-AND-MOLD MAKER, PLASTER (concrete prod.) 777.381-018
MODEL, ARTISTS' (any industry) 961.667-010
MODEL BUILDER (furniture) 709.381-014
Model Builder, Display (aircraft mfg.) 693.261-018
Model Builder, Wind Tunnel (aircraft mfg.) 693.261-018
Model Dresser (retail trade) 298.081-010
modeler (boot & shoe) 788.684-082
MODELER (brick & tile) 777.081-010
modeler (pottery & porc.) 777.281-014
MODEL (garment; retail trade; wholesale tr.) 297.667-014
MODEL MAKER (aircraft mfg.) 693.261-018
MODEL MAKER (auto. mfg.) 693.380-014
model maker (boot & shoe) 788.281-010
MODEL MAKER (clock & watch) 693.380-010
model maker (fabrication, nec) 739.361-010
model maker (house, appl.; light. fix.) 600.280-054
MODEL MAKER (pottery & porc.) 777.281-014
MODEL MAKER (toy-sport equip.) 731.280-010
model maker (wood prod., nec) 761.381-018
MODEL-MAKER APPRENTICE (jewelry-silver.) 709.381-022
MODEL MAKER, FIBERGLASS (concrete prod.) 777.381-010
MODEL MAKER, FIREARMS (ordnance) 600.260-018
MODEL MAKER, FLUORESCENT LIGHTING (light. fix.) 723.361-010
MODEL MAKER I (any industry) 777.261-010
MODEL MAKER I (jewelry-silver.) 700.281-018
MODEL MAKER II (any industry) term
MODEL MAKER II (jewelry-silver.) 709.381-018
Model Maker, Plaster (concrete prod.) 777.381-018
model maker, plaster and plastic (aircraft mfg.) 777.281-018
model maker, plastic (machine shop) 601.381-030
MODEL MAKER, SCALE (office machines) 710.361-010
Model Maker, Sheet-Metal (any industry) 804.281-010
MODEL MAKER, WOOD (any industry) 661.380-010
MODEL, PHOTOGRAPHERS' (any industry) 961.367-010
model-set artist (motion picture) 962.381-018
mogul feeder (sugar & conf.) 520.686-030
mogul operator (sugar & conf.) 520.682-026
MOHEL (profess. & kin.) 129.271-010
MOISTURE-CONDITIONER OPERATOR (paper & pulp) 532.685-022
MOISTURE-MACHINE TENDER (tobacco) 529.685-170
MOISTURE-METER OPERATOR (tobacco) 529.687-162
MOISTURE TESTER (woodworking) 563.687-014
moisture-test puller (tobacco) 529.587-022
MOLASSES AND CARAMEL OPERATOR (grain-feed mills) 526.382-022
Molasses-Feed Mixer (grain-feed mills) 520.685-098
MOLASSES PREPARER (food prep., nec) 522.685-078

mold-car operator (steel & rel.) 514.362-010
mold carrier (tobacco) 790.687-022
mold changer (glass mfg.) 575.687-014
Mold Changer (rubber tire) 629.684-010
Mold Checker (foundry) 518.687-010
Mold Clamper (foundry) 519.687-022
mold cleaner (glass mfg.) 579.685-030
MOLD CLEANER (rubber goods) 556.687-018
MOLD CLEANER (toy-sport equip.) 732.687-046
MOLD CLOSER (foundry) 518.684-018
Mold-Closer Helper (foundry) 519.687-022
MOLD DRESSER (any industry) 519.684-018
mold dresser (rubber tire) 709.381-026
Molded-Goods Inspector-Trimmer (rubber goods) 759.684-074
molded-grid-and-parts inspector (elec. equip.) 727.687-074
MOLDED-PARTS INSPECTOR (elec. equip.) 727.687-074
MOLDED-RUBBER-GOODS CUTTER (rubber goods) 690.685-290
molder (aircraft mfg.) 502.381-014
MOLDER (aircraft mfg.; concrete prod.; foundry) 518.361-010
molder (boot & shoe) 690.682-070
MOLDER (hat & cap) 580.685-042
molder (jewelry-silver.) 502.381-010
molder (nonmet. min.) 575.685-010
MOLDER (optical goods) 575.381-010
molder (pharmaceut.) 556.685-026
molder (plastic prod.) 556.685-022
molder (plastic prod.) 556.382-014
molder (plastic prod.) 777.684-010
molder (protective dev.) 712.684-034
molder (tex. prod., nec) 692.685-286
molder (toy-sport equip.) 732.687-070
MOLDER APPRENTICE (aircraft mfg.; concrete prod.; foundry) 518.361-014
MOLDER, AUTOMOBILE CARPETS (tex. prod., nec) 692.685-286
Molder, Bench (concrete prod.; foundry) 518.361-010
MOLDER, BENCH (jewelry-silver.) 518.381-022
molder, closed molds (aircraft mfg.) 502.381-014
Molder Feeder (woodworking) 669.686-030
MOLDER, FIBERGLASS LUGGAGE (leather prod.) 575.685-066
Molder, Fitting (foundry) 518.682-010
Molder, Floor (foundry) 518.361-010
MOLDER, FOAM RUBBER (rubber goods) 556.685-046
MOLDER, HAND (brick & tile; elec. equip.) 575.684-042
molder, hand (sugar & conf.) 520.687-018
Molder Helper (foundry) 519.687-022
MOLDER HELPER (optical goods) 575.686-014
Molder Helper, Machine (foundry) 519.687-022
MOLDER, INFLATED BALL (toy-sport equip.) 732.687-054
MOLDER, LABELS (boot & shoe) 690.685-294
MOLDER, LEAD INGOT (ordnance) 502.685-010
molder, machine (brick & tile) 575.662-010
MOLDER, MACHINE (pharmaceut.) 556.685-050
MOLDER-MACHINE TENDER (nonmet. min.) 575.685-062
MOLDER, MEAT (meat products) 520.685-174
Molder Offbearer (woodworking) 669.686-034
molder operator (plastic prod.) 556.685-090
MOLDER OPERATOR (woodworking) 665.682-018
MOLDER, PATTERN (foundry) 693.381-022
MOLDER, PIPE COVERING (plastic prod.) 556.665-018
MOLDER, PUNCH (aircraft mfg.) 502.381-014
molder, resin (aircraft mfg.) 556.684-014
Molder Setter (woodworking) 669.280-010
MOLDER, SHOE PARTS (boot & shoe) 788.687-094
MOLDER, SHOULDER PAD (garment) 789.684-026
MOLDER, SWEEP (foundry) 518.361-018
MOLDER, TOILET PRODUCTS (pharmaceut.) 556.687-022
molder-trimmer (tex. prod., nec) 692.685-286
molder, vacuum (plastic prod.) 556.685-082
MOLDER, WAX (petrol. refin.) 549.685-018
MOLDER, WAX BALL (toy-sport equip.) 732.687-058
Mold Filler (dairy products) 529.685-030
Mold Filler (metal prod., nec) 700.687-038
MOLD FILLER (toy-sport equip.) 556.687-030
Mold Filler (wood prod., nec) 569.685-030
MOLD FILLER AND DRAINER (boot & shoe) 753.687-030
MOLD FILLER, PLASTIC DOLLS (toy-sport equip.) 731.687-026
MOLD-FILLING OPERATOR (plastic-synth.) 556.684-018
mold finisher (foundry) 518.684-018
MOLD FINISHER (machine shop) 705.684-038
mold finisher (ship-boat mfg.) 809.687-026
mold-forms builder (brick & tile; concrete prod.) 860.381-034
Mold Hoister (wood prod., nec) 569.685-030
MOLDING CUTTER (woodworking) 663.685-018
Molding Fitter (fabrication, nec) 739.684-190
Molding-Machine Operator (bakery products) 520.685-086
molding-machine operator (fabrication, nec) 549.662-010
MOLDING-MACHINE OPERATOR (sugar & conf.) 520.682-026
MOLDING-MACHINE OPERATOR (toy-sport equip.) 575.682-014
Molding-Machine-Operator Helper (bakery products) 526.686-010
MOLDING-MACHINE-OPERATOR HELPER (sugar & conf.) 520.686-030
MOLDING-MACHINE TENDER (paper & pulp) 539.685-018
MOLDING-MACHINE TENDER (pen & pencil) 570.685-066
molding-press operator (rubber goods; rubber tire; toy-sport equip.) 556.685-066
Molding-Room Supervisor (optical goods) 716.130-010
MOLDING SANDER (woodworking) 662.682-010
MOLDING SUPERVISOR (plastic prod.) 556.130-018
MOLD-INSERT CHANGER (boot & shoe) 753.687-034
mold inspector (plastic-synth.) 556.684-010
MOLD LAMINATOR (concrete prod.; ship-boat mfg.) 806.684-086
mold loft worker (ship-boat mfg.) 661.281-010
Mold Maker (construction) 869.687-026
mold maker (fabrication, nec) 739.381-046
mold maker (hat & cap) 784.361-010
mold maker (jewelry-silver.) 559.684-018
MOLD MAKER (nonmet. min.) 777.684-014
MOLD MAKER (pottery & porc.) 777.684-018
MOLD MAKER (smelt. & refin.) 518.664-010
MOLD-MAKER APPRENTICE (jewelry-silver.) 700.381-038
MOLD MAKER, DIE-CASTING AND PLASTIC MOLDING (machine shop) 601.280-030
MOLD-MAKER HELPER (jewelry-silver.) 700.687-050
MOLD-MAKER HELPER (smelt. & refin.) 518.687-018
MOLD MAKER I (jewelry-silver.) 700.381-034
MOLD MAKER II (jewelry-silver.) 777.381-022
Mold Maker, Plaster (concrete prod.) 777.381-018
mold maker, plastic molds (machine shop) 601.280-030
MOLD MAKER, TERRA COTTA (brick & tile) 575.684-038
Mold-Making Supervisor (foundry) 519.131-010
Mold Mover (toy-sport equip.) 929.687-030
MOLD OPERATOR (elec. equip.) 729.684-030
MOLD PARTER (plastic-synth.) 556.587-010
Mold Picker (rubber goods) 222.387-058
MOLD POLISHER (glass mfg.) 579.685-030
MOLD PREPARER (ship-boat mfg.) 809.687-026
MOLD PRESSER (tobacco) 790.687-022
Mold-Press Operator (glass mfg.) 575.382-014
Mold-Release Worker (chemical) 590.464-010
Mold Remover (dairy products) 529.685-030
mold repairer (any industry) 519.684-018
Mold Repairer, Die-Casting And Plastic Molding (machine shop) 601.280-030
MOLD SETTER (elec. equip.) 502.684-018
MOLD SETTER (inst. & app.; office machines; plastic prod.; recording) 556.380-010
mold setter (optical goods) 713.381-010
MOLD SHEET CLEANER (metal prod., nec) 700.687-046
Mold Sprayer (wood prod., nec) 569.685-030
Mold Stacker (foundry) 519.687-022
MOLD STAMPER (machine shop) 709.684-054
MOLD STAMPER AND REPAIRER (rubber tire) 709.381-026
mold stripper (plastic prod.; rubber goods) 556.686-018
mold stripper (plastic-synth.) 556.686-014
MOLD STRIPPER (toy-sport equip.) 732.687-050
MOLD WORKER (steel & rel.) 514.567-010
Molybdenum-Flotation Operator (smelt. & refin.) 511.685-026
Molybdenum-Leaching-Plant Operator (smelt. & refin.) 511.582-010
MOLYBDENUM-STEAMER OPERATOR (smelt. & refin.) 511.485-010
MONEY COUNTER (amuse. & rec.) 211.467-014
Money-Order Clerk (tel. & tel.) 249.362-010
money position officer (financial; insurance) 186.167-054
money-room teller (amuse. & rec.) 211.467-014
monitor (tel. & tel.) 239.367-026
MONITOR-AND-STORAGE-BIN TENDER (grain-feed mills) 521.685-230
MONITOR CAR OPERATOR (mine & quarry) 939.682-010
monitor chief (tel. & tel.) 239.137-022
Monkey Breeder (agriculture) 410.161-010
Monkey Keeper (amuse. & rec.) 412.674-010
MONOGRAM-AND-LETTER PASTER (tex. prod., nec) 789.687-102
monogram-machine operator (any industry) 787.682-022
MONOMER-PURIFICATION OPERATOR (chemical) 552.362-010
Monomer-Recovery Supervisor (plastic-synth.) 559.132-042
Mononitrotoluene Operator (chemical) 558.382-046
MONORAIL CRANE OPERATOR (any industry) 921.663-042
Monorail Operator (amuse. & rec.) 342.663-010
monotype caster (machinery mfg.; print. & pub.) 654.382-010
MONOTYPE-KEYBOARD OPERATOR (machinery mfg.; print. & pub.) 650.582-014
monotype operator (machinery mfg.; print. & pub.) 650.582-014
Monument Carver (stonework) 771.281-014
MONUMENT SETTER (construction) 861.361-014
Monument Stonecutter (stonework) 771.381-014

MOP-HANDLE ASSEMBLER (tex. prod., nec) 739.687-122
Mophead Sewer (tex. prod., nec) 787.682-066
MOPHEAD TRIMMER-AND-WRAPPER (tex. prod., nec) 789.687-106
mop-machine operator (tex. prod., nec) 739.685-026
MOP MAKER (tex. prod., nec) 739.685-026
mopper (any industry) 381.687-014
morals-squad police officer (government ser.) 375.267-022
MORGUE ATTENDANT (medical ser.) 355.667-010
Mortar Mixer (concrete prod.; construction) 869.687-026
MORTGAGE-ACCOUNTING CLERK (clerical) 216.362-026
MORTGAGE CLERK (financial) 249.362-014
MORTGAGE-CLOSING CLERK (clerical) 219.362-038
MORTGAGE LOAN CLOSER (financial) 249.362-018
MORTGAGE-LOAN-COMPUTATION CLERK (insurance) 210.382-050
Mortgage-Loan Officer (financial; insurance) 186.267-018
Mortgage Loan Originator (financial) 186.267-018
MORTGAGE LOAN PROCESSOR (financial) 249.362-022
Mortgage-Papers-Assignment-And-Assembly Clerk (insurance) 203.582-066
mortician (personal ser.) 187.167-030
MORTICIAN INVESTIGATOR (government ser.) 168.267-078
MORTISING-MACHINE OPERATOR (woodworking) 665.482-014
MORTUARY BEAUTICIAN (personal ser.) 339.361-010
MOSAICIST (profess. & kin.) 018.261-022
MOSAIC WORKER (glass products; nonmet. min.) 779.381-014
moshgiach (hotel & rest.) 319.137-026
MOSQUITO SPRAYER (government ser.) 379.687-014
Moss Picker (agriculture) 453.687-010
Motel Cleaner (hotel & rest.) 323.687-014
motel clerk (hotel & rest.) 238.367-038
MOTHER REPAIRER (recording) 705.684-042
mother tester (recording) 194.387-010
motion-picture-camera repairer (motion picture; photo. appar.) 714.281-018
motion-picture commentator (motion picture) 150.147-010
MOTION-PICTURE PROJECTIONIST (amuse. & rec.; motion picture) 960.362-010
Motion-Study Analyst (profess. & kin.) 012.267-010
moto-mix operator (construction) 900.683-010
Motor Analyst (automotive ser.) 620.261-014
motor-and-generator assembler (elec. equip.) 820.361-014
motor-and-generator-brush cutter (elec. equip.) 721.684-014
MOTOR-AND-GENERATOR-BRUSH MAKER (elec. equip.) 724.684-038
motor assembler (any industry) 721.281-014
Motor Assembler (automotive ser.) 620.261-010
motor assembler (railroad equip.) 721.381-010
Motor-Assembly Supervisor (agric. equip.) 801.137-010
MOTORBOAT MECHANIC (engine-turbine; ship-boat mfg.) 623.281-038
MOTORBOAT-MECHANIC HELPER (engine-turbine; ship-boat mfg.) 623.684-010
Motorboat Mechanic, Inboard (ship-boat mfg.) 623.281-038
Motorboat Mechanic, Inboard/Outboard (ship-boat mfg.) 623.281-038
MOTORBOAT OPERATOR (any industry) 911.663-010
motor boss (mine & quarry) 932.167-010
Motor Checker (clock & watch) 715.684-094
Motor-Coach Driver (motor trans.) 913.463-010
MOTORCYCLE ASSEMBLER (motor-bicycles) 806.684-090
Motorcycle-Engine Assembler (engine-turbine) 806.481-014
motorcycle mechanic (automotive ser.) 620.281-054
Motorcycle Police Officer (government ser.) 375.263-014
MOTORCYCLE RACER (amuse. & rec.) 153.243-014
MOTORCYCLE REPAIRER (automotive ser.) 620.281-054
MOTORCYCLE SUBASSEMBLER (motor-bicycles) 806.684-094
MOTORCYCLE SUBASSEMBLY REPAIRER (motor-bicycles) 620.684-026
MOTORCYCLE TESTER (motor-bicycles) 620.384-010
Motor-Equipment Captain (government ser.) 375.167-018
Motor-Equipment Lieutenant (government ser.) 375.167-018
Motor-Equipment Sergeant (government ser.) 375.167-018
Motor-Express Clerk (motor trans.) 222.367-022
Motor-Generator-Set Operator (chemical) 952.362-038
Motor Grader, Fine Grade (construction) 850.663-022
MOTOR-GRADER OPERATOR (construction) 850.663-022
Motor Grader, Rough Grade (construction) 850.663-022
motor-inspection mechanic (automotive ser.) 620.281-030
Motorized-Squad Captain (government ser.) 375.163-010
Motorized-Squad Lieutenant (government ser.) 375.163-010
Motorized-Squad Sergeant (government ser.) 375.163-010
motor-lodge clerk (hotel & rest.) 238.367-038
MOTOR OPERATOR (r.r. trans.) 910.683-014
motor overhauler (railroad equip.) 721.381-010
motor-patrol operator (construction) 850.663-022
MOTOR POLARIZER (clock & watch) 715.687-090
Motor-Pool Clerk (clerical) 203.362-010
MOTOR-POWER CONNECTOR (motion picture) 962.684-018
MOTOR-ROOM CONTROLLER (utilities) 820.662-010
Motor-Scooter Repairer (automotive ser.) 620.281-054
motor-transport inspector (government ser.) 168.267-058
Motor-Vehicle-Escort Driver (business ser.) 906.683-022
motor-vehicle inspector (government ser.) 379.364-010
MOTOR-VEHICLE-LIGHT ASSEMBLER (light. fix.) 729.684-034
motor vehicles supervisor (any industry) 184.167-226
MOTTLE-LAY-UP OPERATOR (plastic-synth.) 690.585-014
mottle line operator (fabrication, nec) 559.665-034
MOTTLER-MACHINE FEEDER (fabrication, nec) 550.686-034
MOTTLER OPERATOR (fabrication, nec) 550.665-022
Mounted Police Officer (government ser.) 375.263-014
mounter (fabrication, nec) 739.684-170
mounter (furniture) 763.684-042
mounter (print. & pub.) 979.682-010
MOUNTER, AUTOMATIC (photofinishing) 976.685-022
Mounter, Brass-Wind Instruments (musical inst.) 730.684-010
Mounter, Clarinets (musical inst.) 730.684-010
MOUNTER, CLOCK AND WATCH HANDS (clock & watch) 715.687-094
Mounter, Flutes And Piccolos (musical inst.) 730.684-010
MOUNTER, HAND (light. fix.) 725.684-014
MOUNTER, HAND (photofinishing) 976.684-018
MOUNTER I (light. fix.) 692.686-050
MOUNTER II (light. fix.) 692.685-126
Mounter, Keyed Instruments (musical inst.) 730.684-010
Mounter, Saxophones (musical inst.) 730.684-010
MOUNTER, SMOKING PIPE (fabrication, nec) 739.684-130
Mounter, Sousaphones (musical inst.) 730.684-010
Mounter, Trombones (musical inst.) 730.684-010
Mounter, Trumpets And Cornets (musical inst.) 730.684-010
Mounting Inspector (photofinishing) 976.687-014
mounting-machine operator (paint & varnish; print. & pub.) 641.685-030
Mouse Breeder (agriculture) 410.161-010
MOUTHPIECE MAKER (musical inst.) 730.685-014
mover (hotel & rest.) 323.687-018
Movie Critic (print. & pub.; radio-tv broad.) 131.067-018
muck boss (mine & quarry) 939.137-018
Mucker (construction) 869.687-026
Mucker (mine & quarry) 939.687-014
Mucker, Cofferdam (construction) 869.687-026
mucker operator (construction) 850.683-026
MUCKING-MACHINE OPERATOR (construction) 850.683-026
mucking-machine operator (mine & quarry) 932.683-018
mud-analysis-well-logging captain (petrol. & gas) 010.131-010
mud-analysis-well-logging operator (petrol. & gas) 010.281-022
mud-analysis-well-logging supervisor, district (petrol. & gas) 010.167-014
MUD BOSS (smelt. & refin.) 519.585-014
mud engineer (petrol. & gas) 010.167-014
mud grinder (smelt. & refin.; steel & rel.) 570.685-070
Mud-Jack Nozzle Worker (construction) 869.687-026
mud-logging superintendent (petrol. & gas) 010.167-014
mud-mill operator (smelt. & refin.; steel & rel.) 570.685-070
MUD-MILL TENDER (smelt. & refin.) 519.685-026
MUD-MIXER HELPER (steel & rel.) 549.687-022
MUD-MIXER OPERATOR (smelt. & refin.; steel & rel.) 570.685-070
MUD-PLANT OPERATOR (petrol. & gas) 930.685-010
Mud Trucker (steel & rel.) 902.683-010
muffler fringer (knitting) 685.686-010
MUFFLER INSTALLER (automotive ser.) 807.664-010
Muff Winder (textile) 681.685-154
Mule Driver (any industry) 919.664-010
Mule Tender (any industry) 410.674-022
muller (hat & cap) 784.687-086
multicut-line operator (glass mfg.) 677.562-010
multifocal-button assembler (optical goods) 713.684-034
Multifocal-Button Countersink Grinder (optical goods) 716.685-022
Multifocal-Button Generator (optical goods) 716.682-014
Multifocal-Button Grinder (optical goods) 716.382-018
Multifocal-Button Inspector (optical goods) 716.687-018
MULTIFOCAL-LENS ASSEMBLER (optical goods) 713.684-034
multifold operator (paper goods) 649.685-046
MULTINEEDLE-CHAINSTITCH-MACHINE OPERATOR (garment) 786.682-178
multineedle shirrer (garment) 786.682-178
MULTI-OPERATION-FORMING-MACHINE OPERATOR I (any industry) 616.360-026
MULTI-OPERATION-FORMING-MACHINE OPERATOR II (any industry) 616.685-042
MULTI-OPERATION-FORMING-MACHINE SETTER (any industry) 616.260-014
MULTI-OPERATION-MACHINE OPERATOR (any industry) 612.462-010
Multiple-Cut-Off-Saw Operator (millwork-plywood; wood. container) 667.682-022
MULTIPLE-DRUM SANDER (woodworking) 662.682-014
MULTIPLE-DRUM-SANDER HELPER (woodworking) 662.686-014
multiple-effect evaporator operator (chemical) 553.382-018
multiple-knife-edge-trimmer operator (print. & pub.) 640.685-010
Multiple-Needle Stitcher (boot & shoe) 690.682-082

multiple-pressure-riveter operator (any industry) 800.662-010
Multiple-Punch-Press Operator I (any industry) 615.382-010
Multiple-Punch-Press Operator II (any industry) 615.685-030
Multiple-Resaw Operator (wood. container) 667.682-058
multiple-slide operator (any industry) 619.382-018
multiple-spindle-drilling-machine operator (machine shop) 606.380-010
Multiple-Spindle-Router Operator (woodworking) 665.682-030
multiple-tube-winding-machine operator (textile) 681.685-046
Multiple-Wire Sawyer (stonework) 677.462-014
Multiplex-Machine Operator (tel. & tel.) 203.582-050
multi-punch operator (any industry) 615.482-038
MULTI-PURPOSE MACHINE OPERATOR (furniture) 669.382-022
multi-slide-machine tender (any industry) 619.685-050
Municipal-Court Judge (government ser.) 111.107-010
MUNICIPAL-SERVICES SUPERVISOR (government ser.) term
MUNITIONS HANDLER (ordnance) 929.687-034
Munitions-Handler Supervisor (ordnance) 922.137-018
Munitions Worker (government ser.) 632.261-018
MUSEUM ATTENDANT (museums) 109.367-010
museum craft worker (museums) 739.261-010
MUSEUM INTERN (museums) term
museum preparator (museums) 102.381-010
museum service scheduler (museums) 238.367-034
MUSEUM TECHNICIAN (museums) 102.381-010
Mushroom Grower (agriculture) 405.161-018
Mushroom-Growing Supervisor (agriculture) 405.131-010
Mushroom Laborer (agriculture) 405.687-014
Mushroom Packer (agriculture) 920.687-134
Mushroom-Press Operator (laundry & rel.) 363.682-018
Mushroom Sorter-Grader (can. & preserv.) 529.687-186
Mushroom-Spawn Maker (profess. & kin.) 041.061-062
musical director (motion picture; radio-tv broad.) 152.047-018
MUSICAL-STRING MAKER (musical inst.) 730.684-050
music autographer (print. & pub.) 970.581-010
MUSIC COPYIST (print. & pub.) 209.582-010
Music Critic (print. & pub.; radio-tv broad.) 131.067-018
music department head (motion picture; radio-tv broad.) 152.047-018
music director (radio-tv broad.) 100.367-022
MUSIC ENGRAVER (print. & pub.) 972.681-010
MUSIC GRAPHER (print. & pub.) 970.581-010
MUSICIAN, INSTRUMENTAL (amuse. & rec.) 152.041-010
music instructor (education) 152.021-010
MUSIC LIBRARIAN (radio-tv broad.) 100.367-022
MUSIC LIBRARIAN, INTERNATIONAL BROADCAST (radio-tv broad.) 100.367-026
music mixer (motion picture; radio-tv broad.; recording) 194.262-018
MUSIC SUPERVISOR (education) 099.167-026
MUSIC THERAPIST (medical ser.) 076.127-014
music typographer (print. & pub.) 209.582-010
Muskrat Trapper (fishing & hunt.) 461.684-014
Mustard Mixer (food prep., nec) 520.685-154
mutton puncher (agriculture) 410.687-022
mutuel cashier (amuse. & rec.) 211.467-018
mutuel clerk (amuse. & rec.) 211.467-022
MVA-REACTOR OPERATOR (chemical) 558.685-046
MVA-REACTOR OPERATOR, HEAD (chemical) 559.362-022
MYCOLOGIST (profess. & kin.) 041.061-062

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NAIL-ASSEMBLY-MACHINE OPERATOR (steel & rel.) 616.682-030
nailer (boot & shoe) 690.685-162
NAILER (tinware) 739.687-126
NAILER, HAND (any industry) 762.684-050
nailer, machine (any industry) 669.682-058
nailhead puncher (garment; tex. prod., nec) 789.685-010
Nailhead Setter (garment; tex. prod., nec) 789.685-010
NAILING-MACHINE OPERATOR (any industry) 669.682-058
NAILING-MACHINE OPERATOR, AUTOMATIC (any industry) 669.685-066
nail-machine operator (steel & rel.) 616.460-010
NAIL-MAKING-MACHINE SETTER (steel & rel.) 616.460-010
NAIL-MAKING-MACHINE TENDER (steel & rel.) 617.665-010
NAIL-POLISH-BRUSH-MACHINE FEEDER, AUTOMATIC (fabrication, nec) 692.686-054
nail puller (boot & shoe) 690.685-410
Nail Welter (boot & shoe) 690.685-162
NAME-PLATE STAMPER (any industry) 652.685-054
name-plate-stamping-machine operator (clerical) 208.582-014
NAPHTHALENE OPERATOR (steel & rel.) 551.665-010
NAPHTHALENE-OPERATOR HELPER (steel & rel.) 551.687-026
Naphthalene-Still Operator (chemical) 552.462-010
Naphtha-Plant Treater (petrol. refin.) 549.362-014
NAPHTHA-WASHING-SYSTEM OPERATOR (plastic-synth.) 559.382-038
Naphthol-Soaping-Machine Operator (textile) 582.685-030
Napkin-Band Wrapper (paper goods) 920.687-026
Napkin-Machine Operator (paper goods) 649.685-046
napper (tex. prod., nec; textile) 585.685-070
Napper Grinder (textile) 680.380-010
napper operator (tex. prod., nec; textile) 585.685-070
NAPPER TENDER (knitting) 585.665-010
NAPPER TENDER (tex. prod., nec; textile) 585.685-070
narcotics investigator (government ser.) 375.267-018
Narrator (amuse. & rec.) 139.167-010
NARRATOR (motion picture) 150.147-010
NARROW-FABRIC CALENDERER (narrow fabrics) 583.685-074
Narrow-Fabric-Loom Fixer (narrow fabrics) 683.260-018
National Editor (print. & pub.) 132.037-014
national insurance officer (nonprofit org.) 187.167-198
NATURAL-GAS-TREATING-UNIT OPERATOR (petrol. & gas) 549.382-010
NATURALIST (profess. & kin.) term
naturopathic physician (medical ser.) 079.101-014
naval designer (profess. & kin.) 001.061-014
NAVIGATOR (air trans.) 196.167-014
Neck Cutter (light. fix.) 692.685-118
NECKER (jewelry-silver.) 692.686-058
Neck Feller (garment) 782.684-058
Neck Fitter (musical inst.) 730.684-010
neck pinner (meat products) 525.687-050
NECK SKEWER (meat products) 525.687-050
NECKTIE-CENTRALIZING-MACHINE OPERATOR I (garment) 786.682-186
NECKTIE-CENTRALIZING-MACHINE OPERATOR II (garment) 786.682-190
NECKTIE OPERATOR, POCKETS AND PIECES (garment) 786.682-182
necktie stitcher (garment) 786.682-186
Necktie Turner (garment) 789.687-182
NEEDLE-BAR MOLDER (carpet & rug) 556.684-022
NEEDLE-BOARD REPAIRER (tex. prod., nec) 739.684-134
NEEDLE-CONTROL CHENILLER (tex. prod., nec) 687.685-010
NEEDLE-FELT-MAKING-MACHINE OPERATOR (tex. prod., nec) 689.362-010
NEEDLE GRINDER (button & notion) 734.584-010
needle grinder (comm. equip.) 770.382-014
NEEDLE LEADER (button & notion) 502.684-022
NEEDLE-LOOM OPERATOR (tex. prod., nec) 689.662-010
Needle-Loom-Operator Helper (tex. prod., nec) 586.686-022
NEEDLE-LOOM SETTER (tex. prod., nec) 689.360-010
NEEDLE-LOOM TENDER (tex. prod., nec) 689.685-090
NEEDLEMAKER (button & notion) 619.280-010
needle molder (button & notion) 502.684-022
NEEDLE POLISHER (button & notion) 705.684-046
NEEDLE-PUNCH-MACHINE OPERATOR (textile) 689.682-014
NEEDLE-PUNCH-MACHINE-OPERATOR HELPER (textile) 689.686-034
needle-punch operator (carpet & rug; tex. prod., nec) 687.682-014
needle setter (tex. prod., nec) 739.684-134
NEEDLE STRAIGHTENER (knitting) 628.684-018
NEEDLE-TRADE WORKER (garment) term
needle-valve operator (waterworks) 954.382-018
needleworker (any industry) 782.684-058
negative assembler (print. & pub.) 971.381-050
negative checker (print. & pub.) 971.684-010
Negative Developer (motion picture; photofinishing) 976.382-018
Negative Notcher (motion picture) 976.684-010
Negative Spotter (photofinishing) 970.381-034
negative turner (print. & pub.) 971.381-050
negative-turner apprentice (print. & pub.) 971.381-054
NEMATOLOGIST (profess. & kin.) 041.061-066
NEON-SIGN SERVICER (fabrication, nec) 824.281-018
NEON-TUBE PUMPER (fabrication, nec) 824.684-010
nerve specialist (medical ser.) 070.101-050
NESTING OPERATOR, NUMERICAL CONTROL (aircraft mfg.) 007.362-010
net checker-hanger (laundry & rel.) 361.687-010
net finisher (tex. prod., nec) 582.685-054
net hanger (tex. prod., nec) 782.684-026
NET MAKER (tex. prod., nec) 789.684-030
NET REPAIRER (fishing & hunt.) 449.664-010
Net Sorter (laundry & rel.) 361.687-018
NETTING INSPECTOR (tex. prod., nec) 782.487-010
netting machine operator (tex. prod., nec) 685.685-010
NET WASHER (rubber goods) 599.687-022
Network Announcer (radio-tv broad.) 159.147-010
NETWORK CONTROL OPERATOR (any industry) 031.262-014
network-relay tester (utilities) 729.281-038
NEUROLOGIST (medical ser.) 070.101-050
Neuropathologist (medical ser.) 070.061-010
Neurosurgeon (medical ser.) 070.101-094
neutralizer (any industry) 503.685-030
neutralizer (chemical) 558.685-050
NEUTRALIZER (grain-feed mills) 522.685-082
neutralizer (optical goods) 716.687-026

NEUTRALIZER (soap & rel.) 558.585-034
Neverslip Stitcher (boot & shoe) 690.682-082
new-account interviewer (clerical) 205.367-014
new-business clerk (insurance) 209.687-018
NEW-CAR GET-READY MECHANIC (automotive ser.; retail trade) 806.361-026
NEW-CAR INSPECTOR (motor trans.) 919.363-010
News Agent (r.r. trans.) 291.457-014
News Analyst (radio-tv broad.) 131.067-010
News Anchor (radio-tv broad.) 131.262-010
NEWS ASSISTANT (radio-tv broad.) 209.367-038
NEWSCASTER (radio-tv broad.) 131.262-010
news information resource manager (library) 100.167-038
NEWS LIBRARIAN (library) 100.167-038
news library director (library) 100.167-038
NEWSPAPER CARRIER (retail trade) 292.457-010
newspaper deliverer (retail trade) 292.457-010
NEWSPAPER-DELIVERY DRIVER (wholesale tr.) 292.363-010
newspaper library manager (library) 100.167-038
newspaper-press-operator apprentice (print. & pub.) 651.362-034
newsperson (print. & pub.; radio-tv broad.) 131.262-018
newsperson (radio-tv broad.) 131.262-010
NEWSWRITER (print. & pub.; radio-tv broad.) 131.262-014
nib adjuster (pen & pencil) 733.687-042
Nib Assembler (pen & pencil) 733.685-010
NIBBLER OPERATOR (any industry) 615.685-026
NIB FINISHER (pen & pencil) 705.684-050
NIB INSPECTOR (pen & pencil) 733.687-058
Nickel Cleaner (any industry) 709.687-010
NICKEL-PLANT OPERATOR (smelt. & refin.) 519.362-010
Nickel Plater (electron. comp.) 500.684-026
Nickel Plater (electroplating) 500.380-010
NICKER (boot & shoe) 690.685-298
nicker and breaker (nonfer. metal) 614.684-014
NICKING-MACHINE OPERATOR (cutlery-hrdwr.) 609.682-026
nick setter (cutlery-hrdwr.) 609.682-026
NIGHT AUDITOR (hotel & rest.) 210.382-054
Night Baker (hotel & rest.) 313.381-010
night cleaner (any industry) 599.684-010
night cleaner (hotel & rest.) 323.687-018
night-clerk auditor (hotel & rest.) 210.382-054
Night-Court Magistrate (government ser.) 111.107-014
Night Guard (any industry) 372.667-034
NIGHT-PATROL INSPECTOR (fabrication, nec) 824.683-010
nipper (any industry) 932.664-010
Nipple-Machine Operator (machine shop) 604.682-014
NITRATING-ACID MIXER (chemical) 550.585-030
NITRATOR OPERATOR (chemical) 558.382-046
nitric-acid-concentrator operator (chemical) 559.682-062
NITROCELLULOSE OPERATOR (chemical) 553.684-014
NITROGLYCERIN DISTRIBUTOR (chemical) 559.664-010
NITROGLYCERIN NEUTRALIZER (chemical) 558.685-050
Nitroglycerin-Nitrator Operator, Batch (chemical) 558.382-046
NITROGLYCERIN-SEPARATOR OPERATOR (chemical) 551.685-102
NITROGLYCERIN SUPERVISOR (chemical) 559.132-038
Nock Applier (toy-sport equip.) 795.687-014
NODULIZER (cement) 579.685-034
Noise-Abatement Engineer (profess. & kin.) 019.081-018
NONDESTRUCTIVE TESTER (profess. & kin.) 011.261-018
NOODLE-CATALYST MAKER (chemical) 559.685-126
NOODLE MAKER (food prep., nec) 529.385-010
NOODLE-PRESS OPERATOR (food prep., nec) 520.662-010
normalizer (heat treating) 504.682-010
normalizing-equipment tender (rubber goods) 559.685-066
Notched-Blade Loader (cutlery-hrdwr.) 701.687-018
notcher (glass products) 673.685-070
NOTCH GRINDER (glass products) 673.685-070
Notching-Press Operator (any industry) 615.682-014
Notch-Machine Operator (rubber goods) 690.680-010
NOTEREADER (clerical) 203.582-078
Nougat-Candy Maker (sugar & conf.) 529.361-014
Nougat-Candy-Maker Helper (sugar & conf.) 520.685-050
Nougat Cutter, Machine (sugar & conf.) 521.685-102
Novelty-Balloon Assembler And Packer (rubber goods) 920.587-018
novelty-candy maker (fabrication, nec) 739.684-010
novelty-candy maker (sugar & conf.) 520.687-018
Novelty Chain Maker (jewelry-silver.) 700.684-022
novelty dipper (dairy products) 529.482-014
novelty maker (paper goods) 794.684-022
NOVELTY MAKER I (dairy products) 529.482-014
NOVELTY MAKER II (dairy products) 529.482-018
Novelty-Printing-Machine Operator (textile) 652.382-010
Novelty-Twister Tender (textile) 681.685-130
NOVELTY WORKER (dairy products) 524.686-014
NOZZLE-AND-SLEEVE WORKER (nonfer. metal) 514.684-018
NOZZLE TENDER (nonfer. metal) 512.685-014
Nozzle Worker (mine & quarry) 939.684-014
Nub-Card Tender (textile) 680.686-018
NUCLEAR-CRITICALITY SAFETY ENGINEER (profess. & kin.) 015.067-010
Nuclear-Decontamination Research Specialist (profess. & kin.) 015.021-010
NUCLEAR ENGINEER (profess. & kin.) 015.061-014
NUCLEAR-FUELS RECLAMATION ENGINEER (profess. & kin.) 015.061-026
NUCLEAR-FUELS RESEARCH ENGINEER (profess. & kin.) 015.061-030
Nuclear Logging Engineer (petrol. & gas) 010.261-022
NUCLEAR MEDICAL TECHNOLOGIST (medical ser.) 078.361-018
nuclear plant control operator (utilities) 952.362-022
Nuclear-Plant-Instrument Technician (utilities) 710.281-030
NUCLEAR-PLANT TECHNICAL ADVISOR (utilities) 015.167-010
Nuclear-Powerplant Mechanic (utilities) 631.261-014
Nuclear-Powerplant-Mechanic Helper (utilities) 631.684-010
Nuclear-Powerplant Supervisor (utilities) 631.131-010
NUCLEAR-TEST-REACTOR PROGRAM COORDINATOR (profess. & kin.) 015.167-014
Nuclear-Waste-Process Operator (any industry) 955.382-014
Nuclear Weapons Mechanical Specialist (government ser.) 632.261-018
NUMBERER AND WIRER (textile) 689.587-010
NUMERICAL-CONTROL DRILL OPERATOR, PRINTED CIRCUIT BOARDS (electron. comp.) 606.382-018
Numerical Control Machine Machinist (machine shop) 600.280-022
NUMERICAL-CONTROL-MACHINE OPERATOR (machine shop) 609.362-010
NUMERICAL CONTROL MACHINE SET-UP OPERATOR (machine shop) 609.360-010
NUMERICAL-CONTROL ROUTER OPERATOR (aircraft mfg.; electron. comp.) 605.382-046
Numerical-Control-Wire-Preparation-Machine-Tender (aircraft mfg.) 728.685-010
NUMISMATIST (profess. & kin.) term
nurse (medical ser.) see NURSE, PROFESSIONAL
nurse aide (medical ser.) 355.674-014
NURSE ANESTHETIST (medical ser.) 075.371-010
NURSE ASSISTANT (medical ser.) 355.674-014
nurse, certified (medical ser.) see NURSE, PROFESSIONAL
nurse, children's (domestic ser.) 301.677-010
Nurse, College (medical ser.) 075.124-010
NURSE, CONSULTANT (medical ser.) 075.127-014
nurse, first aid (any industry) 354.677-010
NURSE, GENERAL DUTY (medical ser.) 075.364-010
NURSE, HEAD (medical ser.) 075.137-014
Nurse, Infants' (domestic ser.) 301.677-010
NURSE, INFECTION CONTROL (medical ser.) 075.127-034
NURSE, INSTRUCTOR (medical ser.) 075.124-018
nurse, licensed (medical ser.) see NURSE, PROFESSIONAL
NURSE, LICENSED PRACTICAL (medical ser.) 079.374-014
NURSE-MIDWIFE (medical ser.) 075.264-014
NURSE, OFFICE (medical ser.) 075.374-014
NURSE, PRACTICAL (medical ser.) 354.374-010
NURSE PRACTITIONER (medical ser.) 075.264-010
NURSE, PRIVATE DUTY (medical ser.) 075.374-018
NURSE, PROFESSIONAL (medical ser.) term
nurse, registered (medical ser.) see NURSE, PROFESSIONAL
Nursery Laborer (agriculture) 405.687-014
NURSERY SCHOOL ATTENDANT (any industry) 359.677-018
NURSE, SCHOOL (medical ser.) 075.124-010
nurse, special (medical ser.) 075.374-018
nurse, staff (medical ser.) 075.364-010
NURSE, STAFF, COMMUNITY HEALTH (medical ser.) 075.124-014
nurse, staff, industrial (medical ser.) 075.374-022
NURSE, STAFF, OCCUPATIONAL HEALTH NURSING (medical ser.) 075.374-022
NURSE, SUPERVISOR (medical ser.) 075.167-010
NURSE, SUPERVISOR, COMMUNITY-HEALTH NURSING (medical ser.) 075.127-026
NURSE, SUPERVISOR, EVENING-OR-NIGHT (medical ser.) 075.127-030
nurse supervisor, industrial nursing (medical ser.) 075.137-010
NURSE, SUPERVISOR, OCCUPATIONAL HEALTH NURSING (medical ser.) 075.137-010
Nursing Home Administrator (medical ser.) 187.117-010
NUT-AND-BOLT ASSEMBLER (nut & bolt) 929.587-010
NUT CHOPPER (can. & preserv.; food prep., nec; sugar & conf.) 521.686-046
nut-dehydrator operator (can. & preserv.) 523.685-066
NUT FORMER (nut & bolt) 612.462-014
NUT GRINDER (can. & preserv.) 521.685-234
Nut Orchardist (agriculture) 403.161-010
nut picker (can. & preserv.) 521.687-086
NUT-PROCESS HELPER (can. & preserv.) 529.486-010
nutrition aide (government ser.) 195.367-022
nutrition consultant (any industry) 199.251-010

nutrition educator (personal ser.) 359.367-014
Nutritionist (profess. & kin.) 096.121-014
Nutritionist, Public Health (government ser.) 077.127-010
NUT ROASTER (can. & preserv.) 529.685-174
Nut-Roaster Helper (can. & preserv.) 529.486-010
nut sifter (can. & preserv.) 521.687-086
Nut Sorter (agriculture) 529.687-186
NUT SORTER (can. & preserv.) 521.687-086
NUT-SORTER OPERATOR (can. & preserv.) 521.685-238
NUT STEAMER (can. & preserv.) 521.687-090
nutter-up (nut & bolt) 929.587-010
NYLON-HOT-WIRE CUTTER (tex. prod., nec) 781.684-038

O

Oak Tanner (leather mfg.) 582.482-018
observer (tel. & tel.) 239.367-026
OBSERVER, ELECTRICAL PROSPECTING (petrol. & gas) 010.261-014
OBSERVER, GRAVITY PROSPECTING (petrol. & gas) 010.261-018
observer helper (petrol. & gas) 939.364-010
OBSERVER HELPER, GRAVITY PROSPECTING (petrol. & gas) 939.663-010
OBSERVER HELPER, SEISMIC PROSPECTING (petrol. & gas) 939.364-010
OBSERVER, SEISMIC PROSPECTING (petrol. & gas) 010.161-018
OBSTETRICIAN (medical ser.) 070.101-054
OCCUPATIONAL ANALYST (profess. & kin.) 166.067-010
occupational-safety-and-health-compliance officer (government ser.) 168.167-062
OCCUPATIONAL-SAFETY-AND-HEALTH INSPECTOR (government ser.) 168.167-062
OCCUPATIONAL THERAPIST (medical ser.) 076.121-010
OCCUPATIONAL THERAPY AIDE (medical ser.) 355.377-010
OCCUPATIONAL THERAPY ASSISTANT (medical ser.) 076.364-010
OCEANOGRAPHER, ASSISTANT (military ser.) 025.267-010
Oceanographer, Geological (profess. & kin.) 024.061-018
Oceanographer, Physical (profess. & kin.) 024.061-030
Octave Tuner (musical inst.) 730.381-058
ocularist (optical goods) 713.261-014
ocularist, glass (optical goods) 713.261-010
oculist (medical ser.) 070.101-058
ODD BUNDLE WORKER (tobacco) 529.687-166
odd-job worker (domestic ser.) 301.687-010
ODD-PIECE CHECKER (knitting) 221.587-018
ODD-SHOE EXAMINER (boot & shoe) 788.667-010
Offal Baler (leather mfg.) 920.685-010
OFFAL ICER, POULTRY (meat products) 525.687-054
OFFAL SEPARATOR (meat products) 525.684-038
OFFBEARER, PIPE SMOKING MACHINE (fabrication, nec) 563.686-018
OFFBEARER, SEWER PIPE (brick & tile) 579.686-026
Office Auditor (government ser.) 160.167-038
office automation analyst (profess. & kin.) 032.262-010
Office-Chair Assembler (furniture) 709.684-014
office clerk, routine (clerical) 209.562-010
OFFICE COPY SELECTOR (print. & pub.) 249.687-010
office-equipment mechanic (any industry) 633.281-018
OFFICE HELPER (clerical) 239.567-010
office-machine inspector (any industry) 633.281-018
Office-Machine-Repair-Shop Supervisor (any industry) 633.131-010
OFFICE-MACHINE SERVICER (any industry) 633.281-018
OFFICE-MACHINE-SERVICER APPRENTICE (any industry) 633.281-022
OFFICE-MACHINE-SERVICE SUPERVISOR (any industry) 633.131-010
office manager (financial) 186.117-034
office-planning representative (any industry) 019.261-018
OFFICE SUPERVISOR, ANIMAL HOSPITAL (nonprofit org.) 249.137-010
OFFSET-DUPLICATING-MACHINE OPERATOR (clerical) 207.682-018
OFFSET-DUPLICATING-MACHINE OPERATOR (print. & pub.) 651.682-014
offset-duplicating machine operator, instant print (print. & pub.) 979.362-010
OFFSET-PRESS-OPERATOR APPRENTICE (print. & pub.) 651.382-046
offset press operator, helper (print. & pub.) 651.685-026
OFFSET-PRESS OPERATOR I (print. & pub.) 651.382-042
OFFSET-PRESS OPERATOR II (print. & pub.) 651.685-018
Offset-Proof-Press Operator (print. & pub.) 651.582-010
OIL BOILER (tex. prod., nec) 543.362-010
OIL-BURNER-SERVICER-AND-INSTALLER (any industry) 862.281-018
OIL-BURNER-SERVICER-AND-INSTALLER HELPER (any industry) 862.687-022
OIL DIPPER (woodworking) 769.684-026
oil dispatcher (petrol. & gas; petrol. refin.; pipe lines) 914.167-014
Oil Dispenser (can. & preserv.) 529.685-190
oil-distributor tender (construction) 853.665-010
OILER (any industry) 699.687-018
oiler (any industry) 950.685-014
oiler (any industry) 921.667-022
oiler (automotive ser.) 915.687-018
OILER (clock & watch) 715.684-146
oiler (mine & quarry) 850.684-018
oiler (water trans.) 911.584-010
oiler and greaser (any industry) 699.687-018
oiler and packer, gun parts (ordnance) 736.687-010
Oil-Expeller (grain-feed mills; oils & grease) 529.685-106
Oil-Expeller (meat products) 529.685-202
Oil Extractor (machine shop) 609.684-014
OIL-FIELD EQUIPMENT MECHANIC (petrol. & gas) 629.381-014
OIL-FIELD EQUIPMENT MECHANIC SUPERVISOR (petrol. & gas) 629.131-014
Oil-Field-Pipe-Line Supervisor (petrol. & gas) 862.131-022
Oil-House Attendant (clerical) 222.387-058
Oiling-Machine Operator (leather mfg.; tex. prod., nec) 582.685-050
OILING-MACHINE OPERATOR (paper & pulp; paper goods) 534.685-018
Oiling-Machine Operator (steel & rel.) 599.685-074
Oil-Paint Shader (paint & varnish) 550.381-014
OIL-PIPE INSPECTOR (petrol. & gas) 930.267-010
OIL-PIPE-INSPECTOR HELPER (petrol. & gas) 930.364-010
OIL PUMPER (petrol. & gas) 914.382-010
oil-pump-station operator, chief (pipe lines) 914.132-014
Oil-Rag Washer (any industry) 361.685-018
OIL-RECOVERY-UNIT OPERATOR (petrol. refin.) 549.382-014
OIL-SEAL ASSEMBLER (leather prod.) 739.684-138
OILSEED-MEAT PRESSER (oils & grease) 521.685-242
OIL-SPOT WASHER (tex. prod., nec; textile) 689.687-050
Oil Sprayer (construction) 869.687-026
oil sprayer (construction) 853.663-018
Oil Sprayer (leather mfg.) 584.687-014
oil-spreader operator (construction) 853.663-018
oil-spreader-truck operator (construction) 853.663-018
oil tester (petrol. refin.) 029.261-022
oil-well-electrical-wall-sampling-device operator (petrol. & gas) 931.361-010
oil-well-fishing-tool operator (petrol. & gas) 930.261-010
oil-well formation tester (petrol. & gas) 930.261-014
oil-well gun-perforator operator (petrol. & gas) 931.382-010
oil-well logging engineer (petrol. & gas) 010.261-022
oil-well pumper (petrol. & gas) 914.382-010
OIL-WELL-SERVICE OPERATOR (petrol. & gas) 939.462-010
OIL-WELL-SERVICE-OPERATOR HELPER (petrol. & gas) 939.684-018
OIL-WELL-SERVICES SUPERVISOR (petrol. & gas) 939.132-014
oil-well shooter (petrol. & gas) 931.361-014
oil-well-sounding-device operator (petrol. & gas) 930.361-010
oil winterizer (oils & grease) 521.685-374
Ointment-Mill Tender (pharmaceut.) 550.685-090
Oleo-Hasher-And-Renderer (oils & grease) 529.685-158
OLIVE BRINE TESTER (can. & preserv.) 522.584-010
OLIVING-MACHINE OPERATOR (clock & watch) 770.381-034
One-Piece-Expansion Maker, Hand (paper goods) 794.684-018
Onion Farmer (agriculture) 402.161-010
Onion-Harvesting Supervisor (agriculture) 409.131-010
OPAQUER (protective dev.) 712.684-030
OPEN-DEVELOPER OPERATOR (textile) 582.685-098
OPENER (rubber goods) 559.686-034
OPENER I (hat & cap) 784.687-054
OPENER II (hat & cap) 589.686-030
OPENER TENDER (textile) 680.685-070
OPENER-VERIFIER-PACKER, CUSTOMS (government ser.) 168.387-010
Open-Hearth Door-Liner (steel & rel.) 861.381-026
open-hearth-furnace laborer (steel & rel.) 512.687-014
open-hearth-furnace operator (steel & rel.) 512.362-010
open-hearth-furnace-operator helper (steel & rel.) 512.684-010
Opening-Machine Cleaner (textile) 699.687-014
opening-machine tender (textile) 680.685-070
Open-Shank Coverer (boot & shoe) 690.685-074
open-tenter operator (textile) 580.685-066
Operating-Cost Clerk (clerical) 216.382-034
operating engineer (any industry) 950.362-014
operating engineer (any industry) 950.382-026
OPERATING ENGINEER (construction; mine & quarry) 859.683-010
OPERATING-ENGINEER APPRENTICE (construction; mine & quarry) 859.683-014
operating-engineer apprentice, stationary (any industry) 950.382-030
operating-room technician (medical ser.) 079.374-022
OPERATING-TABLE ASSEMBLER (furniture) 706.381-026
operations agent (air trans.) 912.367-014
OPERATIONS AND INTELLIGENCE ASSISTANT (military ser.) 378.367-026
operations chief (tel. & tel.) 822.131-010
operations clerk (financial) 216.362-046
operations clerk (financial) 216.482-034
operations inspector (government ser.) 168.264-010
operations manager (air trans.; motor trans.; r.r. trans.; water trans.) 184.117-050
OPERATIONS MANAGER (motor trans.) 184.167-118

operations manager (retail trade) 185.117-014
OPERATIONS MANAGER (tel. & tel.) 184.117-070
OPERATIONS OFFICER (financial) 186.137-014
operations officer (government ser.) 375.137-014
Operations Officer, Branch Office (financial) 186.137-014
Operations Officer, Trust Department (financial) 186.137-014
OPERATIONS-RESEARCH ANALYST (profess. & kin.) 020.067-018
operations supervisor (government ser.) 185.167-066
OPERATIONS SUPERVISOR, NUCLEAR POWER PLANT (utilities) 952.132-010
Operations Technician (tel. & tel.) 822.281-010
operative supervisor (motion picture) 962.134-010
OPERATOR, AUTOMATED PROCESS (electron. comp.) 590.382-010
OPERATOR, CATALYST CONCENTRATION (plastic-synth.) 550.382-026
OPERATOR, CAVITY PUMP (elec. equip.) 729.682-010
operator, circuit (any industry) 379.362-014
Operator, Coating Furnace (cutlery-hrdwr.) 554.685-014
operator, control room (petrol. refin.) 546.382-010
operator, direct wire (any industry) 379.362-014
operator, lights (motion picture; radio-tv broad.) 962.362-014
OPERATOR, PREFINISH (millwork-plywood) 562.685-018
Operator, Scales (plastic synth.) 929.687-062
Ophthalmic-Lens Inspector (optical goods) 716.381-010
OPHTHALMIC PHOTOGRAPHER (medical ser.) 143.362-014
OPHTHALMIC TECHNICIAN (medical ser.) 078.361-038
ophthalmic-technician apprentice (optical goods; retail trade) 716.280-010
OPHTHALMOLOGIST (medical ser.) 070.101-058
Optical-Brightener Maker (chemical) 559.682-018
Optical-Brightener-Maker Helper (chemical) 550.687-010
optical designer (profess. & kin.) 019.061-018
OPTICAL-EFFECTS-CAMERA OPERATOR (motion picture) 143.260-010
OPTICAL-EFFECTS LAYOUT PERSON (motion picture) 962.361-010
optical-effects-line-up person (motion picture) 962.361-010
OPTICAL-ELEMENT COATER (optical goods) 716.382-014
OPTICAL ENGINEER (profess. & kin.) 019.061-018
OPTICAL-GLASS ETCHER (optical goods) 716.681-022
optical-glass inspector (optical goods) 716.687-034
OPTICAL-GLASS SILVERER (optical goods) 574.484-010
OPTICAL-INSTRUMENT ASSEMBLER (optical goods) 711.381-010
optical mechanic (optical goods; retail trade) 716.280-014
optical-mechanic apprentice (optical goods; retail trade) 716.280-010
optical model maker and tester (optical goods) 716.280-018
optical technician (optical goods) 716.382-018
OPTICIAN (optical goods; retail trade) 716.280-014
OPTICIAN (optical goods) 716.280-018
OPTICIAN APPRENTICE (optical goods; retail trade) 716.280-010
OPTICIAN APPRENTICE, DISPENSING (optical goods; retail trade) 299.361-014
Optician, Contact-Lens Dispensing (optical goods; retail trade) 299.361-010
OPTICIAN, DISPENSING II (optical goods) 299.361-010
OPTOMECHANICAL TECHNICIAN (optical goods; photo. appar.) 007.161-030
OPTOMETRIC ASSISTANT (profess. & kin.) 079.364-014
OPTOMETRIST (medical ser.) 079.101-018
ORAL AND MAXILLOFACIAL SURGEON (medical ser.) 072.101-018
ORAL PATHOLOGIST (medical ser.) 072.061-010
oral surgeon (medical ser.) 072.101-018
Orange Grower (agriculture) 403.161-010
Orange-Peel Operator I (any industry) 921.663-058
Orange-Peel Operator II (any industry) 921.663-062
Orange-Picking Supervisor (agriculture) 409.131-010
Orange Washer (agriculture; can. & preserv.; wholesale tr.) 529.685-258
orchardist (agriculture) 403.161-010
Orchard Pruner (agriculture) 408.684-018
orchestra leader (profess. & kin.) 152.047-014
ORCHESTRATOR (profess. & kin.) 152.067-022
Orchid Grower (agriculture) 405.161-018
Orchid Superintendent (agriculture) 405.131-010
Orchid Worker (agriculture) 405.684-014
ORDER CALLER (clerical) 209.667-014
order checker (clerical) 222.687-030
order checker (clerical) 222.687-018
order clerk (clerical) 214.382-014
ORDER CLERK (clerical) 249.362-026
order clerk (radio-tv broad.; tel. & tel.; utilities; waterworks) 239.362-014
Order Clerk (utilities) 203.362-010
ORDER CLERK, FOOD AND BEVERAGE (hotel & rest.) 209.567-014
ORDER-CONTROL CLERK, BLOOD BANK (medical ser.; nonprofit org.) 245.367-026
ORDER-DEPARTMENT SUPERVISOR (any industry) 169.167-038
order-desk caller (clerical) 209.667-014
ORDER DETAILER (clerical) 221.387-046
ORDER DISPATCHER, CHIEF (utilities) 959.137-018
Order Filler (any industry) 922.687-058
order filler (clerical) 249.362-026
ORDER FILLER (retail trade; wholesale tr.) 222.487-014
order filler, bakery products (bakery products) 222.487-010
ORDER FILLER, LINSEED OIL (oils & grease) 920.686-022
ordering-box operator (tobacco) 522.682-014
ORDERING-MACHINE OPERATOR (tobacco) 522.682-014
ORDERLY (medical ser.) 355.674-018
order picker (any industry) 922.687-058
ORDER RUNNER (meat products) 525.687-058
order taker (clerical) 249.362-026
ORDINARY SEAMAN (water trans.) 911.687-030
ORDNANCE ARTIFICER (government ser.) 632.261-018
ORDNANCE-ARTIFICER HELPER (government ser.) 632.684-010
ORDNANCE ENGINEER (chemical; ordnance) 019.061-022
ORDNANCE TRUCK INSTALLATION MECHANIC (ordnance) 806.684-098
ore crusher (smelt. & refin.) 515.685-014
ore grader (mine & quarry) 939.167-010
ore sampler (mine & quarry) 579.484-010
Organ Grinder (amuse. & rec.) 159.647-010
organ installer (musical inst.) 730.381-046
Organist (amuse. & rec.) 152.041-010
Organ-Pipe Finisher (musical inst.) 730.381-038
ORGAN-PIPE MAKER, METAL (musical inst.) 709.381-030
ORGAN-PIPE VOICER (musical inst.) 730.381-038
organ transplant coordinator (medical ser.) 079.151-010
Organ Tuner, Electronic (any industry) 828.261-010
ORIENTAL-RUG REPAIRER (any industry) 782.381-014
ORIENTAL-RUG STRETCHER (any industry) 580.687-010
ORIENTATION AND MOBILITY THERAPIST FOR THE BLIND (education; medical ser.; nonprofit org.) 076.224-014
Orientation And Mobility Instructor (education) 076.224-014
orientation therapist for blind (education; medical ser.; nonprofit org.) 076.224-014
orientor (education; medical ser.; nonprofit org.) 076.224-014
Ornamental-Brick Installer (construction; retail trade) 863.684-014
Ornamental-Bronze Worker (construction) 809.381-022
ornamental-iron erector (construction) 809.381-022
ORNAMENTAL-IRON WORKER (construction) 809.381-022
ORNAMENTAL-IRON-WORKER APPRENTICE (construction) 809.381-026
Ornamental-Iron-Worker Helper (construction) 869.664-014
ORNAMENTAL-MACHINE OPERATOR (wood prod., nec) 690.682-054
ornamental-metal-erector apprentice (construction) 809.381-026
ornamental-metal-fabricator apprentice (metal prod., nec) 619.260-010
ORNAMENTAL-METALWORK DESIGNER (struct. metal) 142.061-034
ORNAMENTAL-METAL WORKER (metal prod., nec) 619.260-014
ORNAMENTAL-METAL-WORKER APPRENTICE (metal prod., nec) 619.260-010
ORNAMENTAL-METAL-WORKER HELPER (metal prod., nec) 619.484-010
Ornamental-Plaster Sticker (construction) 842.361-018
Ornamental-Rail Installer (construction) 809.381-022
ornamenter (bakery products; sugar & conf.) 524.684-014
ornamenter, hand (wood prod., nec) 769.381-010
ORNAMENT MAKER, HAND (fabrication, nec) 739.687-130
ORNAMENT SETTER (garment; tex. prod., nec) 789.685-010
Ornament Stapler (boot & shoe) 690.685-[illegible]
Ornithologist (profess. & kin.) 041.061-090
ORTHODONTIC BAND MAKER (protective dev.) 712.381-026
ORTHODONTIC TECHNICIAN (protective dev.) 712.381-030
ORTHODONTIST (medical ser.) 072.101-022
ORTHOPEDIC ASSISTANT (medical ser.) 078.664-010
ORTHOPEDIC-BOOT-AND-SHOE DESIGNER AND MAKER (boot & shoe; protective dev.) 788.261-010
orthopedic cast specialist (medical ser.) 078.664-010
orthopedic-shoe fitter (retail trade) 276.257-018
Orthopedic Surgeon (medical ser.) 070.101-094
ORTHOPTIST (medical ser.) 079.371-014
ORTHOTICS ASSISTANT (medical ser.) 078.361-022
Orthotics-Prosthetics Assistant (medical ser.) 078.361-022
Orthotics-Prosthetics Technician (protective dev.) 712.381-034
ORTHOTICS TECHNICIAN (protective dev.) 712.381-034
ORTHOTIST (medical ser.) 078.261-018
Orthotist-Prosthetist (medical ser.) 078.261-018
oscillograph technician (utilities) 710.281-030
osteopath (medical ser.) 071.101-010
OSTEOPATHIC PHYSICIAN (medical ser.) 071.101-010
OTOLARYNGOLOGIST (medical ser.) 070.101-062
Otologist (medical ser.) 070.101-062
otorhinolaryngologist (medical ser.) 070.101-062
out-and-out cigar maker, hand (tobacco) 790.684-014
Outboard-Motor Assembler (engine-turbine) 806.481-014
outboard-motorboat rigger (retail trade; ship-boat mfg.) 806.464-010
OUTBOARD-MOTOR INSPECTOR (engine-turbine) 806.687-042
OUTBOARD-MOTOR MECHANIC (engine-turbine; ship-boat mfg.) 623.281-042
OUTBOARD-MOTOR TESTER (engine-turbine) 623.261-014
Outdoor-Illuminating Engineer (profess. & kin.) 003.061-046

...over-flat ...; grinder, tool
...-dial ... (machine shop) 603.280-010
OUTFITTER, CABIN (ship-boat mfg.) 806.684-102
outliner (ship-boat mfg.) 623.281-030
outgoing inspector (retail trade) 789.687-078
Outlaw-Loan Account Clerk (clerical) 209.687-010
Out-Of-Town Collection Clerk (financial) 216.362-014
OUT-PATIENT ADMITTING CLERK (medical ser.) 205.362-030
Outpatient Receptionist (medical ser.) 237.367-038
Outreach Librarian (library) 100.127-010
Ov...over (garment) 786.682-166
outside collector (clerical) 241.367-010
outside contact clerk (radio-tv broad.; tel. & tel.; utilities; waterworks) 239.362-014
OUTSIDE CUTTER, HAND (boot & shoe) 788.684-082
outside-metal-room machinist (ship-boat mfg., 623.281-030
outside-metal-room supervisor (ship-boat mfg.) 623.281-022
outside marker (boot & shoe) 690.685-298
OUTSIDE-PLANT SPLICER (tel. & tel.) 822.361-010, 167-042
Outside-Plant Supervisor (tel. & tel.) 822.131-010
OUTSIDE PROPERTY AGENT (motion picture) 162.157-030
outside repairer, special (ordnance) 761.381-038
outside rigger (ship-boat mfg.) 806.261-014
Outside Trucker (any industry) 905.687-010
outsole beveler (boot & shoe) 690.685-166
Outsole Cementer, Machine (boot & shoe) 690.685-018
OUTSOLE CUTTER, AUTOMATIC (rubber gds nec) 690.462-010
Outsole Cutter, Hand (rubber goods) 751.684-014
Outsole Cutter, Machine (boot & shoe) 699.682-022
OUTSOLE FLEXER (boot & shoe) 583.686-026
outsole leveler (boot & shoe) 690.685-182
Outsole Molder (rubber goods) 556.685-086
outsole or insole molder (boot & shoe) 690.682-070
outsole paraffiner (boot & shoe) 782.687-010
OUTSOLE SCOURER (boot & shoe) 221.587-022
outsole skiver (boot & shoe) 690.685-166
Outsole Tacker (boot & shoe) 690.685-162
outsole trimmer (boot & shoe) 690.685-158
oven attendant (textile print.) 556.585-014
OVEN CURING ATTENDANT (aircraft mfg.; electron. comp.) 590.685-090
OVEN DAUBER (...& rel.) 543.687-014
oven-shoe tender 581.685-026
OVEN EQUIPMENT REPAIRER (steel & rel.) 630.261-014
OVEN HEATER (paper) 542.665-010
OVEN OPERATOR (fabrication, nec) 590.665-010
OVEN OPERATOR (grain-feed mills) 525.585-010
OVEN OPERATOR, AUTOMATIC (bakery products) 526.685-070
OVEN-PRESS TENDER I (garment. mfg.) 573.685-042
OVEN-PRESS TENDER II (garment. mfg.) 573.685-046
oven roaster (coal & petrol.) 529.685-174
Oven Stripper (any industry) 929.687-030
OVEN TENDER (bakery products) 526.685-030
OVEN TENDER (...nec) 543.685-058
OVEN TENDER (...mfg.) 573.585-010
oven tender (hotel & rest.) 313.381-010
OVEN TENDER (ordnance) 544.565-010
OVEN TENDER (paint & varnish) 553.685-082
Oven Tender, Bagels (bakery products) 526.685-030
Oven Unloader (any industry) 929.687-030
Overall Washer (laundry & rel.) 361.665-010
overcasting-machine operator (any industry) see SERGING-MACHINE OPERATOR
OVERCOILER (clock & watch) 715.687-150
overedge-machine operator (any industry) see SERGING-MACHINE OPERATOR
OVEREDGE SEWER (any industry) 787.682-034
Overhaul and Repair Mechanic (aircraft mfg.) 621.281-014
OVERHAULER (text. prod., nec) 628.261-010
OVERHAULER HELPER (textile) 628.664-010
Overhead Cleaner (any industry) 381.687-018
OVERHEAD CLEANER, PAINT LINER (textile) 628.684-022
OVERHEAD CRANE OPERATOR (any industry) 921.663-010
Overhead-Distribution Engineer (utilities) 003.167-046
overhead-door-and-auto. mfg.) 806.381-014
overlay operator (carpet & rug; tex. prod., nec) 687.682-014
OVERLAY PLASTICIAN (ship-boat mfg.) 806.684-106
overlock-machine operator (any industry) see SERGING-MACHINE OPERATOR
OVERLOCK-MACHINE OPERATOR, COMPLETE GARMENT (garment) 786.682-178
OVERLOCK SEWING MACHINE OPERATOR (garment) 786.682-194
overloader (paper & pulp, nec) 699.687-010
overseaming machine operator (any industry) see SERGING-MACHINE OPERATOR
overseer (any industry) see SUPERVISOR
overseer (any industry) 899.133-010
overseer (textile) 789.222-010
overseer, kosher kitchen (hotel & rest.) 319.137-026
Over-Short-And-Damaged Clerk (clerical) 241.367-014
overshot operator (tobacco) 522.685-030
overweaver (personal ser.) 782.381-022
oxide-furnace tender (paint & varnish) 558.685-054
OXIDIZED-FINISH PLATER (any industry) 599.685-062
OXIDIZER (jewelry-silver.) 700.684-034
OXYGEN-FURNACE OPERATOR (steel & rel.) 512.382-010
OXYGEN-PLANT OPERATOR (chemical) 552.362-014
Oyster-Bed Laborer (fishing & hunt.) 446.687-014
Oyster-Bed Worker (fishing & hunt.) 446.684-014
oyster culturist (fishing & hunt.) 446.161-014
Oyster Dredge Operator (fishing & hunt.) 446.663-010
Oyster Dredger (fishing & hunt.) 446.684-014
OYSTER FLOATER (fishing & hunt.) 449.687-010
Oyster Grower (fishing & hunt.) 446.161-014
Oyster Picker (fishing & hunt.) 446.684-014
Oyster Preparer (hotel & rest.) 311.674-014
Oyster Shucker (can. & preserv.) 521.687-122
Oyster Tonger (fishing & hunt.) 446.684-014
Oyster Unloader (fishing & hunt.) 446.684-014
Oyster Washer (can. & preserv.) 529.685-214
Oyster Worker (fishing & hunt.) 446.684-014

P

Pace Analyst (profess. & kin.) 012.267-010
pacer (any industry) see STRAW BOSS
PACE SETTER (agriculture) term
package clerk (hotel & rest.) 324.137-010
PACKAGE CRIMPER (textile) 582.686-034
PACKAGE DESIGNER (profess. & kin.) 142.081-018
package drier (textile) 581.685-026
PACKAGE-DYEING-MACHINE OPERATOR (textile) 582.685-102
package dyer (textile) 582.685-102
package-dye-stand loader (textile) 589.687-062
Package-Lift Operator (any industry) 921.683-050
package opener (ordnance) 222.387-022
packager and strapper (any industry) 929.687-058
package reinspector (tobacco) 920.667-010
PACKAGER, HAND (any industry) 920.587-018
PACKAGER, HEAD (saw. & plan.) 667.682-046
PACKAGER, MACHINE (any industry) 920.685-078
Packager, Meat (meat products) 920.587-018
PACKAGE SEALER, MACHINE (any industry) 920.685-074
package winder (tex. prod., nec; textile) 681.685-154
PACKAGING ENGINEER (profess. & kin.) 019.187-010
packaging inspector (pharmaceut.) 920.387-010
Packaging-Line Attendant (any industry) 920.587-018
Packaging-Machine-Supplies Distributor (tobacco) 929.687-030
packaging operator (tobacco) 920.685-050
PACKAGING SUPERVISOR (any industry) 920.132-010
Packaging Supervisor (oils & grease) 529.137-030
PACKAGING TECHNICIAN (paper goods) 739.281-010
packer (agriculture) 920.687-134
PACKER (ordnance) 929.684-010
PACKER (tobacco) 920.687-130
packer (tobacco) 920.687-142
PACKER, AGRICULTURAL PRODUCE (agriculture) 920.687-134
PACKER, DENTURE (protective dev.) 712.684-034
Packer, Dried Beef (meat products) 920.587-018
Packer, Foamed-in-Place (any industry) 920.587-018
PACKER-FUSER (chemical) 737.687-094
Packerhead-Machine Operator (concrete prod.) 575.665-010
PACKER, INSULATION (concrete prod.) 579.685-038
packer operator (paper goods) 649.682-042
PACKER OPERATOR, AUTOMATIC (tobacco) 920.685-082
Packer, Sausage And Wiener (meat products) 920.587-018
packing-and-final-assembly supervisor (protective dev.) 712.137-014
packing-and-shipping clerk (clerical) 222.587-018
packing-and-stamping machine operator (tobacco) 920.685-098
packing checker (clerical) 222.687-030
PACKING-FLOOR WORKER (tobacco) 920.686-026
PACKING-HOUSE SUPERVISOR (agriculture; wholesale tr.) 920.137-010
packing inspector (boot & shoe) 753.687-018
PACKING-LINE WORKER (rubber goods) 753.687-038
PACKING-MACHINE CAN FEEDER (tobacco) 920.686-030
Packing-Machine Feeder (tobacco) 529.686-038
packing-machine inspector (tobacco) 920.665-010
packing-machine inspector (tobacco) 920.667-010
PACKING-MACHINE-PILOT CAN ROUTER (tobacco) 920.685-086
packing-machine relief-operator-and-salvager (tobacco) see RELIEF WORKER
Packing-Machine Tender (any industry) 920.685-078

packing presser (tobacco) 920.686-050
Packing-Room Inspector (boot & shoe) 788.384-010
packing-shed supervisor (agriculture; wholesale tr.) 920.137-010
pack-press operator (elec. equip.) 726.684-010
PACK-ROOM OPERATOR (plastic-synth.) 559.684-010
pack-train driver (any industry) 919.687-022
Pad Assembler (jewelry-silver.) 739.687-138
Pad Attacher (any industry) 795.687-014
PAD CUTTER (plastic prod.) 690.685-302
pad cutter and assembler (leather prod.) 780.381-030
padded-box sewer (furniture) 787.685-022
PADDED-PRODUCTS FINISHER (rubber goods) 752.684-034
Padded-Products Inspector-Trimmer (rubber goods) 759.684-074
padder (textile) 589.687-030
PADDER, CUSHION (furniture) 780.684-078
PADDING GLUER (furniture) 780.687-034
Padding-Machine Operator (tex. prod., nec) 584.685-018
padding-machine operator (textile) 587.685-018
PADDING-MACHINE OPERATOR (textile) 582.685-106
Paddle-Dyeing-Machine Operator (knitting) 582.685-170
PADDOCK JUDGE (amuse. & rec.) 153.167-010
PAD-EXTRACTOR TENDER (knitting) 589.485-010
PAD HAND (leather prod.) 780.381-030
PAD-MACHINE FEEDER (saw. & plan.) 920.686-034
PAD-MACHINE OFFBEARER (saw. & plan.) 569.686-030
pad maker (furniture) 780.685-014
pad maker (optical goods) 739.687-154
pad maker (protective dev.) 689.685-130
PAD MAKER (textile) 589.687-030
pad tufter (furniture) 780.687-050
pad tufter (furniture) 687.684-014
Page (hotel & rest.) 324.677-010
page (hotel & rest.) 352.677-018
PAGE (library) 249.687-014
PAGE (radio-tv broad.) 353.367-022
PAGER (machinery mfg.) 654.687-014
Pagination System Operator (print. & pub.) 979.282-010
PAIL BAILER (tinware) 703.685-010
pail tester (tinware) 703.685-014
paint and table edger (furniture) 740.687-022
PAINT-BRUSH MAKER (fabrication, nec) 733.684-010
Paint Cleaner (any industry) 381.687-014
paint-coating-machine operator (any industry) 599.685-046
paint-coating-machine operator (paper goods; wood prod., nec) 534.682-022
Paint-Crew Supervisor (government ser.) 869.137-010
Paint Dipper (any industry) 599.685-026
PAINTER (button & notion) 740.381-018
PAINTER (construction) 840.381-010
PAINTER (jewelry-silver.) 735.687-018
PAINTER (profess. & kin.) 144.061-010
PAINTER, AIRBRUSH (any industry) 741.684-018
Painter, Aircraft (aircraft mfg.; air trans.) 845.381-014
Painter, Aircraft-Production (aircraft mfg.) 845.381-014
PAINTER AND GRADER, CORK (toy-sport equip.) 732.687-062
PAINTER, ANIMATED CARTOONS (motion picture; radio-tv broad.) 970.681-026
PAINTER APPRENTICE, SHIPYARD (ship-boat mfg.) 840.381-014
PAINTER APPRENTICE, TRANSPORTATION EQUIPMENT (aircraft mfg.; air trans.; automotive ser.) 845.381-010
Painter, Automotive (automotive ser.) 845.381-014
Painter, Barrel (petrol. refin.) 741.687-018
Painter, Battery Brand And Vent Plug (elec. equip.) 740.687-018
Painter, Blackwall Tire (rubber tire) 741.687-018
PAINTER, BOTTOM (boot & shoe) 788.687-098
PAINTER, BRUSH (any industry) 740.684-022
Painter, Chassis (auto. mfg.) 741.687-018
PAINTER, CLOCK AND WATCH HANDS (clock & watch) 715.687-098
Painter, Decorative-Commercial Aircraft (aircraft mfg.) 845.381-014
PAINTER, DEPILATORY (meat products) 525.687-062
Painter, Drum (any industry) 740.684-022
Painter, Electric Motor (any industry) 741.687-018
PAINTER, ELECTROSTATIC (any industry) 599.682-010
PAINTER, EMBOSSED OR IMPRESSED LETTERING (any industry) 740.687-018
painter, hand (any industry) 740.684-022
PAINTER, HAND (any industry) 970.381-022
Painter Helper (construction) 869.687-026
PAINTER HELPER, AUTOMOTIVE (automotive ser.) 845.684-014
PAINTER HELPER, SHIPYARD (ship-boat mfg.) 840.687-010
PAINTER HELPER, SIGN (any industry) 970.664-010
PAINTER HELPER, SPRAY (any industry) 741.687-014
Painter, Insignia (aircraft mfg.; auto. mfg.) 741.684-026
Painter, Interior Finish (construction) 840.381-010
Painter, Maintenance (any industry) 840.381-010
Painter, Mannequin (fabrication, nec) 740.684-022
PAINTER, MIRROR (glass products) 741.684-022
Painter, Ordnance (ordnance) 7[illegible].684-026
PAINTER, PANEL EDGE (furniture) 740.687-022
PAINTER, PLATE (print. & pub.) 970.681-030
painter, railroad car (r.r. trans.) 845.681-010
painter, rough (any industry) 741.687-018
Painter, Rough (construction) 869.664-014
PAINTER, RUG TOUCH-UP (laundry & rel.) 364.381-010
painter, set (motion picture) 840.681-010
PAINTER, SHIPYARD (ship-boat mfg.) 840.381-018
PAINTER, SIGN (any industry) 970.381-026
Painter, Sign, Maintenance (r.r. trans.) 970.381-026
PAINTER, SKI EDGE (toy-sport equip.) 749.687-022
PAINTER, SPRAY I (any industry) 741.684-026
PAINTER, SPRAY II (any industry) 741.687-018
Painter, Spring (furniture; metal prod., nec) 599.685-026
PAINTER, STAGE SETTINGS (motion picture) 840.681-010
Painter, Structural Steel (construction) 869.664-014
PAINTER, TOUCH-UP (any industry) 749.684-038
PAINTER, TRANSPORTATION EQUIPMENT (aircraft mfg.; air trans.; automotive ser.) 845.381-014
PAINTER, TUMBLING BARREL (any industry) 599.685-070
PAINT GRINDER (paint & varnish) term
paint grinder, roller mill (paint & varnish) 555.682-014
paint grinder, stone mill (paint & varnish) 555.682-022
PAINTING-MACHINE OPERATOR (any industry) 599.685-074
painting-machine operator (pen & pencil) 692.685-054
paintings conservator (profess. & kin.) 102.261-014
PAINTINGS RESTORER (profess. & kin.) 102.261-014
PAINT-LINE OPERATOR (toy-sport equip.) 599.685-066
Paint Maker (paint & varnish) 550.685-078
PAINT MIXER, HAND (any industry) 550.684-018
PAINT MIXER, MACHINE (any industry) 550.485-018
PAINT POURER (fabrication, nec) 652.687-022
PAINT-ROLLER ASSEMBLER (fabrication, nec) 739.687-134
PAINT-ROLLER-COVER-MACHINE SETTER (fabrication, nec) 692.682-046
PAINT-ROLLER COVERMAKER (fabrication, nec) 739.684-142
PAINT-ROLLER WINDER (fabrication, nec) 739.685-030
paint sprayer (glass products) 741.684-022
PAINT-SPRAYER OPERATOR, AUTOMATIC (any industry) 599.382-010
PAINT SPRAYER, SANDBLASTER (concrete prod.) 845.381-018
paint-spraying-machine-operator helper (any industry) 741.687-014
PAINT-SPRAY INSPECTOR (any industry) 741.687-010
PAINT SPRAY TENDER (glass products) 574.685-014
Paint Stocker (aircraft mfg.) 222.387-058
PAINT STRIPPER (petrol. refin.) 599.685-130
Paint-Stripping-Machine Operator (construction) 869.664-014
paint tinter (paint & varnish) 550.381-014
PAINT TRIMMER, PIPE BOWLS (fabrication, nec) 749.684-050
PAIRER (knitting) 684.687-010
PAIRER (tex. prod., nec) 789.687-110
pairer-inspector (knitting) 684.687-010
Pairer, Odds (knitting) 684.687-010
Pairer, Substandard (knitting) 684.687-010
PAIRING-MACHINE OPERATOR (nonfer. metal) 691.685-022
Paleobotanist (profess. & kin.) 024.061-042
PALEONTOLOGICAL HELPER (profess. & kin.) 024.364-010
PALEONTOLOGIST (profess. & kin.) 024.061-042
PALLBEARER (personal ser.) 359.687-010
PALLET ASSEMBLER (clock & watch) 715.684-154
PALLETIZER (nonfer. metal) 929.687-054
PALLETIZER OPERATOR I (any industry) 921.682-014
Palletizer Operator II (any industry) 920.685-078
PALLET RECTIFIER (clock & watch) 715.684-158
PALLET-STONE INSERTER (clock & watch) 715.381-082
PALLET-STONE POSITIONER (clock & watch) 715.381-086
Palm-And-Back Forger (glove & mit.) 784.682-010
Palmist (amuse. & rec.) 159.647-018
Pamphlet Distributor (any industry) 230.687-010
Panama-Hat Blocker (hat & cap) 580.684-014
Panama-Hat Flanger (hat & cap) 784.684-026
Panama-Hat-Hydraulic-Press Operator (hat & cap) 580.685-038
Panama-Hat Smearer (hat & cap) 589.687-038
pan devulcanizer (rubber reclaim.) 550.685-022
pan-devulcanizer helper (rubber reclaim.) 553.686-014
panel assembler (furniture) 706.684-082
panel assembler and wirer (elec. equip.; machinery mfg.) 826.361-010
panelboard assembler (elec. equip.) 721.381-014
PANELBOARD OPERATOR (chemical) 950.562-010
PANELBOARD OPERATOR (mine & quarry; smelt. & refin.) 939.362-014
PANELBOARD OPERATOR (textile) 582.362-010
Panel Coverer (fabrication, nec) 780.684-026
panel coverer (furniture) 780.684-086
PANEL COVERER, METAL FURNITURE (furniture) 780.684-082
PANEL CUTTER (furniture) 761.684-050

PANEL EDGE SEALER (millwork-plywood) 769.685-010
Panel Finisher (paint & varnish) 741.684-026
Panel Fitter (fabrication, nec) 739.684-190
panel gluer (woodworking) 569.685-050
PANEL INSTALLER (mfd. bldgs.) 869.684-038
Panel-Instrument Repairer (any industry) 710.281-026
PANEL LAMINATOR (struct. metal) 809.684-042
PANEL-LAY-UP WORKER (woodworking) 761.684-018
PANEL-MACHINE OPERATOR (paper goods) 640.685-038
PANEL-MACHINE SETTER (paper goods) 640.360-010
panel-machine tender (paper goods) 649.685-038
Panel Maker (fabrication, nec) 762.687-034
PANEL MAKER (furniture) 780.684-086
Panel Maker (woodworking) 762.684-050
Panel-Raiser Operator (saw. & plan.) 665.682-034
Panel Sewer (tex. prod., nec) 787.682-066
PAN GREASER, MACHINE (bakery products) 526.685-034
PAN HELPER (chemical) 551.585-018
pan operator (chemical; smelt. & refin.) 559.685-074
pan operator (sugar & conf.) 524.382-010
pan reclaim processor (rubber reclaim.) 550.685-022
pan shaker (oils & grease) 521.685-242
pan shoveler (oils & grease) 521.685-242
pan shover (oils & grease) 521.685-242
PANTOGRAPHER (print. & pub.) 979.382-022
PANTOGRAPH-MACHINE SET-UP OPERATOR (machine shop) 605.382-022
pantograph operator (print. & pub.) 979.381-010
PANTOGRAPH SETTER (print. & pub.) 979.380-010
pantomimist (amuse. & rec.) 159.047-022
Pantry Attendant (r.r. trans.) 311.477-022
PANTRY GOODS MAKER (hotel & rest.) 317.684-014
Pantry Goods Maker He!per (hotel & rest.) 317.687-010
Pantry Steward/Stewardess (hotel & rest.) 318.137-010
PANTRY WORKER (sugar & conf.) 520.487-018
Pants Busheler (retail trade) 785.261-010
pants closer (garment) 786.682-202
PANTS OUTSEAMER, CHAINSTITCH (garment) 786.682-202
Pants Presser (any industry) 363.682-018
Pants Presser, Automatic (laundry & rel.) 363.685-014
Pantyhose-Crotch-Closing-Machine Operator (knitting) 787.682-074
Pan Washer, Hand (sugar & conf.) 529.686-034
PAPERBACK-MACHINE OPERATOR (metal prod., nec) 616.685-046
Paper-Bag Inspector (paper goods) 649.367-010
PAPER-BAG-PRESS OPERATOR (paper goods) 641.686-026
Paper Baler (paper goods) 920.685-010
Paperboard Sheeter (paper products) 699.682-018
paper coater (paper & pulp; paper goods) 534.682-018
PAPER COATER (paper & pulp; paper goods) 534.685-022
PAPER-COATING-MACHINE OPERATOR (photo. appar.) 534.582-010
PAPER-CONE-DRYING-MACHINE OPERATOR (paper goods) 532.686-014
PAPER-CONE GRADER (paper goods) 649.687-014
PAPER-CONE-MACHINE TENDER (paper goods) 641.685-062
Paper-Cone Maker (electron. comp.) 795.687-014
PAPER-CONTROL CLERK (water trans.) 219.367-022
PAPER-CORE-MACHINE OPERATOR (paper goods) 640.685-042
paper-cup-handle-machine operator (paper goods) 649.685-050
PAPER-CUP-MACHINE OPERATOR (paper goods) 649.685-078
paper cutter (print. & pub.) 640.682-018
Paper Cutter (any industry) 690.685-122
PAPER CUTTER (beverage) 640.565-010
Paper Cutter, Hand (any industry) 690.685-122
paper-cutting-machine operator (beverage) 640.565-010
paper finisher (fabrication, nec) 739.684-122
PAPERHANGER (concrete prod.) 574.585-010
PAPERHANGER (construction) 841.381-010
Paperhanger, Pipe (construction) 869.687-026
PAPER INSERTER (glass mfg.) 920.687-138
Paper Latcher (construction) 869.687-026
paper layer (fabrication, nec) 794.684-026
paper-machine operator (paper & pulp; paper goods) 539.362-014
PAPER-NOVELTY MAKER (paper goods) 794.684-022
PAPER-PATTERN FOLDER (paper goods) 794.687-034
PAPER-PATTERN INSPECTOR (paper goods) 649.687-018
PAPER-PROCESSING-MACHINE HELPER (paper & pulp; paper goods) 534.686-010
paper reeler (paper goods) 640.685-046
PAPER-REEL OPERATOR (paper goods) 640.685-046
Paper Sheeter (any industry) 699.682-018
Paper Slitter (elec. equip.; paper & pulp; paper goods) 699.682-030
PAPER SORTER AND COUNTER (paper & pulp) 649.687-010
Paper Spooler (construction) 869.687-026
PAPER STRIPPER (paper goods; print. & pub.) 922.687-078
Paper Tester (paper & pulp) 539.364-010
paper-tube cutter (paper goods) 640.685-034
Paper-Tube Grader (paper goods) 649.687-014
paper-tube sawyer (paper goods) 640.685-034
paper twister (tex. prod., nec) 681.685-134
Paper-Wrapping-Machine Operator (nonfer. metal) 691.682-018
Papeterie-Table Assembler (paper goods) 920.687-026
PAPIER MACHE MOLDER (fabrication, nec) 794.684-026
Parachute-Accessories Attacher (tex. prod., nec) 787.682-058
Parachute-Crown Sewer (tex. prod., nec) 787.682-058
Parachute-Cushion Installer (tex. prod., nec) 787.682-058
PARACHUTE FOLDER (tex. prod., nec) 789.684-034
parachute-harness rigger (tex. prod., nec) 789.687-082
PARACHUTE INSPECTOR (tex. prod., nec) 789.687-114
PARACHUTE-LINE TIER (tex. prod., nec) 789.687-118
PARACHUTE MARKER (tex. prod., nec) 789.587-018
PARACHUTE MENDER (tex. prod., nec) 789.684-038
parachute packer (air trans.) 912.684-010
Parachute-Panel Joiner (tex. prod., nec) 787.682-058
PARACHUTE RIGGER (air trans.) 912.684-010
Parachute Taper (tex. prod., nec) 787.682-010
Parachutist (amuse. & rec.) 159.347-018
Paradichlorobenzene-Machine Operator (chemical) 555.685-034
PARADICHLOROBENZENE TENDER (chemical) 556.685-054
paradi tender (chemical) 556.685-054
PARAFFIN-MACHINE OPERATOR (paper goods) 534.685-026
PARAFFIN-PLANT OPERATOR (petrol. refin.) 541.682-010
PARAFFIN-PLANT-SWEATER OPERATOR (petrol. refin.) 543.682-022
PARALEGAL (profess. & kin.) 119.267-026
PARAMEDIC (medical ser.) 079.364-026
para operator (chemical) 556.685-054
PARASITOLOGIST (profess. & kin.) 041.061-070
parboiler (can. & preserv.) 526.382-026
Parcel-Post Carrier (government ser.) 230.367-010
PARCEL POST CLERK (clerical) 222.387-038
Parcel-Post Order-Clerk (clerical) 222.387-038
parcel post packer (clerical) 222.387-038
parcel post weigher (clerical) 222.387-038
parent trainer (social ser.) 195.227-018
parimutuel cashier (amuse. & rec.) 211.467-018
parimutuel clerk (amuse. & rec.) 211.467-022
PARIMUTUEL-TICKET CASHIER (amuse. & rec.) 211.467-018
PARIMUTUEL-TICKET CHECKER (amuse. & rec.) 219.587-010
PARIMUTUEL-TICKET SELLER (amuse. & rec.) 211.467-022
PARK AIDE (government ser.) 249.367-082
Park Guard (amuse. & rec.) 372.667-034
PARKING ANALYST (government ser.) 199.261-014
parking attendant (automotive ser.) 915.473-010
parking enforcement agent (government ser.) 375.587-010
PARKING ENFORCEMENT OFFICER (government ser.) 375.587-010
PARKING-LOT ATTENDANT (automotive ser.) 915.473-010
parking-lot chauffeur (automotive ser.) 915.473-010
PARKING LOT SIGNALER (automotive ser.) 915.667-014
Parking-Meter-Coin Collector (business ser.) 292.687-010
PARKING-METER SERVICER (government ser.) 710.384-026
parking-station attendant (automotive ser.) 915.473-010
Park-Landscape Architect (profess. & kin.) 001.061-018
PARK NATURALIST (government ser.) 049.127-010
PARK RANGER (government ser.) 169.167-042
PARK SUPERINTENDENT (government ser.) 188.167-062
park technician (government ser.) 249.367-082
park worker (government ser.) 406.687-010
PARLOR CHAPERONE (hotel & rest.) 352.667-014
Parole Officer (profess. & kin.) 195.107-046
parter (plastic-synth.) 556.587-010
Partition Assembler (mfd. bldgs.; vehicles, nec) 762.684-014
PARTITION ASSEMBLER (wood. container) 762.687-054
PARTITION-ASSEMBLY-MACHINE OPERATOR (any industry) 649.582-010
PARTITION-MAKING-MACHINE OPERATOR (paper goods) 649.685-082
Partition Notcher (wood. container) 669.382-010
partition-slotter helper (paper goods) 640.686-014
PART MAKER (jewelry-silver.) 739.687-138
Part Maker (fabrication, nec) 739.384-022
Partridge Farmer (agriculture) 412.161-010
parts assembler (furniture) 763.684-038
parts caster, hand (elec. equip.) 502.684-010
parts-casting-machine operator (elec. equip.) 502.482-014
PARTS CATALOGER (any industry) 229.267-010
PARTS CLERK (clerical) 222.367-042
parts clerk (retail trade; wholesale tr.) 279.357-062
Parts Clerk, Automobile Repair (clerical) 222.367-042
Parts Clerk, Plant Maintenance (clerical) 222.367-042
Parts Counter-Weigher (clock & watch; electron. comp.; office machines) 221.587-030
parts data writer (any industry) 229.267-010
parts inspector (any industry) 609.684-010

parts inspector (furniture) 763.684-070
PARTS LISTER (electron. comp.) 229.367-014
parts mechanic (any industry) 600.280-010
PARTS-ORDER-AND-STOCK CLERK (clerical) 249.367-058
parts picker (any industry) 922.687-058
PARTS REMOVER (clock & watch) 715.687-102
PARTS SALVAGER (any industry) 638.281-026
PASSEMENTERIE WORKER (tex. prod., nec) 782.684-050
passenger agent (any industry) 238.367-026
PASSENGER ATTENDANT (water trans.) 350.677-014
passenger-booking clerk (any industry) 238.367-026
Passenger-Car-Cleaning Supervisor (r.r. trans.) 910.137-014
Passenger-Car Inspector (r.r. trans.) 910.387-014
passenger-car scrubber (railroad equip.) 845.684-010
passenger-car-upholsterer apprentice (automotive ser.) 780.381-014
Passenger-Interline Clerk (air trans.) 214.382-022
PASSENGER REPRESENTATIVE (r.r. trans.) 910.367-026
PASSENGER SERVICE REPRESENTATIVE (air trans.) 359.677-022
PASSENGER SERVICE REPRESENTATIVE I (r.r. trans.) 352.677-010
PASSENGER SERVICE REPRESENTATIVE II (r.r. trans.) 910.677-010
Passenger-Tire Inspector (rubber tire) 750.684-030
Passenger Traffic Agent (air trans.; motor trans.; r.r. trans.; water trans.) 252.257-010
passer (hat & cap) 784.387-010
passer (leather mfg.) 589.387-010
passing boss (mine & quarry) 932.167-010
PASSPORT-APPLICATION EXAMINER (government ser.) 169.267-030
past-due-accounts clerk (clerical) 241.357-010
paste-make-up-artist apprentice (print. & pub.) 979.381-022
paste-mill operator (chemical) 559.685-098
PASTE MIXER (chemical) 550.585-034
Paste Mixer (paint & varnish) 550.685-078
Paste Mixer, Liquid (elec. equip.) 550.585-034
paster (boot & shoe) 788.687-030
PASTER (brick & tile) 773.684-014
paster (fabrication, nec) 692.685-110
paster (steel & rel.) 543.687-014
paster (tex. prod., nec) 789.687-102
PASTER, HAND OR MACHINE (leather prod.) 783.687-026
PASTER, HAT LINING (hat & cap) 692.686-070
paster operator (paper & pulp; paper goods) 534.682-026
PASTER, SCREEN PRINTING (textile) 652.687-026
PASTER SUPERVISOR (brick & tile) 773.131-010
Paste Thinner (paint & varnish) 550.585-038
PASTE-UP ARTIST (print. & pub.) 972.381-030
PASTE-UP COPY-CAMERA OPERATOR APPRENTICE (print. & pub.) 979.381-022
PASTEURIZER (beverage; can. & preserv.) 523.685-110
pasteurizer (food prep., nec) 522.685-070
PASTEURIZER (oils & grease) 523.585-026
Pasteurizer Helper (dairy products) 529.686-026
Pasteurizer Operator (dairy products) 529.382-018
Pasteurizing Supervisor (dairy products) 529.131-014
paste worker (sugar & conf.) 520.687-018
PASTING INSPECTOR (brick & tile) 773.687-010
PASTING-MACHINE OFFBEARER (elec. equip.) 509.686-014
PASTING-MACHINE OPERATOR (elec. equip.) 505.482-010
Pastor (profess. & kin.) 120.107-010
PASTORAL ASSISTANT (nonprofit org.) 129.107-026
PASTRY CHEF (hotel & rest.) 313.131-022
PASTRY CHEF (water trans.) 315.131-014
pastry decorator (bakery products) 524.381-010
pastry helper (hotel & rest.) 313.687-010
Pastry Mixer (bakery products) 520.685-234
patch developer (textile) 582.685-110
PATCH DRILLER (fabrication, nec) 739.687-142
patcher (any industry) 932.664-010
patcher (automotive ser.) 750.684-038
patcher (beverage) 764.687-090
PATCHER (fabrication, nec) 739.687-146
PATCHER (house. appl.) 723.687-010
PATCHER (leather mfg.) 585.687-022
PATCHER (pottery & porc.) 774.684-046
PATCHER (steel & rel.) 861.684-014
patcher (tobacco) 790.684-018
PATCHER (woodworking) 769.684-030
PATCHER, BOWLING BALL (toy-sport equip.) 759.684-046
PATCHER HELPER (steel & rel.) 861.687-014
patcher, plastic boat (ship-boat mfg.) 807.684-014
patcher-wood welder (ordnance) 761.684-042
PATCH FINISHER (textile) 582.684-010
PATCHING-MACHINE OPERATOR (laundry & rel.) 361.685-022
PATCH-MACHINE OPERATOR (paper goods) 641.685-066
PATCH SANDER (stonework) 775.684-054
patch setter (woodworking) 769.684-030
PATCH WASHER (textile) 582.685-110
PATCH WORKER (agriculture) 381.687-030
PATCH WORKER (tobacco) 790.684-018
PATENT AGENT (profess. & kin.) 119.167-014
patent attorney (profess. & kin.) 110.117-026
patent-button machine operator, automatic (garment; hat & cap) 699.685-010
Patent Clerk (government ser.) 119.267-026
patented-hogshead assembler (wood. container) 764.687-070
Patent-Leather Sorter (leather mfg.) 589.387-010
PATHOLOGIST (medical ser.) 070.061-010
patient-insurance clerk (medical ser.) 214.362-022
PATIENT-RESOURCES-AND-REIMBURSEMENT AGENT (government ser.) 195.267-018
patient's librarian (library) 100.167-022
patrol commander (government ser.) 375.167-034
PATROL CONDUCTOR (government ser.) 372.677-010
Patrol Driver (government ser.) 375.263-014
patrol guard (any industry) 372.667-034
PATROL JUDGE (amuse. & rec.) 153.267-014
PATROLLER (knitting) 685.687-022
PATROLLER (r.r. trans.) 376.667-018
patrol officer (government ser.) 375.263-014
patrol sergeant (government ser.) 375.133-010
pattern-and-chain maker (knitting) 685.360-010
PATTERN ASSEMBLER (knitting) 685.685-014
Pattern Carrier (foundry) 519.687-022
PATTERN-CHAIN MAKER SUPERVISOR (textile) 683.132-010
pattern changer and repairer (textile) 683.685-014
PATTERN CHART-WRITER (paper goods) 789.381-014
Pattern Cleaner (foundry) 519.687-022
pattern cutter (any industry) 775.684-022
pattern data operator (aircraft mfg.) 007.362-010
pattern designer (profess. & kin.) 142.061-014
Pattern-Drum Maker (knitting) 685.684-010
PATTERN DUPLICATOR (textile) 683.685-026
PATTERN GATER (foundry) 801.684-014
pattern generator operator (electron. comp.) 976.382-038
PATTERN GRADER-CUTTER (garment) 781.381-022
PATTERN-GRADER SUPERVISOR (wood prod., nec) 693.132-010
PATTERN HAND (woodworking) 652.687-030
pattern hanger (textile) 683.685-014
PATTERN-LEASE INSPECTOR (textile) 683.384-010
patternmaker (brick & tile; concrete prod.) 860.381-034
PATTERNMAKER (engraving) 751.381-010
PATTERNMAKER (fabrication, nec) 772.381-014
PATTERNMAKER (furniture) 709.381-034
PATTERNMAKER (furniture; garment; tex. prod., nec) 781.361-014
PATTERNMAKER (furniture) 661.280-010
PATTERNMAKER (glass products) 779.584-010
PATTERNMAKER (hat & cap) 784.361-010
patternmaker (knitting) 685.381-010
PATTERNMAKER (metal prod., nec) 693.281-014
patternmaker (pottery & porc.) 777.281-014
PATTERNMAKER (stonework) 703.381-010
PATTERNMAKER, ACOUSTICAL TILE (wood prod., nec) 649.685-086
PATTERNMAKER, ALL-AROUND (foundry; plastic prod.) 693.280-014
PATTERNMAKER APPRENTICE, METAL (foundry) 600.280-046
PATTERNMAKER APPRENTICE, WOOD (foundry) 661.281-018
patternmaker, bench (foundry) 693.281-018
PATTERNMAKER, ENVELOPE (paper goods) 649.361-010
patternmaker, hand (foundry) 693.281-018
PATTERNMAKER, METAL (foundry) 600.280-050
PATTERNMAKER, METAL, BENCH (foundry) 693.281-018
PATTERNMAKER, PLASTER (aircraft mfg.) 777.281-018
patternmaker, plaster and plastic (aircraft mfg.) 777.281-018
PATTERNMAKER, PLASTICS (plastic prod.) 754.381-014
patternmaker, pressure cast (foundry) 777.381-034
PATTERNMAKER, SAMPLE (cutlery-hrdwr.) 693.281-022
PATTERNMAKER, WOOD (foundry) 661.281-022
pattern marker (any industry) 781.384-014
PATTERN MARKER I (woodworking) 761.381-022
PATTERN MARKER II (woodworking) 761.684-022
pattern-perforating-machine operator (tex. prod., nec) 781.684-042
pattern puncher (knitting) 685.684-010
pattern-punching-machine operator (any industry) 781.684-058
Pattern-Room Attendant (foundry) 222.387-058
PATTERN RULER (tex. prod., nec) 794.687-038
pattern setter (foundry) 518.380-010
Pattern Setter (foundry) 661.281-022
PATTERN-SHOP SUPERVISOR (foundry) 693.131-010
PATTERN WHEEL MAKER (knitting) 685.684-010
pavement curer (construction) see CONCRETE CURER
pavement-joint-cleaning-machine operator (construction) 853.683-018
Pavilion Cutter (jewelry-silver.) 770.261-010
Paving-Bed Maker (construction) 869.687-026

Paving-Block Cutter I (stonework) 677.685-046
Paving-Block Cutter II (stonework) 771.684-010
paving-form mover (construction) see FORM STRIPPER
paving-machine operator, asphalt or bituminous (construction) 853.663-010
Paving Rammer (construction) 869.687-026
PAWNBROKER (retail trade) 191.157-010
Pay Agent (clerical) 215.362-022
PAYMASTER OF PURSES (amuse. & rec.) 211.367-010
Payroll Auditor (insurance) 160.167-054
PAYROLL CLERK (clerical) 215.382-014
payroll clerk, chief (clerical) 215.137-014
PAY-STATION ATTENDANT (tel. & tel.) 237.367-034
pay-station collector (business ser.; tel. & tel.) 292.687-010
pbx installer (tel. & tel.) 822.381-018
pbx operator (clerical) 235.662-022
pbx repairer (tel. & tel.) 822.281-022
Peach Grower (agriculture) 403.161-010
Peach Harvesting Supervisor (agriculture) 409.131-010
Peach Sorter (agriculture; can. & preserv.; wholesale tr.) 529.687-186
PEANUT BLANCHER (can. & preserv.) 521.685-246
PEANUT-BUTTER MAKER (can. & preserv.; food prep., nec) 529.685-178
Peanut Farmer (agriculture) 404.161-010
Peanut Roaster (can. & preserv.) 529.685-174
Peanut Sorter (can. & preserv.) 521.687-086
pearl dipper (jewelry-silver.) 770.687-010
Pearl Diver (fishing & hunt.) 443.664-010
PEARLER (clock & watch) 715.684-162
pearl-glue drier (chemical) 553.685-118
PEARL-GLUE OPERATOR (chemical) 550.685-094
Pearl Hand (jewelry-silver.) 735.687-034
pearl maker (jewelry-silver.) 770.687-010
pearl peeler (jewelry-silver.) 735.381-014
PEARL RESTORER (jewelry-silver.) 735.381-014
Pearl Stringer (jewelry-silver.) 735.684-010
Pear Packer (agriculture; wholesale tr.) 920.687-134
Pebble-Mill Operator (chemical; paint & varnish) 599.685-058
Pecan Grower (agriculture) 403.161-010
Pecan-Mallow Dipper (sugar & conf.) 524.684-010
pedal assembler (musical inst.) 730.684-090
peddler (amuse. & rec.) 291.457-022
peddler (retail trade) 291.357-010
PEDDLER (retail trade) 291.457-018
PEDIATRIC DENTIST (medical ser.) 072.101-026
PEDIATRICIAN (medical ser.) 070.101-066
Pediatric Nurse Practitioner (medical ser.) 075.264-010
pedigree researcher (clerical) 249.387-018
PEDIGREE TRACER (clerical) 249.387-018
perodontist (medical ser.) 072.101-026
PEELED-POTATO INSPECTOR (food prep., nec) 521.687-094
Peeler (can. & preserv.) 529.686-014
peeler (paper goods) 794.687-050
Peel Oven Tender (bakery products) 526.685-030
PEGGER (boot & shoe) 788.687-102
PEGGER, DOBBY LOOMS (narrow fabrics; textile) 689.687-054
pelletizer (cement) 579.685-034
pelletizer (plastic prod.; plastic-synth.) 556.685-058
pelletizer tender (chemical) 550.685-058
pellet-machine operator (plastic prod.; plastic-synth.) 556.685-058
PELLET-MILL OPERATOR (grain-feed mills) 520.685-178
Pellet Operator (grain-feed mills) 520.682-018
Pellet-Post Inspector (chemical) 737.687-062
Pellet-Preparation Operator (electron. comp.) 590.684-014
PELLET-PRESS OPERATOR (chemical) 555.685-042
PELLET-PRESS OPERATOR (ordnance) 694.685-034
pellet-press operator (smelt. & refin.) 519.685-010
PELOTA MAKER (toy-sport equip.) 732.684-090
PELTER (agriculture) 410.687-018
pelt inspector (meat products) 525.687-042
pelt salter (meat products; oils & grease) 525.687-038
pelt scraper (leather mfg.) 585.681-010
pelt shearer (hat & cap) 585.685-046
PEN-AND-PENCIL REPAIRER (any industry) 733.684-014
Pen Assembler (pen & pencil) 733.687-010
PENCIL INSPECTOR (pen & pencil) 733.687-062
pencil sorter (pen & pencil) 733.687-062
pencil striper (any industry) 741.687-022
Penologist (profess. & kin.) 054.067-014
pen-point smoother (pen & pencil) 733.685-026
pen-ruler operator (paper goods; print. & pub.) 659.682-022
Pensionholder-Information Clerk (insurance) 249.262-010
Pepper Pickler (can. & preserv.) 522.684-010
percher (textile) 689.685-038
perch-machine inspector (textile) 689.685-038
PERCOLATOR OPERATOR (grain-feed mills) 523.682-034
PERCUSSION-INSTRUMENT REPAIRER (any industry) 730.381-042
Percussion-Welding-Machine Operator (welding) 812.682-010
Per Diem Clerk (r.r. trans.) 214.382-022
Perfect-Binder Feeder-Offbearer (print. & pub.) 653.686-026
Perfect-Binder Setter (print. & pub.) 653.360-018
PERFORATING-MACHINE OPERATOR (hat & cap) 686.685-038
PERFORATING-MACHINE OPERATOR (print. & pub.) 649.685-090
perforating-machine operator (wood prod., nec) 569.662-010
Perforator (boot & shoe) 690.685-114
perforator (hat & cap) 686.685-038
PERFORATOR (tex. prod., nec) 781.684-042
perforator operator (hat & cap) 686.685-038
perforator operator (print. & pub.) 203.582-062
PERFORATOR OPERATOR, OIL WELL (petrol. & gas) 931.382-010
PERFORATOR TYPIST (clerical) 203.582-038
Performance-Test Inspector (welding) 819.281-018
performer (amuse. & rec.; motion picture; radio-tv broad.) see ENTERTAINER
Perfume And Toilet Water Maker (pharmaceut.) 550.685-090
perfume compounder (pharmaceut.; soap & rel.) 550.685-046
PERFUMER (chemical) 022.161-018
PERFUSIONIST (medical ser.) 078.362-034
PERIODONTIST (medical ser.) 072.101-030
PERISHABLE-FREIGHT INSPECTOR (r.r. trans.) 910.667-022
PERISHABLE-FRUIT INSPECTOR (wholesale tr.) 910.387-010
PERMANENT-MOLD SUPERVISOR (foundry; nonfer. metal) 514.130-010
Permanent Waver (personal ser.) 332.271-010
Permastone Dresser (construction) 869.664-014
permit agent (any industry) 191.117-046
PERMIT AGENT, GEOPHYSICAL PROSPECTING (petrol. & gas) 191.117-042
personal agent (amuse. & rec.) 191.117-010
PERSONAL ATTENDANT (domestic ser.) 309.674-014
personal attendant (personal ser.) 358.677-014
personal manager (amuse. & rec.) 191.117-010
PERSONAL PROPERTY ASSESSOR (government ser.) 191.367-010
PERSONAL SHOPPER (retail trade) 296.357-010
Personal Trust Officer (financial) 186.117-074
personnel administrator (profess. & kin.) 166.167-018
personnel analyst (profess. & kin.) 166.267-018
PERSONNEL CLERK (clerical) 209.362-026
personnel interviewer (profess. & kin.) 166.267-010
personnel monitor (profess. & kin.) 199.167-010
PERSONNEL QUALITY ASSURANCE AUDITOR (electron. comp.) 168.367-022
personnel records clerk (clerical) 209.362-026
PERSONNEL RECRUITER (profess. & kin.) 166.267-038
PERSONNEL SCHEDULER (clerical) 215.367-014
Persulfate Make-Up Operator (chemical) 559.382-034
Pest-Control Pilot (agriculture) 196.263-010
pest-control worker (agriculture) 408.381-010
pest control worker (business ser.) 389.684-010
pest control worker helper (any industry) 383.684-010
PESTICIDE-CONTROL INSPECTOR (government ser.) 168.267-098
Petal Cutter (button & notion) 781.687-030
Petal Shaper, Hand (button & notion) 739.684-014
PETROLEUM ENGINEER (petrol. & gas) 010.061-018
PETROLEUM INSPECTOR (business ser.) 222.367-046
PETROLEUM-INSPECTOR SUPERVISOR (business ser.) 222.137-026
Petroleum Products District Supervisor (government ser.) 168.167-090
Petroleum Products Inspection Supervisor (government ser.) 188.117-134
PETROLOGIST (profess. & kin.) 024.061-046
Pet Shop Attendant (retail trade) 410.674-010
PEWTER CASTER (jewelry-silver.) 502.384-010
PEWTERER (jewelry-silver.) 700.261-010
PEWTER FINISHER (jewelry-silver.) 700.281-026
PHARMACEUTICAL-COMPOUNDING SUPERVISOR (pharmaceut.) 559.131-010
PHARMACEUTICAL DETAILER (wholesale tr.) 262.157-010
PHARMACEUTICAL OPERATOR (pharmaceut.) 559.382-042
PHARMACIST (medical ser.) 074.161-010
PHARMACIST ASSISTANT (military ser.) 074.381-010
Pharmacist, Hospital (medical ser.) 074.161-010
PHARMACOLOGIST (profess. & kin.) 041.061-074
pharmacy clerk (medical ser.) 074.382-010
Pharmacy Stock Clerk (retail trade) 299.367-014
PHARMACY TECHNICIAN (medical ser.) 074.382-010
Pheasant Farmer (agriculture) 412.161-010
PHERESIS SPECIALIST (medical ser.) 078.261-042
philatelic consultant (retail trade) 299.387-014
PHILATELIST (profess. & kin.) term
PHILOLOGIST (profess. & kin.) 059.067-010
PHLEBOTOMIST (medical ser.) 079.364-022
phone-book deliverer (business ser.) 230.667-014
phone-circuit operator (any industry) 193.262-034
PHONOGRAPH-CARTRIDGE ASSEMBLER (comm. equip.) 720.684-014

PHONOGRAPH-NEEDLE-TIP MAKER (comm. equip.) 770.382-014
PHOSPHORIC-ACID OPERATOR (chemical) 558.582-010
PHOTO CHECKER AND ASSEMBLER (photofinishing) 976.687-014
PHOTOCOMPOSING-MACHINE OPERATOR (print. & pub.) 650.582-018
PHOTOCOMPOSING-PERFORATOR-MACHINE OPERATOR (print. & pub.) 203.582-042
PHOTOCOMPOSITION-KEYBOARD OPERATOR (print. & pub.) 203.582-046
PHOTOCOPYING-MACHINE OPERATOR (clerical) 207.685-014
photocopy operator (any industry) 976.382-022
PHOTOENGRAVER (print. & pub.) 971.381-022
PHOTOENGRAVER APPRENTICE (print. & pub.) 971.381-026
PHOTOENGRAVING FINISHER (print. & pub.) 971.381-030
Photoengraving Helper (print. & pub.) 979.684-026
PHOTOENGRAVING PRINTER (print. & pub.) 971.381-034
PHOTOENGRAVING PROOFER (print. & pub.) 971.381-038
PHOTOENGRAVING-PROOFER APPRENTICE (print. & pub.) 971.381-040
PHOTOFINISHING LABORATORY WORKER (photofinishing) 976.687-018
photo-finish photographer (amuse. & rec.) 143.382-014
Photoflash-Powder Mixer (chemical) 737.687-090
Photogeologist (profess. & kin.) 024.061-018
PHOTOGRAMMETRIC ENGINEER (profess. & kin.) 018.167-026
PHOTOGRAMMETRIST (profess. & kin.) 018.261-026
photograph enlarger (photofinishing) 976.381-018
PHOTOGRAPHER (amuse. & rec.) 143.457-010
PHOTOGRAPHER, AERIAL (profess. & kin.) 143.062-014
PHOTOGRAPHER, APPRENTICE (profess. & kin.) 143.062-018
PHOTOGRAPHER APPRENTICE, LITHOGRAPHIC (print. & pub.) 972.382-010
PHOTOGRAPHER, FINISH (amuse. & rec.) 143.382-014
PHOTOGRAPHER HELPER (any industry) 976.667-010
PHOTOGRAPHER, LITHOGRAPHIC (print. & pub.) 972.382-014
Photographer, Motion Picture (profess. & kin.) 143.062-022
photographer, news (print. & pub.; radio-tv broad.) 143.062-034
PHOTOGRAPHER, PHOTOENGRAVING (electron. comp.; print. & pub.) 971.382-014
PHOTOGRAPHER, SCIENTIFIC (profess. & kin.) 143.062-026
PHOTOGRAPHER, STILL (profess. & kin.) 143.062-030
PHOTOGRAPH FINISHER (photofinishing) 976.487-010
PHOTOGRAPHIC ALIGNER, SEMICONDUCTOR WAFERS (electron. comp.) 976.382-030
Photographic Double (amuse. & rec.) 961.364-010
PHOTOGRAPHIC ENGINEER (profess. & kin.) 019.081-014
PHOTOGRAPHIC-EQUIPMENT-MAINTENANCE TECHNICIAN (photo. appar.) 714.281-026
PHOTOGRAPHIC EQUIPMENT TECHNICIAN (photo. appar.) 714.281-022
photographic-laboratory supervisor (photofinishing) 976.131-010
PHOTOGRAPHIC-MACHINE OPERATOR (clerical) 207.685-018
Photographic-Paper-Coating-Machine Operator (photo. appar.) 534.582-010
PHOTOGRAPHIC-PLATE MAKER (electron. comp.) 714.381-018
photographic-process attendant (electron. comp.) 714.381-018
PHOTOGRAPHIC PROCESSOR, SEMICONDUCTOR WAFERS (electron. comp.) 976.685-038
Photo-Graphics Librarian (library) 100.167-038
photograph printer (photofinishing) 976.682-014
photograph restorer (profess. & kin.) 970.281-010
PHOTOGRAPH RETOUCHER (photofinishing) 970.281-018
PHOTOJOURNALIST (print. & pub.; radio-tv broad.) 143.062-034
PHOTOLETTERING-MACHINE OPERATOR (print. & pub.) 652.585-010
photolithographer (print. & pub.) 972.382-014
photolithographer apprentice (print. & pub.) 972.382-010
photolithographic process worker (print. & pub.) 972.382-014
photolith operator (any industry) 976.361-010
photolith operator (print. & pub.) 971.381-022
PHOTO MASK CLEANER (electron. comp.) 590.684-034
PHOTO MASK INSPECTOR (electron. comp.) 726.384-022
PHOTO MASK MAKER, ELECTRON-BEAM (electron. comp.) 972.382-018
PHOTO MASK PATTERN GENERATOR (electron. comp.) 976.382-038
PHOTO MASK PROCESSOR (electron. comp.) 976.384-014
PHOTO MASK TECHNICIAN, ELECTRON-BEAM (electron. comp.) 972.382-022
photo-optical instrumentation engineer (profess. & kin.) 019.081-014
PHOTO-OPTICS TECHNICIAN (profess. & kin.) 029.280-010
photo printer (electron. comp.) 976.684-030
PHOTORADIO OPERATOR (print. & pub.; tel. & tel.) 193.362-010
PHOTORESIST LAMINATOR, PRINTED CIRCUIT BOARD (electron. comp.) 554.685-034
photoresist printer (electron. comp.) 976.684-030
PHOTOSTAT OPERATOR (any industry) 976.382-022
PHOTOSTAT-OPERATOR HELPER (any industry) 979.687-014
PHOTO TECHNICIAN (electron. comp.) 976.384-010
phototypesetter (print. & pub.) 650.582-022
PHOTOTYPESETTER OPERATOR (print. & pub.) 650.582-022
Phrenologist (amuse. & rec.) 159.647-010
Phthalic-Acid Purifier (chemical) 559.685-010
PHYSIATRIST (medical ser.) 070.101-070
PHYSICAL-INTEGRATION PRACTITIONER (medical ser.) 076.264-010
physical-laboratory assistant (profess. & kin.) 011.261-010
physical medicine specialist (medical ser.) 070.101-070
physical tester (profess. & kin.) 011.361-010
physical-testing supervisor (profess. & kin.) 011.161-010
PHYSICAL THERAPIST (education; medical ser.) 076.121-014
PHYSICAL THERAPIST ASSISTANT (medical ser.) 076.224-010
PHYSICAL THERAPY AIDE (medical ser.) 355.354-010
Physical Therapy Aide, Hydrotherapy (medical ser.) 355.354-010
Physical Therapy Aide, Transport (medical ser.) 355.354-010
physical therapy assistant (medical ser.) 076.224-010
physical therapy technician (medical ser.) 076.224-010
PHYSICIAN ASSISTANT (medical ser.) 079.364-018
physician, general practice (medical ser.) 070.101-022
PHYSICIAN, HEAD (medical ser.) 070.101-074
physician, industrial (medical ser.) 070.101-078
PHYSICIAN, OCCUPATIONAL (medical ser.) 070.101-078
PHYSICIAN, RESEARCH (medical ser.) term
PHYSICIST (profess. & kin.) 023.061-014
Physicist, Acoustics (profess. & kin.) 023.061-014
Physicist, Astrophysics (profess. & kin.) 023.061-014
Physicist, Atomic, Electronic And Molecular (profess. & kin.) 023.061-014
Physicist, Cryogenics (profess. & kin.) 023.061-014
Physicist, Electricity And Magnetism (profess. & kin.) 023.061-014
Physicist, Fluids (profess. & kin.) 023.061-014
Physicist, Light And Optics (profess. & kin.) 023.061-014
Physicist, Nuclear (profess. & kin.) 023.061-014
Physicist, Plasma (profess. & kin.) 023.061-014
Physicist, Solid Earth (profess. & kin.) 023.061-014
Physicist, Solid State (profess. & kin.) 023.061-014
PHYSICIST, THEORETICAL (profess. & kin.) 023.067-010
Physicist, Thermodynamics (profess. & kin.) 023.061-014
Physiognomist (amuse. & rec.) 159.647-010
PHYSIOLOGIST (profess. & kin.) 041.061-078
physiotherapist (education; medical ser.) 076.121-014
Pianist (amuse. & rec.) 152.041-010
Piano-And-Organ Refinisher (woodworking) 763.381-010
Piano Bench Assembler (musical inst.) 763.684-058
PIANO CASE AND BENCH ASSEMBLER (musical inst.) 763.684-058
Piano-Case Maker (musical inst.) 660.280-010
piano-machine operator (narrow fabrics; textile) 683.582-010
PIANO REGULATOR-INSPECTOR (musical inst.) 730.681-010
Piano-Sounding-Board Matcher (musical inst.) 761.684-018
PIANO STRINGER (musical inst.) 730.684-054
PIANO TECHNICIAN (any industry) 730.281-038
PIANO TUNER (any industry) 730.361-010
PICKED-EDGE SEWING-MACHINE OPERATOR (garment) 786.682-206
picker (nonfer. metal) 509.686-018
picker (nonmet. min.) 739.687-102
picker (optical goods) 573.686-014
PICKER (saw. & plan.) 669.687-022
picker (textile) 680.685-074
PICKER (tobacco) 521.687-098
picker-box operator (oils & grease) 520.565-010
Picker Feeder (nonmet. min.) 570.686-018
Picker Feeder (tex. prod., nec; textile) 680.686-018
PICKER-MACHINE OPERATOR (furniture) 680.685-078
PICKER TENDER (textile) 680.685-074
Picket, Labor Union (nonprofit org.) 299.687-014
picking-belt operator (can. & preserv.) 521.687-086
PICKING-MACHINE OPERATOR (any industry) 680.685-082
Picking-Machine-Operator Helper (tex. prod., nec) 586.686-022
PICKING-TABLE WORKER (sugar & conf.) 521.687-102
pickle maker (can. & preserv.) 522.684-010
pickle processor (can. & preserv.) 522.684-010
PICKLE PUMPER (meat products) 522.685-086
pickler (any industry) 503.685-030
PICKLER (can. & preserv.) 522.684-010
Pickler (leather mfg.) 582.482-014
PICKLER (meat products) 522.687-034
PICKLER, CONTINUOUS PICKLING LINE (any industry) 503.362-010
PICKLER HELPER, CONTINUOUS PICKLING LINE (any industry) 503.686-010
pickler operator (any industry) 503.362-010
pickle-water-pump operator (meat products) 522.685-086
Pickling-Drum Operator (meat products) 582.685-126
pickling grader (meat products) 529.687-106
pickling operator (any industry) 503.685-030
pickling-solution maker (can. & preserv.) 522.685-018
PICKLING SOLUTION MAKER (meat products) 522.485-010
pickling-tank operator (any industry) 503.685-030
PICK-PULLING-MACHINE OPERATOR (textile) 689.685-094
PICK REMOVER (textile) 689.687-058
Pick-Up Driver (motor trans.) 906.683-022

PICK-UP OPERATOR (textile) 689.685-098
PICTURE FRAMER (retail trade; wood prod., nec) 739 .1-146
Pie Bottomer (bakery products) 526.685-038
piece-dyeing-machine tender (textile) 582.665-014
piece-dye worker (textile) 582.665-014
Piece-Goods Packer (textile) 920.587-018
Piece Hand (textile) 681.685-154
piece marker, small arms (ordnance) 652.582-010
piece-meat trimmer (meat products) 521.687-106
Piece Presser (garment) 363.684-018
piecer-up (garment; glove & mit.) 781.687-010
piece trimmer (meat products) 521.687-106
pie chef (hotel & rest.) 313.361-038
Pie-Crimping-Machine Operator (bakery products) 526.685-038
Pie-Crust Mixer (bakery products) 520.685-234
Pie-Dough Roller (bakery products) 526.685-038
Pie Filler (bakery products) 526.685-038
Pie-Filling Mixer (bakery products) 520.685-114
Pie Icer (bakery products) 524.684-022
Pie Icer, Machine (bakery products) 524.685-034
PIE MAKER (hotel & rest.) 313.361-038
PIE MAKER, MACHINE (bakery products) 526.685-038
piercer operator (nonfer. metal) 613.482-014
PIERCING-MACHINE OPERATOR (nonfer. metal) 613.482-014
PIERCING-MILL OPERATOR (steel & rel.) 613.685-018
pier hand (water trans.) 911.364-014
pier hand helper (water trans.) 911.687-010
Pie Topper (bakery products) 526.685-038
PIG-MACHINE OPERATOR (steel & rel.) 514.362-010
PIG-MACHINE-OPERATOR HELPER (steel & rel.) 514.667-014
Pigment And Lacquer Mixer (chemical) 550.685-106
pigment blender (chemical) 550.685-014
PIGMENT FURNACE TENDER (chemical) 553.685-086
Pigment Mixer (paint & varnish) 550.685-078
Pigment Presser (chemical) 551.685-082
PIGMENT PROCESSOR (chemical; paint & varnish) 559.685-130
PIGMENT PUMPER (rubber reclaim.) 914.665-010
pigment supplier (rubber reclaim.) 914.665-010
pigment weigher (fabrication, nec) 590.487-010
Pigskin Trimmer (meat products) 525.687-046
PILE DRIVER (construction) term
PILE-DRIVER OPERATOR (construction) 859.682-018
Pile-Driver Operator, Barge Mounted (construction) 859.682-018
Pile-Driving Setter (construction) 869.664-014
Pile-Fabric Knitter (knitting) 685.665-014
pile operator (profess. & kin.) 015.362-014
pill coater (pharmaceut.) 554.382-010
PILLING-MACHINE OPERATOR (plastic prod.; plastic-synth.) 556.685-058
Pillow-And-Cushion-Department Supervisor (tex. prod., nec) 789.132-010
Pillowcase Cleaner (tex. prod., nec) 689.687-050
pillowcase cutter (tex. prod., nec) 686.685-014
Pillowcase Folder (tex. prod., nec) 589.687-014
Pillowcase Sewer (tex. prod., nec) 787.682-026
Pillowcase Sewer, Automatic (tex. prod., nec) 787.685-014
PILLOWCASE TURNER (tex. prod., nec) 583.685-078
pillow cleaner (laundry & rel.) 362.685-010
PILLOW CLEANER (tex. prod., nec) 789.687-122
Pillow Filler (tex. prod., nec) 780.684-066
pilot (air trans.) 196.263-014
pilot (textile) 582.685-130
Pilot-Boat Deckhand (water trans.) 911.687-022
pilot-can router (tobacco) 920.685-086
PILOT-CONTROL OPERATOR (chemical; plastic-synth.) 559.382-046
PILOT-CONTROL-OPERATOR HELPER (chemical; plastic-synth.) 559.664-014
PILOT, HIGHWAY PATROL (government ser.) 375.163-014
pilot-plant-operator helper (chemical; plastic-synth.) 559.664-014
Pilot-Plant Research-Technician (petrol. refin.) 008.261-010
pilot-plant technician (chemical; plastic-synth.) 559.382-046
PILOT, SHIP (water trans.) 197.133-026
Pilot, Steam Yacht (water trans.) 197.133-026
PILOT, SUBMERSIBLE (any industry) 029.383-010
Pilot, Tank Vessel (water trans.) 197.133-026
Pin Attacher (button & notion) 692.685-206
Pinball-Machine Repairer (business ser.) 639.281-014
Pin Cleaner (textile) 699.687-014
pin-drafting-machine operator (textile) 680.685-058
Pin-Feather-Machine Operator (tex. prod., nec) 589.685-054
PIN-GAME-MACHINE INSPECTOR (svc. ind. mach.) 729.381-014
Pin Inserter (any industry) 920.685-034
Pin Inserter (clock & watch) 715.684-182
PIN INSERTER, REGULATOR (clock & watch) 715.684-166
Pinion Inspector (clock & watch) 715.384-022
PINION POLISHER (clock & watch) 715.685-042
Pinion Staker (clock & watch) 715.684-182
pinker (boot & shoe; garment) 686.685-042
PINKING-MACHINE OPERATOR (boot & shoe; garment) 686.685-042
PINKING-MACHINE OPERATOR (button & notion) 692.685-130
pin-machine operator (furniture) 763.684-046
pin-machine tender (textile) 680.685-058
pinmaker (button & notion) 609.482-014
PIN MAKER (pottery & porc.) 575.686-018
pinner (cutlery-hrdwr.) 701.687-010
PINNER (garment; tex. prod., nec) 782.687-026
pinner (medical ser.) 712.687-014
Pinner (metal prod., nec) 706.684-090
PINNER (tex. prod., nec) 782.684-054
pinner, jewel bearing (clock & watch) 770.682-010
PINNER, PRINTED CIRCUIT BOARDS (electron. comp.) 699.685-046
PIN-OR-CLIP FASTENER (jewelry-silver.) 735.687-022
Pin Puller (smelt. & refin.) 630.684-010
PINSETTER ADJUSTER, AUTOMATIC (toy-sport equip.) 829.381-010
PINSETTER MECHANIC, AUTOMATIC (any industry) 638.261-022
PINSETTER-MECHANIC HELPER (any industry) 829.667-014
Pin Sorter And Bagger (laundry & rel.) 361.687-018
pin-tenter operator (textile) 580.685-066
Pin-Ticket-Machine Operator (any industry) 652.685-098
Pin Worker (laundry & rel.) 361.687-018
PIPE-AND-TANK FABRICATOR (wood. container) 669.380-018
Pipe-And-Test Supervisor (construction) 899.131-010
Pipe-Bending-Machine Operator (construction) 617.482-010
PIPE BUFFER (construction) 705.684-054
Pipe Caulker (construction) 869.664-014
PIPE CHANGER (mine & quarry) 891.564-010
PIPE-CLEANING-AND-PRIMING-MACHINE OPERATOR (construction) 862.662-010
Pipe-Cleaning-Machine Operator (construction) 862.662-010
Pipe Coater (steel & rel.) 740.684-022
PIPE COVERER AND INSULATOR (ship-boat mfg.) 863.381-014
PIPE CUTTER (construction) term
PIPE CUTTER (mfd. bldgs.) 862.682-010
Piped-Buttonhole-Machine Operator (garment) 786.685-022
PIPED-POCKET-MACHINE OPERATOR (garment) 786.685-022
PIPE FINISHER (brick & tile) 779.684-042
PIPE FITTER (construction) 862.281-022
PIPE FITTER (ship-boat mfg.) 862.261-010
pipe fitter (utilities) 862.361-014
Pipe Fitter, Ammonia (construction) 862.281-022
PIPE-FITTER APPRENTICE (construction) 862.281-026
PIPE FITTER, DIESEL ENGINE I (engine-turbine) 862.361-018
PIPE FITTER, DIESEL ENGINE II (engine-turbine) 862.381-022
Pipe Fitter, Fire-Sprinkler Systems (construction) 862.281-022
Pipe Fitter, Gas Pipe (construction) 862.281-022
PIPE-FITTER HELPER (construction) 862.684-022
PIPE-FITTER HELPER (ship-boat mfg.) 862.684-018
Pipe Fitter, Maintenance (any industry) 862.281-022
pipe fitter, marine (ship-boat mfg.) 862.261-010
Pipe Fitter, Plastic Pipe (construction) 862.281-022
Pipe Fitter, Soft Copper (construction) 862.281-022
Pipe Fitter, Street Service (utilities) 862.361-014
PIPE-FITTER SUPERVISOR (construction) 862.131-010
PIPE-FITTER SUPERVISOR (ship-boat mfg.) 862.131-014
Pipe-Fitter Supervisor, Maintenance (any industry) 862.131-010
Pipe Fitter, Welding (construction) 862.281-022
Pipe-Fittings Molder (brick & tile) 575.684-042
pipe inspector (construction) 862.687-010
pipe inspector (petrol. & gas) 930.267-010
PIPE INSTALLER (construction; utilities) 869.381-018
pipe jeeper (construction) 862.687-014
Pipe Layer (construction) 869.664-014
Pipe-Layer Helper (construction) 869.687-026
Pipe-Laying Supervisor (construction) 899.131-010
PIPE-LINE-CONSTRUCTION INSPECTOR (construction) 869.367-018
pipe-line gauger (petrol. & gas; petrol. refin.; pipe lines) 914.384-010
Pipe-Line Inspector (construction) 182.267-010
pipe-line maintenance supervisor (pipe lines) 869.134-018
PIPELINER (pipe lines) 899.684-026
Pipe-Line Superintendent, District (pipe lines) 184.167-198
Pipe-Line Superintendent, Division (pipe lines) 184.167-198
PIPE-LINE SUPERVISOR (construction) term
Pipe-Line Worker (construction) 869.664-014
Pipe-Machine Operator (construction) 869.687-026
PIPE-ORGAN BUILDER (musical inst.) 730.281-042
PIPE-ORGAN INSTALLER (musical inst.) 730.381-046
PIPE-ORGAN TUNER AND REPAIRER (any industry) 730.361-014
pipe processor (steel & rel.) 619.662-014
pipe puller (petrol. & gas) 930.382-030
piper (engine-turbine) 862.361-018
PIPE RACKER (fabrication, nec) 749.687-034
Pipe Racker (petrol. & gas) 930.684-026

PIPE-SMOKER-MACHINE OPERATOR (fabrication, nec) 739.687-150
pipe smoking machine operator (fabrication, nec) 563.686-018
pipe steamer (garment) 789.687-166
PIPE STEM ALIGNER (fabrication, nec) 739.687-210
PIPE STEM REPAIRER (fabrication, nec) 739.684-186
PIPE STRIPPER (concrete prod.) 575.687-026
PIPE TESTER (petrol. & gas) 930.382-014
PIPE THREADER, HAND (construction) term
Pipe-Threading-Machine Operator (machine shop) 604.682-014
pipe-thread inspector (petrol. & gas) 862.381-038
Pipe Washer (dairy products) 599.684-010
PIPE-WRAPPING-MACHINE OPERATOR (construction; pipe lines) 862.682-014
Piping Blocker (boot & shoe) 699.685-014
Piping-Cutting-Machine Operator (garment) 686.685-066
Pirn Winder (textile) 681.685-154
Piston-Cup Inspector (rubber goods) 759.684-074
PISTON MAKER (musical inst.) 730.681-014
pit boss (amuse. & rec.) 153.167-014
pit car repairer (mine & quarry) 622.381-030
PITCH FILLER (any industry) 619.687-018
Pitch Flaker (chemical) 559.685-074
Pitching Coach (amuse. & rec.) 153.227-010
PITCH WORKER (optical goods) 551.666-010
pit-furnace melter (foundry; steel & rel.) 512.362-018
pit inspector (railroad equip.) 622.281-010
PIT STEWARD (amuse. & rec.) 153.167-014
PIT SUPERVISOR (mine & quarry) 939.137-014
pit tanner (leather mfg.) 582.482-018
Pit-Worker, Power Shovel (any industry) 921.667-022
pivot-end polisher (clock & watch) 715.685-026
Pivot Polisher (clock & watch) 715.685-042
placement interviewer (profess. & kin.) 166.267-010
PLACER (insurance) 239.267-010
Placer Miner, Hydraulic (mine & quarry) 939.684-014
Placing Judge (amuse. & rec.) 153.267-014
plain-clothes officer (government ser.) 375.267-010
plain-goods hemmer (any industry) 787.682-026
plaiter (textile) 589.685-074
PLAN CHECKER (government ser.) 168.267-102
Planer-Chain Offbearer (saw. & plan.) 669.686-018
planer feeder (saw. & plan.) 665.686-014
Planer Feeder (woodworking) 669.686-030
Planer-Mill Grader (saw. & plan.) 669.687-030
Planer Offbearer (woodworking) 669.686-034
PLANER OPERATOR (elec. equip.) 675.682-014
planer operator (saw. & plan.) 665.482-018
PLANER OPERATOR (woodworking) 665.682-022
Planer Setter (woodworking) 669.280-010
PLANER SET-UP OPERATOR, TOOL (machine shop) 605.282-014
PLANER, STONE (stonework) 675.682-018
Planer-Type Milling-Machine Operator, Numerical Control (machine shop) 605.380-010
PLANER-TYPE-MILLING-MACHINE SET-UP OPERATOR (machine shop) 605.282-018
Planetarium Sky Show Technician (museums) 739.261-010
PLANETARIUM TECHNICIAN (museums) 962.261-010
PLANIMETER OPERATOR (government ser.) 219.387-022
PLANING-MACHINE OPERATOR (clock & watch) 605.685-034
planing-machine operator (stonework) 675.682-018
planing machine operator (woodworking) 665.682-022
PLANISHER (jewelry-silver.) 700.687-054
planishing-hammer operator (aircraft mfg.) 617.382-014
PLANISHING-PRESS OPERATOR (plastic-synth.) 690.682-058
planner, chief (profess. & kin.) 012.167-050
PLANNER, PROGRAM SERVICES (government ser.) 188.167-110
planning assistant (profess. & kin.) 199.364-010
planning-division superintendent (utilities) 184.167-210
planning engineer (profess. & kin.) 012.167-018
planning engineer (utilities) 003.167-026
PLANNING ENGINEER, CENTRAL OFFICE FACILITIES (tel. & tel.) 003.061-050
planning supervisor (profess. & kin.) 012.167-050
PLANT BREEDER (profess. & kin.) 041.061-082
PLANT-CARE WORKER (agriculture) 408.364-010
plant chief (tel. & tel.) 184.117-082
plant clerk (clerical) 221.382-018
Plant Cytologist (profess. & kin.) 041.061-042
Plant Ecologist (profess. & kin.) 041.061-038
PLANT ENGINEER (profess. & kin.) 007.167-014
PLANTER (agriculture) term
plant machinist (utilities) 631.261-010
plant-maintenance worker (any industry) 899.261-014
PLANT OPERATOR (concrete prod.; construction) 570.682-014
PLANT OPERATOR, CHANNEL PROCESS (chemical) 542.685-010
PLANT OPERATOR, FURNACE PROCESS (chemical) 559.362-026
plant-operator helper (chemical) 542.685-018
Plant Packer (agriculture) 920.687-134
PLANT PATHOLOGIST (profess. & kin.) 041.061-086
Plant Physiologist (profess. & kin.) 041.061-078
PLANT PROPAGATOR (agriculture) 405.361-010
Plant-Protection Supervisor (any industry) 372.167-014
plant superintendent (pipe lines) 914.132-010
plant superintendent, industrial organization (any industry) 189.117-022
plant supervisor (any industry) 183.117-014
PLANT SUPERVISOR (grain-feed mills) 529.132-014
plant supervisor (petrol. refin.) 542.130-010
Plant Taxonomist (profess. & kin.) 041.061-038
plant tender (agriculture) 408.364-010
plant tour guide (any industry) 353.367-018
Plant Wrapper (agriculture) 920.687-134
Plaque Maker (nonmet. min.) 779.684-046
Plasma-Cutting-Machine Operator (welding) 816.482-010
PLASMA ETCHER, PRINTED CIRCUIT BOARDS (electron. comp.) 590.685-094
Plaster-Block Layer (construction) 861.381-018
PLASTER-DIE MAKER (pottery & porc.) 774.684-026
PLASTERER (construction) 842.361-018
PLASTERER (furniture) 749.687-026
PLASTERER APPRENTICE (construction) 842.361-022
Plasterer, Finish (construction) 842.361-018
Plasterer Helper (construction) 869.687-026
Plasterer, Maintenance (construction) 842.361-018
PLASTERER, MOLDING (concrete prod.; construction) 842.361-026
plasterer, ornamental (concrete prod.; construction) 842.361-026
Plasterer, Rough (construction) 842.361-018
plasterer, spot (furniture) 749.687-026
Plasterer, Spray Gun (construction) 842.361-018
plasterer, stucco (construction) 842.381-014
PLASTER-MACHINE TENDER (construction) 842.665-010
PLASTER MAKER (nonmet. min.) 779.684-046
PLASTER MIXER, MACHINE (concrete prod.) 570.382-014
PLASTER MOLDER I (foundry) 777.381-034
PLASTER MOLDER II (foundry) 518.484-010
Plaster-of-Paris Molder (elec. equip.) 729.684-030
PLASTER-PATTERN CASTER (machine tools) 777.381-038
plaster whittler (hat & cap) 784.361-010
plastic ball buffer (toy-sport equip.) 690.685-038
PLASTIC-CARD GRADER, CARDROOM (amuse. & rec.) 343.687-010
PLASTIC-DESIGN APPLIER (boot & shoe) 690.686-046
PLASTIC DUPLICATOR (machine tools) 754.684-038
Plastic-Extruding-Machine Operator (nonfer. metal) 691.382-010
plastic-eye technician (optical goods) 713.261-014
PLASTIC-FIXTURE BUILDER (machine shop) 601.381-030
Plastic-Frame Inserter (optical goods) 713.681-010
plastic insert molder (boot & shoe) 788.687-094
plastic installer (foundry) 849.484-010
PLASTIC-JOINT MAKER (brick & tile) 590.687-014
plastic-machine folder (boot & shoe) 690.685-070
PLASTIC MOLDER (fabrication, nec) 779.684-050
Plastic Outfitter (ship-boat mfg.) 806.684-146
Plastic-Panel Installer (construction; retail trade) 863.684-014
Plastic Parts Fabricator (aircraft mfg.) 754.381-018
Plastic Parts Fabricator-Trimmer (aircraft mfg.) 754.684-042
plastic-press molder (plastic prod.) 556.685-022
PLASTIC ROLLER (plastic prod.) 690.685-498
plastics bench mechanic (aircraft mfg.; plastic prod.) 754.381-018
PLASTICS FABRICATOR (aircraft mfg.; plastic prod.) 754.381-018
plastics fabricator and assembler (aircraft mfg.; plastic prod.) 754.381-018
Plastic-Sheeting Cutter (plastic prod.) 699.682-026
Plastic-Sign Fabricator (plastic prod.) 754.381-018
Plastics Plater (plastic prod.) 500.380-010
PLASTICS REPAIRER (plastic prod.) 754.684-046
Plastics Rework And Repair Mechanic (aircraft mfg.) 754.381-018
PLASTICS-SEASONER OPERATOR (plastic-synth.) 553.665-042
plastics-sheet-finishing-press operator (plastic-synth.) 690.682-058
PLASTICS-SPREADING-MACHINE OPERATOR (plastic-synth.) 554.382-014
Plastic Surgeon (medical ser.) 070.101-094
PLASTICS WORKER (aircraft mfg.) 754.684-042
Plastic-Tile Layer (construction; retail trade) 861.381-034
PLASTIC TOOL MAKER (machine shop) 601.381-026
PLASTIC-TOP ASSEMBLER (furniture) 763.684-062
Plastic-Top Installer (furniture) 763.684-050
Plastic-Tubing-Insulation Supervisor (nonfer. metal) 691.130-010
plastic-welding-machine operator (any industry) 690.685-154
Plate-And-Frame-Filter Operator (any industry) 551.685-082
plate-and-weld inspector (any industry) 619.261-010
PLATE ASSEMBLER, SMALL BATTERY (elec. equip.) 727.684-026
Plate Boner (meat products) 525.684-010
plate colorer (print. & pub.) 970.681-030

PLATE CONDITIONER (steel & rel.) 819.664-010
Plate-Drying-Machine Tender (elec. equip.) 590.685-026
plate embosser (clerical) 208.582-014
plate embosser (clerical) 208.682-010
plate filler (ordnance) 737.685-014
plate fin assembler (svc. ind. mach.) 706.684-010
PLATE FINISHER (print. & pub.) 659.360-010
plate finisher, photoengraving (print. & pub.) 971.381-030
PLATE FORMER (elec. equip.) 500.684-018
PLATE GAUGER (print. & pub.) 979.687-018
Plate-Glass Installer (construction) 865.381-010
PLATE GRAINER (print. & pub.) 972.682-010
PLATE-GRAINER APPRENTICE (print. & pub.) 972.682-014
plate grouper, machine (elec. equip.) 692.382-014
Plate Inspector (clock & watch) 715.384-022
PLATE INSPECTOR (print. & pub.) 972.687-010
Plate Inspector (steel & rel.) 619.381-010
platemaker (print. & pub.) 972.381-010
PLATEMAKER, SEMICONDUCTOR PACKAGES (electron. comp.) 972.384-014
Plate Maker, Zinc (print. & pub.) 971.381-022
PLATE MOLDER (pen & pencil; print. & pub.) 556.582-010
plate mounter (paper goods) 659.684-010
PLATEN BUILDER-UP (print. & pub.) 651.384-010
platen-drier operator (millwork-plywood) 563.685-026
PLATEN GRINDER (office machines) 690.385-010
platen operator, metal bond (aircraft mfg.) 553.382-026
PLATEN-PRESS FEEDER (print. & pub.) 651.685-022
PLATEN-PRESS OPERATOR (paper goods) 649.682-026
PLATEN-PRESS OPERATOR (print. & pub.) 651.362-018
PLATEN-PRESS-OPERATOR APPRENTICE (print. & pub.) 651.362-022
plate preparer (print. & pub.) 972.682-010
plate printer (print. & pub.) 651.382-030
Plate-Put-in Worker (elec. equip.) 727.687-058
plater (agriculture) 418.381-010
PLATER (electroplating) 500.380-010
PLATER (inst. & app.) 500.684-034
plater (paper & pulp) 649.686-026
PLATER APPRENTICE (electroplating) 500.380-014
PLATER, BARREL (electroplating) 500.362-014
plater helper (any industry) 599.685-062
plater helper (electroplating) 500.686-010
PLATER, HOT DIP (galvanizing) 501.685-010
plater, machine (electroplating) 500.362-014
Plate Roller (any industry) 613.662-022
PLATER, PRINTED CIRCUIT BOARD PANELS (electron. comp.) 500.684-026
plater production (electroplating) 500.685-014
PLATER, SEMICONDUCTOR WAFERS AND COMPONENTS (electron. comp.) 500.684-030
plater supervisor (electroplating) 500.131-010
PLATE SETTER, FLEXOGRAPHIC PRESS (print. & pub.) 659.381-010
plate-shear operator (any industry) 615.682-018
plate-shop helper (any industry) 619.686-022
plate-shop inspector (any industry) 619.261-010
PLATE SLITTER-AND-INSPECTOR (elec. equip.) 727.685-010
PLATE STACKER, HAND (elec. equip.) 729.687-026
plate stacker, machine (any industry) 692.682-054
PLATE STACKER, MACHINE (elec. equip.) 692.382-014
PLATE-TAKE-OUT WORKER (elec. equip.) 500.687-010
Plate Washer (elec. equip.) 727.687-058
plate-worker helper (any industry) 801.687-014
PLATE WORKER (paper & pulp) 535.685-010
plate worker (plastic prod.) 690.682-062
PLATFORM ATTENDANT (food prep., nec) 299.377-010
platform beater (boot & shoe) 690.685-470
Platform Cementer (boot & shoe) 690.686-018
platform inspector (can. & preserv.; wholesale tr.) 529.387-018
Platform Loader (any industry) 929.687-030
Platform Presser (boot & shoe) 690.685-074
Platform Stapler (boot & shoe) 690.685-162
Platform Stitcher (boot & shoe) 690.682-078
Platform Supervisor (any industry) 922.137-018
platform worker (glass mfg.) 575.687-010
platform worker (wood prod., nec) 561.665-010
plating-department helper (electroplating) 500.686-010
PLATING EQUIPMENT TENDER (electroplating) 500.685-014
plating inspector (amuse. & rec.) 153.287-010
PLATING-MACHINE OPERATOR (paper & pulp) 649.686-026
plating-press operator (leather mfg.; leather prod.) 690.682-030
Plating Stripper (electroplating) 500.380-010
Plating-Tank Cleaner (electron. comp.) 891.687-022
plating-tank-operator apprentice (electroplating) 500.380-014
plating-tank operator (electroplating) 500.380-010
Platinumsmith (jewelry-silver.) 700.281-010
playback operator (petrol. & gas) 194.382-010
Player-Manager (amuse. & rec.) 153.117-010
PLAYER-PIANO TECHNICIAN (musical inst.) 730.381-050
PLAYGROUND-EQUIPMENT ERECTOR (retail trade) 801.684-018
PLAYROOM ATTENDANT (any industry) 359.677-026
PLAYWRIGHT (profess. & kin.) 131.067-038
pleater (any industry) 787.682-082
PLEATER (tex. prod., nec) 787.685-026
PLEATER (textile) 589.685-074
PLEATER, HAND (tex. prod., nec) 583.684-010
PLEATING-MACHINE OPERATOR (any industry) 583.685-082
pleating-machine operator (knitting; textile) 589.685-086
PLEAT PATTERNMAKER (garment; tex. prod., nec) 781.484-010
Pleat Presser (laundry & rel.) 363.681-010
PLEAT TAPER (tex. prod., nec) 789.487-010
plier worker (jewelry-silver.) 735.687-014
Plisse-Machine Operator (textile) 652.382-010
Plisse-Machine Operator Helper (textile) 652.686-010
PLODDER OPERATOR (soap & rel.) 556.682-018
plodding-machine operator (soap & rel.) 556.682-018
plotter (motion picture) 962.361-010
PLOW-AND-BORING-MACHINE TENDER (saw. & plan.) 665.685-018
plow holder (construction) 850.663-014
plow shaker (construction) 850.663-014
plug-and-mold finisher (concrete prod.; ship-boat mfg.) 806.684-086
Plug Assembler (elec. equip.) 729.687-010
Plug Builder (ship-boat mfg.) 661.281-010
PLUG CUTTER (pen & pencil) 690.685-306
plug-cutter (tobacco) 529.685-182
plug-cutting-and-wrapping-machine operator (tobacco) 529.685-182
PLUG-CUTTING-MACHINE OPERATOR (tobacco) 529.685-182
plug-drill operator (mine & quarry) 930.684-018
PLUGGER (steel & rel.) 613.687-010
PLUGGER (wood. container) 764.687-098
PLUGGING-MACHINE OPERATOR (woodworking) 669.682-062
plug maker (plastic prod.) 754.381-014
plug-making operator (tobacco) 529.685-062
PLUG-OVERWRAP-MACHINE TENDER (tobacco) 529.685-186
PLUG SHAPER, HAND (tobacco) 520.687-050
PLUG SHAPER, MACHINE (tobacco) 520.686-034
PLUG SORTER (woodworking) 769.687-034
Plug Stitcher (boot & shoe) 690.682-078
PLUG WIRER (elec. equip.) 726.687-014
PLUMBER (construction) 862.381-030
PLUMBER (mfd. bldgs.) 862.681-010
PLUMBER APPRENTICE (construction) 862.381-034
Plumber Helper (construction) 869.664-014
Plumber, Maintenance (any industry) 862.381-030
plumber, pipe fitting (construction) 862.281-022
PLUMBER SUPERVISOR (construction) 862.131-018
Plumber Supervisor, Maintenance (construction) 862.131-018
PLUMBING ASSEMBLER-INSTALLER (mfd. bldgs.) 862.684-026
PLUMBING-HARDWARE ASSEMBLER (plumbing-heat.) 706.684-086
Plum Packer (agriculture; wholesale tr.) 920.687-134
Plunger-Machine Operator (paper goods) 649.685-042
PLUSH WEAVER (textile) 683.682-030
Plycor Operator (woodworking) 569.685-046
ply cutter (rubber tire) 690.682-022
ply splicer (rubber tire) 759.684-058
Plywood Builder (millwork-plywood) 762.687-026
Plywood Patcher (millwork-plywood) 769.684-030
PLYWOOD-SCARFER TENDER (millwork-plywood) 665.685-022
Plywood-Stock Grader (millwork-plywood) 569.687-034
Pneumatic-Drum Sander (woodworking) 761.682-014
PNEUMATIC-HOIST OPERATOR (construction; mfd. bldgs.) 921.663-046
PNEUMATIC JACKETER (nonfer. metal) 691.667-010
PNEUMATIC-JACK OPERATOR (petrol. & gas) 939.682-014
pneumatic-press operator (any industry) see AIR-PRESS OPERATOR
pneumatic-systems operator (food prep., nec) 921.382-010
Pneumatic Tester (any industry) 862.687-018
pneumatic-tool operator (construction) see AIR-TOOL OPERATOR
PNEUMATIC-TOOL OPERATOR (ship-boat mfg.) 809.381-030
PNEUMATIC-TOOL REPAIRER (any industry) 630.281-010
Pneumatic-Tube Fitter (construction) 862.281-022
pneumatic-tube operator (clerical) 239.687-014
PNEUMATIC-TUBE REPAIRER (any industry) 630.281-014
POACHER OPERATOR (chemical) 551.685-106
Poacher-Wringer Operator (chemical) 551.685-162
Pocket-And-Pulley-Machine Operator (saw. & plan.) 667.482-014
Pocket Assembler (toy-sport equip.) 732.384-010
Pocketbook Framer (leather prod.) 739.684-090
pocket builder (rubber tire) 750.684-010
Pocket Creaser (garment; knitting) 583.685-042
POCKET CUTTER (saw. & plan.) 667.482-014
POCKETED-SPRING ASSEMBLER (furniture) 780.684-090

pocketed-spring-machine operator (furniture) 616.685-050
Pocket-Flap-Creasing-Machine Operator (garment) 583.685-042
Pocket-Grinder Operator (paper & pulp) 530.662-014
POCKET-MACHINE OPERATOR (furniture) 616.685-050
pocket maker (garment) 786.682-210
Pocket Marker (garment) 781.687-042
Pocket Presser (garment) 363.684-018
Pocket-Secretary Assembler (leather prod.) 783.684-010
POCKET SETTER, LOCKSTITCH (garment) 786.682-210
PODIATRIC ASSISTANT (medical ser.) 079.374-018
Podiatric Surgeon (medical ser.) 079.101-022
PODIATRIST (medical ser.) 079.101-022
Podiatrist, Orthopedic (medical ser.) 079.101-022
Podopediatrician (medical ser.) 079.101-022
POET (profess. & kin.) 131.067-042
Pointer, Caulker, And Cleaner (construction) 869.664-014
POINTING-MACHINE OPERATOR (plastic prod.; rubber goods) 690.685-310
poiser, balance (clock & watch) 715.681-010
poker-in (steel & rel.) 512.683-010
polarity tester (elec. equip.) 727.687-054
pole classifier (wood prod., nec) 561.587-010
POLE FRAMER (utilities; wood prod., nec) 959.684-010
Pole Framer, Machine (wood prod., nec) 669.662-014
Pole-Incisor Operator (wood prod., nec) 569.662-010
POLE INSPECTOR (utilities) 869.387-010
POLE INSPECTOR (wood prod., nec) 561.587-010
pole peeler (saw. & plan.; wood prod., nec) 663.682-014
pole-peeler helper (wood prod., nec) 665.686-010
POLE-PEELING-MACHINE OPERATOR (saw. & plan.; wood prod., nec) 663.682-014
POLE-PEELING-MACHINE-OPERATOR HELPER (wood prod., nec) 665.686-010
poler (millwork-plywood; paper & pulp; saw. & plan.) 921.686-022
Pole-Sander Operator (woodworking) 662.685-014
pole setter (utilities) 821.687-010
pole shaver (saw. & plan.; wood prod., nec) 663.682-014
pole-shaver helper (wood prod., nec) 665.686-010
pole tester (utilities) 869.387-010
Pole-Truck Driver (construction; tel. & tel.; utilities) 904.383-010
POLEYARD SUPERVISOR (utilities) 929.137-014
POLICE-ACADEMY INSTRUCTOR (government ser.) 375.227-010
POLICE ACADEMY PROGRAM COORDINATOR (government ser.) 375.167-054
POLICE AIDE (government ser.) 243.362-014
POLICE ARTIST (government ser.) 141.061-034
POLICE CAPTAIN, PRECINCT (government ser.) 375.167-034
police captain, senior (government ser.) 375.267-026
police chemist (profess. & kin.) 029.261-026
POLICE CHIEF (government ser.) 375.117-010
Police Chief, Deputy (government ser.) 375.267-026
POLICE CLERK (government ser.) 375.362-010
POLICE COMMISSIONER I (government ser.) 188.117-118
Police Commissioner II (government ser.) 375.117-010
police-department secretary (government ser.) 375.137-022
police inspector, chief (government ser.) 375.117-010
POLICE INSPECTOR I (government ser.) 375.267-026
POLICE INSPECTOR II (government ser.) 375.267-030
police judge (government ser.) 111.107-014
police justice (government ser.) 111.107-014
POLICE LIEUTENANT, COMMUNITY RELATIONS (government ser.) 375.137-018
POLICE LIEUTENANT, PATROL (government ser.) 375.167-038
Police Lieutenant, Precinct (government ser.) 375.167-034
police magistrate (government ser.) 111.107-014
POLICE OFFICER, BOOKING (government ser.) 375.367-018
POLICE OFFICER, CRIME PREVENTION (government ser.) 375.264-010
POLICE OFFICER, IDENTIFICATION AND RECORDS (government ser.) 375.384-010
POLICE OFFICER I (government ser.) 375.263-014
POLICE OFFICER II (government ser.) 375.367-010
POLICE OFFICER III (government ser.) 375.267-038
POLICE OFFICER, SAFETY INSTRUCTION (government ser.) 375.267-042
police radio dispatcher (government ser.) 379.362-010
POLICE SERGEANT, PRECINCT I (government ser.) 375.133-010
Police Sergeant, Precinct II (government ser.) 375.167-034
Police Sergeant, Radio Patrol (government ser.) 375.133-010
Police Stenographer (government ser.) 202.362-014
POLICE SURGEON (government ser.) 070.101-082
policy-cancellation clerk (insurance) 203.382-014
POLICY-CHANGE CLERK (insurance) 219.362-042
Policy Checker (insurance) 219.482-014
POLICYHOLDER-INFORMATION CLERK (insurance) 249.262-010
Policy-Issue Clerk (insurance) 203.362-010
policy-issue supervisor (insurance) 219.132-022
Policy-Loan Calculator (insurance) 216.382-050
policy rater (insurance) 214.482-022
POLICY-VALUE CALCULATOR (insurance) 216.382-050
Policy Writer (insurance) 203.582-066
POLISHER (any industry) 705.684-058
polisher (boot & shoe) 690.685-046
polisher (boot & shoe) 690.685-058
POLISHER (button & notion) 599.685-078
POLISHER (clock & watch) 715.682-018
polisher (fabrication, nec) 739.684-026
POLISHER (glass mfg.; glass products) 775.684-058
POLISHER (jewelry-silver.) 700.687-058
polisher (sugar & conf.) 524.382-010
POLISHER (woodworking) 761.684-026
Polisher, Aluminum (any industry) 705.684-058
Polisher And Buffer I (any industry) 705.684-014
POLISHER AND BUFFER II (any industry) 705.684-062
polisher and sander (wood prod., nec) 662.685-026
POLISHER APPRENTICE (any industry) 705.684-066
POLISHER, BALANCE SCREWHEAD (clock & watch) 715.685-046
Polisher, Brass (any industry) 705.684-058
Polisher, Bronze (any industry) 705.684-058
POLISHER, DIAL (clock & watch) 715.684-170
POLISHER, EYEGLASS FRAMES (optical goods) 713.684-038
polisher, hand (stonework) 775.664-010
POLISHER, IMPLANT (optical goods) 713.687-034
Polisher, Numeral (clock & watch) 715.684-170
POLISHER, SAND (jewelry-silver.) 705.684-070
Polisher, Zinc (any industry) 705.684-058
POLISHING-MACHINE OPERATOR (any industry) 603.682-026
polishing-machine operator (stonework) 673.382-018
POLISHING-MACHINE-OPERATOR HELPER (any industry) 603.686-010
polishing-machine operator, semiautomatic (jewelry-silver.) 603.682-022
POLISHING MACHINE TENDER (electron. comp.) 673.685-094
POLISHING-PAD MOUNTER (optical goods) 739.687-154
polishing-wheel repairer (any industry) 739.684-030
POLISHING-WHEEL SETTER (any industry) 776.684-014
Political Officer (government ser.) 188.117-106
POLITICAL SCIENTIST (profess. & kin.) 051.067-010
poll clerk (government ser.) 205.367-030
POLLUTION-CONTROL ENGINEER (profess. & kin.) 019.081-018
POLLUTION-CONTROL TECHNICIAN (profess. & kin.) 029.261-014
poly-area supervisor (plastic-synth.) 559.132-042
Polyethylene-Bag-Machine Operator (paper goods) 649.685-014
Polyethylene Combiner (paper goods) 534.682-026
POLYGRAPH EXAMINER (profess. & kin.) 199.267-026
POLYMERIZATION HELPER (plastic-synth.) 558.585-038
POLYMERIZATION-KETTLE OPERATOR (plastic-synth.) 558.382-050
POLYMERIZATION OPERATOR (chemical; plastic-synth.) term
POLYMERIZATION-OVEN OPERATOR (plastic-synth.) 556.585-014
Polymerization Supervisor (plastic-synth.) 559.132-042
Polymer Operator (plastic-synth.) 559.382-018
POLY-PACKER AND HEAT-SEALER (protective dev.) 920.686-038
POLYSILICON PREPARATION WORKER (electron. comp.) 590.684-038
POLYSOMNOGRAPHIC TECHNICIAN (medical ser.) 078.362-042
polysomnographic technologist (medical ser.) 078.362-042
POLYSTYRENE-BEAD MOLDER (plastic prod.) 556.382-018
POLYSTYRENE-MOLDING-MACHINE TENDER (plastic prod.) 556.685-062
POMPOM MAKER (knitting) 789.687-126
pondsaw operator (paper & pulp; saw. & plan.) 667.685-034
Pond Scaler (paper & pulp; saw. & plan.) 455.487-010
POND TENDER (chemical) 939.685-010
POND WORKER (millwork-plywood; paper & pulp; saw. & plan.) 921.686-022
Pony-Cylinder-Press Feeder (print. & pub.) 651.686-010
Pony-Cylinder-Press Operator (print. & pub.) 651.362-010
PONY EDGER (saw. & plan.) 667.682-050
Pony-Ride Attendant (amuse. & rec.) 349.674-010
Pony-Roll Finisher (paper & pulp) 920.685-090
pony winder (paper goods) 640.685-058
Pool-Hall Inspector (government ser.) 375.263-014
pooling operator (medical ser., pharmaceut.) 599.687-026
poolroom attendant (amuse. & rec.) 340.477-010
pool servicer (any industry) 891.684-018
POPCORN-CANDY MAKER (sugar & conf.) 526.685-042
popcorn maker (sugar & conf.) 526.685-026
popped-corn oven attendant (sugar & conf.) 526.685-026
porcelain-buildup assistant (protective dev.) 712.684-030
PORCELAIN-ENAMELING SUPERVISOR (any industry) 590.131-010
Porcelain-Enamel Installer (construction; retail trade) 863.684-014
PORCELAIN-ENAMEL LABORER (any industry) 509.687-014
PORCELAIN-ENAMEL REPAIRER (any industry) 741.684-030
Porcelain-Enamel Sprayer (any industry) 741.684-026
porcelain finisher (protective dev.) 712.664-010
Porcelain Slusher (any industry) 599.685-026
porcelain waxer (protective dev.) 712.664-010

portable grinder operator (any industry) 705.684-030
Portable Grout-Mixer Operator (concrete prod.; construction) 869.687-026
PORTABLE SAWYER (railroad equip.) 899.684-030
Port Captain (water trans.) 184.167-182
port drier (textile) 581.685-026
PORT ENGINEER (ship-boat mfg.; water trans.) 014.167-014
PORTER (air trans.; motor trans.; r.r. trans.) 357.677-010
porter (any industry) 381.687-014
porter, baggage (air trans.; motor trans.; r.r. trans.) 357.677-010
PORTER, BAGGAGE (hotel & rest.) 324.477-010
porter, bath (personal ser.) 335.677-014
porter, head (any industry) 381.137-010
Porter, Lobby (hotel & rest.) 323.687-018
porter, luggage (hotel & rest.) 324.477-010
PORTER, MARINA (water trans.) 329.677-010
porter, pullman (r.r. trans.) 351.677-010
PORTER, SAMPLE CASE (wholesale tr.) 299.687-010
PORTER, USED-CAR LOT (retail trade; wholesale tr.) 915.687-022
portfolio administrator (financial; insurance) 186.167-054
PORT PURSER (water trans.) 166.167-038
portrait photographer apprentice (profess. & kin.) 143.062-018
PORT-TRAFFIC MANAGER (water trans.) 184.167-122
port warden (government ser.) 375.167-026
Position Classifier (government ser.) 166.267-018
position clerk (financial) 210.367-014
Positive Developer (motion picture; photofinishing) 976.382-018
positive printer operator (motion picture) 976.682-010
postage-machine operator (clerical) 208.685-026
postal clerk (clerical) 209.687-026
postal clerk (government ser.) 243.367-014
Postal Inspector (government ser.) 168.267-062
Postbed Stitcher (boot & shoe) 690.682-082
Post-Form Remover (elec. equip.) 727.687-070
post-hole digger (construction; utilities) 859.682-010
POSTMASTER (government ser.) 188.167-066
POST-OFFICE CLERK (government ser.) 243.367-014
post-office supervisor (government ser.) 243.137-010
Post-Wave Assembler (electron. comp.) 726.684-070
Pot Annealer (heat treating) 504.682-010
Potash Flaker (chemical) 559.685-074
potato-chip cooker machine (food prep., nec) 526.685-046
POTATO-CHIP FRIER (food prep., nec) 526.685-046
POTATO-CHIP-PROCESSING SUPERVISOR (food prep., nec) 526.137-010
POTATO-CHIP SORTER (food prep., nec) 526.687-010
Potato Grader (agriculture; wholesale tr.) 529.687-186
POTATO-PANCAKE FRIER (food prep., nec) 526.685-050
POTATO-PEELING-MACHINE OPERATOR (food prep., nec) 521.685-250
potato-seed cutter (agriculture) 404.686-010
Potato Sorter (agriculture; wholesale tr.) 529.687-186
potato spotter (food prep., nec) 521.687-094
POT BUILDER (chemical) 826.684-022
Potdevin Cementer, Machine (boot & shoe) 690.686-018
POT FIRER (chemical) 553.582-014
Pot-Holder Binder (tex. prod., nec) 787.682-010
POTLINE MONITOR (smelt. & refin.) 512.467-010
POT LINER (smelt. & refin.) 519.664-014
POT-LINING SUPERVISOR (smelt. & refin.) 519.134-010
Pot Maker (brick & tile) 575.684-042
pot maker (pottery & porc.) 774.381-010
pot maker (pottery & porc.) 774.382-010
pot-press operator (pottery & porc.) 575.685-034
pot puncher (smelt. & refin.) 512.685-018
POT-ROOM SUPERVISOR (smelt. & refin.) 512.135-010
pot runner (galvanizing) 501.685-010
POT TENDER (smelt. & refin.) 512.685-018
Potter (electron. comp.) 726.687-022
Potter (pottery & porc.) 774.382-010
POTTERY-MACHINE OPERATOR (pottery & porc.) 774.382-010
Pottery Striper (pottery & porc.) 741.687-022
Pouch-Making-Machine Operator (tobacco) 920.685-098
POULTICE-MACHINE OPERATOR (pharmaceut.) 692.685-134
poultry-and-fish butcher (hotel & rest.) 316.684-010
POULTRY BONER (meat products) 525.687-066
POULTRY BREEDER (agriculture) 411.161-014
poultry culler (agriculture) 411.687-010
POULTRY DEBEAKER (agriculture) 411.687-026
POULTRY DRESSER (agriculture; meat products) 525.687-070
POULTRY-DRESSING WORKER (meat products) 525.687-082
POULTRY EVISCERATOR (meat products) 525.687-074
POULTRY FARMER (agriculture) 411.161-018
Poultry Farmer, Egg (agriculture) 411.161-018
Poultry Farmer, Meat (agriculture) 411.161-018
Poultry-Feed-Mixer Operator (grain-feed mills) 520.685-098
Poultry Feed Supervisor (grain-feed mills) 529.132-054
POULTRY HANGER (meat products) 525.687-078
poultry helper (agriculture) 411.584-010
POULTRY INSEMINATOR (agriculture) 411.384-010
POULTRY KILLER (meat products) 525.684-042
Poultry Picker (meat products) 525.687-070
POULTRY-PICKING MACHINE TENDER (meat products) 525.685-026
Poultry Scalder (meat products) 525.687-070
POULTRY SCIENTIST (profess. & kin.) 040.061-042
Poultry Specialist Supervisor (government ser.) 168.167-090
POULTRY TENDER (agriculture) 411.364-014
POULTRY VACCINATOR (agriculture) 411.684-014
pouncer (hat & cap) 784.687-018
pouncer (hat & cap) 585.685-074
pouncer, machine (hat & cap) 585.685-074
POUNCING-LATHE OPERATOR (hat & cap) 585.685-074
pouncing-machine operator (hat & cap) 585.685-074
pouncing-machine operator (hat & cap) 585.685-058
POUNDER (boot & shoe) 690.685-314
POURED-CONCRETE-WALL TECHNICIAN (construction) 869.261-018
poured-pipe maker (concrete prod.) 779.684-014
POURER (fabrication, nec) 739.687-158
pourer (leather mfg.) 584.687-010
pourer (leather mfg.) 584.687-014
pourer (plastic prod.) 754.684-022
pourer (pottery & porc.) 575.684-014
POURER (rubber goods) 556.687-026
pourer (smelt. & refin.) 514.682-010
Pourer, Buggy Ladle (foundry) 514.684-022
Pourer, Bull Ladle (foundry) 514.684-022
Pourer, Crane Ladle (foundry) 514.684-022
Pourer, Crucible (foundry) 514.684-022
POURER, METAL (foundry) 514.684-022
powder-actuated-tool operator (construction) STUD-DRIVER OPERATOR
POWDER-AND-PRIMER-CANNING LEADER (ordnance) 737.137-014
POWDER BLENDER AND POURER (chemical) 550.485-022
powder carrier (any industry) 859.687-010
Powder Compounder (pharmaceut.) 550.685-090
POWDER-CUTTING OPERATOR (chemical) 559.685-134
Powdered-Sugar-Pulverizer Operator (sugar & conf.) 521.585-018
POWDERER (hat & cap) 784.687-058
Powder Gilder (wood prod., nec) 763.381-010
Powder Guard (construction) 372.667-034
POWDER-LINE REPAIRER (chemical) 629.261-018
POWDER LOADER (mine & quarry) 931.667-010
POWDER-MILL OPERATOR (sugar & conf.) 521.585-018
Powder Mixer (chemical) 550.685-090
powder monkey (clerical) 222.367-038
powder nipper (clerical) 222.367-038
powder operator (can. & preserv.; dairy products) 523.682-022
powder-press operator (chemical) 556.685-014
powder-press operator (chemical) 557.682-010
powder shoveler (chemical) 692.686-038
POWDER-TRUCK DRIVER (ordnance) 903.683-014
Powder Trucker (chemical; ordnance) 929.687-030
POWDER WORKER, TNT (ordnance) 737.684-030
POWER-BARKER OPERATOR (paper & pulp; saw. & plan.) 669.485-010
power-brake operator (any industry) 617.360-010
POWER-CHISEL OPERATOR (cutlery-hrdwr.) 701.687-030
power-cleaner operator (any industry) 389.683-010
power-cutting-machine operator (tex. prod., nec) 686.682-018
power dispatcher (utilities) 952.167-014
POWER-DISTRIBUTION ENGINEER (utilities) 003.167-046
POWER-DRIVEN-BRUSH MAKER (fabrication, nec) 692.682-050
POWERED BRIDGE SPECIALIST (military ser.) 378.683-014
power engineer (utilities) 952.382-018
power engineer (utilities) 003.167-018
power equipment mechanic (government ser.) 620.281-014
power-grader operator (construction) 850.663-022
power-hammer operator (aircraft mfg.) 617.382-014
Power-Hammer Operator (boot & shoe) 690.685-350
power hammer repairer (forging) 626.261-010
powerhouse attendant (chemical) 952.362-038
powerhouse engineer (utilities) 952.382-018
POWERHOUSE HELPER (chemical) 550.685-098
POWERHOUSE MECHANIC (utilities) 631.261-014
POWERHOUSE-MECHANIC APPRENTICE (utilities) 631.261-018
POWERHOUSE-MECHANIC HELPER (utilities) 631.684-010
POWERHOUSE-MECHANIC SUPERVISOR (utilities) 631.131-010
powerhouse oiler (any industry) 950.685-014
power-line inspector (utilities) 821.367-010
power-nut-runner operator (any industry) 699.685-026
POWER OPERATOR (tel. & tel.) 952.382-014
power-panel assembler (elec. equip.) 721.381-014
power-plant assistant (utilities) 952.367-014
power-plant engineer (utilities) 952.382-018
power-plant operator (any industry) 950.382-026

POWER-PLANT OPERATOR (utilities) 952.382-018
power-plant-operator apprentice (any industry) 950.382-030
power-press operator (any industry) 699.682-022
POWER-PRESS OPERATOR (any industry) term
power-press supervisor (jewelry-silver.) 615.130-010
POWER-PRESS TENDER (any industry) 617.685-026
POWER-REACTOR OPERATOR (utilities) 952.362-022
POWER-SAW MECHANIC (any industry) 625.281-030
power-saw operator (machine shop) 607.682-010
power-saw operator (wood. container) 667.662-014
powersaw supervisor (logging) 454.134-010
POWER-SCREWDRIVER OPERATOR (any industry) 699.685-026
power-shear operator (any industry) 615.682-018
power-shear operator (any industry) 615.685-034
POWER-SHOVEL OPERATOR (any industry) 850.683-030
Power-Shovel-Operator Helper (any industry) 921.667-022
Power-Sweeper Operator (any industry) 919.683-022
power-switchboard operator (utilities) 952.362-026
Power-Tool Assembler (house. appl.) 723.684-010
power-tool repairer (any industry) 729.281-022
Power-Transformer Assembler (elec. equip.) 820.381-014
POWER-TRANSFORMER REPAIRER (utilities) 821.361-034
Power-Transformer-Repair Supervisor (utilities) 829.131-014
POWER-TRANSMISSION ENGINEER (utilities) 003.167-050
power washer (any industry) 503.685-030
preacher (profess. & kin.) 120.107-010
PREASSEMBLER AND INSPECTOR (musical inst.) 730.684-058
PREASSEMBLER, PRINTED CIRCUIT BOARD (electron. comp.) 726.687-038
Preboarder (knitting) 589.685-010
PRECAST MOLDER (concrete prod.) 579.685-042
precast worker (concrete prod.) 579.685-042
precinct captain (government ser.) 375.167-034
PRECIPITATE WASHER (chemical) 551.685-110
Precipitation Equipment Tender (chemical) 558.685-062
PRECIPITATOR I (smelt. & refin.) 511.685-038
PRECIPITATOR II (smelt. & refin.) 511.685-042
Precipitator Operator (chemical) 558.682-014
PRECIPITATOR OPERATOR (smelt. & refin.) term
PRECIPITATOR SUPERVISOR (smelt. & refin.; steel & rel.) 511.132-010
PRECISE WINDER (textile) 681.685-066
PRECISION ASSEMBLER (aircraft mfg.) 806.381-082
PRECISION ASSEMBLER, BENCH (aircraft mfg.) 706.381-050
precision filer, hand (machine shop) 705.484-010
precision grinder (machine shop) 603.280-018
precision grinder (machine shop) 603.280-022
precision grinder, external (machine shop) 603.280-010
precision grinder, surface (machine shop) 603.280-014
precision grinder, universal (machine shop) 603.280-030
precision-honing-machine operator (machine shop) 603.382-022
precision inspector (machine shop) 601.281-022
precision-instrument and tool maker (any industry) 600.280-010
precision jig grinder (machine shop) 603.280-026
precision lap hand (machine shop) 705.481-014
precision-lathe operator (machine shop) 604.280-010
PRECISION-LENS CENTERER AND EDGER (optical goods) 716.462-010
PRECISION-LENS GENERATOR (optical goods) 716.682-014
PRECISION-LENS GRINDER (optical goods) 716.382-018
PRECISION-LENS-GRINDER APPRENTICE (optical goods) 716.382-022
PRECISION-LENS POLISHER (optical goods) 716.682-018
precision lens technician (optical goods) 716.280-018
precision-mechanical-instrument maker (any industry) 600.280-010
precision-mechanical-instrument-maker apprentice (any industry) 600.280-018
PRECISION-OPTICAL WORKER (optical goods) term
precision-thread-grinder operator (machine shop) 603.260-010
PREDATORY-ANIMAL HUNTER (fishing & hunt.) 461.661-010
prefitter (furniture) 763.684-026
PREFITTER, DOORS (woodworking) 666.582-010
preformer, impregnated fabrics (plastic prod.) 754.684-050
Preforming-Machine Operator (electron. comp.) 590.684-014
PREFORM-MACHINE OPERATOR (button & notion) 556.380-014
preform-machine operator (plastic prod.; plastic-synth.) 556.685-058
PREFORM PLATE MAKER (ship-boat mfg.) 751.684-026
prehemmer (tex. prod., nec) 781.684-034
Preliminary-Block-Press Operator (chemical) 556.685-014
premium-cancellation clerk (insurance) 203.382-014
premium-card-cancellation clerk (insurance) 203.382-014
Premium-Note Interest-Calculator Clerk (insurance) 216.482-022
Premix Operator, Concentrate (grain-feed mills) 523.685-022
preparation center coordinator (hotel & rest.) 313.131-018
Preparation-Plant Repairer (mine & quarry) 630.281-022
PREPARATION-ROOM WORKER (nonmet. min.) 570.686-018
PREPARATION SUPERVISOR (can. & preserv.) 529.137-010
Preparation Supervisor, Canning (can. & preserv.) 529.137-010
Preparation Supervisor, Freezing (can. & preserv.) 529.137-010
PREPARER (jewelry-silver.) 700.687-062
preparer (leather mfg.) 585.684-010
PREPARER, MAKING DEPARTMENT (jewelry-silver.) 700.684-058
PREPARER, SAMPLES AND REPAIRS (jewelry-silver.) 700.684-062
PREPAROLE-COUNSELING AIDE (government ser.) 195.367-026
PREPLEATER (tex. prod., nec) 686.685-046
Prescription Clerk, Frames (optical goods) 222.367-050
PRESCRIPTION CLERK, LENS-AND-FRAMES (optical goods) 222.367-050
Prescription Clerk, Lenses (optical goods) 222.367-050
PRESERVATION INSPECTOR, MARINE EQUIPMENT (government ser.) 929.367-010
preservationist (profess. & kin.) 055.381-010
PRESERVATIVE FILLER, MACHINE (can. & preserv.) 529.685-190
presetter operator (textile) 587.685-018
PRESIDENT (any industry) 189.117-026
President, Business School (education) 090.117-034
President, College Or University (education) 090.117-034
President, Commercial Bank (financial) 186.117-054
President, Credit Union (financial) 186.117-054
PRESIDENT, EDUCATIONAL INSTITUTION (education) 090.117-034
President, Finance Company (financial) 186.117-054
PRESIDENT, FINANCIAL INSTITUTION (financial) 186.117-054
President, Mortgage Company (financial) 186.117-054
President, Savings Bank (financial) 186.117-054
President, Trust Company (financial) 186.117-054
press-and-blow-machine tender (glass mfg.) 575.685-038
PRESS-BOX CUSTODIAN (amuse. & rec.) 344.677-010
press-brake operator (any industry) 619.685-026
press-brake operator (any industry) 617.360-010
PRESS BREAKER (wood prod., nec) 569.686-050
PRESS BUCKER (any industry) 920.686-042
presser (boot & shoe) 788.684-130
PRESSER (glass mfg.) 575.685-074
presser (hat & cap) 580.685-038
presser (hat & cap) 584.685-026
PRESSER (print. & pub.) 977.684-018
PRESSER (rubber goods) 690.685-318
PRESSER (soap & rel.) 559.685-142
PRESSER, ALL-AROUND (laundry & rel.) 363.682-014
presser-and-blocker, knitted goods (laundry & rel.) 363.684-010
presser-and-shaper, knitted goods (laundry & rel.) 363.684-010
PRESSER, AUTOMATIC (laundry & rel.) 363.685-014
PRESSER, BUFFING WHEEL (tex. prod., nec) 583.685-090
presser, cotton ginning (agriculture) 920.685-114
Presser, First (hat & cap) 583.685-110
PRESSER, FORM (any industry) 363.685-018
PRESSER, HAND (any industry) 363.684-018
PRESSER, HANDKERCHIEF (laundry & rel.) 363.685-022
presser, leather garments (laundry & rel.) 363.682-010
PRESSER, MACHINE (any industry) 363.682-018
Presser, Second (hat & cap) 583.685-110
PRESS FEEDER (knitting; textile) 583.686-030
PRESS FEEDER (print. & pub.) term
PRESS FEEDER (tinware) 652.685-058
PRESS FEEDER, BROOMCORN (agriculture) 429.686-010
press hand (forging) 611.685-010
PRESS HAND (knitting) 583.687-010
PRESS-HAND SUPERVISOR (jewelry-silver.) 615.130-010
press helper (forging) 619.686-034
PRESS HELPER (plastic prod.) 651.586-010
pressing-machine operator (any industry) 363.685-018
pressing machine operator (any industry) 363.682-018
pressing machine operator (knitting) 583.685-070
PRESS MACHINE FEEDER (tobacco) 529.686-066
PRESS-MACHINE OPERATOR (fabrication, nec) 590.665-014
PRESS OFFBEARER (brick & tile) 579.686-030
press operator (any industry) 920.685-010
Press Operator (beverage) 521.685-118
PRESS OPERATOR (brick & tile) 575.682-018
press operator (chemical) 556.685-078
press operator (forging) 611.685-010
PRESS OPERATOR (laundry & rel.) 363.685-010
Press Operator (meat products) 529.685-202
PRESS OPERATOR (mine & quarry) 575.685-070
press operator (nonfer. metal) 691.382-014
PRESS OPERATOR (oils & grease) 551.685-114
PRESS OPERATOR (plastic prod.) 690.682-062
press operator (plastic-synth.) 690.682-058
press operator (pottery & porc.) 575.685-026
press operator (print. & pub.) 651.362-010
PRESS OPERATOR (print. & pub.) term
PRESS OPERATOR (protective dev.) 686.685-050
PRESS OPERATOR (rubber reclaim.) 559.685-138
PRESS OPERATOR (textile) 583.685-086
press operator, automatic (laundry & rel.) 363.685-014

press operator, automatic (tobacco) 920.685-082
PRESS OPERATOR, CARBON BLOCKS (smelt. & refin.) 514.682-014
Press Operator, Carbon Products (elec. equip.) 556.682-014
press operator, carcass (toy-sport equip.) 732.687-054
PRESS OPERATOR, HARDBOARD (wood prod., nec) 569.682-014
PRESS OPERATOR, HEAVY DUTY (any industry) 617.260-010
PRESS OPERATOR I (chemical) 559.665-030
PRESS OPERATOR II (chemical) 551.685-118
press operator, instant print shop (print. & pub.) 979.362-010
PRESS OPERATOR, MEAT (meat products) 520.685-182
Press Operator, Paraffin Plant (petrol. refin.) 541.682-010
PRESS OPERATOR, PIERCE AND SHAVE (clock & watch) 715.685-050
press operator, wax ball (toy-sport equip.) 732.687-058
PRESS-PIPE INSPECTOR (brick & tile) 575.687-030
press-plate maker (print. & pub.) 972.381-026
PRESS PULLER (grain-feed mills) 529.687-170
press reader (business ser.) 249.387-022
PRESSROOM WORKER, FAT (oils & grease) 559.685-146
press-service reader (business ser.) 249.387-022
PRESS SETTER (nonfer. metal; steel & rel.) 617.480-014
Press Smith (forging) 612.361-010
Press-Smith Helper (forging) 612.687-014
PRESS SUPERVISOR (brick & tile) 575.130-010
PRESS TENDER (food prep., nec) 520.685-186
press tender (print. & pub.) 651.686-018
PRESS TENDER (rubber goods; rubber tire; toy-sport equip.) 556.685-066
Press Tender, Head, Feed House (grain-feed mills) 521.665-018
Press Tender, Incendiary Grenade (chemical) 694.685-038
Press Tender, Long Goods (food prep., nec) 520.685-186
PRESS TENDER, PYROTECHNICS (chemical) 694.685-038
Press Tender, Short Goods (food prep., nec) 520.685-186
Press Tender, Smoke Signal (chemical) 694.685-038
Press Tender, Star Signal (chemical) 694.685-038
PRESSURE CONTROLLER (utilities) 953.362-018
pressure-control supervisor (utilities) 953.137-014
PRESSURE SEALER-AND-TESTER (aircraft mfg.) 806.384-038
PRESSURE SUPERVISOR (utilities) 953.137-014
PRESSURE-TANK OPERATOR (chemical) 523.385-010
PRESSURE-TEST OPERATOR (ordnance) 737.387-018
Pressurization Mechanic (aircraft mfg.) 806.384-038
Pressurization Mechanic, Air Controls (aircraft mfg.) 806.384-038
Pressurizer (aircraft mfg.) 806.384-038
PRETZEL COOKER (bakery products) 526.685-054
Pretzel-Dough Mixer (bakery products) 520.685-234
Pretzel-Stick-Machine Operator (bakery products) 520.685-190
PRETZEL TWISTER (bakery products) 520.587-010
PRETZEL-TWISTING-MACHINE OPERATOR (bakery products) 520.685-190
PREVENTIVE MAINTENANCE COORDINATOR (any industry) 169.167-074
Pre-Wave Assembler (electron. comp.) 726.684-070
Price Checker (clerical) 209.687-010
Price Economist (profess. & kin.) 050.067-010
price marker (retail trade; wholesale tr.) 209.587-034
pricer (laundry & rel.) 216.482-030
pricer-bagger (photofinishing) 976.687-018
PRICER, MESSAGE AND DELIVERY SERVICE (business ser.) 214.467-014
pricer-sorter (nonprofit org.) 222.387-054
priest (profess. & kin.) 120.107-010
priller (clerical) 222.367-038
primary care nurse practitioner (medical ser.) 075.264-010
Primary Connector, Armature (elec. equip.) 724.684-014
primary-crusher operator (any industry) 570.685-022
primer-and-powder-canning leader (ordnance) 737.137-014
primer assembler (ordnance) 694.685-010
PRIMER ASSEMBLER (ordnance) 737.687-098
PRIMER BOXER (ordnance) 737.587-018
PRIMER CHARGER (ordnance) 737.687-102
PRIMER-CHARGING TOOL SETTER (ordnance) 694.360-010
PRIMER EXPEDITOR AND DRIER (chemical) 553.385-014
PRIMER-INSERTING-MACHINE ADJUSTER (ordnance) 632.360-018
PRIMER-INSERTING-MACHINE OPERATOR (ordnance) 694.685-042
PRIMER INSPECTOR (ordnance) 737.687-106
PRIMER-POWDER BLENDER, DRY (ordnance) 550.565-010
PRIMER-POWDER BLENDER, WET (chemical) 550.582-010
primer-press operator (ordnance) 694.685-010
Primer Sprayer (aircraft mfg.; auto. mfg.) 741.684-026
PRIMER SUPERVISOR (ordnance) 737.132-010
PRIMER-WATERPROOFING-MACHINE ADJUSTER (ordnance) 632.380-018
PRIMER-WATERPROOFING-MACHINE OPERATOR (ordnance) 694.685-046
priming-machine operator (ordnance) 694.685-042
PRIMING-MIXTURE CARRIER (ordnance) 922.587-010
PRIMING-POWDER-PREMIX BLENDER (chemical) 550.684-022
principal (any industry) see SUPERVISOR
PRINCIPAL (education) 099.117-018
principal librarian (library) 100.127-010
print applier (any industry) 749.684-010
Print-Color Matcher (tex. prod., nec) 550.382-014
Print-Color Mixer (tex. prod., nec) 550.382-014
print-color operator (tex. prod., nec) 550.382-014
PRINT CONTROLLER (photofinishing) 976.360-010
print cutter (photofinishing) 976.685-010
Print Decorator (pottery & porc.) 749.684-010
PRINT DEVELOPER, AUTOMATIC (photofinishing) 976.685-026
PRINTED CIRCUIT BOARD ASSEMBLER, HAND (electron. comp.) 726.684-070
PRINTED CIRCUIT BOARD COMPONENT TESTER, CHEMICAL (electron. comp.) 726.684-074
PRINTED CIRCUIT BOARD COMPONENT TESTER, PRE-ASSEMBLY (electron. comp.) 726.684-078
PRINTED CIRCUIT BOARD INSPECTOR, PRE-ASSEMBLY (electron. comp.) 726.684-082
PRINTED CIRCUIT DESIGNER (profess. & kin.) 003.261-022
Printed-Forms Proofreader (clerical) 209.687-010
printer (any industry) 652.382-010
printer (boot & shoe) 690.685-158
PRINTER (glass products) 979.681-014
printer (leather mfg.; leather prod.) 690.682-030
PRINTER (pen & pencil) 652.685-062
PRINTER (print. & pub.) 979.382-018
printer (print. & pub.) 973.381-018
printer (sugar & conf.) 526.687-014
printer (tex. prod., nec) 652.685-022
PRINTER, FLOOR COVERING (fabrication, nec) 652.685-066
PRINTER, FLOOR COVERING, ASSISTANT (fabrication, nec) 652.687-038
PRINTER, MACHINE (hat & cap) 652.685-070
Printer Maintainer (tel. & tel.) 822.281-010
PRINTER OPERATOR, BLACK-AND-WHITE (photofinishing) 976.682-014
PRINTER, PLASTIC (plastic prod.; tex. prod., nec) 651.382-026
printer's devil (print. & pub.) 973.381-022
PRINTER-SLOTTER HELPER (paper goods) 659.686-014
PRINTER-SLOTTER OPERATOR (paper goods) 659.662-010
printer, small print shop (print. & pub.) 979.382-018
print finisher (photofinishing) 976.487-010
printing-equipment mechanic (print. & pub.) 627.261-010
printing-equipment-mechanic apprentice (print. & pub.) 627.261-014
printing-machine operator (any industry) 652.382-010
PRINTING-MACHINE OPERATOR, FOLDING RULES (cutlery-hrdwr.) 652.685-074
PRINTING-MACHINE OPERATOR, TAPE RULES (cutlery-hrdwr.) 652.662-010
Printing-Plate Clerk (print. & pub.) 222.387-058
printing-plate router (print. & pub.) 979.682-026
PRINTING-ROLLER HANDLER (textile) 652.385-010
PRINTING-ROLLER POLISHER (machine shop) 603.382-030
PRINTING SCREEN ASSEMBLER (electron. comp.) 979.684-042
Printing Supervisor (tex. prod., nec) 589.130-014
PRINT INSPECTOR (photofinishing) 976.687-022
PRINT INSPECTOR (pottery & porc.) 774.687-018
PRINT-LINE FEEDER (furniture) 652.686-026
PRINT-LINE INSPECTOR (furniture) 652.687-034
PRINT-LINE OPERATOR (furniture; wood prod., nec) 652.662-018
print-line supervisor (furniture; wood prod., nec) 652.662-018
PRINT-LINE TAILER (furniture) 652.686-030
PRINTMAKER (profess. & kin.) 144.061-014
PRINT-SHOP HELPER (print. & pub.) 979.684-026
PRINT WASHER (photofinishing) 976.684-022
Prism Inspector (optical goods) 716.381-010
PRISONER-CLASSIFICATION INTERVIEWER (profess. & kin.) 166.267-022
prison librarian (library) 100.167-022
PRIVATE-BRANCH-EXCHANGE INSTALLER (tel. & tel.) 822.381-018
Private-Branch-Exchange Installer, Mobile Radio (tel. & tel.) 822.381-018
private-branch-exchange operator (clerical) 235.662-022
PRIVATE-BRANCH-EXCHANGE REPAIRER (tel. & tel.) 822.281-022
PRIVATE-BRANCH-EXCHANGE SERVICE ADVISER (tel. & tel.) 235.222-010
Private-Branch-Exchange Teletypewriter (tel. & tel.) 822.381-018
private pilot (any industry) 196.263-030
PRIZE COORDINATOR (radio-tv broad.) 162.167-026
prize jacker (tobacco) 920.685-062
PRIZER (tobacco) 920.687-142
Probate Judge (government ser.) 111.107-010
PROBATION-AND-PAROLE OFFICER (profess. & kin.) 195.107-046
Probation Officer (profess. & kin.) 195.107-046
PROBE TEST EQUIPMENT TECHNICIAN, SEMICONDUCTOR WAFERS (electron. comp.) 729.360-010
PROCESS-AREA SUPERVISOR (plastic-synth.) 559.132-042
process artist (print. & pub.) 972.281-010
process attendant (elec. equip.) 590.362-010
process-camera operator (print. & pub.) 972.382-014

PROCESS CHECKER (ordnance) 737.364-010
PROCESS CONTROLLER (textile) 689.364-014
process control supervisor (plastic-synth.) 559.137-038
Process-Description Writer (profess. & kin.) 131.267-026
Process Equipment Operator (aircraft mfg.) 704.381-014
process helper (petr. refin.) 549.687-018
PROCESS INSPECTOR (ordnance) 736.381-018
process inspector (plastic prod.; plastic-synth.) 559.381-010
process inspector (toy-sport equip.) 732.684-130
PROCESS-MACHINE OPERATOR (paper goods) 640.685-050
process operator (pharmaceut.) 559.685-058
process operator (chemical) 590.464-010
process operator (chemical; pharmaceut.) 550.685-090
process operator (chemical; plastic-synth.) 559.382-046
process operator, atomic energy (chemical) 709.381-010
processor (any industry) 012.167-074
processor (knitting) 589.485-010
PROCESSOR (plastic synth.) 557.685-018
PROCESSOR, GRAIN (grain-feed mills) 521.685-254
PROCESSOR HELPER (grain-feed mills) 521.686-050
PROCESSOR, INSTANT POTATO (food prep., nec) 523.382-022
PROCESSOR, SOLID PROPELLANT (chemical) 590.464-010
process planner (profess. & kin.) 012.167-050
process projectionist (amuse. & rec.; motion picture) 960.362-010
process pumper (petrol. refin.) 549.362-010
PROCESS SERVER (business ser.) 249.367-062
process stripper (print. & pub.) 972.281-022
process supervisor (any industry) 183.167-018
process treater (any industry) 503.685-030
PROCTOLOGIST (medical ser.) 070.101-086
PROCUREMENT CLERK (clerical) 249.367-066
PROCUREMENT ENGINEER (aircraft mfg.) 162.157-034
procurement inspector (government ser.) 168.287-014
Procurement Transplant Coordinator (medical ser.) 079.151-010
Produce Clerk I (retail trade) 290.477-018
Produce Clerk II (retail trade) 922.687-058
Produce-Department Manager (retail trade) 299.137-010
PRODUCER (amuse. & rec.) 187.167-178
PRODUCER (motion picture) 187.167-174
PRODUCER (radio-tv broad.) 159.117-010
PRODUCER, ASSISTANT (motion picture) 187.167-182
Producer-Director (radio-tv broad.) 159.067-014
Produce Stock Clerk (retail trade) 299.367-014
PRODUCE WEIGHER (retail trade) 299.587-010
Product-Development Worker (any industry) 804.281-010
product inspector (steel & rel.) 619.381-010
production supervisor (radio-tv broad.) 194.162-010
production aide (electron. comp.) 590.362-018
production aide (electron. comp.) 726.362-010
PRODUCTION ASSEMBLER (ordnance) 737.684-034
PRODUCTION ASSISTANT (chemical) 221.387-050
production assistant (radio-tv broad.) 962.167-014
production assistant (radio-tv broad.) 194.062-010
production broacher (machine shop) 605.682-014
production checker (clerical) 221.382-018
PRODUCTION CLERK (clerical) 221.382-018
production clerk (paper goods) 221.162-010
Production Clerk, Lace Tearing (tex. prod., nec) 221.382-018
production-control clerk (clerical) 221.382-018
production-control clerk (clock & watch) 221.387-018
production controller (clerical) 221.167-018
Production-Control Pegboard Clerk (garment) 221.382-018
production control scheduler (aircraft mfg.) 012.167-082
production control scheduler (clerical) 221.167-014
PRODUCTION COORDINATOR (clerical) 221.167-018
production coordinator (radio-tv broad.) 962.167-014
production-drilling-machine operator (machine shop) 606.682-014
Production Engineer (petrol. & gas) 010.061-018
production engineer (profess. & kin.) 012.167-070
PRODUCTION ENGINEER (profess. & kin.) 012.167-046
PRODUCTION ENGINEER, TRACK (r.r. trans.) 005.167-026
production estimator (profess. & kin.) 169.267-038
production expediter (clerical) 221.167-018
production expert (profess. & kin.) 012.167-070
production-gear cutter (machine shop) 602.685-010
production grinder (machine shop) 603.685-062
Production Grip (motion picture) 962.687-022
PRODUCTION HARDENER (heat treating) 504.685-026
production helper (any industry) 619.686-022
PRODUCTION HELPER (can. & preserv.; food prep., nec) 529.686-070
production helper (food prep., nec) 921.685-050
PRODUCTION HELPER (nonfer. metal) 691.687-010
production-honing-machine operator (machine shop) 603.482-034
production illustrator (profess. & kin.) 017.281-034
PRODUCTION-MACHINE TENDER (auto. mfg.) 699.685-050
PRODUCTION-MACHINE TENDER (machine shop) 609.685-018
PRODUCTION-MACHINE TENDER (nut & bolt) 619.365-010
PRODUCTION-MACHINE TENDER, GLASS CUTTING-OR-GRINDING (electron. comp.; glass mfg.) 679.685-014
PRODUCTION MANAGER, ADVERTISING (profess. & kin.) 141.137-010
PRODUCTION MANAGER, REPRODUCTION (print. & pub.) 652.137-010
Production Material Coordinator (electron. comp.) 221.387-046
Production Mechanic, Tin Cans (tinware) 616.260-014
production operator (petrol. & gas) 541.382-014
production planner (paper goods) 221.162-010
PRODUCTION PLANNER (profess. & kin.) 012.167-050
production-planning supervisor (profess. & kin.) 012.167-050
production-posting clerk (clerical) 221.382-018
PRODUCTION PROOFREADER (print. & pub.; retail trade) 247.667-010
production repairer (comm. equip.; electron. comp.) 726.381-014
production repairer (inst. & app.) 710.381-050
PRODUCTION REPAIRER, PRINTED CIRCUIT BOARD ASSEMBLY (electron. comp.) 726.684-086
production scheduler (clerical) 221.167-018
production scheduler (profess. & kin.) 012.167-050
PRODUCTION SCHEDULER, PAPERBOARD PRODUCTS (paper goods) 221.162-010
production solderer (welding) 813.684-014
Production-Statistical Clerk (clerical) 216.382-062
PRODUCTION SUPERINTENDENT (any industry) 183.117-014
production superintendent, hydro (utilities) 952.137-014
PRODUCTION SUPERVISOR (any industry) 699.130-010
production supervisor (any industry) 183.167-018
PRODUCTION SUPERVISOR (nonmet. min.) 539.137-014
PRODUCTION SUPERVISOR, ANHYDROUS AMMONIA (chemical) 559.132-046
PRODUCTION SUPERVISOR, DEFLUORINATED PHOSPHATE (chemical) 559.132-050
PRODUCTION-SUPPLY-EQUIPMENT TENDER (food prep., nec) 921.685-050
production technician (radio-tv broad.) 194.062-010
PRODUCTION TECHNICIAN, SEMICONDUCTOR PROCESSING EQUIPMENT (electron. comp.) 590.384-014
Product Representative (profess. & kin.) 096.121-014
PRODUCT-SAFETY ENGINEER (profess. & kin.) 012.061-010
PRODUCT TESTER, FIBERGLASS (textile) 589.384-010
PROFESSIONAL ATHLETE (amuse. & rec.) 153.341-010
professional engineer (profess. & kin.) see ENGINEER
professional shopper (retail trade) 296.357-010
Professor (education) 090.227-010
professor, dance (education) 151.027-014
profile grinder (stonework) 675.682-010
PROFILE-GRINDER TECHNICIAN (clock & watch) 601.482-010
Profile-Mill Operator, Tape Control (machine shop) 605.380-010
profiler (machine shop) 605.280-014
profiler (machine shop) 605.382-026
PROFILER, HAND (clock & watch) 715.685-054
PROFILE-SAW OPERATOR (jewelry-silver.) 700.682-018
PROFILE-SHAPER OPERATOR, AUTOMATIC (woodworking) 665.682-026
PROFILE-STITCHING-MACHINE OPERATOR (garment) 786.685-026
PROFILE TRIMMER (jewelry-silver.) 607.682-014
PROFILING-MACHINE OPERATOR (clock & watch) 605.685-038
PROFILING-MACHINE SET-UP OPERATOR I (machine shop) 605.280-014
PROFILING-MACHINE SET-UP OPERATOR II (machine shop) 605.382-026
PROFILING-MACHINE SET-UP OPERATOR, TOOL (machine shop) 605.280-018
PROGRAM AIDE, GROUP WORK (social ser.) 195.227-010
Program Analyst (government ser.) 160.162-022
PROGRAM ASSISTANT (radio-tv broad.) 962.167-014
program checker (radio-tv broad.) 249.387-010
program consultant (social ser.) 195.167-010
PROGRAM COORDINATOR (amuse. & rec.) 139.167-010
Program Director (profess. & kin.) 187.137-014
PROGRAM DIRECTOR, CABLE TELEVISION (radio-tv broad.) 194.162-010
PROGRAM DIRECTOR, GROUP WORK (profess. & kin.) 187.117-046
Program Director, Scouting (nonprofit org.) 187.117-046
PROGRAM MANAGER (profess. & kin.) 189.167-030
PROGRAMMER-ANALYST (profess. & kin.) 030.162-014
programmer, business (profess. & kin.) 030.162-010
PROGRAMMER, ENGINEERING AND SCIENTIFIC (profess. & kin.) 030.162-018
programmer, numerical control (any industry) 007.167-018
programmer operator, numerical control (electron. comp.) 609.262-010
PROGRAMMING EQUIPMENT OPERATOR (electron. comp.) 726.685-062
PROGRAM PROPOSALS COORDINATOR (radio-tv broad.) 132.067-030
program schedule clerk (radio-tv broad.) 199.382-010
PROGRAM SPECIALIST, EMPLOYEE-HEALTH MAINTENANCE (profess. & kin.) 166.167-050
progress clerk (clerical) 221.387-034

progress clerk

progress clerk (clerical) 221.167-018
PROGRESS CLERK (construction) 221.362-022
PROGRESSIVE ASSEMBLER AND FITTER (agric. equip.) 801.684-022
Progressive D... Maker (machine shop) 601.260-010
PROJECT CREW WORKER (any industry) 891.687-018
project development coordinator (profess. & kin.) 010.162-018
PROJECT DIRECTOR (profess. & kin.) 189.117-070
PROJECT ENGINEER (profess. & kin.) 019.167-014
projection camera operator (photofinishing) 976.381-018
projectionist (amuse. & rec., motion picture) 960.362-010
projector ... (any industry) 960.382-010
PROOF OPERATOR (photofinishing) 976.381-018
Proportional Welding Machine Operator (welding) 812.... 782-010
project manager (profess. & kin.) 189.117-050
PROJECT MANAGER, ENVIRONMENTAL RESEARCH (profess. & kin.) 029.167-014
Projector Assembler (photo. apparat.) 710.684-010
projector operator (elec. tel. comp.) 726.685-066
promotion, group-ticket sales (amuse. & rec.) 259.357-010
PROMPTER (amuse. & rec.) 152.367-010
Prongers (jewelry-silver.) 733.687-030
proof clerk (financial) 217.382-010
PROOF-COIN COLLECTOR (government ser.) 709.687-030
proofer (print. & pub.) 651.582-030
proofer apprentice (print. & pub.) 651.582-014
proofer, apprentice (print. & pub.) 971.381-030
Proofer, Black And White (print. & pub.) 971.381-038
Proofer, Color (print. & pub.) 971.381-038
PROOFER, PREPRESS (print. & pub.) 972.281-034
Proofing-Machine Operator (print. & pub.) 652.382-013
PROOF INSPECTOR (ordnance) 736.384-010
proof-load mechanic (aircraft mfg.) 929.382-010
PROOF-MACHINE OPERATOR (financial) 217.382-010
PROOF-MACHINE OPERATOR SUPERVISOR (financial) 217.132-010
proof-plate maker (print. & pub.) 971.381-034
PROOF-PRESS OPERATOR (print. & pub.) 651.582-010
proofreader (clerical) 209.687-010
PROOFREADER (print. & pub.) 209.387-030
proof runner (print. & pub.) 209.677-010
PROOFSHEET CORRECTOR (print. & pub.) 973.381-030
proof sorter (photofinishing) 976.687-018
PROOF TECHNICIAN (ordnance) 737.171-010
PROOF-TECHNICIAN HELPER (ordnance) 736.387-010
proof tester (ordnance) 736.384-030
PROP ATTENDANT (amuse. & rec.) 962.684-022
PROPELLANT-CHARGE LOADER (ordnance) 737.687-010
PROPELLANT-CHARGE-ZONE ASSEMBLER (ordnance) 737.687-110
Propeller Inspector (ship-boat mfg.) 609.361-010
Property-And-Equipment Clerk (retail trade; wholesale tr.) 222.387-030
PROPERTY-ASSESSMENT MONITOR (government ser.) 241.367-042
PROPERTY CLERK (government ser.) 222.367-054
PROPERTY COORDINATOR (amuse. & rec., radio-tv broad.) 962.167-018
property custodian (government ser.) 222.367-054
PROPERTY CUSTODIAN (motion picture) 222.387-042
PROPERTY-DISPOSAL OFFICER (any industry) 163.167-026
property handler (motion picture, video tape broad.) 962.687-022
property investor (business serv.; real estate) 189.157-010
Property-Loss-Insurance Claim Adjuster (clerical) 241.217-010
Property Manager (government ser.) 186.117-042
PROPERTY-UTILIZATION OFFICER (government ser.) 188.117-122
PROP MAKER (amuse. & rec., motion picture) 962.281-013
proposition, player (amuse. & rec.) 343.367-010
Proprietor-Manager, Local Automotive Service (retail trade) 185.167-014
PROPULSION-MOTOR AND GENERATOR REPAIRER (automotive ser.) 721.281-026
prosecuting attorney (government ser.) 110.117-010
prosecutor (government ser.) 110.117-010
PROSPECTING DRILLER (petrol. & gas) 930.382-038
Prospecting-Driller Helper (petrol. & gas) 930.364-010
PROSPECTOR (any industry) 024.281-010
prosthetic dentist (medical ser.) 072.101-034
PROSTHETICS ASSISTANT (medical ser.) 078.361-026
PROSTHETICS TECHNICIAN (professional ser.) 712.381-038
PROSTHETIST (medical ser.) 078.261-022
PROSTHODONTIST (medical ser.) 072.101-034
protection chief, industrial plant (any industry) 189.167-050
PROTECTION ENGINEER (utilities) 003.167-054
protective clothing and equipment specialist (profess. & kin.) 142.061-038
PROTECTIVE-CLOTHING ISSUER (chemicals) 222.687-046
PROTECTIVE OFFICER (government ser.) 372.363-010
PROTECTIVE-SIGNAL INSTALLER (business ser.) 822.261-018
PROTECTIVE-SIGNAL INSTALLER HELPER (business ser.) 822.664-010
PROTECTIVE SIGNAL OPERATOR (any industry) 379.362-014
PROTECTIVE-SIGNAL REPAIRER (business ser.) 822.361-022
PROTECTIVE-SIGNAL REPAIRER HELPER (business ser.) 822.684-014
PROTECTIVE-SIGNAL SUPERINTENDENT (business ser.) 822.131-022
PROTECTOR-PLATE ATTACHER (cutlery-hrdwr.) 692.685-138
prototype assembler, electronics (any industry) 726.261-010
PROTOTYPE-DEICER ASSEMBLER (rubber goods) 759.261-010
prototype-machine operator (engraving) 704.382-010
prototype machinist (machine shop) 600.260-022
Protozoologist (profess. & kin.) 041.061-070
prover (print. & pub.) 971.381-038
Provider (steel & rel.) 221.387-046
provost (education) 090.117-010
Prune Washer (food prep., nec) 521.685-110
PSYCHIATRIC AIDE (medical ser.) 355.377-014
psychiatric attendant (medical ser.) 355.377-014
PSYCHIATRIC TECHNICIAN (medical ser.) 079.374-026
PSYCHIATRIST (medical ser.) 070.107-014
PSYCHIC READER (amuse. & rec.) 159.647-018
Psychological Anthropologist (profess. & kin.) 055.067-010
Psychological Stress Evaluator (profess. & kin.) 199.267-026
PSYCHOLOGIST, CHIEF (profess. & kin.) 045.107-046
psychologist, clinical (profess. & kin.) 045.107-022
Psychologist, Comparative (profess. & kin.) 045.061-018
PSYCHOLOGIST, COUNSELING (profess. & kin.) 045.107-026
PSYCHOLOGIST, DEVELOPMENTAL (profess. & kin.) 045.061-010
PSYCHOLOGIST, EDUCATIONAL (profess. & kin.) 045.067-010
PSYCHOLOGIST, ENGINEERING (profess. & kin.) 045.061-014
PSYCHOLOGIST, EXPERIMENTAL (profess. & kin.) 045.061-018
PSYCHOLOGIST, INDUSTRIAL-ORGANIZATIONAL (profess. & kin.) 045.107-030
Psychologist, Military Personnel (profess. & kin.) 045.107-030
Psychologist, Personnel (profess. & kin.) 045.107-030
Psychologist, Physiological (profess. & kin.) 045.061-018
PSYCHOLOGIST, SCHOOL (profess. & kin.) 045.107-034
PSYCHOLOGIST, SOCIAL (profess. & kin.) 045.067-014
PSYCHOMETRIST (profess. & kin.) 045.067-018
public-address announcer (amuse. & rec.) 159.347-010
PUBLIC-ADDRESS SERVICER (any industry) 823.261-010
public-address-system operator (any industry) 823.261-010
Public Affairs Officer (government ser.) 188.117-106
publications-distribution clerk (clerical) 222.587-018
public-bath attendant (personal ser.) 335.677-014
Public Finance Specialist (government ser.) 160.162-022
PUBLIC-HEALTH DENTIST (medical ser.) 072.101-038
PUBLIC HEALTH EDUCATOR (profess. & kin.) 079.117-014
public-health engineer (profess. & kin.) 005.061-030
public-health engineer (profess. & kin.) see ENVIRONMENTAL ENGINEER
PUBLIC-HEALTH MICROBIOLOGIST (government ser.) 041.261-010
public-health nurse (medical ser.) 075.124-014
PUBLIC HEALTH PHYSICIAN (government ser.) 070.101-046
PUBLIC HEALTH REGISTRAR (government ser.) 169.167-046
PUBLIC HEALTH SERVICE OFFICER (government ser.) 187.117-050
public improvement inspector (utilities) 859.267-010
Public Information Officer (profess. & kin.) 165.167-014
public interviewer (clerical) 205.367-054
public-relations player (amuse. & rec.) 343.367-010
public-relations practitioner (profess. & kin.) 165.167-014
PUBLIC-RELATIONS REPRESENTATIVE (profess. & kin.) 165.167-014
PUBLIC-SAFETY OFFICER (government ser.) 379.263-014
Public Stenographer (clerical) 202.362-014
Public Utilities Complaint Analyst Supervisor (government ser.) 168.167-090
PUBLIC-UTILITIES ENGINEER (profess. & kin.) term
public-works commissioner (government ser.) 188.117-030
PUBLISHER (print. & pub.) term
puddler (concrete prod.) 530.384-010
Puddler, Pile Driving (construction) 869.687-026
puffer (laundry & rel.) 363.687-018
PUFF IRONER (laundry & rel.) 363.687-018
Puff-Iron Operator I (laundry & rel.) 363.681-010
Puff-Iron Operator II (laundry & rel.) 363.682-018
pugger helper (brick & tile; pottery & porc.) 570.685-074
pugg maker (hat & cap) 690.686-034
Pug Mill Operator (brick & tile; pottery & porc.) 575.382-010
Pug-Mill Operator (cement) 570.685-046
PUG-MILL OPERATOR (smelt. & refin.) 510.685-022
PUG-MILL-OPERATOR HELPER (brick & tile; pottery & porc.) 570.685-074
Pullboat Engineer (logging) 921.663-066
PULLER AND LASTER, MACHINE (boot & shoe) 788.684-086
puller (button & notion) 734.687-074
Puller (foundry) 514.685-014
Puller (laundry & rel.) 361.686-010
PULLER, MACHINE (leather mfg.) 589.685-078
PULLER OVER, MACHINE (boot & shoe) 788.684-090
PULLER-THROUGH (glove & mit.) 782.687-030
PULLEY MAINTAINER (mine & quarry) 630.687-010
PULLEY-MORTISER OPERATOR (saw. & plan.) 666.482-010

pulling-machine operator (petrol. & gas) 930.382-030
Pullman Attendant (r.r. trans.) 315.381-018
pullman clerk (r.r. trans.) 215.167-010
PULL-OUT OPERATOR (fabrication, nec) 739.687-162
pull-out operator (plastic-synth.) 559.584-010
Pull-Socket Assembler (elec. equip.; light. fix.) 729.687-010
Pull-Through Hooker (meat products) 525.685-018
PULMONARY-FUNCTION TECHNICIAN (medical ser.) 078.262-010
pulmonary-function technologist (medical ser.) 078.262-010
PULP-AND-PAPER TESTER (paper & pulp) 539.364-010
pulp drier (wood prod., nec) 532.685-010
PULP-DRIER FIRER (sugar & conf.) 523.585-030
PULPER (paper & pulp; wood prod., nec) 530.685-014
PULPER, SYNTHETIC SOIL BLOCKS (paper & pulp) 530.582-010
PULPER TENDER (can. & preserv.) 521.685-262
PULP GRINDER AND BLENDER (paper & pulp; wood prod., nec) 530.682-010
pulping-machine operator (chemical) 555.685-010
pulp-machine operator (paper & pulp) 539.685-030
pulp-making-plant operator (paper & pulp; paper goods) 532.686-010
PULP PILER (logging) 922.687-082
PULP-PRESS TENDER (paper & pulp) 532.685-026
PULP-PRESS TENDER (sugar & conf.) 521.685-258
PULP-REFINER OPERATOR (paper & pulp) 530.382-010
pulp roller (logging) 922.687-082
pulp-screen operator (chemical) 551.685-106
Pulp Tester (paper & pulp) 539.364-010
Pulpwood Cutter (logging) 454.684-026
Pulpwood Scaler (paper & pulp) 455.487-010
pulverizer (brick & tile; pottery & porc.) 570.685-098
PULVERIZER (chemical) 555.685-046
PULVERIZER (jewelry-silver.) 770.687-030
PULVERIZER (meat products) 521.685-266
pulverizer (plastic prod.; plastic-synth.) 555.685-026
PULVERIZER-MILL OPERATOR (rubber goods; rubber reclaim.) 555.382-010
pulverizer operator (steel & rel.) 544.582-010
pulverizer tender (chemical) 555.685-034
PULVERIZING-AND-SIFTING OPERATOR (chemical) 550.485-026
Pulvi-Mixer Operator (construction) 859.683-026
Pump-And-Blower Attendant (sanitary ser.) 955.585-010
Pump-And-Blower Operator (sanitary ser.) 955.362-010
pump-and-still operator (steel & rel.) 550.382-010
pump-and-tank servicer (any industry) 620.281-018
Pump Assembler (machinery mfg.) 801.361-010
PUMPER (any industry) 914.682-010
pumper (chemical) 559.565-010
pumper (petrol. & gas) 541.382-014
pumper (petrol. & gas) 914.382-010
PUMPER (petrol. refin.) 549.360-010
PUMPER, BREWERY (beverage) 914.665-014
PUMP ERECTOR (construction) 637.281-010
Pump-Erector Helper (construction) 869.664-014
PUMPER-GAUGER (chemical; petrol. refin.; pipe lines) 914.382-014
PUMPER-GAUGER APPRENTICE (chemical; petrol. refin.; pipe lines) 914.382-018
Pumper, Hand (meat products) 522.685-086
PUMPER, HEAD (petrol. & gas) 914.382-022
PUMPER HELPER (any industry) 914.687-018
PUMPER HELPER (petrol. refin.) 549.684-010
pumphouse operator, chief (chemical) 559.132-138
pumping-plant operator (waterworks) 954.382-010
pump installation and servicer (construction) 637.281-010
PUMP INSTALLER (any industry) 630.684-018
pump-machine operator (any industry) 914.682-010
PUMP MECHANIC (paper & pulp) 629.281-034
pump operator (any industry) 914.682-010
pump operator (petrol. refin.) 549.362-010
pump operator, brine well (chemical) 559.685-026
PUMP OPERATOR, BYPRODUCTS (steel & rel.) 541.362-014
PUMP-PRESS OPERATOR (paper & pulp) 539.685-022
pump repairer (any industry) 630.281-018
pump-room operator (utilities) 952.362-010
pump runner (any industry) 914.682-010
PUMP SERVICER (any industry) 630.281-018
PUMP-SERVICER HELPER (any industry) 630.684-022
PUMP-SERVICER SUPERVISOR (any industry) 630.131-010
pump-station operator (pipe lines) 914.362-018
PUMP-STATION OPERATOR, WATERWORKS (waterworks) 954.382-010
pump tender (any industry) 914.682-010
Pump Tender (construction) 869.665-010
pump tender (steel & rel.) 541.362-014
PUMP TENDER, CEMENT BASED MATERIALS (concrete prod.; construction) 849.665-010
PUMP TESTER (plastic-synth.) 557.564-014
PUNCHBOARD ASSEMBLER I (paper goods) 794.687-042
PUNCHBOARD ASSEMBLER II (paper goods) 794.687-046
PUNCHBOARD-FILLING-MACHINE OPERATOR (paper goods) 649.685-094
punchboard inserter (paper goods) 794.687-042
punchboard stuffer (paper goods) 794.687-042
puncher (agriculture) 410.674-014
puncher (boot & shoe) 690.685-162
puncher (boot & shoe) 690.685-114
puncher (leather prod.) 690.685-266
puncher (optical goods) 713.687-014
Puncher (saw. & plan.) 669.687-030
PUNCHER (tex. prod., nec) 689.582-010
PUNCHER (woodworking) 663.685-022
puncher and fastener (boot & shoe) 690.685-162
Punch Finisher (machine shop) 601.381-010
punching-machine operator (hat & cap) 686.685-038
Punch-Press Feeder (any industry) 699.686-010
Punch-Press Offbearer (any industry) 699.686-010
PUNCH-PRESS OPERATOR (fabrication, nec) 692.665-014
punch press operator (glass mfg.) 575.685-054
PUNCH PRESS OPERATOR (wood prod., nec) 669.685-106
PUNCH-PRESS OPERATOR, AUTOMATIC (any industry) 615.482-026
Punch-Press-Operator Helper (any industry) 619.687-014
PUNCH-PRESS OPERATOR I (any industry) 615.382-010
PUNCH-PRESS OPERATOR II (any industry) 615.685-030
PUNCH-PRESS OPERATOR III (any industry) 615.682-014
Punch-Press Operator IV (any industry) 617.685-026
PUNCH-PRESS SETTER (any industry) 619.380-014
Punch-Press Supervisor (any industry) 619.130-030
PUPPETEER (amuse. & rec.) 159.041-014
purchase-order checker (clerical) 214.362-026
PURCHASE-PRICE ANALYST (profess. & kin.) 162.167-030
purchaser, automotive parts (clerical) 249.367-058
purchase-request editor (clerical) 249.367-066
PURCHASING AGENT (profess. & kin.) 162.157-038
PURCHASING-AND-CLAIMS SUPERVISOR (water trans.) 248.137-014
purchasing-and-fiscal clerk (clerical) 249.367-066
purchasing clerk (clerical) 249.367-066
purchasing-contracting clerk (clerical) 249.367-066
pure-culture operator (food prep., nec) 522.685-090
purification operator (chemical) 552.362-022
purification operator (chemical) 552.462-010
Purification Operator (petrol. refin.) 549.260-010
PURIFICATION-OPERATOR HELPER (chemical) 551.465-010
Purification-Operator Helper (petrol. refin.) 542.362-014
PURIFICATION OPERATOR I (chemical) 551.685-122
PURIFICATION OPERATOR II (chemical) 551.362-010
Purifier (grain-feed mills) 521.685-030
purifying-plant operator (waterworks) 954.382-014
Purse Framer (leather prod.) 739.684-090
PURSER (water trans.) 197.167-014
push-bench-operator helper (nonfer. metal; steel & rel.) 614.686-010
Push-Button-Switch Assembler (elec. equip.) 729.687-010
PUSH-CONNECTOR ASSEMBLER (house. appl.) 706.687-030
pusher (any industry) see STRAW BOSS
pusher (dairy products) 529.685-030
pusher (steel & rel.) 504.665-014
PUSHER OPERATOR (steel & rel.) 519.663-018
pusher runner (steel & rel.) 512.683-010
push-up machine operator (boot & shoe) 690.685-206
PUT-IN-BEAT ADJUSTER (clock & watch) 715.684-174
putter-in (dairy products) 529.685-030
putter-out, machine (leather mfg.; tex. prod., nec) 589.685-098
putty-and-patch worker (furniture) 763.684-070
PUTTY GLAZER (any industry) 749.684-042
Putty Maker (paint & varnish) 550.685-078
PUTTY MIXER AND APPLIER (wood. container) 769.687-038
Putty Remover (fabrication, nec) 761.684-030
PUTTY TINTER-MAKER (paint & varnish) 559.482-014
PUZZLE ASSEMBLER (toy-sport equip.) 731.687-030
PYRIDINE OPERATOR (steel & rel.) 552.382-010
pyridine-recovery operator (steel & rel.) 552.382-010
pyroglazer (glass mfg.; glass products) 740.381-010
pyrometer operator (ordnance) 619.662-010
pyrotechnic assembler (chemical) 737.587-014
Pyrotechnic-Loading Supervisor (chemical) 737.131-010
Pyrotechnic Mixer (chemical) 737.687-090

Q

quad stayer (paper goods) 641.685-054
Quail Farmer (agriculture) 412.161-010
QUALITY ASSURANCE ANALYST (profess. & kin.) 033.262-010

quality assurance calibrator (aircraft mfg.) 019.281-010
QUALITY ASSURANCE COORDINATOR (medical scr.) 075.167-014
QUALITY ASSURANCE GROUP LEADER (auto. mfg.) 806.367-014
QUALITY ASSURANCE MONITOR (auto. mfg.) 806.367-018
Quality Assurance Monitor, Body (auto. mfg.) 806.367-018
Quality Assurance Monitor, Chassis (auto. mfg.) 806.367-018
Quality Assurance Monitor, Final (auto. mfg.) 806.367-018
Quality Assurance Monitor, Trim (auto. mfg.) 806.367-018
QUALITY ASSURANCE SUPERVISOR (auto. mfg.) 806.137-022
Quality Assurance Supervisor (office machines) 726.130-010
Quality Assurance Supervisor, Body (auto. mfg.) 806.137-022
Quality Assurance Supervisor, Chassis (auto. mfg.) 806.137-022
Quality Assurance Supervisor, Final (auto. mfg.) 806.137-022
Quality Assurance Supervisor, Trim (auto. mfg.) 806.137-022
quality auditor (elec. equip.) 727.381-022
quality-control-assembly-test technician (any industry) 726.261-018
QUALITY-CONTROL CHECKER (garment) 789.387-010
QUALITY CONTROL CHECKER, TEXTURING PROCESS (textile) 681.387-010
QUALITY-CONTROL CLERK (pharmaceut.) 229.587-014
QUALITY-CONTROL COORDINATOR (pharmaceut.) 168.167-066
QUALITY-CONTROL ENGINEER (profess. & kin.) 012.167-054
QUALITY-CONTROL INSPECTOR (bakery products) 529.367-018
quality control inspector (comm. equip.; electron. comp.; inst. & app.) 726.381-010
QUALITY-CONTROL INSPECTOR (cutlery-hrdwr.) 701.261-010
QUALITY CONTROL INSPECTOR (furniture; millwork-plywood) 569.687-030
QUALITY-CONTROL INSPECTOR (glass mfg.) 579.367-010
QUALITY-CONTROL INSPECTOR (light. fix.) 725.687-026
quality-control inspector (paper goods) 649.367-010
quality-control inspector (paper goods) 652.687-042
quality control inspector (print. & pub.) 653.667-010
QUALITY-CONTROL INSPECTOR (recording) 194.387-010
QUALITY-CONTROL INSPECTOR (rubber tire) 750.367-010
QUALITY CONTROL INSPECTOR (sugar & conf.) 529.367-034
quality-control-inspector, heading (wood. container) 764.387-010
quality-control projectionist (photofinishing) 976.362-010
quality-control supervisor (machine shop) 609.131-010
QUALITY-CONTROL SUPERVISOR (plastic prod.) 559.134-010
QUALITY-CONTROL SUPERVISOR (plastic-synth.) 559.131-014
quality-control technician (beverage) 029.361-010
QUALITY-CONTROL TECHNICIAN (beverage) 529.367-022
QUALITY-CONTROL TECHNICIAN (can. & preserv.: food prep., nec) 529.387-030
QUALITY CONTROL TECHNICIAN (concrete prod.) 579.364-010
QUALITY-CONTROL TECHNICIAN (glass mfg.) 579.367-014
QUALITY-CONTROL TECHNICIAN (photofinishing) 976.267-010
QUALITY-CONTROL TECHNICIAN (profess. & kin.) 012.261-013
QUALITY-CONTROL TECHNICIAN (svc. ind. mach.) 637.684-014
QUALITY-CONTROL TECHNICIAN, INKED RIBBONS (pen & pencil) 733.364-010
QUALITY-CONTROL TESTER (fabrication, nec) 543.684-010
QUALITY-CONTROL TESTER (knitting) 684.384-010
QUALITY-CONTROL TESTER (paper goods; plastic-synth.) 559.367-010
QUALITY-CONTROL TESTER (wood prod., nec) 569.384-010
QUALITY TECHNICIAN, FIBERGLASS (glass mfg.) 579.384-014
quality worker (auto. mfg.) 806.684-010
Quantometer Operator (smelt. & refin.) 519.387-010
QUARRY PLUG-AND-FEATHER DRILLER (mine & quarry) 930.684-022
QUARRY SUPERVISOR, DIMENSION STONE (mine & quarry) 930.134-010
QUARRY SUPERVISOR, OPEN PIT (mine & quarry) 939.131-010
QUARRY WORKER (mine & quarry) 939.667-014
quarter doper (boot & shoe) 788.687-038
quarter folder (boot & shoe) 690.685-070
Quarter Former (boot & shoe) 690.685-098
Quarter Inspector (boot & shoe) 788.384-010
Quarter-Lining Smoother (boot & shoe) 690.685-350
Quarter-Lining Stitcher (boot & shoe) 690.682-082
QUARTERMASTER (water trans.) 911.363-014
Quarter-Section Ironer (hat & cap) 583.685-098
Quebracho Tanner (leather mfg.) 582.482-018
Queen Producer (agriculture) 413.161-010
Quick-Mixer Operator (sugar & conf.) 520.685-074
quick print operator (print. & pub.) 979.362-010
QUICK SKETCH ARTIST (amuse. & rec.) 149.041-010
QUILL-BUNCHER-AND-SORTER (tex. prod., nec) 734.687-066
Quill Changer (narrow fabrics) 689.686-038
quill cleaner (textile) 689.686-014
quill cleaner, hand (textile) 689.687-014
quill-cleaning-machine operator (textile) 689.686-014
quiller (textile) 681.685-074
quiller hand (textile) 681.685-074
Quiller-Machine Fixer (textile) 689.260-010
QUILLER OPERATOR (textile) 681.685-070
quiller tender (textile) 681.685-074
QUILLING-MACHINE OPERATOR, AUTOMATIC (textile) 681.685-074
quill inspector (glass mfg.; plastic-synth.; textile) 681.687-030
quill-machine tender (textile) 681.685-070
Quill-Picking-Machine Operator (tex. prod., nec) 589.685-054
quill skinner (textile) 689.686-014
quill stripper (textile) 689.686-014
Quill Winder (narrow fabrics) 681.685-154
QUILTER FIXER (tex. prod., nec) 689.260-014
quilting-machine helper (tex. prod., nec) 689.686-010
QUILTING-MACHINE OPERATOR (glove & mit.; tex. prod., nec) 689.685-106
QUILTING-MACHINE OPERATOR (tex. prod., nec) 584.382-014
Quilt Sewer (tex. prod., nec) 787.682-066
Quilt Sewer, Hand (tex. prod., nec) 782.684-018
QUILT STUFFER (tex. prod., nec) 789.687-130
QUILT STUFFER, MACHINE (tex. prod., nec) 689.685-102
quirk sander (boot & shoe) 662.685-042
quote clerk (financial) 237.367-046

R

rabbi (profess. & kin.) 120.107-010
Rabbit Breeder (agriculture) 410.161-010
Rabbit Dresser (meat products) 525.687-010
Rabbit Flesher (leather mfg.) 585.681-010
RABBLE-FURNACE TENDER (chemical) 553.685-090
racing-board marker (amuse. & rec.) 249.587-010
RACING SECRETARY AND HANDICAPPER (amuse. & rec.) 153.167-018
Rack Carrier (paper goods) 929.687-030
Rack Cleaner (electroplating) 500.686-010
Rack Cleaner (textile) 699.687-014
RACKER (amuse. & rec.) 340.477-010
Racker (any industry) 929.687-030
RACKER (bakery products) 524.687-018
racker (beverage) 920.665-014
RACKER (clock & watch) 715.687-106
Racker (electroplating) 500.686-010
racker (furniture) 780.684-090
racker (hat & cap) 784.387-010
RACKER (jewelry-silver.) 735.687-026
RACKER (paper goods) 659.687-010
racker (photofinishing) 976.687-018
Racker (saw. & plan.) 922.687-074
Racker (steel & rel.) 509.687-026
racker (tobacco) 529.687-090
RACKER (toy-sport equip.) 749.587-010
racker (woodworking) 922.687-074
RACKER, OCTAVE BOARD (musical inst.) 730.684-062
RACKER, SILK-SCREEN PRINTING (any industry) 659.687-014
RACKET STRINGER (toy-sport equip.) 732.684-094
Rack Loader (elec. equip.) 727.687-070
RACK LOADER (fabrication, nec) 590.687-018
RACK LOADER I (tobacco) 529.686-074
Rack Loader II (tobacco) 529.686-038
RACK-ROOM WORKER (beverage) 920.665-014
Radar Mechanic (any industry) 828.261-022
radiagraph operator (welding) 816.482-010
RADIAL-ARM-SAW OPERATOR (woodworking) 667.682-054
Radial-Drill Operator (stonework) 676.682-014
RADIATION MONITOR (profess. & kin.) 199.167-010
RADIATION-PROTECTION ENGINEER (profess. & kin.) 015.137-010
RADIATION-PROTECTION SPECIALIST (government ser.) 168.261-010
RADIATION-THERAPY TECHNOLOGIST (medical ser.) 078.361-034
radiator repairer (automotive ser.) 620.381-010
RADIOACTIVITY-INSTRUMENT MAINTENANCE TECHNICIAN (petrol. & gas) 828.281-022
radioactivity technician (petrol. & gas) 828.281-022
radio and radar technician (aircraft mfg.; air trans.) 823.261-026
Radio-And-Television-Cabinet Inspector (furniture) 763.687-026
Radio Announcer (radio-tv broad.) 159.147-010
radio board operator-announcer (radio-tv broad.) 159.147-010
radio-communications mechanician (any industry) 823.281-014
Radio-Division Captain (government ser.) 193.167-018
Radio-Division Lieutenant (government ser.) 193.167-018
radiographer (medical ser.) 078.362-026
radiographer, angiogram (medical ser.) 078.362-046
RADIOGRAPHER (any industry) 199.361-010
radiographer, cardiac catheterization (medical ser.) 078.362-050
Radio Installer (tel. & tel.) 822.381-018
Radio Installer, Automobile (automotive ser.) 806.684-038
RADIO-INTELLIGENCE OPERATOR (government ser.) 193.362-014
RADIO INTERFERENCE INVESTIGATOR (electron. comp.) 823.261-014
radio-interference trouble shooter (electron. comp.) 823.261-014

RADIOISOTOPE-PRODUCTION OPERATOR (profess. & kin.) 015.362-022
RADIOLOGICAL-EQUIPMENT SPECIALIST (medical ser.) 719.261-014
radiologic electronic specialist (medical ser.) 719.261-014
RADIOLOGIC TECHNOLOGIST (medical ser.) 078.362-026
RADIOLOGIC TECHNOLOGIST, CHIEF (medical ser.) 078.162-010
Radiologic Technologist, Mammogram (medical ser.) 078.362-026
RADIOLOGIST (medical ser.) 070.101-090
RADIOLOGY ADMINISTRATOR (medical ser.) 187.117-062
RADIO MECHANIC (any industry) 823.261-018
radio mechanic (any industry) 823.281-014
RADIO-MESSAGE ROUTER (tel. & tel.) 235.387-010
RADIO OFFICER (water trans.) 193.262-022
radio operator (water trans.) 193.262-022
radio operator, ground (aircraft mfg.) 193.262-026
RADIOPHARMACIST (medical ser.) 074.161-014
radiophone operator (any industry) 193.262-034
radio-photo technician (print. & pub.; tel. & tel.) 193.362-010
Radio Police Officer (government ser.) 375.263-014
Radio Producer (radio-tv broad.) 159.117-010
RADIO REPAIRER (any industry) 720.281-010
Radio Repairer, Domestic (any industry) 720.281-010
RADIO STATION OPERATOR (aircraft mfg.) 193.262-026
radiotelegraphist (tel. & tel.) 193.262-030
RADIOTELEGRAPH OPERATOR (tel. & tel.) 193.262-030
Radiotelegraph Operator-Servicer (any industry) 823.281-014
RADIOTELEPHONE OPERATOR (any industry) 193.262-034
radiotelephone-technical operator (any industry) 193.262-034
RADIUS CORNER MACHINE OPERATOR (glass products) 673.685-098
radius grinder (nonmet. min.) 673.685-010
RAFTER (logging) 455.664-010
RAFTER-CUTTING-MACHINE OPERATOR (mfd. bldgs.) 669.382-014
Rag Baler (laundry & rel.) 920.685-010
RAG-CUTTING-MACHINE FEEDER (paper & pulp; tex. prod., nec) 530.666-010
RAG-CUTTING-MACHINE TENDER (paper & pulp; tex. prod., nec) 530.665-014
RAG INSPECTOR (paper & pulp) 530.687-010
Rag Sorter (any industry) 929.687-022
RAG SORTER AND CUTTER (tex. prod., nec) 789.687-134
Rag Washer (laundry & rel.) 361.665-010
rag-willow operator (paper & pulp) 533.685-030
Rail Assembler (toy-sport equip.) 732.384-010
Rail-Car Operator (logging) 919.663-014
rail-doweling-machine operator (saw. & plan.) 669.682-042
Rail-Express Clerk (r.r. trans.) 222.367-022
Rail-Flaw-Detector-Car Operator (r.r. trans.) 910.363-014
RAIL-FLAW-DETECTOR OPERATOR (r.r. trans.) 910.263-010
rail gang supervisor (construction) 869.134-022
Rail Inspector (steel & rel.) 619.381-010
railroad-car-cleaning supervisor (r.r. trans.) 910.137-014
railroad-car inspector (railroad equip.) 910.667-010
RAILROAD-CAR INSPECTOR (r.r. trans.) 910.387-014
RAILROAD-CAR LETTERER (r.r. trans.) 84[illegible]681-010
railroad-car loader (mine & quarry) 932.687-010
railroad-car retarder operator (r.r. trans.) 910.382-010
RAILROAD-CAR-TRUCK BUILDER (railroad equip.) 806.684-114
RAILROAD-CONSTRUCTION DIRECTOR (r.r. trans.) 182.167-018
railroad-crane operator (any industry) 921.663-038
RAILROAD ENGINEER (profess. & kin.) 005.061-026
RAILROAD-MAINTENANCE CLERK (r.r. trans.) 221.362-026
Railroad Operator (amuse. & rec.) 342.663-010
RAILROAD SUPERVISOR (construction) term
railroad supervisor of engines (r.r. trans.) 910.137-034
RAILROAD WHEELS AND AXLE INSPECTOR (railroad equip.) 622.381-034
Rail Splitter (logging) 454.684-022
RAIL-TRACTOR OPERATOR (steel & rel.) 919.683-018
RAILWAY-EQUIPMENT OPERATOR (r.r. trans.) 859.683-018
Raimann-Machine Operator (millwork-plywood) 669.685-098
RAISED PRINTER (print. & pub.) 652.686-034
raise driller (mine & quarry) 930.683-026
Raise Miner (mine & quarry) 939.281-010
raiser (machinery mfg.) 979.681-010
raiser (wood. container) 764.684-018
raiser helper (wood. container) 764.687-038
Raisin-Separator Operator (sugar & conf.) 529.686-034
Raisin Washer (food prep., nec) 521.685-110
RAKER (carpet & rug) 789.687-138
RAKER, BUFFING WHEEL (tex. prod., nec) 589.684-010
ram-die maker (pottery & porc.) 774.684-026
RAM-PRESS OPERATOR (pottery & porc.) 575.682-022
ramrod (agriculture) 410.137-014
ranch hand, livestock (agriculture) 410.664-010
ranch manager (agriculture; wholesale tr.) 180.167-018
ranch rider (agriculture) 410.674-014
rand butter (boot & shoe) 690.685-474
rand-butting-machine operator (boot & shoe) 690.685-474
Rand Cementer (boot & shoe) 690.686-018
Rand Sewer (boot & shoe) 690.682-082
Rand Tacker (boot & shoe) 690.685-162
Range Conservationist (profess. & kin.) 040.061-046
range feeder (textile) 589.686-014
range-management specialist (profess. & kin.) 040.061-046
RANGE MANAGER (profess. & kin.) 040.061-046
range master (amuse. & rec.) 187.167-118
range operator (textile) 589.562-010
ranger (government ser.) 169.167-042
ranger aide (government ser.) 249.367-082
rapid-extractor operator (any industry) 581.685-038
Rapid-Outsole Stitcher (boot & shoe) 690.682-078
Rapier-Insertion Loom Fixer (textile) 683.260-018
rapper (smelt. & refin.) 511.687-014
Raschel-Knitting-Machine Operator (knitting) 685.665-018
Raspberry Checker (can. & preserv.) 529.687-186
Raspberry Grower (agriculture) 403.161-014
RASPER (boot & shoe) 788.684-094
rasper-machine operator (boot & shoe) 690.685-046
Rat Breeder (agriculture) 410.161-010
Rate Analyst (government ser.) 160.267-014
RATE ANALYST, FREIGHT (air trans.; motor trans.; r.r. trans.; water trans.) 214.267-010
rate-and-cost analyst (utilities) 216.137-010
rate clerk (clerical) 214.362-038
RATE CLERK, PASSENGER (motor trans.) 214.362-030
Rate Engineer (profess. & kin.) 160.162-026
rate inserter (insurance) 214.482-022
rate marker (tel. & tel.) 214.587-010
RATER (insurance) 214.482-022
RATE REVIEWER (utilities) 214.387-014
RATER, TRAVEL ACCOMMODATIONS (profess. & kin.) 168.367-014
RATE SUPERVISOR (clerical) 214.137-018
rating clerk (insurance) 214.482-022
Rattan Worker (furniture) 763.684-078
Rattan Worker (wood. container) 769.684-054
Rattlesnake Farmer (agriculture) 413.161-014
RAVELER (knitting) 782.687-034
Raw-Calender Operator (tex. prod., nec) 584.685-010
RAW-CHEESE WORKER (dairy products) 529.686-078
Raw-Finish-Mill Operator (cement) 570.685-046
RAWHIDE-BONE ROLLER (leather prod.) 789.684-042
Raw-Hide Trimmer (leather mfg.) 585.684-010
RAW-JUICE WEIGHER (sugar & conf.) 529.685-194
RAW SAMPLER (smelt. & refin.) 519.484-014
RAW SHELLFISH PREPARER (hotel & rest.) 311.674-014
RAW-SILK GRADER (textile) 689.687-062
RAW-STOCK-DRIER TENDER (textile) 581.685-046
Raw-Stock-Dyeing-Machine Tender (textile) 582.685-102
RAW-STOCK-MACHINE LOADER (textile) 582.686-018
reactor-kettle operator (plastic-synth.) 558.382-042
reactor operator (chemical) 558.685-062
reactor operator (chemical) 559.382-018
reactor operator (chemical) 558.382-022
Reactor Operator (smelt. & refin.) 513.362-010
reactor operator (utilities) 952.362-022
REACTOR OPERATOR, TEST-AND-RESEARCH (profess. & kin.) 015.362-026
reactor-service operator (profess. & kin.) 015.362-014
READER (business ser.) 249.387-022
READER (motion picture; radio-tv broad.) 131.087-014
Readers'-Advisory-Service Librarian (library) 100.127-014
reading improvement teacher (education) 099.227-042
ready-mix-truck driver (construction) 900.683-010
REAGENT TENDER (smelt. & refin.) 511.685-046
REAGENT TENDER HELPER (smelt. & refin.) 511.686-010
REAL-ESTATE AGENT (profess. & kin.) 186.117-058
real-estate agent (real estate) 250.357-018
Real-Estate Broker (real estate) 250.357-018
REAL-ESTATE CLERK (clerical) 219.362-046
Real-Estate-Utilization Officer (government ser.) 188.117-122
Reamer (clock & watch) 606.685-030
REAMER (construction) term
reamer (fabrication, nec) 739.687-014
REAMER, CENTER HOLE (clock & watch) 715.687-110
REAMER, HAND (machine shop) 709.684-058
Reamer Operator (machine shop) 606.682-014
REAMING-MACHINE TENDER (nonfer. metal) 606.685-034
rebeamer (textile) 681.585-010
rebrander (boot & shoe) 753.687-014
REBRANDER (rubber goods) 559.685-150
rebut-machine tail offbearer (saw. & plan.) 667.686-018

RECEIPT-AND-REPORT CLERK (water trans.) 216.382-054
receiver, bulk system (any industry) 921.685-026
RECEIVER-DISPATCHER (nonprofit org.) 239.367-022
RECEIVER, FERMENTING CELLARS (beverage) 522.662-010
Receiver Setter (construction) 869.664-014
RECEIVING-BARN CUSTODIAN (amuse. & rec.) 349.367-014
RECEIVING CHECKER (clerical) 222.687-018
receiving checker (laundry & rel.) 369.687-026
Receiving Clerk (clerical) 222.387-050
receiving-distribution-station operator (utilities) 952.362-026
receiving inspector (clerical) 222.687-018
Receiving Inspector (inst. & app.) 729.361-010
Receiving, Marking, And Washing Supervisor (laundry & rel.) '61.137-010
receiving-room clerk (hotel & rest.) 324.577-010
Receiving Supervisor (clerical) 222.137-030
Receiving-Tank Operator (sugar & conf.) 529.585-014
Receiving Weigher (clerical) 222.387-074
reception clerk (clerical) 237.367-038
reception clerk (clerical) 237.367-010
reception interviewer (clerical) 205.362-014
receptionist (any industry) 352.667-010
RECEPTIONIST (clerical) 237.367-038
RECEPTIONIST, AIRLINE LOUNGE (air trans.) 352.677-014
Receptionist, Doctor's Office (medical ser.) 237.367-038
recessing-machine operator (clock & watch) 605.685-038
Rechecker (textile) 689.685-038
Reciprocating-Drill Operator (any industry) 850.683-034
reclaimer (any industry) 929.687-022
RECLAMATION KETTLE TENDER, METAL (smelt. & refin.) 512.685-022
RECLAMATION SUPERVISOR (nonfer. metal) 512.132-014
reclamation supervisor (petrol. refin.) 929.131-010
RECLAMATION WORKER (wholesale tr.) 621.684-014
recoater (woodworking) 763.381-010
recoil spring winder (metal prod., nec) 616.685-070
RECONNAISSANCE CREWMEMBER (military ser.) 378.367-030
RECONSIGNMENT CLERK (clerical) 209.367-042
record-changer adjuster (comm. equip.) 720.684-010
RECORD-CHANGER ASSEMBLER (comm. equip.) 720.687-010
RECORD-CHANGER TESTER (comm. equip.) 720.687-014
record clerk (clerical) 216.382-062
Record Clerk (hotel & rest.) 203.582-066
RECORD CLERK (textile) 206.387-022
RECORDER (knitting) 221.587-026
RECORDER (steel & rel.) 221.367-050
recorder, gravity prospecting (petrol. & gas) 010.261-018
recorder helper, gravity prospecting (petrol. & gas) 939.663-010
recorder helper, seismograph (petrol. & gas) 939.364-010
RECORDING ENGINEER (radio-tv broad.; recording) 194.362-010
recordings librarian (library) 100.167-010
RECORDING STUDIO SET-UP WORKER (recording) 962.664-014
RECORDIST (motion picture) 962.382-010
RECORDIST, CHIEF (motion picture) 962.134-010
RECORD-PRESS TENDER (recording) 556.685-070
RECORDS-MANAGEMENT ANALYST (profess. & kin.) 161.267-022
records-section supervisor (clerical) 206.137-010
RECORD TESTER (recording) 194.387-014
RECOVERY OPERATOR (chemical) 558.682-022
RECOVERY OPERATOR (paper & pulp) 552.362-018
RECOVERY OPERATOR (smelt. & refin.) 519.582-010
RECOVERY-OPERATOR HELPER (smelt. & refin.) 519.485-014
recovery-unit operator (plastic-synth.) 558.682-010
RECREATION AIDE (social ser.) 195.367-030
RECREATIONAL THERAPIST (medical ser.) 076.124-014
RECREATION-FACILITY ATTENDANT (amuse. & rec.) 341.367-010
RECREATION LEADER (social ser.) 195.227-014
recreation specialist (profess. & kin.) 187.167-238
RECREATION SUPERVISOR (profess. & kin.) 187.167-238
RECRUITER (military ser.) 166.267-026
RECRUIT INSTRUCTOR (military ser.) 378.227-014
recruitment clerk (government ser.) 205.362-010
Rectangular-Tank Cooper (wood. container) 764.684-030
RECTIFICATION PRINTER (any industry) 976.682-018
Rectifier Operator (chemical) 952.362-038
Rectifying Attendant (beverage) 522.382-018
rectifying operator (chemical) 552.362-022
Rector (profess. & kin.) 120.107-010
redcap (air trans.; motor trans.; r.r. trans.) 357.677-010
REDEYE GUNNER (military ser.) 378.682-010
redistribution-and-marketing officer (any industry) 163.167-026
RED-LEAD BURNER (paint & varnish) 558.685-054
Red-Mud Thickener Operator (smelt. & refin.) 511.485-014
Redraw Operator (textile) 681.685-154
REDRYING-MACHINE OPERATOR (tobacco) 522.662-014
reducer (paint & varnish) 550.585-038
REDUCING-MACHINE OPERATOR (optical goods) 614.685-018
REDUCING-SALON ATTENDANT (personal ser.) 359.567-010
REDUCTION-FURNACE OPERATOR (chemical) 553.682-022
REDUCTION-FURNACE-OPERATOR HELPER (chemical; oils & grease) 559.686-038
REDUCTION-PLANT SUPERVISOR (smelt. & refin.) 512.130-010
REDYE HAND (knitting) 789.687-142
reed cleaner (textile) 699.687-010
reed cleaner (textile) 628.484-010
Reeding-Machine Operator (hat & cap) 784.682-014
REED MAKER (machinery mfg.) 709.381-038
reed maker (textile) 628.484-010
reed polisher (textile) 628.484-010
REED-PRESS FEEDER (wood prod., nec) 669.686-022
REED REPAIRER (textile) 628.484-010
Reed Worker (furniture) 763.684-078
Reefer Engineer (water trans.) 950.362-014
reel assembler (toy-sport equip.) 732.684-062
REEL ASSEMBLER (woodworking) 762.484-010
REEL-BLADE-BENDER FURNACE TENDER (agric. equip.) 504.685-030
reel cutter (paper goods) 640.685-046
REELER (build. mat., nec) 549.685-022
REELER (paper goods) 640.685-054
reeler (tex. prod., nec) 681.685-034
reeler (textile) 681.685-078
REELER (woodworking) 769.684-034
reeler operator (steel & rel.) 613.682-014
Reel Fabricator (agric. equip.) 706.684-042
reel-film inspector (photofinishing) 976.362-010
Reeling-And-Tubing-Machine Operator (textile) 689.685-046
REELING-MACHINE OPERATOR (steel & rel.) 613.682-014
reeling-machine operator (textile) 689.685-042
REELING-MACHINE OPERATOR (textile) 681.685-078
reel operator (paper goods) 640.685-046
Reel Oven Tender (bakery products) 526.685-070
reel slitter (tex. prod., nec) 690.682-026
Reel Tender (nonfer. metal) 691.685-030
reel tender (textile) 681.685-078
reexaminer (knitting) 684.687-014
referee (amuse. & rec.) 153.267-018
referee (amuse. & rec.) 153.167-014
referee (government ser.) 119.107-010
Referee (profess. & kin.) 169.107-010
Reference Librarian (library) 100.127-014
REFERRAL-AND-INFORMATION AIDE (government ser.) 237.367-042
referral clerk (clerical) 205.367-062
REFERRAL CLERK, TEMPROARY-HELP AGENCY (clerical) 205.367-062
REFINED-SYRUP OPERATOR (sugar & conf.) 520.485-022
REFINER (protective dev.) 712.684-038
refiner bleacher (oils & grease) 559.685-146
REFINERY OPERATOR (grain-feed mills) 521.362-018
refinery operator (oils & grease) 559.382-030
REFINERY OPERATOR (petrol. refin.) 549.260-010
Refinery Operator, Alkylation (petrol. refin.) 549.260-010
REFINERY OPERATOR, ASSISTANT (grain-feed mills) 521.462-010
Refinery Operator, Coking (petrol. refin.) 549.260-010
Refinery Operator, Cracking Unit (petrol. refin.) 549.260-010
Refinery Operator, Crude Unit (petrol. refin.) 549.260-010
Refinery Operator, Gas Plant (petrol. refin.) 549.260-010
REFINERY OPERATOR HELPER (petrol. refin.) 542.362-014
Refinery Operator Helper, Cracking Unit (petrol. refin.) 542.362-014
Refinery Operator Helper, Crude Unit (petrol. refin.) 542.362-014
Refinery Operator, Light-Ends Recovery (petrol. refin.) 549.260-010
Refinery Operator, Polymerization Plant (petrol. refin.) 549.260-010
Refinery Operator, Reforming Unit (petrol. refin.) 549.260-010
Refinery Operator, Vapor Recovery Unit (petrol. refin.) 549.260-010
Refinery Operator, Visbreaking (petrol. refin.) 549.260-010
Refinery Supervisor (oils & grease) 529.137-030
REFINING-MACHINE OPERATOR (oils & grease) 529.685-198
REFINING-MACHINE OPERATOR (sugar & conf.) 521.682-034
refining-still operator (chemical) 552.682-010
refinisher (furniture) 763.684-034
refinisher (woodworking) 763.381-010
REFLOW OPERATOR (electron. comp.) 726.685-038
REFRACTORY-GRINDER OPERATOR (brick & tile) 677.682-014
REFRACTORY MIXER (steel & rel.) 570.685-078
refractory specialist (glass mfg.) 579.664-010
Refrigerated-Cargo Clerk (water trans.) 248.367-014
REFRIGERATING ENGINEER (any industry) 950.362-014
REFRIGERATING ENGINEER, HEAD (any industry) 950.131-010
Refrigerating Technician (profess. & kin.) 007.181-010
REFRIGERATION MECHANIC (any industry) 637.261-026
REFRIGERATION MECHANIC (svc. ind. mach.) 827.361-014
refrigeration-mechanic apprentice (construction) 862.281-026
REFRIGERATION-MECHANIC HELPER (any industry) 637.687-014
Refrigeration Operator (chemical) 559.362-018

refrigeration operator, head (any industry) 950.131-010
refrigeration supervisor (any industry) 950.131-010
Refrigeration-System Installer (any industry) 637.261-026
REFRIGERATION UNIT REPAIRER (svc. ind. mach.) 637.381-014
Refrigerator Cabinetmaker (svc. ind. mach.) 660.280-010
refrigerator-car icer (food prep., nec; meat products) 910.687-018
Refrigerator Crater (svc. ind. mach.) 920.684-010
REFRIGERATOR GLAZIER (svc. ind. mach.) 865.684-022
Refrigerator-Room Clerk (clerical) 222.387-058
REFRIGERATOR TESTER (svc. ind. mach.) 827.384-010
regeneration operator (chemical) 558.585-018
REGENERATOR OPERATOR (sugar & conf.) 573.685-034
regional coordinator for aging (government ser.) 188.117-058
regional extension-service specialist (government ser.) 096.167-010
REGIONAL SUPERINTENDENT, RAILROAD CAR INSPECTION AND REPAIR (r.r. trans.) 184.117-090
REGISTERED REPRESENTATIVE (financial) 250.257-018
REGISTER REPAIRER (r.r. trans.) 710.681-018
REGISTRAR (government ser.) 205.367-038
REGISTRAR, COLLEGE OR UNIVERSITY (education) 090.167-030
REGISTRAR, MUSEUM (museums) 102.167-018
registrar, nurses' registry (medical ser.) 187.167-034
REGISTRATION CLERK (government ser.) 205.367-042
REGISTRATION CLERK (library) 249.365-010
REGISTRATION SPECIALIST, AGRICULTURAL CHEMICALS (government ser.) 168.267-106
Regrinder Operator (plastic prod.) 555.685-026
regrind mill operator (cement; smelt. & refin.) 519.685-030
regulation supervisor (utilities) 953.137-014
regulator assembler (elec. equip.) 724.684-030
Regulator Assembler (inst. & app.) 710.684-046
REGULATOR INSPECTOR (utilities) 820.361-018
REGULATORY ADMINISTRATOR (tel. & tel.) 168.167-070
REHABILITATION CENTER MANAGER (government ser.) 195.167-038
REHABILITATION CLERK (nonprofit org.) 205.367-046
rehabilitation officer (nonprofit org.) 187.167-198
rehabilitation technician (personal ser.) 365.131-010
REHABILITATION THERAPIST (profess. & kin.) term
Reindeer Rancher (agriculture) 410.161-018
Reinforced-Concrete Inspector (construction) 182.267-010
reinforcing-bar setter (construction) 801.684-026
reinforcing-iron worker (construction) 801.684-026
Reinforcing-Iron-Worker Helper (construction) 869.687-026
REINFORCING-METAL WORKER (construction) 801.684-026
reinforcing-steel erector (construction) 801.684-026
REINFORCING-STEEL-MACHINE OPERATOR (construction) 859.683-022
reinforcing-steel placer (construction) 801.684-026
reinforcing-steel setter (construction) 801.684-026
reinforcing-steel worker (construction) 801.684-026
Reinforcing-Steel Worker, Wire Mesh (construction) 869.687-026
reinspector (boot & shoe) 753.687-018
REINSPECTOR (knitting) 684.687-014
reinstatement clerk (insurance) 219.362-050
REINSURANCE CLERK (insurance) 219.482-018
rejected-items clerk (financial) 216.382-058
REJECT OPENER (tobacco) 790.687-026
reject opener and filler (tobacco) 790.687-026
relaster (boot & shoe) 788.684-106
Relay Adjuster (elec. equip.) 724.381-010
Relay Assembler (elec. equip.) 729.684-026
Relay Checker (elec. equip.) 724.381-010
Relay Engineer (utilities) 003.167-054
RELAY-RECORD CLERK (utilities) 221.367-054
Relay Repairer (elec. equip.) 729.684-038
RELAY-SHOP SUPERVISOR (utilities) 729.131-014
relay-shop tester (utilities) 729.281-038
RELAY TECHNICIAN (utilities) 821.261-018
Relay Tester (electron. comp.) 726.684-078
RELAY TESTER (utilities) 729.281-038
Relay-Tester Helper (utilities) 821.564-010
release and technical records clerk (aircraft mfg.; electron. comp.) 206.367-010
RELIABILITY ENGINEER (profess. & kin.) 019.061-026
reliability inspector (clock & watch) 715.685-034
relief clerk (retail trade) see SALESPERSON, CONTINGENT
RELIEF-MAP MODELER (any industry) 777.381-042
RELIEF WORKER (tobacco) term
RELISH BLENDER (can. & preserv.) 520.685-194
relish maker (can. & preserv.) 520.685-194
RELOCATION COMMISSIONER (government ser.) 188.167-070
Remelt-Centrifugal Operator (sugar & conf.) 521.682-010
REMELTER (elec. equip.; machinery mfg.; print. & pub.) 502.685-014
REMELT-FURNACE EXPEDITER (nonfer. metal) 512.132-018
remelt operator (foundry; nonfer. metal) 512.685-010
Remelt-Pan-Tank Operator (sugar & conf.) 529.585-014
Remelt-Sugar Boiler (sugar & conf.) 522.382-034
Remelt-Sugar Cutter (sugar & conf.) 521.682-010
remittance clerk (utilities) 211.462-034
Remittance-On-Farm-Rental-And-Soil-Conservation Auditor (insurance) 210.382-010
REMNANTS CUTTER (textile) 789.687-150
REMNANT SORTER (textile) 789.687-146
remodeler (boot & shoe; wood prod., nec) 739.684-106
Remote-Control Assembler (engine-turbine) 706.481-010
remover (boot & shoe) 690.685-046
renderer (profess. & kin.) 970.281-014
RENDERING-EQUIPMENT TENDER (meat products) 529.685-202
Renovation-Plant Supervisor (ordnance) 694.132-010
renovator (museums) 899.384-010
RENOVATOR-MACHINE OPERATOR (tex. prod., nec) 589.685-082
rental agent (real estate) 250.357-014
rental clerk, furniture (retail trade) 295.357-018
rental clerk, tool-and-equipment (business ser.; retail trade) 295.357-014
RENTAL MANAGER, PUBLIC EVENTS FACILITIES (business ser.) 186.117-062
Rent And Miscellaneous Remittance Clerk (insurance) 216.482-010
REPACK-ROOM WORKER (beverage) 920.687-146
repair clerk (boot & shoe) 221.387-014
repairer (any industry) 632.281-010
repairer (beverage) 764.687-090
REPAIRER (boot & shoe) 753.684-026
repairer (fabrication, nec) 739.687-146
REPAIRER (furniture) 709.684-062
repairer (hat & cap) 784.387-010
repairer (house. appl.) 723.584-010
REPAIRER (mine & quarry) 630.281-022
REPAIRER (smelt. & refin.) 630.281-026
repairer (tex. prod., nec; textile) 681.687-026
Repairer And Checker (ordnance) 761.381-034
REPAIRER, ART OBJECTS (any industry) 779.381-018
REPAIRER, ASSEMBLED WOOD PRODUCTS (woodworking) 769.684-038
Repairer, Assembly Line (motor-bicycles) 620.684-026
REPAIRER, AUTO CLOCKS (clock & watch) 715.584-014
Repairer, Cylinder Heads (welding) 819.384-010
Repairer, Electric Motors (elec. equip.) 721.684-022
Repairer, Evaporator (chemical) 630.261-018
REPAIRER, FINISHED METAL (any industry) 809.684-034
REPAIRER, GENERAL (auto. mfg.) 806.684-118
REPAIRER, GYROSCOPE (inst. & app.) 710.381-054
Repairer, Hairspring (clock & watch) 715.281-010
REPAIRER, HANDTOOLS (cutlery-hdwr.) 701.381-010
REPAIRER, HEAVY (auto. mfg.) 620.381-022
REPAIRER HELPER (smelt. & refin.) 630.664-010
REPAIRER I (chemical) 630.261-018
REPAIRER II (chemical) 630.684-026
REPAIRER, KILN CAR (brick & tile) 861.684-022
REPAIRER, MANUFACTURED BUILDINGS (mfd. bldgs.; vehicles, nec) 869.384-010
Repairer, Mirror And Picture Frame (wood prod., nec) 769.684-038
REPAIRER, PENS AND PENCILS (pen & pencil) 733.384-010
REPAIRER, PROBE TEST CARD, SEMICONDUCTOR WAFERS (electron. comp.) 726.361-022
Repairer, Pump (chemical) 630.261-018
REPAIRER, RECREATIONAL VEHICLE (vehicles, nec) 869.261-022
Repairer, Resistance-Welding Machines (welding) 626.361-010
Repairer, Sash And Door (wood prod., nec) 769.684-038
REPAIRER, SHOE STICKS (rubber goods) 619.685-074
Repairer, Still (chemical) 630.261-018
REPAIRER, SWITCHGEAR (comm. equip.; elec. equip.) 729.684-038
REPAIRER, TYPEWRITER (office machines) 706.381-030
REPAIRER, VENEER SHEET (furniture) 769.684-058
Repairer, Watchcases (clock & watch) 715.281-010
REPAIRER, WELDING, BRAZING, AND BURNING MACHINES (welding) 626.361-010
REPAIRER, WELDING EQUIPMENT (welding) 626.384-010
REPAIRER, WELDING SYSTEMS AND EQUIPMENT (welding) 626.261-014
Repairer, Wood Furniture (furniture) 769.684-038
repair helper (any industry) 638.684-018
repair mechanic (any industry) 638.281-014
REPAIR OPERATOR (garment) 786.682-214
REPAIR-ORDER CLERK (clerical) 221.382-022
repair-service clerk (clerical) 221.367-070
Repair Supervisor (toy-sport equip.) 732.130-010
repair weaver (personal ser.) 782.381-022
REPEAT CHIEF (print. & pub.) 970.361-014
repeater attendant (tel. & tel.) 822.261-026
repeater operator (textile) 683.685-026
REPEAT-PHOTOCOMPOSING-MACHINE OPERATOR (print. & pub.) 971.382-018
report checker (clerical) 209.687-010

report clerk (clerical) 216.382-062
REPORTER (print. & pub.; radio-tv broad.) 131.262-018
REPORTS ANALYST (profess. & kin.) 161.267-026
REPOSSESSOR (clerical) 241.367-022
Representative, Government Relations (profess. & kin.) 189.117-010
REPRESENTATIVE, PERSONAL SERVICE (tel. & tel.) 236.252-010
reprint sorter (photofinishing) 976.687-018
REPRODUCTION ORDER PROCESSOR (clerical) 221.367-058
REPRODUCTION TECHNICIAN (any industry) 976.361-010
REPTILE FARMER (agriculture) 413.161-014
RERECORDING MIXER (motion picture; radio-tv broad.) 194.362-014
reroller, hand (tobacco) 790.684-018
reroll tender (rubber goods; rubber tire) 554.685-022
Resaw Feeder (woodworking) 669.686-030
resaw-machine operator (woodworking) 667.682-058
RESAW OPERATOR (woodworking) 667.682-058
resawyer (woodworking) 667.682-058
RESEARCH ANALYST (insurance) 169.267-034
research assembler (photo. appar.) 714.281-010
Research Assistant (education) 090.227-010
research assistant (profess. & kin.) 199.364-014
RESEARCH ASSISTANT I (profess. & kin.) 109.267-010
RESEARCH ASSISTANT II (profess. & kin.) 199.267-034
RESEARCH ASSOCIATE (museums) 109.067-014
RESEARCH ASSOCIATE (profess. & kin.) term
RESEARCH-CONTRACTS SUPERVISOR (government ser.) 162.117-030
Research Director (profess. & kin.) 189.117-010
RESEARCH ENGINEER (profess. & kin.) master
research engineer, geophysical laboratory (profess. & kin.) 024.167-010
RESEARCH ENGINEER, MARINE EQUIPMENT (profess. & kin.) 014.061-018
RESEARCH ENGINEER, MINING-AND-OIL-WELL EQUIPMENT (mine & quarry; petrol. & gas) 010.061-022
RESEARCH ENGINEER, NUCLEAR EQUIPMENT (profess. & kin.) 015.061-018
researcher (profess. & kin.) 199.267-034
Research-Home Economist (profess. & kin.) 096.121-014
research-manufacturing operator (chemical; plastic-synth.) 559.382-046
RESEARCH MECHANIC (aircraft mfg.) 002.261-014
research mechanic (photo. appar.) 714.281-010
research nutritionist (profess. & kin.) 077.061-010
RESEARCH SUBJECT (any industry) 359.677-030
research-test-engine evaluator (petrol. refin.) 010.261-026
research-test-engine operator (petrol. refin.) 029.261-018
RESEARCH WORKER, ENCYCLOPEDIA (profess. & kin.) 109.267-014
research worker, kitchen (hotel & rest.) 310.267-010
RESEARCH WORKER, SOCIAL WELFARE (profess. & kin.) 054.067-010
reservation clerk (any industry) 238.367-026
RESERVATION CLERK (clerical) 238.362-014
Reservation Clerk (hotel & rest.) 238.367-038
RESERVATION CLERK (r.r. trans.) 238.367-014
RESERVATIONS AGENT (air trans.) 238.367-018
RESERVE OFFICER (financial; insurance) 186.167-054
reserve operator (garment) 786.682-262
RESERVE OPERATOR (tobacco) 529.685-206
RESERVES CLERK (financial) 216.362-034
reservoir caretaker (waterworks) 954.382-018
Reservoir Engineer (petrol. & gas) 010.061-018
Reshipping Clerk (clerical) 222.387-050
RESIDENCE COUNSELOR (education) 045.107-038
RESIDENCE SUPERVISOR (any industry) 187.167-186
resident care aide (medical ser.) 355.377-018
Residential Building Inspector (government ser.) 168.167-030
RESIN COATER (wood prod., nec) 562.687-014
Resin Compounder, Batch Lot (plastic-synth.) 550.685-134
Resin Filterer (paint & varnish) 551.685-082
resin maker (plastic-synth.) 558.382-050
Resin Worker (meat products) 525.687-094
resist coater-developer (electron. comp.) 976.685-038
Resistor Inspector (electron. comp.) 726.684-022
Resistor Tester (elec. equip.) 729.684-058
Resistor Tester (electron. comp.) 726.684-078
Resistor Winder (elec. equip.; electron. comp.) 724.684-026
resizer operator (woodworking) 667.682-058
Resource Agent (government ser.) 096.127-010
RESOURCE-RECOVERY ENGINEER (government ser.) 019.167-018
RESPIRATORY THERAPIST (medical ser.) 076.361-014
RESPIRATORY-THERAPY AIDE (medical ser.) 355.674-022
restoration technician (protective dev.) 712.381-038
RESTORER, CERAMIC (museums) 102.361-014
RESTORER, LACE AND TEXTILES (museums) 102.361-010
RESTORER, PAPER-AND-PRINTS (library; museums) 109.361-010
RESTRICTIVE-PREPARATION OPERATOR (ordnance) 559.685-154
Restrike Hammer Operator (forging) 610.362-010
RESTROOM ATTENDANT (any industry) 358.677-018
Retaining-Room Cutter (meat products) 525.684-026
Retanned-Leather Roller (leather mfg.) 583.685-094
retanner (leather mfg.) 582.482-018
retarder operator (r.r. trans.) 910.382-010
reticle printer (inst. & app.; optical goods) 976.684-034
RETIREMENT OFFICER (government ser.) 166.267-030
RETORT-CONDENSER ATTENDANT (chemical) 552.685-022
retort engineer (wood prod., nec) 561.362-010
Retort Feeder, Ground Bone (chemical) 553.686-010
retort forker (chemical) 569.686-034
Retort-Kiln Burner (brick & tile) 573.682-010
Retort Loader (chemical) 929.687-030
RETORT-LOAD EXPEDITER (wood prod., nec) 221.167-022
RETORT OPERATOR (can. & preserv.) 526.682-034
retort operator (woodworking) 562.665-014
RETORT-OR-CONDENSER PRESS OPERATOR (brick & tile) 575.382-026
RETORT UNLOADER (chemical) 569.686-034
retoucher (any industry) 740.684-026
retoucher (furniture) 763.684-034
retoucher (photofinishing) 970.281-018
RETOUCHER, PHOTOENGRAVING (print. & pub.) 970.381-030
Retouching Operator (hat & cap) 589.687-038
retreader (automotive ser.) 750.684-022
retread-mold operator (rubber tire) 553.685-102
RETREAD SUPERVISOR (rubber tire) 750.132-010
retrimmer (meat products) 521.687-106
Return Checker (laundry & rel.) 369.687-014
RETURNED-CASE INSPECTOR (beverage) 929.687-038
Returned-Goods Inspector (tex. prod., nec) 789.587-014
Returned-Goods Receiving Clerk (clerical) 222.387-050
returned-goods repairer (welding) 813.684-014
RETURNED-GOODS SORTER (textile) 922.687-086
RETURNED-ITEM CLERK (financial) 216.382-058
RETURNED-TELEPHONE-EQUIPMENT APPRAISER (comm. equip.) 222.387-046
Returner (agriculture) 920.687-074
returner, lasts (boot & shoe; rubber goods) 922.687-066
returning officer (government ser.) 205.367-030
returns clerk (boot & shoe) 221.387-014
returns clerk (clerical) 209.587-042
RETURN-TO-FACTORY CLERK (clerical) 209.587-042
REVENUE AGENT (government ser.) 160.167-050
REVENUE OFFICER (government ser.) 188.167-074
REVENUE-SETTLEMENTS ADMINISTRATOR (tel. & tel.) 184.117-074
revenue-stamp clerk (clerical) 219.487-010
Revenue-Stamp Cutter (beverage) 640.565-010
Reversal-Print Inspector (photofinishing) 976.687-014
Reverser (tex. prod., nec) 789.687-182
REVERSER (toy-sport equip.) 732.687-066
Reversing-Mill Roller (steel & rel.) 613.662-018
REVIEWER (insurance) 209.687-018
REVIEWING OFFICER, DRIVER'S LICENSE (government ser.) 168.167-074
REVISING CLERK (motor trans.; r.r. trans.) 214.382-026
REVIVAL CLERK (insurance) 219.362-050
revolving field assembler (elec. equip.) 721.684-026
reweaver (personal ser.) 782.381-022
rewinder (any industry) 699.587-010
rewinder (metal prod., nec) 920.685-102
Rewinder (motion picture) 976.685-018
rewinder (paper goods) 640.685-058
rewinder (tex. prod., nec; textile) 681.685-154
REWINDER OPERATOR (paper goods) 640.685-058
rewinder-operator helper (any industry) 699.587-010
reworker (electron. comp.) 726.684-090
REWORKER, PRINTED CIRCUIT BOARD (electron. comp.) 726.684-090
Rework Machine Operator (plastic prod.) 605.685-054
rewriter (print. & pub.; radio-tv broad.) 131.262-014
Rheostat Assembler (elec. equip.) 729.684-026
Rhinestone Setter (garment; tex. prod., nec) 789.685-010
Rhinestone Setter (jewelry-silver.) 735.687-034
Rhinologist (medical ser.) 070.101-062
Rib Bender (musical inst.) 569.685-014
ribber (meat products) 525.684-010
Ribbon Blocker (narrow fabrics) 689.685-014
Ribbon Cutter (garment) 699.685-014
Ribbon Cutter (hat & cap) 784.687-050
RIBBON CUTTER (narrow fabrics) 781.687-050
Rib Boner (meat products) 525.684-010
RIBBON-HANKING-MACHINE OPERATOR (paper goods) 640.385-010
RIBBON INKER (pen & pencil) 692.685-142
RIBBON-LAP-MACHINE TENDER (textile) 680.685-086
Ribbon-Sweatband Operator (hat & cap) 784.682-014
Ribbon Weaver (narrow fabrics) 683.682-046
RIBBON WINDER (pen & pencil) 733.685-022
Rib-Cloth Knitter (knitting) 685.665-014

rib matcher and fitter (ordnance) 736.381-014
rib-stiffener and heel-dipper (boot & shoe) 788.687-062
Rib-Trim Separator (knitting) 789.687-030
RICE CLEANING MACHINE TENDER (grain-feed mills) 521.665-022
Rice-Drier Operator (grain-feed mills) 523.685-090
Rice Farmer (agriculture) 401.161-010
rickshaw driver (amuse. & rec.) 349.477-010
RIDDLER OPERATOR (tobacco) 521.685-270
RIDE ATTENDANT (amuse. & rec.) 342.677-010
RIDE OPERATOR (amuse. & rec.) 342.663-010
rider (agriculture) 410.674-014
Riding Double (amuse. & rec.) 961.364-010
RIDING-SILKS CUSTODIAN (amuse. & rec.) 346.677-014
Riffler Tender (paper & pulp) 533.685-022
Rifle-Case Repairer (leather prod.) 783.684-026
rigger (amuse. & rec.) 962.684-010
RIGGER (any industry) 921.260-010
RIGGER (construction) 869.683-014
rigger (fishing & hunt.) 449.664-010
RIGGER (logging) 921.664-014
RIGGER (radio-tv broad.) 823.281-022
RIGGER (ship-boat mfg.) 806.261-014
RIGGER (tex. prod., nec) 789.684-046
RIGGER APPRENTICE (ship-boat mfg.) 806.261-018
rigger, chief (radio-tv broad.; tel. & tel.) 823.131-014
RIGGER HELPER (any industry) 921.687-026
RIGGER HELPER (ship-boat mfg.) 806.684-122
RIGGER SUPERVISOR (radio-tv broad.; tel. & tel.) 823.131-014
RIGGER, THIRD (logging) 921.687-030
Rigging-Loft Repairer (ship-boat mfg.) 806.684-122
RIGGING SLINGER (logging) 921.364-010
RIGGING SUPERVISOR (construction) 921.130-010
RIGHT-OF-WAY AGENT (any industry) 191.117-046
Right-of-Way Inspector (r.r. trans.) 376.667-018
RIGHT-OF-WAY SUPERVISOR (any industry) 191.117-050
right-of-way supervisor (construction) 869.133-010
rig operator (petrol. & gas) 930.382-030
rim-fire charger operator (ordnance) 694.685-050
RIM-FIRE-PRIMING OPERATOR (ordnance) 694.685-050
RIM-FIRE-PRIMING TOOL SETTER (ordnance) 632.380-022
Rim-Roller Setter (auto. mfg.) 616.260-014
Rim-Strip Tuber-Machine Operator (rubber tire) 690.662-014
RIM-TURNING FINISHER (clock & watch) 604.685-030
Ring Attacher (tex. prod., nec) 787.685-026
Ring-Barker Operator (saw. & plan.) 669.485-010
RING CONDUCTOR (amuse. & rec.) 159.367-010
Ring Facer (agriculture) 920.687-134
Ring-Grinder Operator (paper & pulp) 530.662-014
Ring Maker (chemical) 844.681-010
ring maker (jewelry-silver.) 700.684-010
RING MAKER (jewelry-silver.) 700.381-042
RING-MAKING-MACHINE OPERATOR (paper goods) 649.685-098
Ring Packer (agriculture; wholesale tr.) 920.687-134
RING-ROLLING-MACHINE OPERATOR (rubber goods) 690.682-066
Ring Sewer (tex. prod., nec) 789.687-090
ring-shear operator (any industry) 615.482-030
RING STAMPER (jewelry-silver.) 700.684-066
ring striker (jewelry-silver.) 700.684-066
RIP-AND-GROOVE-MACHINE OPERATOR (furniture) 667.682-062
RIPENING-ROOM ATTENDANT (plastic-synth.) 559.682-038
ripening-room hand (plastic-synth.) 559.585-018
Ripening-Room Operator (plastic-synth.) 559.585-018
rip-machine operator (any industry) 699.682-030
RIPPER (furniture) 617.685-030
RIPPER (garment; retail trade; tex. prod., nec) 782.687-038
ripper (leather mfg.) 585.684-010
ripper operator (tobacco) 529.685-090
Riprap Placer (construction) 869.687-026
Ripsaw Grader (woodworking) 667.382-010
Ripsaw Matcher (woodworking) 667.682-066
RIPSAW OPERATOR (woodworking) 667.682-066
ripsawyer (woodworking) 667.682-066
RISK AND INSURANCE MANAGER (any industry) 186.117-066
ritual circumciser (profess. & kin.) 129.271-010
RIVER (logging) 454.684-022
RIVER-AND-HARBOR SUPERVISOR (construction) term
riverboat captain (water trans.) 197.163-018
River-Crossing Supervisor (construction) 899.131-010
river tester (engine-turbine) 623.261-010
rivet bucker (any industry) 800.687-010
rivet catcher (any industry) 800.687-010
riveter (boot & shoe) 690.685-162
RIVETER (light. fix.) 616.685-054
RIVETER (railroad equip.) 800.684-010
Riveter, Automobile Brakes (automotive ser.) 620.685-010
RIVETER, HAND (any industry) 709.684-066
RIVETER, HAND (garment) 789.687-154
RIVETER HELPER (any industry) 800.687-010
RIVETER, HYDRAULIC (any industry) 800.662-010
RIVETER, PNEUMATIC (any industry) 800.684-014
Riveter, Portable Machine (any industry) 800.662-010
RIVETER, PORTABLE PINCH (any industry) 800.682-010
rivet-hammer-machine operator (furniture) 616.685-058
RIVET HEATER (heat treating) 504.485-010
Rivet Heater, Electric (heat treating) 504.485-010
Rivet Heater, Gas (heat treating) 504.485-010
rivet-hole-machine operator (garment) 686.685-054
RIVET-HOLE PUNCHER (garment) 686.685-054
RIVETING MACHINE OPERATOR (aircraft mfg.) 806.380-010
RIVETING-MACHINE OPERATOR (furniture) 616.685-058
RIVETING-MACHINE OPERATOR I (any industry) 699.482-010
RIVETING-MACHINE OPERATOR II (any industry) 699.685-030
Riveting Machine Operator, Programmed Control (aircraft mfg.) 806.380-010
Riveting Machine Operator, Tape Control (aircraft mfg.) 806.380-010
Rivet Maker (nut & bolt) 612.462-010
Rivet Spinner (any industry) 699.685-030
rivet sticker (any industry) 800.687-010
ROADABILITY-MACHINE OPERATOR (auto. mfg.) 806.383-010
Road Clerk (r.r. trans.) 221.362-026
Road Engineer, Freight (r.r. trans.) 910.363-014
Road Engineer, Passenger (r.r. trans.) 910.363-014
Road-Freight Firer (r.r. trans.) 910.363-010
road grader (construction) 850.663-022
road-hogger operator (construction) 850.663-022
Road Manager (amuse. & rec.) 191.117-038
ROAD-MIXER OPERATOR (construction) 859.683-026
road-oil distributor (construction) 853.663-018
ROAD-OILING-TRUCK DRIVER (construction) 853.663-018
Road-Passenger Firer (r.r. trans.) 910.363-010
ROAD-ROLLER OPERATOR (construction) 859.683-030
Road-Roller Operator, Hot Mix (construction) 859.683-030
ROADS SUPERVISOR (government ser.) 188.167-078
ROAD SUPERVISOR (motor trans.) 913.133-010
ROAD SUPERVISOR OF ENGINES (r.r. trans.) 910.137-034
road tester (auto. mfg.) 806.283-014
roaster (can. & preserv.) 529.685-174
roaster (cement; chemical; mine & quarry) 573.382-010
ROASTER, GRAIN (grain-feed mills) 523.585-034
roaster helper (sugar & conf.) 523.666-010
Roaster Supervisor (smelt. & refin.) 513.132-010
roast tier (meat products) 525.687-118
ROBOTIC MACHINE OPERATOR (aircraft mfg.) 606.382-026
robotic machine tender, production (machine shop) 609.685-018
robot technician (machinery mfg.) 638.261-026
Rockboard Lather (construction) 842.361-010
ROCK BREAKER (retail trade; stonework) 770.687-034
Rock Contractor (mine & quarry) 939.281-010
ROCK DRILL OPERATOR I (construction) 850.683-034
ROCK-DRILL OPERATOR II (construction) 850.662-014
ROCK-DUST SPRAYER (mine & quarry) 939.687-026
Rocket-Assembly Operator (chemical) 590.464-010
Rocket-Control Technician (profess. & kin.) 003.261-010
ROCKET-ENGINE-COMPONENT MECHANIC (aircraft mfg.) 621.281-030
Rocket-Engine Mechanic, Liquid (aircraft mfg.) 693.261-022
ROCKET-MOTOR MECHANIC (aircraft mfg.) 693.261-022
ROCKET-TEST-FIRE WORKER (ordnance) 806.384-022
rock splitter (mine & quarry) 930.684-022
ROCK SPLITTER (stonework) 771.684-010
ROD-AND-TUBE STRAIGHTENER (plastic-synth.) 559.587-010
Rod-Bending-Machine Operator I (any industry) 617.482-010
Rod-Bending-Machine Operator II (any industry) 617.685-010
RODDING-ANODE WORKER (smelt. & refin.) 519.687-034
RODDING MACHINE TENDER (furniture) 665.685-038
Rod-Drawing Supervisor (nonfer. metal; steel & rel.) 614.132-010
Rodent Exterminator (business ser.) 389.684-010
RODEO PERFORMER (amuse. & rec.) 159.344-014
Rod Inspector (construction) 182.267-010
Rod-Machine Operator (paper & pulp) 533.685-022
Rod-Mill Operator (any industry) 599.685-058
ROD-MILL TENDER (cement; smelt. & refin.) 519.685-030
ROD-PULLER AND COILER (nonfer. metal) 619.685-078
ROD TAPE OPERATOR (electron. comp.) 726.685-042
roll attendant (any industry) 570.685-022
ROLL BUILDER (rubber goods) 759.484-010
ROLL BUILDER (steel & rel.) 801.664-018
roll-calender tender (tex. prod., nec; textile) 583.685-026
roll changer (rubber goods; rubber tire) 554.665-010
roll-coating-machine operator (carpet & rug; tex. prod., nec) 584.562-010
roll-contour grinder (rubber reclaim.) 629.682-010
ROLL COVERER, BURLAP (textile) 929.687-042

ROLL CUTTER (rubber goods) 690.685-322
roll-cutting operator (any industry) 699.682-030
roll-dough divider (bakery products) 520.685-086
Roll-Edge Stitcher, Hand (furniture) 780.684-070
Rolled-Gold Plater (jewelry-silver.) 813.482-010
Rolled-Ham Lacer (meat products) 529.687-034
Rolled-Oats-Mill Operator (grain-feed mills) 521.685-122
Rolled-Seat Trimmer (boot & shoe) 690.685-434
roll-embosser operator (paper goods) 649.682-022
ROLLER (jewelry-silver.) 613.682-018
roller (jewelry-silver.) 735.687-042
ROLLER (ship-boat mfg.) 806.687-046
roller (textile) 689.685-046
roller (tobacco) 922.687-026
roller-bearing assembler (machinery mfg.; motor-bicycles) 706.687-034
ROLLER-BEARING INSPECTOR (machinery mfg.; motor-bicycles) 706.687-034
Roller, Billet Mill (steel & rel.) 613.362-014
Roller, Blooming Mill (steel & rel.) 613.362-014
ROLLER CHECKER (textile) 682.684-010
ROLLER CLEANER (textile) 680.687-014
Roller-Coaster Operator (amuse. & rec.) 342.663-010
ROLLER COVERER (textile) 628.682-010
Roller-Die-Cutting-Machine Operator (rubber goods) 690.685-290
roller embosser (any industry) 583.685-030
ROLLER ENGRAVER, HAND (print. & pub.) 979.681-018
ROLLER, GOLD LEAF (metal prod., nec) 709.685-018
Roller Hand (recording) 559.686-010
ROLLER, HAND (tobacco) 790.684-022
ROLLER I (sugar & conf.) 520.684-014
Roller II (sugar & conf.) 524.687-014
Roller Inspector (textile) 979.381-026
roller inspector and mender (textile) 979.381-026
ROLLER-LEVELER OPERATOR (steel & rel.) 613.685-022
ROLLER-MACHINE OPERATOR (leather mfg.) 583.685-094
ROLLER-MACHINE OPERATOR (metal prod., nec) 611.482-014
ROLLER MAKER (print. & pub.) 759.664-018
ROLLER MAKER (rubber goods) 690.685-502
roller maker (textile) 628.682-010
roller, merchant mill (steel & rel.) 613.130-014
roller-mill operator (grain-feed mills) 521.682-026
ROLLER-MILL OPERATOR (paint & varnish) 555.682-014
Roller-Mill Tender (pharmaceut.) 550.685-090
roller operator (construction) 859.683-030
ROLLER OPERATOR (hat & cap) 580.685-046
roller operator (metal prod., nec) 611.482-014
roller operator (sugar & conf.) 520.685-198
roller operator (tobacco) 521.685-330
ROLLER OPERATOR (toy-sport equip.) 652.685-078
roller painter (print. & pub.) 971.684-014
Roller, Plate Mill (steel & rel.) 613.130-018
roller, pneumatic (construction) 859.683-030
roller-presser operator (knitting; textile) 583.686-030
ROLLER, PRIMARY MILL (steel & rel.) 613.362-014
roller printer (print. & pub.) 971.685-010
roller printer (textile) 652.582-014
ROLLER-PRINT TENDER (print. & pub.) 971.685-010
ROLLER REPAIRER (textile) 979.381-026
roller-shop worker (textile) 628.682-010
ROLLER-SKATE ASSEMBLER (toy-sport equip.) 732.684-098
ROLLER-SKATE REPAIRER (any industry) 732.684-102
Roller, Slabbing Mill (steel & rel.) 613.362-014
Roller Stainer (leather prod.) 749.684-022
Roller Staker (clock & watch) 715.684-182
ROLLER-STITCHER (boot & shoe) 753.684-030
roller, structural mill (steel & rel.) 613.130-018
roller tender (grain-feed mills) 521.685-210
ROLLER VARNISHER (print. & pub.) 979.682-022
ROLL EXAMINER (paper & pulp) 640.687-010
Roll Filler (leather mfg.) 629.280-010
ROLL FINISHER (paper & pulp) 920.685-090
roll forger (forging) 612.682-014
roll former (any industry) 619.362-014
ROLL-FORMING-MACHINE OPERATOR I (any industry) 617.482-018
ROLL-FORMING-MACHINE OPERATOR II (any industry) 617.685-034
ROLL-FORMING-MACHINE SET-UP MECHANIC (any industry) 613.360-010
Roll-Forming Supervisor (any industry) 619.130-030
Roll Grinder (rubber goods) 690.680-010
ROLL GRINDER (rubber reclaim.) 629.682-010
Roll Grinder Operator (machine shop) 603.280-010
Roll Guider, Mold Goods (fabrication, nec) 590.686-014
Roll Icer (bakery products) 524.684-022
Roll Icer, Machine (bakery products) 524.685-034
ROLLING ATTENDANT (steel & rel.) 613.662-010
ROLLING-DOWN-MACHINE OPERATOR (knitting; textile) 589.685-086
rolling-machine operator (forging) 612.682-014
ROLLING-MACHINE OPERATOR (paper goods) 640.685-070
ROLLING-MACHINE OPERATOR (sugar & conf.) 520.685-198
rolling-machine operator (textile) 689.685-046
ROLLING-MACHINE OPERATOR (textile) 585.685-078
Rolling-Machine Operator, Automatic (any industry) 619.685-082
ROLLING-MACHINE TENDER (knitting) 689.685-114
ROLLING-MILL OPERATOR (nonfer. metal) 613.462-018
ROLLING-MILL-OPERATOR HELPER (nonfer. metal) 613.685-026
rolling-mill plugger (steel & rel.) 613.687-010
rolling supervisor, continuous-pipe mill (steel & rel.) 619.130-022
rolling-up-machine operator (knitting) 580.485-010
ROLL INSPECTOR (plastic-synth.) 554.587-010
roll-machine attendant (soap & rel.) 553.685-098
roll-machine operator (bakery products) 520.685-086
roll-mill operator (any industry) 616.685-042
roll molder (rubber goods) 559.482-010
roll operator (construction) 859.683-030
roll operator (grain-feed mills) 520.685-102
roll operator (grain-feed mills; oils & grease) 529.685-106
ROLL OPERATOR (plastic-synth.) 554.682-018
Roll-Operator Helper (any industry) 619.687-014
ROLL OPERATOR I (any industry) 619.362-014
ROLL OPERATOR II (any industry) term
Roll Operator, Sheet Metal (any industry) 619.362-014
ROLL-OR-TAPE-EDGE-MACHINE OPERATOR (furniture) 787.682-038
roll-over loader (optical goods) 713.687-026
ROLL-OVER-PRESS OPERATOR (optical goods) 690.685-326
roll picker (textile) 680.687-014
roll-press operator (leather mfg.; tex. prod., nec) 589.685-098
ROLL RECLAIMER (paper goods) 640.685-062
Roll Repairer (smelt. & refin.) 630.281-026
Rolls Baker (hotel & rest.) 313.381-010
roll setter (print. & pub.) 651.686-022
roll setter (steel & rel.) 613.360-014
roll setter, pipe mill (steel & rel.) 613.360-014
ROLL-SHEETING CUTTER (tex. prod., nec) 699.682-026
roll skinner (paper & pulp) 539.686-010
ROLL-SLICING-MACHINE TENDER (pen & pencil) 640.685-066
ROLL TENDER (chemical) 559.362-030
ROLL TENDER (print. & pub.) 651.686-022
ROLL-TENSION TESTER (plastic-synth.) 559.584-010
roll tester (textile) 652.685-090
ROLL-THREADER OPERATOR (nut & bolt) 619.462-010
ROLL-TUBE SETTER (steel & rel.) 613.360-014
ROLL TURNER (knitting) 689.685-110
ROLL-UP-GUIDER OPERATOR (fabrication, nec) 590.685-050
roll-up helper (fabrication, nec) 739.587-010
roll-up operator (fabrication, nec) 590.665-018
Roll Weigher (paper & pulp; paper goods; plastic-synth.) 222.387-074
roll winder (build. mat., nec) 549.685-022
roll winder (paper goods) 640.685-058
roll wrapper (paper & pulp) 920.685-090
ROOF ASSEMBLER I (mfd. bldgs.) 869.684-042
Roof Assembler II (mfd. bldgs.) 869.684-018
ROOF BOLTER (mine & quarry) 930.683-026
ROOF-CEMENT-AND-PAINT MAKER (build. mat., nec; nonmet. min.) 550.382-030
ROOF-CEMENT-AND-PAINT-MAKER HELPER (build. mat., nec; nonmet. min.) 550.686-038
ROOFER (construction) 866.381-010
ROOFER APPLICATOR (construction) 866.684-010
ROOFER APPRENTICE (construction) 866.381-014
Roofer, Gypsum (construction) 866.381-010
Roofer Helper (construction) 869.687-026
Roofer Helper, Vinyl Coating (construction) 869.687-026
Roofer, Metal (construction) 804.281-010
Roofer, Vinyl Coating (construction) 869.664-014
ROOF FITTER (railroad equip.) 806.684-126
Roof Framer (mfd. bldgs.; vehicles, nec) 869.684-010
ROOFING-MACHINE OPERATOR (build. mat., nec) 554.682-022
ROOFING-MACHINE TENDER (nonmet. min.) 590.685-098
ROOFING SUPERVISOR (construction) 866.131-010
Roofing-Tile Burner (brick & tile) 573.682-010
Roofing-Tile Sorter (brick & tile) 573.687-034
Roof-Panel Hanger (mfd. bldgs.; vehicles, nec) 809.684-030
Roof-Promenade-Tile Setter (construction) 861.381-054
ROOF-TRUSS-MACHINE TENDER (mfd. bldgs.) 669.685-070
room boss (mine & quarry) 939.137-018
Room Clerk (hotel & rest.) 238.367-038
Rooming-House Inspector (government ser.) 168.267-066
Room Service Assistant (hotel & rest.) 311.677-018
ROOM-SERVICE CLERK (hotel & rest.) 324.577-010
ROOTER OPERATOR (fabrication, nec) 731.685-010

ROPE CLEANER (textile) 699.687-022
rope-coiling-machine operator (tex. prod., nec) 681.685-086
ROPE-LAYING-MACHINE OPERATOR (tex. prod., nec) 681.685-086
ROPE-MACHINE SETTER (tex. prod., nec) 681.380-010
ROPE MAKER, MACHINE (nonmet. min.) 681.685-082
ROPE-MAKER, ROPEWALK (tex. prod., nec) 681.682-014
Roper (agriculture) 929.687-030
roper (hat & cap) 580.684-010
roper (meat products) 529.687-150
rope rider (any industry) 932.664-010
roper operator (plastic-synth.) 559.562-010
ROPE-SILICA-MACHINE OPERATOR (textile) 582.685-114
rope-twisting-machine operator (tex. prod., nec) 681.685-086
Roping Machine Tender (button & notion) 739.685-058
Rose-Farm Laborer (agriculture) 405.687-014
Rose Grader (agriculture) 409.687-010
Rose Grower (agriculture) 405.161-014
ROSIN-BARREL FILLER (chemical) 920.687-150
rotary-bar operator (steel & rel.) 619.682-042
ROTARY CUTTER (boot & shoe) 585.685-082
ROTARY-CUTTER FEEDER (paper & pulp) 640.686-010
ROTARY-CUTTER OPERATOR (rubber goods) 551.585-022
ROTARY DERRICK OPERATOR (petrol. & gas) 930.382-022
ROTARY-DRIER FEEDER (chemical) 553.686-038
rotary-drier operator (chemical) 553.685-050
rotary-drier operator (smelt. & refin.) 511.565-014
ROTARY DRILLER (petrol. & gas) 930.382-026
ROTARY-DRILLER HELPER (petrol. & gas) 930.684-026
Rotary Driller, Marine Operations (petrol. & gas) 930.382-026
rotary driller, prospecting (petrol. & gas) 930.382-018
Rotary-Drill Operator (construction; mine & quarry) 930.382-010
rotary-drill-rig operator (construction) 859.362-010
Rotary-Drum Dyer (knitting) 582.685-170
Rotary-Dump Operator (mine & quarry; steel & rel.) 921.685-038
ROTARY-ENGINE ASSEMBLER (engine-turbine) 801.261-018
Rotary-Envelope-Machine Operator (paper goods) 649.685-042
rotary-filter operator (paper & pulp) 533.682-010
rotary-furnace operator (foundry; steel & rel.) 512.362-018
ROTARY-FURNACE TENDER (chemical) 553.685-094
ROTARY-HEAD-MILLING-MACHINE SET-UP OPERATOR (machine shop) 605.382-030
rotary helper (petrol. & gas) 930.684-026
ROTARY-KILN OPERATOR (cement; chemical; mine & quarry) 573.382-010
Rotary-Kiln Operator (concrete prod.) 573.462-010
ROTARY-KILN OPERATOR (smelt. & refin.) 513.682-010
Rotary-Machine Operator (bakery products) 520.682-034
Rotary-Peel Oven Tender (bakery products) 526.685-030
Rotary Planer Set-Up Operator (machine shop) 605.282-014
Rotary Preformer (plastic prod.; plastic-synth.) 556.685-058
rotary profile-shaper operator, automatic (woodworking) 665.682-026
Rotary Pump Operator (electron. comp.) 599.382-014
ROTARY-RIG ENGINE OPERATOR (petrol. & gas) 950.382-022
Rotary-Rock-Drilling-Machine Operator (any industry) 850.683-034
rotary-saw operator (stonework) 677.462-010
ROTARY-SCREEN-PRINTING-MACHINE OPERATOR (textile) 652.582-014
ROTARY-SHEAR OPERATOR (any industry) 615.482-030
rotary-slicing-machine operator (millwork-plywood) 664.662-010
rotary-soil-stabilizer operator (construction) 859.683-026
rotary-surface grinder (machine shop) 603.280-014
Rotary-Swaging-Machine Operator (forging) 612.682-014
rotary-veneer-machine operator (millwork-plywood) 664.662-010
rotating field assembler (elec. equip.) 721.684-026
ROTOGRAVURE-PRESS OPERATOR (print. & pub.) 651.362-026
roto-mixer operator (construction) 859.683-026
rotor-and-armature bander (any industry) 724.684-010
ROTOR ASSEMBLER (clock & watch) 715.687-114
Rotor Balancer (elec. equip.) 724.384-014
ROTOR CASTING-MACHINE OPERATOR (elec. equip.) 502.482-018
rotor-lamination inspector (elec. equip.) 729.687-018
Rotor Winder (elec. equip.) 721.484-010
ROUGE MIXER (optical goods) 570.685-082
Rouge Mixer (pharmaceut.) 550.685-090
rouge presser (pharmaceut.) 556.685-026
ROUGE SIFTER AND MILLER (optical goods) 579.685-046
ROUGH-AND-TRUEING-MACHINE OPERATOR (toy-sport equip.) 690.685-330
roughener (boot & shoe) 690.685-046
Rougher (glass products) 775.684-010
ROUGHER (steel & rel.) 613.362-018
Rougher, Bar Mill (steel & rel.) 613.362-018
Rougher For Cement (boot & shoe) 690.685-046
Rougher, Hot-Strip Mill (steel & rel.) 613.362-018
Rougher, Merchant Mill (steel & rel.) 613.362-018
ROUGHER OPERATOR (steel & rel.) 613.662-014
Rough-Lumber Grader (woodworking) 669.687-030
roughneck (petrol. & gas) 930.684-026
roughneck (petrol. & gas) 869.684-046
ROUGH OPENER, JEWEL HOLE (clock & watch) 770.684-018
Rough Patcher (concrete prod.) 579.687-042
Rough Patcher (fabrication, nec) 739.687-146
ROUGH PLANER TENDER (woodworking) 665.665-010
ROUGH-RICE GRADER (grain-feed mills) 529.367-026
ROUGH-RICE TENDER (grain-feed mills) 521.685-274
ROUGH-ROUNDER, MACHINE (boot & shoe) 690.685-334
Rough Sander (fabrication, nec) 761.684-030
Roulette Dealer (amuse. & rec.) 343.464-010
Round Boner (meat products) 525.684-010
ROUND-CORNER-CUTTER OPERATOR (paper goods) 640.685-074
round-cutter operator (hat & cap; tex. prod., nec) 585.685-086
rounder (boot & shoe) 690.685-334
ROUNDER (boot & shoe) 690.685-338
rounder (hat & cap; tex. prod., nec) 585.685-086
rounder (print. & pub.) 653.685-026
rounder and backer (print. & pub.) 653.685-026
ROUNDER, HAND (hat & cap) 784.684-050
ROUNDING-AND-BACKING-MACHINE OPERATOR (print. & pub.) 653.685-026
Rounding-Machine Operator (hat & cap) 699.682-022
ROUNDING-MACHINE OPERATOR (hat & cap; tex. prod., nec) 585.685-086
rounding-machine operator (wood. container) 667.685-066
ROUNDING-MACHINE TENDER (pen & pencil) 663.685-026
round-kiln drawer (pottery & porc.) 573.667-010
ROUND-UP-RING HAND (concrete prod.) 579.587-010
roustabout (leather mfg.) 589.686-026
roustabout (petrol. & gas) 939.687-018
ROUSTABOUT (petrol. & gas) 869.684-046
roustabout, head (petrol. & gas) 862.131-022
ROUTE AIDE (tel. & tel.) 239.687-010
route clerk (clerical) 222.687-022
ROUTE-DELIVERY CLERK (clerical) 222.587-034
route driver (retail trade; wholesale tr.) 292.353-010
route driver, coin machines (business ser.) 292.483-010
route driver helper (retail trade; wholesale tr.) 292.667-010
ROUTER (clerical) 222.587-038
router (clerical) 222.687-022
ROUTER (print. & pub.) 979.682-026
Route Returner (clerical) 222.387-050
ROUTER MACHINE OPERATOR (plastic prod.) 605.685-054
ROUTER OPERATOR (any industry) 605.382-034
ROUTER OPERATOR (stonework) 676.462-010
ROUTER OPERATOR (woodworking) 665.682-030
ROUTER OPERATOR, HAND (aircraft mfg.; railroad equip.) 806.684-150
Router Operator, Pin (aircraft mfg.) 605.382-034
Router Operator, Radial (aircraft mfg.) 605.382-034
ROUTER, PRINTED CIRCUIT BOARDS (electron. comp.) 605.682-034
Router Setter (woodworking) 669.280-010
ROUTER SET-UP OPERATOR, NUMERICAL CONTROL (machine shop) 605.360-010
ROUTER TENDER (furniture) 665.685-042
route supervisor (retail trade; wholesale tr.) 292.137-014
ROUTE SUPERVISOR (tel. & tel.) 239.137-018
ROUTING CLERK (clerical) 222.687-022
routing clerk (clerical) 222.587-038
ROUTING CLERK (nonprofit org.) 249.367-070
ROUTING-EQUIPMENT TENDER (grain-feed mills) 521.685-278
routing-machine operator (woodworking) 665.682-030
roving changer (textile) 689.686-026
roving-frame tender (textile) 681.685-106
roving selector (glass mfg.) 689.687-038
ROVING SIZER (textile) 680.367-010
Roving Stock Handler (textile) 929.687-030
roving technician (textile) 589.384-010
roving tender (textile) 680.685-098
roving tester, laboratory (textile) 689.384-014
ROVING-WEIGHT GAUGER (textile) 680.687-018
ROVING WINDER, FIBERGLASS (textile) 681.485-010
row boss (agriculture) 180.167-022
ROW BOSS, HOEING (agriculture) 409.137-014
rubber (furniture) 742.687-010
RUBBER (furniture; wood prod., nec) 742.684-010
RUBBER (personal ser.) 334.677-010
rubber (personal ser.) 334.374-010
RUBBER AND PLASTICS WORKER (military ser.) 891.684-014
rubber and pounder (boot & shoe) 690.685-350
Rubber Attacher (toy-sport equip.) 795.687-014
rubber ball finisher (toy-sport equip.) 690.685-038
rubber-calender helper (rubber goods; rubber tire) 554.686-018
Rubber Compounder (plastic-synth.; rubber goods; rubber tire) 929.687-062
Rubber-Compounder Supervisor (rubber goods) 559.137-014
Rubber-Compounder Supervisor (rubber reclaim.) 559.132-058

Rubber-Compounder Supervisor (rubber tire) 750.130-010
rubber coverer (textile) 681.685-038
rubber-covering-machine operator (textile) 681.685-038
rubber curer (rubber goods; rubber reclaim.; rubber tire) 553.665-038
RUBBER CUTTER (rubber goods; rubber tire) 559.685-158
rubber cutter (stonework) 771.281-010
rubber cutter and shape carver (stonework) 673.382-010
RUBBER-CUTTING-MACHINE TENDER (rubber goods) 690.685-342
Rubber-Flap Cutter (rubber goods; rubber tire) 690.685-446
Rubber-Flap Tuber-Machine Operator (rubber tire) 690.662-014
Rubber-Gasket Inspector-Trimmer (rubber goods) 759.684-074
RUBBER-GOODS ASSEMBLER (rubber goods) 752.684-038
RUBBER-GOODS CUTTER-FINISHER (rubber goods) 690.680-010
Rubber-Goods Finisher (rubber goods) 759.684-074
rubber-goods finisher (rubber goods) 690.680-010
RUBBER-GOODS INSPECTOR-TESTER (rubber goods) 759.684-074
Rubber-Goods Inspector-Trimmer (rubber goods; rubber reclaim.; rubber tire) 759.684-074
RUBBER-GOODS REPAIRER (any industry) 759.684-054
RUBBER-GOODS TESTER (elec. equip.; utilities) 759.381-010
Rubber-Goods Tester, Water (rubber goods; rubber tire) 759.684-074
Rubber-Heel-And-Sole Press Tender (rubber goods) 556.685-066
rubber insulator (machinery mfg.) 759.684-050
RUBBERIZING MECHANIC (any industry) 630.281-030
RUBBER LINER (machinery mfg.) 759.684-050
RUBBER-MILL OPERATOR (plastic-synth.) 559.682-042
RUBBER-MILL TENDER (plastic-synth.; rubber goods; rubber reclaim.; rubber tire) 559.685-102
RUBBER MOLDER (fabrication, nec) 556.684-026
RUBBER-MOLD MAKER (jewelry-silver.) 559.684-018
rubber-off (jewelry-silver.) 700.687-058
RUBBER-PRINTING-MACHINE OPERATOR (rubber goods) 652.462-010
RUBBER-ROLLER GRINDER (pen & pencil) 690.686-050
rubber-stamp assembler (pen & pencil) 733.684-018
RUBBER-STAMP MAKER (pen & pencil) 733.381-014
RUBBER TESTER (rubber goods; rubber tire) 559.381-014
RUBBER-THREAD SPOOLER (toy-sport equip.) 681.685-090
Rubber-Tile-Floor Layer (construction; retail trade) 864.481-010
rubber-tubing backer (rubber goods) 559.686-018
RUBBER-TUBING SPLICER (rubber goods) 752.684-042
rubbing-bed operator (stonework) 673.685-014
rubbish-collection supervisor (motor trans.) 909.137-014
ruching-machine operator (any industry) 787.682-082
ruffer (boot & shoe) 690.685-046
ruffler (any industry) 787.682-078
ruffler (tex. prod., nec) 787.685-038
Ruffling Hemmer, Automatic (tex. prod., nec) 787.685-018
RUG-BACKING STENCILER (carpet & rug) 781.687-054
RUG BRAIDER, HAND (carpet & rug) 782.687-042
RUG CLEANER (carpet & rug) 689.687-066
RUG CLEANER, HAND (laundry & rel.) 369.384-014
RUG-CLEANER HELPER (laundry & rel.) 362.686-014
RUG CLEANER, MACHINE (laundry & rel.) 361.682-010
RUG CLIPPER (carpet & rug) 781.684-046
RUG CUTTER (carpet & rug) 686.662-010
rug cutter (carpet & rug) 781.684-046
rug cutter (carpet & rug) 781.684-010
RUG CUTTER (fabrication, nec) 590.687-022
RUG-CUTTER HELPER (carpet & rug) 686.686-014
Rug Designer (carpet & rug) 142.061-014
RUG-DRYING-MACHINE OPERATOR (carpet & rug) 581.685-050
RUG-DRY-ROOM ATTENDANT (laundry & rel.) 369.685-026
RUG-DYER HELPER (laundry & rel.) 364.687-014
RUG DYER I (laundry & rel.) 364.361-014
RUG DYER II (laundry & rel.) 364.684-010
RUG-FRAME MOUNTER (carpet & rug) 687.464-010
RUG HOOKER (carpet & rug) 687.684-010
Rug Hooker, Hand (carpet & rug) 687.684-010
Rug Inspector (fabrication, nec) 590.367-010
RUG INSPECTOR (laundry & rel.) 369.687-030
RUG INSPECTOR (tex. prod., nec) 585.685-090
RUG-INSPECTOR HELPER (carpet & rug) 789.687-158
RUG-INSPECTOR HELPER (tex. prod., nec) 589.686-038
RUG INSPECTOR I (carpet & rug) 689.667-010
RUG INSPECTOR II (carpet & rug) 789.587-022
RUG MEASURER (laundry & rel.; retail trade) 369.367-014
Rug Mender (carpet & rug) 782.684-042
rug-receiving clerk (laundry & rel.; retail trade) 369.367-014
rug renovator (laundry & rel.) 369.384-014
RUG REPAIRER (laundry & rel.) 782.381-018
RUG-SAMPLE BEVELER (carpet & rug) 781.684-050
rug scratcher (carpet & rug) 789.687-138
rug scrubber (laundry & rel.) 369.384-014
RUG SETTER, AXMINSTER (carpet & rug) 681.682-018
Rug Setter, Six-Quarter Machine (carpet & rug) 681.682-018
Rug Setter, Three-Quarter Machine (carpet & rug) 681.682-018
Rug Setter, Velvet (carpet & rug) 681.682-018
rug shampooer (laundry & rel.) 369.384-014
rug stretcher (any industry) 580.687-010
Rug-Underlay-Machine Operator (rubber goods) 559.682-050
rug washer (laundry & rel.) 369.384-014
RULING-MACHINE SET-UP OPERATOR (paper goods; print. & pub.) 659.682-022
Rump Sawyer (meat products) 525.684-018
Run-Boat Operator (water trans.) 911.663-010
Runner (financial) 239.567-010
Runner (hotel & rest.) 311.677-018
runner (hotel & rest.) 324.577-010
runner (library) 249.687-014
runner (water trans.) 222.567-014
RUNNING RIGGER (ship-boat mfg.) 806.684-142
runstitching-machine operator (garment) 786.685-026
RURAL MAIL CARRIER (government ser.) 230.363-010
Rural-Service Engineer (utilities) 003.167-046
Rural Sociologist (profess. & kin.) 054.067-014
Russet-Leather Sorter (leather mfg.) 589.387-010
Russet Repairer (boot & shoe) 788.684-022
Russian Rubber (personal ser.) 334.677-010
Rust Proofer (auto. mfg.) 599.685-026
rust proofer (automotive ser.) 843.684-014

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sack-cleaning hand (textile) 689.687-010
SACK-DEPARTMENT SUPERVISOR (grain-feed mills) 229.137-010
Sack Keeper (clerical) 222.387-058
sack mender (any industry) 782.687-046
SACK REPAIRER (any industry) 782.687-046
Sack Sewer, Hand (any industry) 920.587-018
Sack Sewer, Machine (any industry) 920.685-078
Sack Sorter (any industry) 929.687-022
Sack Stenciler (any industry) 920.687-178
SADDLE-AND-SIDE WIRE STITCHER (print. & pub.) 692.685-146
Saddle-Lining Stitcher (boot & shoe) 690.682-082
SADDLE MAKER (leather prod.) 783.381-026
Saddler (leather prod.; retail trade) 783.381-026
Saddle Stitcher (boot & shoe) 690.682-082
Saddle-Stitching-Machine Feeder-Offbearer (print. & pub.) 653.686-026
Saddle-Stitching-Machine Operator (print. & pub.) 653.662-010
SAFE-AND-VAULT SERVICE MECHANIC (business ser.; wholesale tr.) 869.381-022
SAFE-DEPOSIT-BOX RENTAL CLERK (financial) 295.367-022
safe deposit manager (financial) 295.137-010
safe repairer (business ser.; wholesale tr.) 869.381-022
SAFETY-CLOTHING-AND-EQUIPMENT DEVELOPER (profess. & kin.) 142.061-038
SAFETY COORDINATOR (motor trans.) 909.127-010
Safety Director (nonprofit org.) 187.167-214
safety engineer (insurance) 168.167-078
SAFETY ENGINEER (profess. & kin.) 012.061-014
safety engineer, elevators (government ser.) 168.167-038
SAFETY ENGINEER, MINES (mine & quarry) 010.061-026
safety-engineer, pressure vessels (profess. & kin.) 168.167-026
safety-equipment tester (elec. equip.; utilities) 759.381-010
safety-grooving-machine operator (construction) 853.683-018
SAFETY INSPECTOR (any industry) 168.264-014
SAFETY INSPECTOR (insurance) 168.167-078
safety inspector (mine & quarry) 168.267-074
SAFETY INSPECTOR (utilities) 821.367-014
SAFETY INSPECTOR, TRUCK (automotive ser.; motor trans.) 919.687-018
SAFETY-LAMP KEEPER (mine & quarry) 729.684-042
SAFETY MANAGER (medical ser.) 168.167-086
SAFETY MANAGER (profess. & kin.) 012.167-058
Safety-Net Maker (tex. prod., nec) 789.684-030
SAFETY-PIN-ASSEMBLING-MACHINE OPERATOR (button & notion) 616.482-010
safety-sealer (build. mat., nec) 550.686-026
Safety-Stitch-Machine Operator (garment) 786.682-194
safety technician (any industry) 168.264-014
sagger filler (pottery & porc.) 573.686-026
Sagger Former (pottery & porc.) 774.381-010
SAGGER MAKER (pottery & porc.) 774.684-030
SAGGER PREPARER (pottery & porc.) 570.685-086
sagger soak (pottery & porc.) 570.685-086
SAIL CUTTER (tex. prod., nec) 781.384-018
Sail Finisher, Hand (tex. prod., nec) 789.484-014
Sail Finisher, Machine (tex. prod., nec) 787.682-058
SAIL-LAY-OUT WORKER (tex. prod., nec) 781.381-030
Sailmaker (ship-boat mfg.; tex. prod., nec) 739.381-010

SAILOR (water trans.) term
sailor-merchant mariner (water trans.) see SAILOR
SAILOR, PLEASURE CRAFT (water trans.) 911.664-014
sail, tent, and awning-maker apprentice (ship-boat mfg.; tex. prod., nec) 739.381-014
Salad Counter Attendant (hotel & rest.) 311.677-014
Salad Maker (hotel & rest.) 317.684-014
SALAD MAKER (water trans.) 317.384-010
sales agent (retail trade; wholesale tr.) see SALES REPRESENTATIVE
SALES AGENT, BUSINESS SERVICES (business ser.) 251.357-010
Sales Agent, Casualty Insurance (insurance) 250.257-010
sales agent, credit services (business ser.) 250.357-026
sales agent, exterminating service (business ser.) 251.357-018
SALES AGENT, FINANCIAL-REPORT SERVICE (business ser.) 250.357-026
Sales Agent, Fire Insurance (insurance) 250.257-010
Sales Agent, Food-Vending Service (wholesale tr.) 251.357-010
SALES AGENT, INSURANCE (insurance) 250.257-010
Sales Agent, Life Insurance (insurance) 250.257-010
Sales Agent, Marine Insurance (insurance) 250.257-010
SALES AGENT, PEST CONTROL SERVICE (business ser.) 251.357-018
Sales Agent, Protective Service (business ser.) 251.357-010
SALES AGENT, PSYCHOLOGICAL TESTS AND INDUSTRIAL RELATIONS (business ser.; print. & pub.) 251.257-014
SALES AGENT, REAL ESTATE (real estate) 250.357-018
Sales Agent, Trading Stamps (business ser.) 251.357-010
sales associate (retail trade; wholesale tr.) see SALES REPRESENTATIVE
sales associate, garage service (automotive ser.) 620.261-018
SALES ATTENDANT (retail trade) 299.677-010
SALES ATTENDANT, BUILDING MATERIALS (retail trade) 299.677-014
SALES CLERK (retail trade) 290.477-014
Sales Clerk, Fish (retail trade) 290.477-018
SALES CLERK, FOOD (retail trade) 290.477-018
Sales Clerk, Fresh Poultry (retail trade) 316.684-010
Sales-Correspondence Clerk (clerical) 209.362-034
SALES CORRESPONDENT (clerical) 221.367-062
SALES ENGINEER (profess. & kin.) master
SALES ENGINEER, AERONAUTICAL PRODUCTS (aircraft mfg.) 002.151-010
SALES ENGINEER, AGRICULTURAL EQUIPMENT (profess. & kin.) 013.151-010
SALES ENGINEER, CERAMIC PRODUCTS (profess. & kin.) 006.151-010
SALES-ENGINEER, ELECTRICAL PRODUCTS (profess. & kin.) 003.151-010
SALES-ENGINEER, ELECTRONICS PRODUCTS AND SYSTEMS (profess. & kin.) 003.151-014
SALES ENGINEER, MARINE EQUIPMENT (profess. & kin.) 014.151-010
SALES ENGINEER, MECHANICAL EQUIPMENT (utilities) 007.151-010
SALES ENGINEER, MINING-AND-OIL-WELL EQUIPMENT AND SERVICES (mine & quarry; petrol. & gas) 010.151-010
SALES ENGINEER, NUCLEAR EQUIPMENT (profess. & kin.) 015.151-010
SALES EXHIBITOR (nonprofit org.) 279.357-010
SALESPERSON (retail trade; wholesale tr.) master
salesperson apprentice, meats (retail trade; wholesale tr.) 316.684-022
SALESPERSON, ART OBJECTS (retail trade) 277.457-010
SALESPERSON, AUTOMOBILE ACCESSORIES (retail trade; wholesale tr.) 273.357-030
SALESPERSON, AUTOMOBILES (retail trade) 273.353-010
SALESPERSON, BOOKS (retail trade) 277.357-034
SALESPERSON, BURIAL NEEDS (retail trade) 279.357-042
Salesperson, Burial Plots (retail trade) 279.357-042
salesperson, cemetery (retail trade) 279.357-042
Salesperson, Children's Shoes (retail trade) 261.357-062
Salesperson, China And Glassware (retail trade; wholesale tr.) 270.357-018
SALESPERSON, CHINA AND SILVERWARE (retail trade; wholesale tr.) 270.357-018
SALESPERSON, CONTINGENT (retail trade) term
SALESPERSON, CORSETS (retail trade) 261.354-010
SALESPERSON, COSMETICS AND TOILETRIES (retail trade) 262.357-018
SALESPERSON, CURTAINS AND DRAPERIES (retail trade) 270.357-022
Salesperson, Custom Draperies (retail trade) 270.357-022
SALESPERSON-DEMONSTRATOR, PARTY PLAN (retail trade) 279.357-038
SALESPERSON, ELECTRIC MOTORS (retail trade; wholesale tr.) 271.354-010
Salesperson, Fashion Accessories (retail trade) 261.357-066
SALESPERSON, FLOOR COVERINGS (retail trade; wholesale tr.) 270.357-026
SALESPERSON, FLORIST SUPPLIES (wholesale tr.) 275.357-054
SALESPERSON, FLOWERS (retail trade) 260.357-026
SALESPERSON, FLYING SQUAD (retail trade) 279.357-046
SALESPERSON, FURNITURE (retail trade) 270.357-030
SALESPERSON, FURS (retail trade) 261.357-042
SALESPERSON, GENERAL HARDWARE (retail trade; wholesale tr.) 279.357-050
SALESPERSON, GENERAL MERCHANDISE (retail trade; wholesale tr.) 279.357-054
Salesperson, Grave Coverings And Markers (retail trade) 279.357-042
Salesperson, Handbags (retail trade) 261.357-066
salesperson, hearing aids (retail trade) 276.354-010
SALESPERSON, HORTICULTURAL AND NURSERY PRODUCTS (retail trade; wholesale tr.) 272.357-022
Salesperson, Hosiery (retail trade) 261.357-066
SALESPERSON, HOUSEHOLD APPLIANCES (retail trade) 270.357-034
SALESPERSON, INFANTS' AND CHILDREN'S WEAR (retail trade) 261.357-046
SALESPERSON, JEWELRY (retail trade) 279.357-058
salesperson, ladies' wear (retail trade) 261.357-066
SALESPERSON, LEATHER-AND-SUEDE APPAREL-AND-ACCESSORIES (retail trade) 261.357-074
Salesperson, Lingerie (retail trade) 261.357-066
salesperson, meats (retail trade; wholesale tr.) 316.684-018
SALESPERSON, MEN'S AND BOYS' CLOTHING (retail trade) 261.357-050
SALESPERSON, MEN'S FURNISHINGS (retail trade) 261.357-054
Salesperson, Men's Hats (retail trade) 261.357-054
Salesperson, Men's Shoes (retail trade) 261.357-062
SALESPERSON, MILLINERY (retail trade) 261.357-058
SALESPERSON, MUSICAL INSTRUMENTS AND ACCESSORIES (retail trade) 277.357-038
Salesperson, Neckties (retail trade) 261.357-054
Salesperson, New Cars (retail trade) 273.353-010
SALESPERSON, ORTHOPEDIC SHOES (retail trade) 276.257-018
Salesperson, Paint (retail trade; wholesale tr.) 279.357-050
SALESPERSON, PARTS (retail trade; wholesale tr.) 279.357-062
salesperson, part time (retail trade) see SALESPERSON, CONTINGENT
SALESPERSON, PETS AND PET SUPPLIES (retail trade) 277.357-042
SALESPERSON, PHONOGRAPH RECORDS AND TAPE RECORDINGS (retail trade) 277.357-046
SALESPERSON, PHOTOGRAPHIC SUPPLIES AND EQUIPMENT (retail trade; wholesale tr.) 277.357-050
SALESPERSON, PIANOS AND ORGANS (retail trade) 277.354-010
salesperson, recreational vehicles (retail trade) 273.357-034
salesperson, relief (retail trade) see SALESPERSON, CONTINGENT
SALESPERSON, SEWING MACHINES (retail trade) 270.352-010
SALESPERSON, SHEET MUSIC (retail trade) 277.357-054
SALESPERSON, SHOES (retail trade) 261.357-062
Salesperson, Silverware (retail trade) 270.357-018
SALESPERSON, SPORTING GOODS (retail trade) 277.357-058
SALESPERSON, STAMPS OR COINS (retail trade; wholesale tr.) 277.357-062
SALESPERSON, STEREO EQUIPMENT (retail trade) 270.357-038
SALESPERSON, SURGICAL APPLIANCES (retail trade) 276.257-022
Salesperson, Terrazzo Tiles (retail trade; wholesale tr.) 270.357-026
SALESPERSON, TOY TRAINS AND ACCESSORIES (retail trade) 277.357-066
SALESPERSON, TRAILERS AND MOTOR HOMES (retail trade) 273.357-034
Salesperson, Used Cars (retail trade) 273.353-010
salesperson, utility staff (retail trade) 279.357-046
Salesperson, Wall Coverings (retail trade; wholesale tr.) 279.357-050
SALESPERSON, WIGS (personal ser.; retail trade) 261.351-010
SALESPERSON, WOMEN'S APPAREL AND ACCESSORIES (retail trade) 261.357-066
Salesperson, Women's Dresses (retail trade) 261.357-066
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Salesperson, Women's Sportswear (retail trade) 261.357-066
SALESPERSON, YARD GOODS (retail trade) 261.357-070
sales promotion director (any industry) 164.117-010
SALES-PROMOTION REPRESENTATIVE (wholesale tr.) 269.357-018
Sales-Record Clerk (clerical) 216.382-062
sales representative (air trans.; motor trans.; r.r. trans.; water trans.) 252.257-010
sales representative (construction) 250.157-010
sales representative (insurance) 166.167-046
SALES REPRESENTATIVE (motor trans.) 250.357-022
SALES REPRESENTATIVE (retail trade; wholesale tr.) master
SALES REPRESENTATIVE, ABRASIVES (wholesale tr.) 274.357-010
Sales Representative, Adding Machines (wholesale tr.) 275.357-034
Sales Representative, Addressing Machines (wholesale tr.) 275.357-034
SALES REPRESENTATIVE, ADVERTISING (print. & pub.) 254.357-014

SALES REPRESENTATIVE, AIRCRAFT

SALES REPRESENTATIVE, AIRCRAFT (retail trade; wholesale tr.) 273.253-010
SALES REPRESENTATIVE, AIRCRAFT EQUIPMENT AND PARTS (wholesale tr.) 273.357-010
SALES REPRESENTATIVE, ANIMAL-FEED PRODUCTS (wholesale tr.) 272.357-010
SALES REPRESENTATIVE, APPAREL TRIMMINGS (wholesale tr.) 261.357-010
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SALES REPRESENTATIVE, AUDIOVISUAL PROGRAM PRODUCTIONS (motion picture) 259.157-010
Sales Representative, Automobile Parts And Supplies (wholesale tr.) 273.357-022
SALES REPRESENTATIVE, AUTOMOTIVE-LEASING (business ser.) 273.357-014
SALES REPRESENTATIVE, BARBER AND BEAUTY EQUIPMENT AND SUPPLIES (wholesale tr.) 275.357-010
SALES REPRESENTATIVE, BOATS AND MARINE SUPPLIES (retail trade; wholesale tr.) 273.357-018
Sales Representative, Bookkeeping-And-Accounting Machines (wholesale tr.) 275.357-034
SALES REPRESENTATIVE, BOTTLES AND BOTTLING EQUIPMENT (wholesale tr.) 274.357-014
Sales Representative, Bottles And Jars (wholesale tr.) 274.357-014
Sales Representative, Bottling Equipment (wholesale tr.) 274.357-014
SALES REPRESENTATIVE, BUILDING EQUIPMENT AND SUPPLIES (wholesale tr.) 274.357-018
Sales Representative, Business Courses (education) 259.257-010
Sales Representative, Calculating Machines (wholesale tr.) 275.357-034
SALES REPRESENTATIVE, CANVAS PRODUCTS (wholesale tr.) 261.357-014
Sales Representative, Cash Registers (wholesale tr.) 275.357-034
Sales Representative, Cattle-And-Poultry Feed Supplements (wholesale tr.) 272.357-010
Sales Representative, Check-Endorsing-And-Signing Machines (wholesale tr.) 275.357-034
SALES REPRESENTATIVE, CHEMICALS AND DRUGS (wholesale tr.) 262.357-010
Sales Representative, Church Furniture (wholesale tr.) 275.357-014
SALES REPRESENTATIVE, CHURCH FURNITURE AND RELIGIOUS SUPPLIES (wholesale tr.) 275.357-014
Sales Representative, Classified Advertising (print. & pub.) 254.357-014
SALES REPRESENTATIVE, COMMERCIAL EQUIPMENT AND SUPPLIES (wholesale tr.) 275.357-018
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SALES REPRESENTATIVE, COMPUTERS AND EDP SYSTEMS (wholesale tr.) 275.257-010
SALES REPRESENTATIVE, CONSTRUCTION MACHINERY (wholesale tr.) 274.357-022
SALES REPRESENTATIVE, CONTAINERS (wholesale tr.) 274.357-026
SALES REPRESENTATIVE, CORDAGE (wholesale tr.) 275.357-022
Sales Representative, Correspondence Courses (education) 259.257-010
SALES REPRESENTATIVE, DAIRY SUPPLIES (wholesale tr.) 274.357-030
SALES REPRESENTATIVE, DANCING INSTRUCTIONS (education) 259.357-014
SALES REPRESENTATIVE, DATA PROCESSING SERVICES (business ser.) 251.157-014
SALES REPRESENTATIVE, DENTAL AND MEDICAL EQUIPMENT AND SUPPLIES (wholesale tr.) 276.257-010
Sales Representative, Dental Equipment And Supplies (wholesale tr.) 276.257-010
Sales Representative, Dental Prosthetics (wholesale tr.) 276.257-010
Sales Representative, Dictating Machines (wholesale tr.) 275.357-034
Sales Representative, Display Advertising (print. & pub.) 254.357-014
SALES REPRESENTATIVE, DOOR-TO-DOOR (retail trade) 291.357-010
Sales Representative, Duplicating Machines (wholesale tr.) 275.357-034
SALES REPRESENTATIVE, EDUCATION COURSES (education) 259.257-010
Sales Representative, Electric Service (utilities) 253.357-010
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SALES REPRESENTATIVE, ELEVATORS, ESCALATORS, AND DUMBWAITERS (wholesale tr.) 274.157-010
Sales Representative, Envelope (wholesale tr.) 279.357-026
SALES REPRESENTATIVE, FARM AND GARDEN EQUIPMENT AND SUPPLIES (wholesale tr.) 272.357-014
Sales Representative, Flour And Cereals (wholesale tr.) 260.357-014
SALES REPRESENTATIVE, FOOD PRODUCTS (wholesale tr.) 260.357-014
SALES REPRESENTATIVE, FOOTWEAR (wholesale tr.) 261.357-018
SALES REPRESENTATIVE, FOUNDRY AND MACHINE SHOP PRODUCTS (wholesale tr.) 274.257-010
SALES REPRESENTATIVE, FRANCHISE (business ser.) 251.357-022
SALES REPRESENTATIVE, FUELS (retail trade; wholesale tr.) 269.357-010
sales representative, funeral equipment (wholesale tr.) 275.357-030
Sales Representative, Gas Service (utilities) 253.357-010
SALES REPRESENTATIVE, GENERAL MERCHANDISE (wholesale tr.) 279.357-014
Sales Representative, Girls' Apparel (wholesale tr.) 261.357-038
SALES REPRESENTATIVE, GRAPHIC ART (business ser.) 254.251-010
Sales Representative, Groceries (wholesale tr.) 260.357-014
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sales representative, heavy equipment (wholesale tr.) 274.357-022
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SALES REPRESENTATIVE, HOBBIES AND CRAFTS (retail trade; wholesale tr.) 277.357-010
SALES REPRESENTATIVE, HOME FURNISHINGS (wholesale tr.) 270.357-010
SALES REPRESENTATIVE, HOTEL AND RESTAURANT EQUIPMENT AND SUPPLIES (wholesale tr.) 275.357-026
SALES REPRESENTATIVE, HOTEL SERVICES (hotel & rest.) 259.157-014
SALES REPRESENTATIVE, HOUSEHOLD APPLIANCES (wholesale tr.) 270.357-014
Sales Representative, Industrial Lubricants (wholesale tr.) 269.357-014
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SALES REPRESENTATIVE, INDUSTRIAL RUBBER GOODS (wholesale tr.) 274.357-042
SALES REPRESENTATIVE, JEWELRY (wholesale tr.) 279.357-018
SALES REPRESENTATIVE, LEATHER GOODS (wholesale tr.) 279.357-022
SALES REPRESENTATIVE, LIVESTOCK (wholesale tr.) 260.257-010
SALES REPRESENTATIVE, LUBRICATING EQUIPMENT (wholesale tr.) 274.357-046
SALES REPRESENTATIVE, MALT LIQUORS (wholesale tr.) 260.357-018
Sales Representative, Marine Supplies (retail trade; wholesale tr.) 273.357-018
SALES REPRESENTATIVE, MATERIAL-HANDLING EQUIPMENT (wholesale tr.) 274.357-050
Sales Representative, Meats (wholesale tr.) 260.357-014
SALES REPRESENTATIVE, MEN'S AND BOYS' APPAREL (wholesale tr.) 261.357-022
SALES REPRESENTATIVE, METALS (wholesale tr.) 274.357-054
SALES REPRESENTATIVE, MORTICIAN SUPPLIES (wholesale tr.) 275.357-030
SALES REPRESENTATIVE, MOTOR VEHICLES AND SUPPLIES (wholesale tr.) 273.357-022
SALES REPRESENTATIVE, MUSICAL INSTRUMENTS AND ACCESSORIES (wholesale tr.) 277.357-014
SALES REPRESENTATIVE, NOVELTIES (wholesale tr.) 277.357-018
SALES REPRESENTATIVE, OFFICE MACHINES (retail trade; wholesale tr.) 275.357-034
Sales Representative, Oilfield Supplies (wholesale tr.) 274.357-058
SALES REPRESENTATIVE, OILFIELD SUPPLIES AND EQUIPMENT (wholesale tr.) 274.357-058
Sales Representative, Oil-Well Equipment Rentals (wholesale tr.) 274.357-058
Sales Representative, Oil-Well Services (wholesale tr.) 274.357-058
SALES REPRESENTATIVE, PAPER AND PAPER PRODUCTS (wholesale tr.) 279.357-026
SALES REPRESENTATIVE, PETROLEUM PRODUCTS (wholesale tr.) 269.357-014
SALES REPRESENTATIVE, PLASTIC PRODUCTS (wholesale tr.) 279.357-030
Sales Representative, Playground Equipment (wholesale tr.) 277.357-026
SALES REPRESENTATIVE, POULTRY EQUIPMENT AND SUPPLIES (retail trade; wholesale tr.) 272.357-018
SALES REPRESENTATIVE, PRECISION INSTRUMENTS (wholesale tr.) 276.357-014
SALES REPRESENTATIVE, PRESSURE-SENSITIVE TAPE (wholesale tr.) 275.357-038
SALES REPRESENTATIVE, PRINTING (wholesale tr.) 254.357-018
Sales Representative, Printing Paper (wholesale tr.) 279.357-026
SALES REPRESENTATIVE, PRINTING SUPPLIES (wholesale tr.) 274.357-062
Sales Representative, Prosthetic And Orthotic Appliances (wholesale tr.) 276.257-010
SALES REPRESENTATIVE, PUBLICATIONS (wholesale tr.) 277.357-022
SALES REPRESENTATIVE, PUBLIC UTILITIES (tel. & tel.; utilities) 253.357-010
SALES REPRESENTATIVE, RADIO AND TELEVISION TIME (radio-tv broad.) 259.357-018
SALES REPRESENTATIVE, RADIOGRAPHIC-INSPECTION EQUIPMENT AND SERVICES (wholesale tr.) 271.352-010
SALES REPRESENTATIVE, RAILROAD EQUIPMENT AND SUPPLIES (wholesale tr.) 273.357-026
Sales Representative, Raw Fibers (wholesale tr.) 261.357-030
SALES REPRESENTATIVE, RECREATION AND SPORTING GOODS (wholesale tr.) 277.357-026
Sales Representative, Religious Supplies (wholesale tr.) 275.357-014

Sales Representative, Rural Power (utilities) 253.357-010
SALES REPRESENTATIVE, SAFETY APPAREL AND EQUIPMENT (wholesale tr.) 261.357-026
SALES REPRESENTATIVE, SCHOOL EQUIPMENT AND SUPPLIES (wholesale tr.) 275.357-042
SALES REPRESENTATIVE, SECURITY SYSTEMS (business ser.) 259.257-022
SALES REPRESENTATIVE, SHIPPING SERVICES (motor trans.) 252.357-014
SALES REPRESENTATIVE, SHOE LEATHER AND FINDINGS (wholesale tr.) 275.357-046
SALES REPRESENTATIVE, SIGNS (fabrication, nec) 254.357-022
SALES REPRESENTATIVE, SIGNS AND DISPLAYS (fabrication, nec) 254.257-010
Sales Representative, Sporting Goods (wholesale tr.) 277.357-026
Sales Representative, Stenographic Machines (wholesale tr.) 275.357-034
Sales Representative, Telephone And Telegraph Services (tel. & tel.) 253.357-010
SALES REPRESENTATIVE, TELEPHONE SERVICES (tel. & tel.) 253.257-010
SALES REPRESENTATIVE, TELEVISION CABLE SERVICE (radio-tv broad.) 259.357-022
SALES REPRESENTATIVE, TEXTILE DESIGNS (wholesale tr.) 274.357-066
SALES REPRESENTATIVE, TEXTILE MACHINERY (wholesale tr.) 274.357-070
SALES REPRESENTATIVE, TEXTILES (wholesale tr.) 261.357-030
SALES REPRESENTATIVE, TOBACCO PRODUCTS AND SMOKING SUPPLIES (retail trade; wholesale tr.) 260.357-022
SALES REPRESENTATIVE, TOILET PREPARATIONS (wholesale tr.) 262.357-014
Sales Representative, Toys And Games (retail trade; wholesale tr.) 277.357-026
Sales Representative, Typewriters (wholesale tr.) 275.357-034
SALES REPRESENTATIVE, ULTRASONIC EQUIPMENT (wholesale tr.) 271.352-014
sales representative, undertaker supplies (wholesale tr.) 275.357-030
SALES REPRESENTATIVE, UNIFORMS (retail trade; wholesale tr.) 261.357-034
SALES REPRESENTATIVE, UPHOLSTERY AND FURNITURE REPAIR (retail trade) 259.357-026
SALES REPRESENTATIVE, VENDING AND COIN MACHINES (wholesale tr.) 275.357-050
SALES REPRESENTATIVE, VETERINARIAN SUPPLIES (wholesale tr.) 276.357-018
SALES REPRESENTATIVE, VIDEOTAPE (wholesale tr.) 271.357-014
SALES REPRESENTATIVE, WATER-SOFTENING EQUIPMENT (retail trade; wholesale tr.) 279.357-034
SALES REPRESENTATIVE, WATER-TREATMENT CHEMICALS (wholesale tr.) 262.357-022
SALES REPRESENTATIVE, WEATHER-FORECASTING SERVICE (business ser.) 259.357-030
SALES REPRESENTATIVE, WEIGHING AND FORCE-MEASUREMENT INSTRUMENTS (wholesale tr.) 276.257-014
SALES REPRESENTATIVE, WELDING EQUIPMENT (wholesale tr.) 274.357-074
SALES REPRESENTATIVE, WIRE ROPE (wholesale tr.) 274.357-078
SALES REPRESENTATIVE, WOMEN'S AND GIRLS' APPAREL (wholesale tr.) 261.357-038
Sales Representative, Women's Apparel (wholesale tr.) 261.357-038
SALES REPRESENTATIVE, WRITING AND MARKING PENS (wholesale tr.) 277.357-030
SALES REPRESENTATIVE, FINANCIAL SERVICES (financial) 250.257-022
sales-review clerk (insurance) 209.687-018
SALES-SERVICE PROMOTER (any industry) 165.167-010
SALES-SERVICE REPRESENTATIVE, MILKING MACHINES (retail trade) 299.251-010
sales-service supervisor (clerical) 249.137-026
Sales-Slip Sorter (clerical) 209.687-022
SALES SUPERVISOR, MALT LIQUORS (wholesale tr.) 299.137-014
salicylic-acid blender (chemical) 555.685-046
Salt-Bellies Overhauler (meat products) 525.687-026
Salt Cutter (chemical) 551.685-026
salter (meat products) 525.687-026
salt operator (soap & rel.) 551.685-030
Salt-Plant Operator (chemical) 558.685-062
salt spreader (meat products; oils & grease) 525.687-038
SALT WASHER (chemical) 551.685-126
Salt Washer, Harvesting Station (chemical) 551.685-126
Salt Washer, Processing Station (chemical) 551.685-126
Salvage Clerk (clerical) 222.387-058
salvage clerk (pen & pencil) 733.384-010
salvage cutter (welding) 816.684-010
salvage diver (any industry) 379.384-010
SALVAGE ENGINEER (machinery mfg.) 600.131-014
Salvage Grinder (sugar & conf.) 521.686-018
salvage inspector (auto. mfg.) 806.384-014
SALVAGE INSPECTOR (can. & preserv.) 529.687-174
SALVAGE INSPECTOR (railroad equip.) 622.381-038
salvage inspector, wood parts (ordnance) 769.387-010
SALVAGE-MACHINE OPERATOR (ordnance) 694.382-010
salvage-machine operator (ordnance) 737.684-026
salvage painter (any industry) 740.684-026
salvager (any industry) 929.687-022
SALVAGER (optical goods) 713.687-038
SALVAGER (petrol. refin.) 709.684-070
SALVAGER (utilities) 729.687-030
salvage repairer (petrol. refin.) 709.684-070
Salvage Repairer I (utilities) 829.261-018
SALVAGE REPAIRER II (utilities) 729.384-018
SALVAGER HELPER (petrol. refin.) 709.687-034
SALVAGER I (ordnance) 737.687-114
SALVAGER II (ordnance) 737.687-118
Salvager, Inserts (nonfer. metal) 509.686-018
SALVAGE SUPERVISOR (paint & varnish) 559.137-010
Salvage Winder (textile) 681.685-154
SALVAGE WINDER AND INSPECTOR (paper goods) 649.685-102
salvage worker (furniture) 709.684-062
SALVAGE WORKER (nonfer. metal) 619.387-010
SAMPLE-BOOK MAKER (paper goods) 659.685-014
sample carrier (smelt. & refin.) 519.484-014
SAMPLE CHECKER (carpet & rug; textile) 229.687-010
SAMPLE CLERK (furniture) 221.382-026
SAMPLE CLERK (plastic prod.) 222.387-066
SAMPLE CLERK (textile) 789.587-026
SAMPLE CLERK, HANDKERCHIEF (garment) 920.587-022
SAMPLE CLERK, PAPER (paper & pulp; paper goods) 209.587-046
SAMPLE COLLECTOR (chemical) 550.587-014
SAMPLE-COLOR MAKER (paint & varnish) 550.584-014
sample cutter (boot & shoe) 788.684-082
SAMPLE CUTTER (furniture) 781.684-070
Sample Cutter (garment; textile) 699.685-014
SAMPLE DISPLAY PREPARER (knitting) 222.687-026
Sample Distributor (any industry) 230.687-010
Sample Driller (tobacco) 529.587-022
sample dyer (laundry & rel.) 364.361-010
sample finisher (carpet & rug) 781.684-050
sample gatherer (any industry) 922.687-054
SAMPLE MAKER (boot & shoe) 690.685-506
Sample Maker (carpet & rug) 687.684-010
sample maker (garment) 785.361-018
sample maker (ordnance) 600.260-018
SAMPLE MAKER, APPLIANCES (house. appl.; light. fix.) 600.280-054
SAMPLE MAKER, HAND (paper goods) 794.684-030
SAMPLE MAKER I (jewelry-silver.) 700.381-046
SAMPLE MAKER II (jewelry-silver.) 735.381-018
sample maker, original (garment) 785.361-018
SAMPLE MAKER, VENEER (millwork-plywood) 769.684-042
Sample Mounter (any industry) 795.687-014
Sample Processor (carpet & rug) 787.682-010
sample puller (tobacco) 529.587-022
sampler (agriculture) 410.357-010
sampler (agriculture; textile) 922.687-042
sampler (any industry) 922.687-054
SAMPLER (beverage) 529.687-178
SAMPLER (elec. equip.) 549.587-018
SAMPLER (mine & quarry) 579.484-010
sampler (nonfer. metal; steel & rel.) 509.584-010
SAMPLER (oils & grease) 529.387-034
SAMPLER (petrol. refin.) 549.587-014
SAMPLER (steel & rel.) 599.684-014
SAMPLER, FIRST (smelt. & refin.) 619.682-038
SAMPLER, HEAD (smelt. & refin.) 519.130-014
SAMPLE-ROOM SUPERVISOR (textile) 299.137-018
Sampler, Ovens (steel & rel.) 599.684-014
sampler, pickup (beverage) 529.687-178
Sampler, Radioactive Waste (chemical) 922.687-054
SAMPLER-TESTER (nonmet. min.) 579.585-010
SAMPLER, WOOL (wholesale tr.) 222.587-042
SAMPLE SAWYER (brick & tile) 677.685-034
SAMPLE SELECTOR (tex. prod., nec) 789.387-014
sample sewer (garment) 785.361-018
SAMPLE SHOE INSPECTOR AND REWORKER (boot & shoe) 788.684-098
sample steamer (textile) 582.685-110
SAMPLE STITCHER (garment) 785.361-018
sample supervisor (textile) 299.137-018
sample tailor (garment) 785.361-018
SAMPLE-TAKER OPERATOR (petrol. & gas) 931.361-010
SAMPLE TESTER (chemical) 553.364-010
sample tester (electroplating) 500.287-010
SAMPLE TESTER-GRINDER (mine & quarry) 519.585-018
SAMPLE WASHER (petrol. & gas) 939.687-030

Sash Assembler (woodworking) 762.687-050
Sash-Clamp Operator (saw. & plan.) 669.685-030
Sash-Gang-Saw Operator (saw. & plan.) 667.682-030
Sash Maker (saw. & plan.) 669.380-014
Sash Repairer (railroad equip.) 807.381-026
SATELLITE-INSTRUCTION FACILITATOR (education) 249.367-086
satellite-project site monitor (education) 249.367-086
Satin Finisher (furniture; wood prod., nec) 742.684-010
SATURATION-EQUIPMENT OPERATOR (fabrication, nec) 582.665-022
saturator (chemical) 551.382-010
saturator (tex. prod., nec) 584.382-010
SATURATOR OPERATOR (chemical; steel & rel.) 558.362-018
SATURATOR TENDER (build. mat., nec) 582.685-118
sauce maker (beverage) 520.485-026
SAUSAGE INSPECTOR (meat products) 529.587-014
sausage linker (meat products) 529.687-150
SAUSAGE MAKER (meat products) 520.685-202
SAUSAGE-MEAT TRIMMER (meat products) 521.687-106
SAUSAGE MIXER (meat products) 520.685-206
sausage stuffer (meat products) 520.685-210
SAVE-ALL OPERATOR (paper & pulp) 533.685-018
saw boss (logging) 454.134-010
Sawdust Drier (electroplating) 500.686-010
saw-dust machine operator (fur goods; laundry & rel.; retail trade; wholesale tr.) 369.685-014
sawdust-machine operator (laundry & rel.) 362.684-014
SAW-EDGE FUSER, CIRCULAR (cutlery-hrdwr.) 701.684-026
SAW FILER (any industry) 701.381-014
saw filer (oils & grease) 603.682-018
Saw-Handle Assembler (woodworking) 762.687-042
SAW MAKER (cutlery-hrdwr.) 601.381-034
saw maker (stonework) 701.684-022
saw mechanic (cutlery-hrdwr.) 601.381-034
Sawmill-Relief Worker (saw. & plan.) 667.687-018
SAWMILL WORKER (saw. & plan.) 667.687-018
Saw Offbearer (woodworking) 669.686-034
SAW OPERATOR (aircraft mfg.) 607.382-014
SAW OPERATOR (brick & tile) 677.685-054
saw operator (electron. comp.) 677.382-018
SAW OPERATOR (electron. comp.) 726.682-026
SAW OPERATOR, SEMICONDUCTOR WAFERS (electron. comp.) 726.685-046
SAW SETTER (stonework) 701.684-022
Sawsmith (cutlery-hrdwr.) 601.381-034
Sawyer (can. & preserv.) 525.687-126
sawyer (food prep., nec) 521.685-342
sawyer (jewelry-silver.) 770.382-010
sawyer (jewelry-silver.) 700.682-014
SAWYER (plastic prod.; plastic-synth.) 690.482-010
SAWYER (stonework) term
SAWYER, CORK SLABS (wood prod., nec) 667.685-046
SAWYER I (nonmet. min.) 677.686-010
SAWYER II (nonmet. min.) 677.685-038
SAWYER, OPTICAL GLASS (optical goods) 677.382-014
Saxophone Assembler (musical inst.) 730.381-018
Scaffold Builder (construction; ship-boat mfg.) 860.381-042
Scaffold Builder, Metal (construction) 801.361-014
scaffold worker (wood prod., nec) 561.665-010
SCAGLIOLA MECHANIC (nonmet. min.) 556.484-010
Scalder (can. & preserv.) 521.685-206
Scalder (meat products) 525.685-018
Scaler (r.r. trans.) 222.387-074
scale-and-skip-car operator (steel & rel.) 921.683-062
SCALE ASSEMBLY SET-UP WORKER (office machines) 710.360-010
scale clerk (agriculture) 221.467-010
scale clerk (clerical) 221.587-030
SCALE MECHANIC (any industry) 633.281-026
SCALE OPERATOR (chemical) 555.687-010
SCALE-RECLAMATION TENDER (smelt. & refin.) 515.585-010
SCALER-PACKER (meat products) 929.687-046
Scaler, Sliced Bacon (meat products) 920.587-018
Scale Shooter (forging) 619.686-034
scale-tank operator (oils & grease) 529.485-026
scaling machine operator (bakery products) 526.682-010
SCALING MACHINE OPERATOR (can. & preserv.) 521.685-386
SCALLOP CUTTER, MACHINE (tex. prod., nec) 686.685-058
Scallop Dredger (fishing & hunt.) 446.684-014
Scallop Raker (fishing & hunt.) 446.684-014
Scallop Shucker (can. & preserv.) 521.687-122
SCALPER OPERATOR (nonfer. metal) 605.682-022
scalp-machine operator (nonfer. metal) 605.682-022
scalp specialist (personal ser.) 339.371-014
SCALP-TREATMENT OPERATOR (personal ser.) 339.371-014
SCANNER (profess. & kin.) 015.384-010
SCANNER OPERATOR (print. & pub.) 972.282-010

Scanner Supervisor (print. & pub.) 972.137-010
scarfer (boot & shoe) 585.685-110
scarfer (boot & shoe; rubber goods) 690.685-378
scarfer operator (millwork-plywood) 665.685-022
SCARF GLUER (millwork-plywood) 762.684-054
SCARFING MACHINE OPERATOR (steel & rel.) 816.682-010
Scarifier Operator (any industry) 850.683-010
scenario writer (motion picture; radio-tv broad.) 131.067-050
Scenic Artist (motion picture; radio-tv broad.) 144.061-010
scenic designer (amuse. & rec.) 142.061-050
schedule clerk (utilities) 959.167-010
schedule clerk (clerical) 221.167-018
schedule clerk (print. & pub.) 247.387-014
schedule clerk (r.r. trans.) 219.462-014
SCHEDULE MAKER (motor trans.) 913.167-018
scheduler (auto. mfg.) 221.367-026
scheduler (clerical) 221.167-018
SCHEDULER (museums) 238.367-034
scheduler (paper goods) 221.162-010
scheduler (profess. & kin.) 012.167-050
scheduler and planner (clerical) 215.367-014
scheduler, conveyor (auto. mfg.) 221.367-026
SCHEDULER, MAINTENANCE (clerical) 221.367-066
scheme examiner (government ser.) 239.367-018
Scholarship Counselor (education) 169.267-018
school adjustment counselor (profess. & kin.) 195.107-038
SCHOOL BUS MONITOR (government ser.) 372.667-042
school examiner (education) 099.167-010
SCHOOL-PLANT CONSULTANT (education) 001.167-010
SCHOOL SECRETARY (education) 201.362-022
Science Center, Display Builder (museums) 739.261-010
SCIENTIFIC GLASS BLOWER (glass products) 006.261-010
SCIENTIFIC HELPER (profess. & kin.) 199.364-014
SCIENTIFIC LINGUIST (profess. & kin.) 059.067-014
SCIENTIST (profess. & kin.) term
scientologist (profess. & kin.) 199.207-010
scientology auditor (profess. & kin.) 199.207-010
Scissors Grinder (any industry) 701.381-018
SCOOPING-MACHINE TENDER (furniture) 665.685-026
scoop-machine operator (button & notion) 692.685-270
SCOREBOARD OPERATOR (amuse. & rec.) 349.665-010
SCORER (amuse. & rec.) 153.387-014
SCORER (paper goods) 641.685-070
Scorer, Double (paper goods) 641.685-070
SCORER HELPER (paper goods) 641.686-030
Scorer, Single (paper goods) 641.685-070
scoring-machine-operator helper (paper goods) 641.686-030
scourer (boot & shoe) 690.685-046
scourer (pottery & porc.) 774.684-010
scouring-machine operator (carpet & rug; textile) 589.662-010
SCOURING-TRAIN OPERATOR (carpet & rug; textile) 589.662-010
Scouring-Train Operator, Chief (carpet & rug; textile) 589.662-010
SCOUT (agriculture) 408.381-010
SCOUT (petrol. & gas) 010.267-010
SCOUT, PROFESSIONAL SPORTS (amuse. & rec.) 153.117-018
scow captain (water trans.) 911.137-010
Scow Deckhand (water trans.) 911.687-022
scow-derrick operator (water trans.) 921.683-034
Scrap Baler (nonfer. metal; steel & rel.) 920.685-010
SCRAP BALLER (nonfer. metal; steel & rel.) 509.685-046
Scrap Breaker (steel & rel.) 509.687-026
Scrap-Bunch Maker (tobacco) 529.685-038
Scrap Burner (any industry) 929.687-022
scrap burner (welding) 816.684-010
Scrap-Crane Operator I (steel & rel.) 921.663-010
Scrap-Crane Operator II (steel & rel.) 921.663-042
scrap crusher (fabrication, nec) 555.685-022
scrap cutter (welding) 816.684-010
scrap cutter, machine (tobacco) 529.685-110
SCRAPER (jewelry-silver.) 700.687-066
scraper (machine shop) 705.384-010
scraper (mine & quarry) 939.687-014
scraper (pottery & porc.) 774.684-010
scraper burrer (clock & watch) 715.684-042
scraper, hand (furniture) 761.684-038
SCRAPER, HAND (machine shop) 705.384-010
SCRAPER-LOADER OPERATOR (mine & quarry) 921.663-050
Scraper, Meat (meat products) 525.587-014
SCRAPER OPERATOR (construction) 850.683-038
Scraper Operator (mine & quarry) 850.683-010
scraper tender (furniture) 665.685-026
scrap-filler-cigar roller, machine (tobacco) 529.685-270
SCRAP HANDLER (any industry) 509.685-050
SCRAPPER (paper goods) 794.687-050
Scrapper (sugar & conf.) 529.686-034
scrap picker (tobacco) 521.687-098
scrap preparer (tobacco) 520.687-030
Scrap Sawyer (saw. & plan.) 667.685-022
SCRAP SEPARATOR (food prep., nec) 529.587-018
Scrap-Shear Operator (any industry) 615.685-034
Scrap Sorter (any industry) 929.687-022
SCRAP SORTER (boot & shoe) 788.687-106
SCRAP SORTER (nonfer. metal) 509.686-018
Scrap Sorter (tobacco) 521.687-098
Scrap Stripper, Hand (tobacco) 521.687-134
Scrap-Tire Shearer (rubber reclaim.) 690.685-386
Scrap Wheeler (machine shop) 929.687-030
scratch brusher (clock & watch) 715.687-022
Scratch Brusher (jewelry-silver.) 700.687-058
scratcher (hat & cap) 585.685-014
scratcher, metal patterns (foundry) 693.281-018
SCRATCHER TENDER (fabrication, nec) 555.685-050
Scratch Polisher (glass products) 775.684-058
Screed Operator (construction) 853.663-014
SCREEN-AND-CYCLONE REPAIRER (mine & quarry) 630.664-014
SCREEN CLEANER (wood prod., nec) 569.687-018
Screen Coach (profess. & kin.) 150.027-010
screen cutter and trimmer (metal prod., nec) 709.684-074
screener (any industry) 979.684-034
Screener (electron. comp.) 725.685-010
SCREENER-AND-BLENDER OPERATOR (steel & rel.) 549.685-026
SCREENER OPERATOR (any industry) 599.685-082
SCREENER-PERFUMER (soap & rel.) 559.685-162
Screen-Frame Enameler (struct. metal) 599.685-026
SCREEN HANDLER (paper & pulp) 539.685-026
screening representative (air trans.) 372.667-010
Screen Installer (struct. metal) 809.684-010
SCREEN-MACHINE OPERATOR (tex. prod., nec) 559.682-070
SCREEN MAKER (paper goods) 739.684-150
SCREEN MAKER, PHOTOGRAPHIC PROCESS (any industry) 979.384-010
SCREEN MAKER, TEXTILE (textile) 971.381-046
Screen Operator (cement) 921.662-018
SCREEN OPERATOR (chemical) 551.685-130
SCREEN OPERATOR (smelt. & refin.) 511.685-050
SCREEN PRINTER (any industry) 979.684-034
screen printer (any industry) 979.685-010
SCREEN PRINTER (textile) 979.684-030
SCREEN PRINTER HELPER (any industry) 979.687-022
Screen Printer, Printed Circuit Boards (electron. comp.) 979.684-034
SCREEN-PRINTING-EQUIPMENT SETTER (paper goods) 979.360-010
SCREEN-PRINTING-MACHINE OPERATOR (textile) 652.682-018
SCREEN-PRINTING-MACHINE-OPERATOR HELPER (textile) 652.686-038
Screen-Printing-Machine Tender, Printed Circuit Boards (electron. comp.) 979.685-010
SCREEN REPAIRER, CRUSHER (mine & quarry) 630.684-030
Screen Roller (woodworking) 762.687-058
screen-room operator (paper & pulp) 533.685-022
SCREEN-ROOM OPERATOR (sugar & conf.) 521.685-282
screen stretcher (electron. comp.) 979.684-042
Screen Supervisor (smelt. & refin.) 511.135-010
SCREEN TACKER (saw. & plan.) 762.687-058
SCREEN TENDER (paper & pulp) 533.685-022
SCREEN TENDER (paper & pulp; wood prod., nec) 534.665-010
SCREEN TENDER, CHIPS (paper & pulp) 533.685-026
SCREEN-TENDER HELPER (paper & pulp) 533.687-010
Screen-Vent Binder (hat & cap) 787.682-010
screen washer (paper & pulp) 533.687-010
SCREEN WRITER (motion picture; radio-tv broad.) 131.067-050
SCREWDOWN OPERATOR (steel & rel.) 613.382-018
SCREW-EYE ASSEMBLER (ordnance) 737.687-122
SCREWHEAD POLISHER (clock & watch) 715.381-090
screwhead polisher (clock & watch) 715.685-046
screwhead stoner and polisher (clock & watch) 603.685-082
Screw Inspector (clock & watch) 715.384-022
Screw-Machine Adjuster, Automatic (ordnance) 638.261-030
screw-machine operator (machine shop) 604.280-014
SCREW-MACHINE OPERATOR, MULTIPLE SPINDLE (machine shop) 604.382-010
SCREW-MACHINE OPERATOR, SINGLE SPINDLE (machine shop) 604.382-014
SCREW-MACHINE OPERATOR, SWISS-TYPE (clock & watch) 604.682-010
Screw-Machine Repairer (machine shop) 638.261-030
screw-machine setter (machine shop) 604.280-014
SCREW-MACHINE SET-UP OPERATOR (machine shop) 604.380-022
SCREW-MACHINE SET-UP OPERATOR, MULTIPLE SPINDLE (machine shop) 604.280-014
SCREW-MACHINE SET-UP OPERATOR, SINGLE SPINDLE (machine shop) 604.280-018
SCREW-MACHINE SET-UP OPERATOR, SWISS-TYPE (clock & watch) 604.260-010
Screw-Machine Set-Up Operator, Tool (machine shop) 604.280-022

SCREW-MACHINE TENDER (machine shop) 604.685-034
SCREWMAKER, AUTOMATIC (clock & watch) 609.682-030
SCREW REMOVER (boot & shoe) 788.684-102
SCREW SUPERVISOR (clock & watch) 609.130-014
scriber (electron. comp.) 726.685-046
SCRIBING-MACHINE OPERATOR (cutlery-hrdwr.) 605.685-042
script artist (profess. & kin.) 970.661-010
script reader (motion picture; radio-tv broad.) 131.087-014
SCRIPT READER (radio-tv broad.) 131.267-022
SCRIPT SUPERVISOR (motion picture; radio-tv broad.) 201.362-026
script writer (motion picture; radio-tv broad.) 131.067-050
SCROLL ASSEMBLER (office machines) 710.584-010
SCROLL-MACHINE OPERATOR (struct. metal) 616.685-062
scroll-saw operator (woodworking) 667.682-010
scroll-saw operator (woodworking) 667.682-042
scrubber (any industry) 381.687-014
scrubber (any industry) 381.687-018
scrubber (glass mfg.; glass products) 673.685-026
SCRUBBER MACHINE TENDER (electron. comp.) 599.685-134
scrubber-system attendant (any industry) 950.585-010
Scrubbing-Machine Operator (any industry) 381.687-014
SCRUBBING-MACHINE OPERATOR (tex. prod., nec) 582.685-122
SCUBA DIVER (any industry) 379.384-010
scudding inspector (leather mfg.) 585.687-010
SCULLION (water trans.) 318.687-014
Scullion Chief (water trans.) 318.687-014
SCULPTOR (profess. & kin.) 144.061-018
sculptor (stonework) 771.281-014
SCUTCHER TENDER (textile) 589.685-090
sea-foam-kiss maker (sugar & conf.) 529.687-122
Sealant Mixer (aircraft mfg.) 550.685-062
Seal Driver (fishing & hunt.) 461.684-010
SEALER (elec. equip.) 727.684-030
SEALER (fishing & hunt.) 461.684-010
Sealer (light. fix.) 692.685-118
SEALER (office machines) 710.684-038
sealer, aircraft (aircraft mfg.) 806.384-038
sealer and stripper (brick & tile) 573.684-010
SEALER, DRY CELL (elec. equip.) 692.685-158
seal r operator (elec. equip.) 69. 685-158
SEALER, SEMICONDUCTOR PACKAGES (electron. comp.) 726.687-042
SEAL-EXTRUSION OPERATOR (elec. equip.) 692.685-154
SEALING-AND-CANCELING-MACHINE OPERATOR (clerical) 208.685-026
SEALING-MACHINE OPERATOR (light. fix.) 692.685-162
SEALING-MACHINE OPERATOR (paper goods) 641.685-074
Seal Killer (fishing & hunt.) 461.684-010
SEAL MIXER (elec. equip.) 540.687-010
seal-mixing operator (elec. equip.) 540.687-010
Seal Skinner (fishing & hunt.) 461.684-010
seam checker (beverage; can. & preserv.) 920.687-050
seamer (boot & shoe) 690.682-082
Seamer (knitting) 787.682-074
Seamer (metal prod., nec) 709.684-074
seamer (rubber goods) 690.686-026
seamer (tex. prod., nec) 787.682-066
Seamer, Elastic Band (knitting) 787.682-074
Seamer, Pantyhose (knitting) 787.682-074
SEAM HAMMERER (musical inst.) 730.684-070
Seaming Inspector (knitting) 684.684-010
Seaming-Machine Operator (tinware) 619.685-046
SEAMLESS-HOSIERY KNITTER (knitting) 684.685-010
seamless sizer (knitting) 684.684-014
seamless-tube drawer (nonfer. metal; steel & rel.) 614.685-022
seamless-tube-mill operator (steel & rel.) 619.682-042
SEAMLESS TUBE ROLLER (steel & rel.) 619.682-042
Seam Pres[illegible]ment) 363.684-018
SEAM PR[illegible]SS[illegible]s (hat & cap) 583.685-098
Seam-Pres. Operator (boot & shoe) 690.685-350
seam roller (boot & shoe) 690.685-350
SEAM-RUBBING-MACHINE OPERATOR (boot & shoe) 690.685-350
Seam-Stay Stitcher (boot & shoe) 690.682-082
SEAM STEAMER (garment) 789.687-166
Seam Taper, Machine (boot & shoe) 690.685-414
searcher (tobacco) 521.687-098
seasoner, hand (leather mfg.) 584.687-010
SEASONING MIXER (chemical) 550.685-106
SEASONING MIXER (meat products) 520.687-054
Seasoning Sprayer (leather mfg.) 584.687-014
Seat Assembler (furniture) 709.684-014
Seat Installer (construction) 869.664-014
SEAT JOINER, CHAINSTITCH (garment) 786.682-218
Seat Maker (furniture) 780.684-134
Seat-Pack Inspector (tex. prod., nec) 789.687-086
seat padder (furniture) 780.684-078
seat scooper, machine (furniture) 665.685-026
Seat Trimmer (boot & shoe) 690.685-434
SECOND (amuse. & rec.) 346.677-018
Secondary Connector, Armature (elec. equip.) 724.684-014
second assistant engineer (water trans.) 623.281-034
Second-Calender Operator (tex. prod., nec) 584.685-010
SECOND COOK AND BAKER (water trans.) 315.381-026
SECOND CUTTER (glass mfg.) 779.684-054
Second Facing Baster (garment) 786.682-102
SECOND-FLOOR OPERATOR (plastic-synth.) 557.685-022
SECOND HAND (textile) term
second hand, paper machine (paper & pulp) 534.662-010
SECOND HELPER (steel & rel.) 512.684-010
second loader (logging) 921.687-022
Second Operator (chemical) 552.685-030
SECOND OPERATOR, MILL TENDER (chemical) 555.685-054
second press operator (print. & pub.) 651.685-026
Second-Ride-Fare Collector (amuse. & rec.) 211.467-030
second rigger (logging) 921.664-014
seconds grader (textile) 689.387-010
SECONDS HANDLER (knitting) 782.687-050
Seconds Inspector (garment; knitting) 789.687-070
seconds inspector (textile) 689.387-010
Second Steward/Stewardess, Night (water trans.) 350.137-022
secretarial stenographer (clerical) 201.362-030
SECRETARY (clerical) 201.362-030
SECRETARY, BOARD-OF-EDUCATION (education) 169.267-022
SECRETARY OF POLICE (government ser.) 375.137-022
SECRETARY OF STATE (government ser.) 188.167-082
secretary to board of commissioners (government ser.) 375.137-022
secret-code expert (government ser.) 199.267-014
SECTIONAL-BELT-MOLD ASSEMBLER (rubber goods) 752.685-010
SECTIONAL CENTER MANAGER, POSTAL SERVICE (government ser.) 188.167-086
section beamer (knitting; narrow fabrics; nonmet. min.; textile) 681.685-018
section beamer (textile) 681.685-058
section chief (any industry) see SUPERVISOR
section chief (clerical) see SUPERVISOR
Section-Crews-Activities Clerk (r.r. trans.) 221.362-026
section-gang worker (r.r. trans.) 910.684-014
SECTION HAND (textile) term
section head (clerical) see SUPERVISOR
section leader (any industry) see SUPERVISOR
SECTION LEADER AND MACHINE SETTER (textile) 689.260-018
Section Leader And Machine Setter, Cards (textile) 689.260-018
Section Leader And Machine Setter, Drawing And Combers (textile) 689.260-018
Section Leader And Machine Setter, Opening And Picking (textile) 689.260-018
SECTION LEADER AND MACHINE SETTER, POLISHING (textile) 689.260-022
Section Leader And Machine Setter, Roving Frames (textile) 689.260-018
Section Leader And Machine Setter, Spinning (textile) 689.260-018
Section Leader All Machine Setter, Winding And Twisting (textile) 689.260-018
SECTION LEADER, SCREEN PRINTING (textile) 652.260-010
Section Maintainer (tel. & tel.) 822.261-022
section manager (print. & pub.) 653.131-010
SECTION-PLOTTER OPERATOR (petrol. & gas) 194.382-010
section-plotter operator (petrol. & gas) 010.161-018
SECTION SUPERVISOR (mine & quarry) 939.137-018
section warper (knitting; narrow fabrics; nonmet. min.; textile) 681.685-018
section weaver (personal ser.) 782.381-022
securities analyst (financial; insurance) 160.267-026
securities auditor (financial) 216.367-014
securities broker (financial) 250.257-018
SECURITIES CLERK (clerical) 210.382-062
SECURITIES CLERK (financial) 219.362-054
securities-research analyst (financial; insurance) 160.267-026
Securities Supervisor (financial) 219.132-014
SECURITIES TRADER (financial) 162.167-038
security agent (business ser.) 376.367-010
Security Chief, Museum (museums) 372.167-014
security clerk (clerical) 205.362-022
SECURITY CONSULTANT (business ser.; personal ser.) 189.167-054
security guard (business ser.) 372.667-038
security inspector (government ser.) 372.363-010
security manager (any industry) 189.167-050
SECURITY OFFICER (any industry) 189.167-034
security officer (hotel & rest.) 376.367-018
security technician (government ser.) 372.363-010
SEED ANALYST (profess. & kin.) 040.361-014
Seed And Havana-Scrap Preparer (tobacco) 520.687-030
seed cleaner (agriculture; oils & grease) 599.665-010
SEED-CLEANER OPERATOR (agriculture; oils & grease) 599.665-010
seed-cleaning-machine operator (agriculture; oils & grease) 599.665-010

Seed-Cone Picker (forestry) 453.687-010
SEED CORE OPERATOR (electron. comp.) 679.384-010
SEED CUTTER (agriculture) 404.686-010
Seed Grower (agriculture) 405.161-014
SEEDLING PULLER (forestry) 451.687-018
SEEDLING SORTER (forestry) 451.687-022
Seed Packer (agriculture) 920.687-134
SEED PELLETER (agriculture) 599.685-126
SEED-POTATO ARRANGER (agriculture) 404.685-010
Seed Sorter (agriculture) 529.687-186
SEED-YEAST OPERATOR (food prep., nec) 522.685-090
Segregator (agriculture; wholesale tr.) 929.687-030
Seismic Prospector (petrol. & gas) 024.061-026
seismograph-operator helper (petrol. & gas) 939.364-010
SEISMOLOGIST (profess. & kin.) 024.061-050
SELECTOR (fabrication, nec) 739.687-166
SELECTOR (glass mfg.) 579.687-030
selector (hat & cap) 784.387-010
selector (meat products; oils & grease) 525.687-046
selector (tobacco) 529.687-134
selector (tobacco) 529.687-090
Selenium-Plant Operator (smelt. & refin.) 511.685-054
Self-Propelled Dredge Operator (fishing & hunt.) 446.663-010
Self-Rising-Flour Mixer (grain-feed mills) 520.485-010
SELF-SEALING-FUEL-TANK BUILDER (rubber goods) 752.684-046
SELF-SEALING-FUEL-TANK REPAIRER (rubber goods) 759.384-010
SELF-SERVICE-LAUNDRY-AND-DRY-CLEANING ATTENDANT (laundry & rel.) 369.677-010
SELVAGE-MACHINE OPERATOR (textile) 681.685-094
semiautomatic-stitcher operator (paper goods) 649.685-114
semiautomatic-taper operator (paper goods) 649.685-126
SEMICONDUCTOR PROCESSOR (electron. comp.) 590.684-022
semi-truck driver (any industry) 904.383-010
Senior Animal Trainer (amuse. & rec.) 159.224-010
SENIOR COMMISSARY AGENT (air trans.) 922.137-010
SENIOR ENLISTED ADVISOR (military ser.) 166.167-042
senior gate agent (air trans.) 238.137-018
senior librarian (library) 100.127-010
senior passenger agent (air trans.) 238.137-022
senior radio operator (air trans.; business ser.) 193.162-022
SENIOR RESERVATIONS AGENT (air trans.) 238.137-014
Senior Service Aide (social ser.) 195.367-010
SENIOR TECHNICIAN, CONTROLS (pipe lines) 828.261-018
senior ticket-sales agent (air trans.) 238.137-022
SENSITIZED-PAPER TESTER (photo. appar.) 714.667-010
sensitizer (photo. appar.) 534.582-010
Sensitometrist (motion picture) 976.381-010
separator (chemical) 551.685-102
separator (laundry & rel.) 361.687-014
separator (saw. & plan.) 921.682-022
separator (woodworking) 922.687-074
Separator Inserter (elec. equip.) 727.687-038
separator-machine operator (any industry) 599.685-082
SEPARATOR OPERATOR (button & notion) 692.685-166
SEPARATOR OPERATOR (chemical) 559.685-166
Separator Operator (dairy products) 529.382-018
SEPARATOR OPERATOR (grain-feed mills) 521.382-014
SEPARATOR OPERATOR, SHELLFISH MEATS (can. & preserv.) 521.685-286
Separator Tender I (grain-feed mills) 521.685-254
SEPARATOR TENDER II (grain-feed mills) 521.685-290
SEPTIC-TANK INSTALLER (construction) 851.663-010
Septic-Tank Servicer (construction) 869.664-014
SEQUENCING-MACHINE OPERATOR (electron. comp.) 726.382-010
SEQUINS STRINGER (plastic prod.) 754.687-014
sequins winder (plastic prod.) 920.686-046
sergeant (government ser.) 375.133-010
serger (any industry) see SERGING-MACHINE OPERATOR
SERGING-MACHINE OPERATOR (any industry) term
SERGING-MACHINE OPERATOR, AUTOMATIC (any industry) 787.685-030
server (hotel & rest.) 311.477-026
server (hotel & rest.) 311.477-030
server (hotel & rest.) 311.677-014
service aide (nonprofit org.) 239.367-022
service attendant, cafeteria (hotel & rest.) 311.677-010
SERVICE ATTENDANT, SLEEPING CAR (r.r. trans.) 351.677-010
service auditor (business ser.) 376.267-022
Service-Bar Cashier (hotel & rest.) 211.462-010
Service Bartender (hotel & rest.) 312.474-010
service-car operator (any industry) 388.663-010
service center manager (air trans.; motor trans.; r.r. trans.) 184.167-042
service-center supervisor (tel. & tel.) 822.131-014
service-claims inspector (auto. mfg.) 806.384-014
SERVICE CLERK (clerical) 221.367-070
service coordinator (air trans.) 912.367-014
Service Correspondent (clerical) 221.367-062
service-crew supervisor (smelt. & refin.) 630.134-010
Service-Crew Supervisor (utilities) 862.137-010
service dismantler (auto. mfg.) 806.384-014
service engineer (construction; petrol. & gas; pipe lines) 620.281-046
service engineer (machinery mfg.; machine tools) 638.261-018
SERVICE-ESTABLISHMENT ATTENDANT (laundry & rel.; personal ser.) 369.477-014
service inspector (motor trans.; r.r. trans.) 168.167-082
service inspector (r.r. trans.) 168.267-030
service inspector (utilities) 821.131-010
Service Investigator (tel. & tel.; utilities) 241.367-014
SERVICE MANAGER (automotive ser.) 185.167-058
SERVICE MANAGER (retail trade) 185.164-010
SERVICE MECHANIC (auto. mfg.) 807.381-022
SERVICE MECHANIC, COMPRESSED-GAS EQUIPMENT (chemical) 630.281-034
SERVICE-MECHANIC HELPER, COMPRESSED-GAS EQUIPMENT (chemical) 630.664-018
SERVICE OBSERVER (tel. & tel.) 239.367-026
SERVICE OBSERVER, CHIEF (tel. & tel.) 239.137-022
service officer (nonprofit org.) 187.167-198
service-order dispatcher (clerical) 221.367-070
service-order dispatcher, chief (utilities) 959.137-014
Service-Parts Driver (automotive ser.) 906.683-022
servicer (any industry) 929.687-030
servicer, coin machines (business ser.) 292.483-010
SERVICE REPRESENTATIVE (auto. mfg.) 191.167-022
service representative (machinery mfg.; machine tools) 638.261-018
service representative (radio-tv broad.; tel. & tel.; utilities; waterworks) 239.362-014
SERVICE REPRESENTATIVE (utilities; waterworks) 959.574-010
SERVICE REPRESENTATIVE, ELEVATORS, ESCALATORS, AND DUMBWAITERS (wholesale tr.) 259.257-018
SERVICE RESTORER, EMERGENCY (r.r. trans.) 821.261-022
Servicer, Travel Trailers (vehicles, nec) 869.384-010
SERVICES CLERK (water trans.) 214.387-018
services engineer (tel. & tel.) 003.187-018
service-station attendant (automotive ser.) 915.467-010
service supervisor (hotel & rest.) 329.137-010
service supervisor (wholesale tr.) 187.167-142
SERVICE SUPERVISOR I (utilities) 953.137-018
SERVICE SUPERVISOR II (utilities) 821.131-018
SERVICE SUPERVISOR III (utilities) 184.167-126
SERVICE SUPERVISOR, LEASED MACHINERY AND EQUIPMENT (any industry) 183.167-030
SERVICE TECHNICIAN, COMPUTERIZED-PHOTOFINISHING EQUIPMENT (photofinishing) 714.281-030
service tester (utilities) 821.381-014
Service-Transformer-Repair Supervisor (utilities) 829.131-014
SERVICE-UNIT OPERATOR, OIL WELL (petrol. & gas) 930.361-010
service worker (any industry) see MAINTENANCE WORKER
service writer (automotive ser.) 620.261-018
SET DECORATOR (motion picture; radio-tv broad.) 142.061-042
SET DESIGNER (amuse. & rec.) 142.061-050
SET DESIGNER (motion picture; radio-tv broad.) 142.061-046
set electrician, assistant chief (motion picture; radio-tv broad.) 962.362-014
SET-KEY DRIVER (clock & watch) 715.687-118
set-making-machine operator (print. & pub.) 653.382-014
set-model builder (motion picture) 962.381-018
Set-Off Blocker (hat & cap) 580.684-014
Set-Off-Press Operator (hat & cap) 583.685-018
set rider (any industry) 932.664-010
SET-STAFF FITTER (clock & watch) 715.684-178
setter (boot & shoe) 690.685-074
SETTER (brick & tile) 573.684-014
setter (construction) 861.361-014
setter (stonework) 679.664-010
setter (wood. container) 761.381-014
Setter, Automatic-Spinning-And-Beading-Lathe (any industry) 604.360-010
SETTER, AUTOMATIC-SPINNING LATHE (any industry) 604.360-010
SETTER, COLD-ROLLING MACHINE (machine shop) 617.682-022
SETTER HELPER (brick & tile) 573.687-030
setter-in (pottery & porc.) 573.686-026
SETTER, INDUCTION-HEATING EQUIPMENT (welding) 813.360-014
SETTER, JUICE PACKAGING MACHINES (can. & preserv.) 920.380-010
setter, machine (leather mfg.; tex. prod., nec) 589.685-098
SETTER, MOLDING-AND-COREMAKING MACHINES (foundry) 518.380-010
setter-off (chemical) 969.664-010
setter, plastics-molding machine (inst. & app.; office machines; plastic prod.; recording) 556.380-010
setter-up (chemical) 969.664-010
setter-up (wood. container) 764.684-018
setter-up, silk-screen frame (any industry) 709.484-010

setting-up-and-windlass-machine operator (wood. container) 764.684-018
setting-up-and-windlass-machine-operator helper (wood. container) 764.687-038
SETTLEMENT CLERK (smelt. & refin.) 214.382-030
settlement technician (insurance) 209.382-014
set-up and charger (jewelry-silver.) 700.687-026
SET-UP MECHANIC (pen & pencil) 692.380-010
SET-UP MECHANIC, AUTOMATIC LINE (pen & pencil) 692.380-014
Set-Up Mechanic, Coating Machines (pen & pencil) 692.380-010
SET-UP MECHANIC, COIL-WINDING MACHINES (elec. equip.) 724.360-010
SET-UP MECHANIC, CROWN ASSEMBLY MACHINE (any industry) 692.362-010
Set-Up Mechanic, Heading Machines (pen & pencil) 692.380-010
Set-Up Mechanic, Stamping Machines (pen & pencil) 692.380-010
set-up-operator, tool (machine shop) 601.280-054
SET-UP WORKER (clock & watch) 715.660-010
setup worker, electronics (comm. equip.; electron. comp.) 726.364-018
SEWAGE-DISPOSAL WORKER (sanitary ser.) 955.687-010
sewage-plant attendant (sanitary ser.) 955.585-010
sewage-plant operator (sanitary ser.) 955.362-010
sewage plant supervisor (sanitary ser.) 955.130-010
sewer (boot & shoe) 690.685-162
sewer (boot & shoe) 690.682-082
Sewer-And-Cutter, Finger-Buff Material (tex. prod., nec) 787.685-014
SEWER AND INSPECTOR (knitting) 684.682-014
SEWER-AND-WATERWORKS SUPERVISOR (construction) term
SEWER, HAND (any industry) 782.684-058
sewer, hand (tex. prod., nec) 782.684-050
Sewer, Head (agriculture) 920.687-022
Sewer, Linen Room (hotel & rest.) 787.682-030
SEWER-LINE PHOTO-INSPECTOR (sanitary ser.) 851.362-010
SEWER-LINE REPAIRER (sanitary ser.) 869.664-018
SEWER-LINE REPAIRER, TELE-GROUT (sanitary ser.) 851.262-010
SEWER-PIPE CLEANER (business ser.) 899.664-014
Sewer-Pipe-Press Operator (brick & tile) 575.462-010
Sewer-Pipe Sorter (brick & tile) 573.687-034
Sewer Tapper (construction) 869.664-014
Sewing-Department Supervisor (leather prod.) 783.132-010
Sewing Inspector (laundry & rel.) 369.687-022
sewing-machine adjuster (any industry) 639.281-018
SEWING-MACHINE ASSEMBLER (machinery mfg.) 706.381-034
Sewing-Machine Attachment Tester (machinery mfg.) 709.382-010
SEWING-MACHINE OPERATOR (any industry) 787.682-046
SEWING-MACHINE OPERATOR (furniture) 780.682-010
SEWING-MACHINE OPERATOR (knitting) 787.682-074
SEWING-MACHINE OPERATOR (knitting; protective dev.) 787.682-050
SEWING MACHINE OPERATOR (leather prod.) 783.682-014
SEWING-MACHINE OPERATOR (toy-sport equip.) 787.682-054
SEWING-MACHINE OPERATOR, AUTOMATIC (any industry) master
sewing-machine operator, carpet and rugs (carpet & rug; retail trade) 787.682-014
SEWING MACHINE OPERATOR I (tex. prod., nec) 787.682-066
SEWING-MACHINE OPERATOR II (tex. prod., nec) 787.682-058
SEWING-MACHINE OPERATOR, PAPER BAGS (paper goods) 787.685-054
Sewing-Machine Operator, Plastic Zipper (button & notion) 787.685-034
SEWING-MACHINE OPERATOR, REGULAR EQUIPMENT (any industry) master
SEWING-MACHINE OPERATOR, SEMIAUTOMATIC (garment) 786.685-030
SEWING-MACHINE OPERATOR, SPECIAL EQUIPMENT (furniture) 689.685-118
SEWING-MACHINE OPERATOR, ZIPPER (button & notion) 787.685-034
SEWING-MACHINE REPAIRER (any industry) 639.281-018
SEWING-MACHINE-REPAIRER HELPER (any industry) 639.684-010
SEWING-MACHINE TESTER (machinery mfg.) 709.382-010
Sewing Room Grip (motion picture) 962.687-022
SEWING SUPERVISOR (any industry) 787.132-010
sew-out operator (garment) 786.682-166
SEXTON (nonprofit org.) 389.667-010
SHACKLER (meat products) 525.687-086
Shactor (meat products) 525.361-010
SHACTOR HELPER (meat products) 525.687-090
shade-and-quality checker (textile) 582.387-010
shade classifier (brick & tile) 574.367-010
SHADE-CLOTH FINISHER (furniture) 585.687-026
SHADE MATCHER (textile) 582.687-022
shader (paint & varnish) 550.381-014
shader and folder (textile) 781.687-014
shader and toner (wood prod., nec) 749.684-030
shadowgraph operator (any industry) 699.384-010
SHADOWGRAPH-SCALE OPERATOR (ordnance) 737.687-126
Shadowgraph-Weight Operator (toy-sport equip.) 929.687-062
Shafting Cleaner (any industry) 699.687-014
Shaft Inspector (house. appl.) 729.384-022
SHAFT MECHANIC (mine & quarry) 899.684-034
shaft repairer (mine & quarry) 899.684-034
Shaft Sinker (mine & quarry) 939.281-010
shaft tender (mine & quarry) 899.684-034
SHAKE BACKBOARD NOTCHER (saw. & plan.) 663.685-030
Shake Feeder (saw. & plan.) 669.686-030
Shake-Out Worker (foundry) 519.687-022
Shake Packer (saw. & plan.) 920.687-158
SHAKER (hat & cap) 589.685-094
SHAKER (knitting) 589.687-058
SHAKER (tobacco) 521.687-110
Shaker, Flatwork (laundry & rel.) 363.686-010
shaker operator (steel & rel.) 541.665-010
SHAKER-PLATE OPERATOR (ordnance) 737.685-014
SHAKER REPAIRER (grain-feed mills) 769.664-010
shaker-screen operator (chemical) 551.685-130
SHAKER TENDER (concrete prod.; mine & quarry) 934.685-018
SHAKER TENDER (steel & rel.) 541.665-010
SHAKER WASHER (grain-feed mills) 521.687-114
SHAKER, WEARING APPAREL (laundry & rel.) 361.687-026
SHAKE SAWYER (saw. & plan.) 667.682-070
Shake Splitter (logging) 454.684-022
SHALE PLANER OPERATOR (mine & quarry) 930.663-010
SHALE PLANER OPERATOR HELPER (mine & quarry) 930.667-010
Shampooer (personal ser.) 332.271-010
Shank Beveler (boot & shoe) 690.685-166
Shank Boner (meat products) 525.684-010
Shank Burnisher (boot & shoe) 690.685-058
Shank Cementer, Hand (boot & shoe) 788.687-030
shanker (boot & shoe) 788.687-118
SHANK INSPECTOR (boot & shoe) 788.687-110
shank paperer (boot & shoe) 788.687-114
shank picker (boot & shoe) 788.687-110
SHANK-PIECE TACKER (boot & shoe) 788.687-118
Shank Sander (boot & shoe) 690.685-046
Shank Sander (fabrication, nec) 761.684-030
shank sorter (boot & shoe) 788.687-110
Shank Stapler (boot & shoe) 690.685-162
Shank Stitcher (boot & shoe) 690.682-082
shank tacker (boot & shoe) 788.687-118
SHANK TAPER (boot & shoe) 788.687-114
SHANK THREADER (fabrication, nec) 739.685-034
shank turner (fabrication, nec) 664.685-022
Shape-Brick Molder (brick & tile) 575.684-042
shape carver (stonework) 771.281-010
shape hand (tobacco) 520.687-050
shaper (button & notion) 734.684-010
shaper (jewelry-silver.) 700.684-034
shaper (ordnance) 761.381-038
shaper (pottery & porc.) 774.684-018
shaper (stonework) 673.382-010
SHAPER AND PRESSER (garment) 583.685-102
SHAPER, BASEBALL GLOVE (toy-sport equip.) 732.684-106
SHAPER, HAND (furniture) 761.684-038
shaper machine hand (machine shop) 605.382-038
shaper operator (machine shop) 605.382-038
SHAPER OPERATOR (woodworking) 665.682-034
Shaper Setter (woodworking) 669.280-010
SHAPER SET-UP OPERATOR, TOOL (machine shop) 605.382-038
shaping-machine operator (machine shop) 605.382-038
SHAPING-MACHINE OPERATOR (plastic prod.) 690.685-354
SHAPING MACHINE TENDER (furniture) 665.685-046
shaping-machine tender (pen & pencil) 663.685-026
SHARECROPPER (agriculture) term
sharpener (oils & grease) 603.682-018
Sharples-Machine Operator (oils & grease) 529.685-198
shaver (boot & shoe) 690.685-434
shaver (boot & shoe; leather prod.) 585.685-114
shaver (hat & cap) 585.685-046
SHAVER (laundry & rel.) 362.687-018
SHAVER (meat products) 525.687-094
SHAVING-MACHINE OPERATOR (leather mfg.) 585.685-094
Shear Assembler (cutlery-hrdwr.) 701.687-010
shearer (any industry) 699.685-014
shearer (hat & cap) 585.685-046
shearer (leather mfg.) 585.685-098
shearer (leather mfg.) 585.685-126
SHEARER AND TRIMMER, WIRE SCREEN AND FABRIC (metal prod., nec) 709.684-074
shearer, printed circuit boards (electron. comp.) 615.685-046
shearer, screen measurer and trimmer (metal prod., nec) 709.684-074
SHEAR-GRINDER OPERATOR (textile) 628.382-014
SHEAR-GRINDER-OPERATOR HELPER (textile) 628.687-014
SHEARING-MACHINE FEEDER (leather mfg.) 585.685-098
SHEARING-MACHINE OPERATOR (carpet & rug; textile) 585.685-102
Shearing-Machine Operator (leather mfg.) 585.685-094

shearing-machine operator (print. & pub.) 640.685-010
shear operator (carpet & rug; textile) 585.685-102
Shear Operator, Automatic I (any industry) 615.682-018
Shear Operator, Automatic II (any industry) 699.686-010
Shear Operator Helper (any industry) 619.687-014
SHEAR OPERATOR I (any industry) 615.682-018
SHEAR OPERATOR II (any industry) 615.685-034
SHEAR SETTER (any industry) 615.380-010
shear tender (textile) 585.685-026
Sheather (construction) 860.381-042
shed boss (agriculture) 404.131-014
SHED WORKER (agriculture) term
Sheep Boner (meat products) 525.684-010
sheep clipper (agriculture) 410.684-014
SHEEP HERDER (agriculture) 410.687-022
Sheep Or Calf Grader (meat products) 525.387-010
Sheep Rancher (agriculture) 410.161-018
SHEEP SHEARER (agriculture) 410.684-014
SHEEPSKIN PICKLER (meat products) 582.685-126
Sheep Sticker (meat products) 525.684-050
Sheet Cleaner (tex. prod., nec) 689.687-050
sheet-combining operator (plastic-synth.) 690.682-058
Sheet Cutter I (tex. prod., nec) 699.685-014
Sheet Cutter II (tex. prod., nec) 787.685-014
sheet-cutting operator (tex. prod., nec) 686.585-010
sheeter (paper goods) 640.685-046
sheeter helper (paper & pulp; paper goods; print. & pub.) 649.685-066
Sheeter-Machine Operator (paper goods) 659.685-014
sheeter operator (any industry) 699.682-018
Sheeter Operator (paper & pulp) 649.682-022
SHEETER OPERATOR (plastic-synth.) 690.382-010
sheeter-waxer operator (paper goods) 534.482-010
Sheet Folder (tex. prod., nec) 589.687-014
Sheet Hanger (smelt. & refin.) 519.565-014
Sheeting Puller (construction) 869.687-026
Sheet Inspector (tex. prod., nec) 789.587-014
sheet metal assembler (aircraft mfg.) 806.384-034
Sheet-Metal-Fabricating-Machine Operator (any industry) 616.380-
Sheet-Metal Installer (any industry) 804.281-010
Sheet-Metal Lay-Out Worker (any industry) 809.281-010
sheet-metal mechanic (any industry) 804.281-010
SHEET-METAL-PATTERN CUTTER (musical inst.) 730.684-074
Sheet Metal Production Worker (any industry) 619.685-062
Sheet Metal Shop Helper (any industry) 619.686-022
Sheet-Metal-Shop Supervisor (any industry) 809.130-014
SHEET-METAL WORKER (any industry) 804.281-010
SHEET-METAL-WORKER APPRENTICE (any industry) 804.281-014
Sheet-Metal Worker, Maintenance (any industry) 804.281-010
SHEET-MILL SUPERVISOR (nonfer. metal) 619.132-014
Sheet-Pile-Driver Operator (construction) 859.682-018
Sheet-Pile-Hammer Operator (construction) 869.687-026
SHEETROCK APPLICATOR (mfd. bldgs.) 869.684-050
sheetrock installer (construction; mfd. bldgs.) 842.684-014
sheetrock taper (construction; mfd. bldgs.) 842.664-010
Sheet Sewer (tex. prod., nec) 787.682-026
Sheet Straightener (plastic-synth.) 690.682-058
sheet taker (paper & pulp) 539.686-010
Sheet Tester (steel & rel.) 011.361-010
SHEET TURNER (millwork-plywood) 762.687-062
SHEET WRITER (amuse. & rec.) 211.467-026
shell-drier operator (chemical) 553.685-106
SHELLACKER (ordnance) 737.687-130
Shellac Polisher (fabrication, nec) 739.684-026
SHELL ASSEMBLER (ordnance) 737.684-038
Shell-Core-And-Molding Supervisor (foundry) 519.131-010
Shell Coremaker (foundry) 518.685-026
Sheller (mfd. bldgs., vehicles, nec) 869.684-010
SHELLER I (can. & preserv.) 521.687-118
SHELLER II (can. & preserv.) 521.685-294
SHELLFISH-BED WORKER (fishing & hunt.) 446.684-014
Shellfish Checker (can. & preserv.) 529.687-230
SHELLFISH DREDGE OPERATOR (fishing & hunt.) 446.663-010
SHELLFISH GROWER (fishing & hunt.) 446.161-014
shellfish harvester (fishing & hunt.) 446.663-010
Shellfish Packer (can. & preserv.) 529.687-230
SHELLFISH-PROCESSING-MACHINE TENDER (can. & preserv.) 529.685-214
SHELLFISH SHUCKER (can. & preserv.) 521.687-122
Shellfish Sorter (can. & preserv.) 529.687-230
Shellfish Weigher (can. & preserv.) 529.687-230
shell-freezing-machine operator (pharmaceut.) 559.685-090
SHELL-GRADER (button & notion) 734.687-070
shell-house operator (chemical) 649.682-030
SHELL-MACHINE OPERATOR (chemical) 649.682-030
Shell Maker, Lockstitch (garment) 786.682-174
shell mold bonder (foundry) 518.685-030
SHELL-MOLD-BONDING-MACHINE OPERATOR (foundry) 518.685-030
SHELL MOLDER (foundry) 518.685-026
shell-press operator (plastic-synth.) 690.682-058
shell-reprint operator (ordnance) 659.685-018
SHELL-SHOP SUPERVISOR (ordnance) 619.132-018
SHELL-SIEVE OPERATOR (ordnance) 694.585-010
shell sorter (button & notion) 734.687-070
shell-trim operator (ordnance) 609.685-026
shell-trim tool setter (ordnance) 609.280-010
Shelter Management Officer (government ser.) 188.117-022
shelver (library) 249.687-014
shelving clerk (library) 249.687-014
SHELVING SUPERVISOR (library) 109.137-010
shepherd (agriculture) 410.687-022
SHERIFF, DEPUTY (government ser.) 377.263-010
shield operator (construction) 850.682-010
SHIELD RUNNER (construction) 850.682-010
shift adjuster (smelt. & refin.) 511.130-010
shift boss (mine & quarry) 939.137-018
shifter (construction) 859.137-018
SHIFT SUPERINTENDENT, CAUSTIC CRESYLATE (chemical) 552.132-010
SHIFT SUPERVISOR, FILM PROCESSING (print. & pub.) 979.132-010
shift supervisor, melting (glass mfg.) 579.137-026
shill (amuse. & rec.) 343.367-010
Shingle-Bolt Cutter (logging) 454.684-022
Shingle-Machine Supervisor (build. mat., nec) 590.130-018
SHINGLE PACKER (saw. & plan.) 920.687-158
SHINGLE SAWYER (saw. & plan.) 667.485-010
SHINGLE TRIMMER (saw. & plan.) 667.685-050
shingle weaver (saw. & plan.) 920.687-158
ship boss (water trans.) 911.137-018
SHIPFITTER (ship-boat mfg.) 806.381-046
SHIPFITTER APPRENTICE (ship-boat mfg.) 806.381-050
SHIPFITTER HELPER (ship-boat mfg.) 806.687-050
ship officer (water trans.) 197.133-022
SHIPPING AND RECEIVING CLERK (clerical) 222.387-050
SHIPPING-AND-RECEIVING SUPERVISOR (clerical) 222.137-030
SHIPPING-AND-RECEIVING WEIGHER (clerical) 222.387-074
SHIPPING CHECKER (clerical) 222.687-030
Shipping Clerk (clerical) 222.387-050
Shipping Hand (chemical) 559.687-050
SHIPPING-ORDER CLERK (clerical) 219.367-030
shipping-room supervisor (rubber reclaim.) 559.132-058
Shipping Supervisor (clerical) 222.137-030
Shipping Weigher (clerical) 222.387-074
ship purser (water trans.) 197.167-014
SHIP RUNNER (water trans.) 222.567-014
ship's captain (water trans.) 197.167-010
Ship's Doctor (medical ser.) 070.101-022
ship surveyor (profess. & kin.) 014.167-010
SHIPWRIGHT (ship-boat mfg.) 860.381-058
SHIPWRIGHT APPRENTICE (ship-boat mfg.) 860.381-062
SHIPWRIGHT HELPER (ship-boat mfg.) 860.664-018
Shipwright Supervisor (ship-boat mfg.) 891.131-010
SHIRRING MACHINE OPERATOR (any industry) 787.682-078
SHIRRING-MACHINE OPERATOR, AUTOMATIC (tex. prod., nec) 787.685-038
shirring tender (meat products) 525.685-014
Shirt-Collar-And-Cuff Presser (laundry & rel.) 363.685-026
Shirt Creaser (garment) 583.685-042
Shirt Finisher (garment) 363.682-018
Shirt Folder (garment; knitting) 789.687-066
Shirt Folder I (laundry & rel.) 369.687-018
Shirt Folder II (laundry & rel.) 363.685-026
SHIRT-FOLDING-MACHINE OPERATOR (garment; laundry & rel.) 369.685-030
Shirt-Ironer Supervisor (laundry & rel.) 361.137-010
Shirt Marker (garment) 781.384-014
SHIRT PRESSER (laundry & rel.) 363.685-026
Shirt Presser, Automatic (laundry & rel.) 363.685-014
Shirt Sorter (garment) 222.687-014
Shirt Turner (garment; knitting) 789.687-074
Shochet (meat products) 525.361-010
Shoder Filler (metal prod., nec) 700.687-038
SHOE CLEANER (boot & shoe) 788.687-122
SHOE COVERER (boot & shoe) 788.687-126
shoe cutter (boot & shoe) 788.684-082
Shoe Designer (boot & shoe) 142.061-018
shoe dresser (boot & shoe) 788.687-038
Shoe-Dressing Maker (chemical) 559.665-026
SHOE DYER (personal ser.) 364.684-014
shoe hammerer (boot & shoe) 690.685-350
shoe handler (boot & shoe) 920.687-166

shoe troner (boot & shoe) 788.687-158
shoelace tipper (narrow fabrics) 686.685-062
SHOELACE-TIPPING-MACHINE OPERATOR (narrow fabrics) 686.685-062
SHOE-LAY-OUT PLANNER (boot & shoe) 012.187-014
shoemaker (personal ser.) 365.361-014
SHOEMAKER, CUSTOM (boot & shoe) 788.381-014
SHOE PACKER (boot & shoe) 920.687-166
Shoe-Parts Cutter (boot & shoe) 699.682-022
shoe planner (boot & shoe) 012.187-014
shoe polisher (personal ser.) 366.677-010
shoe repairer (boot & shoe) 788.684-022
shoe repairer (boot & shoe) 788.381-010
SHOE REPAIRER (personal ser.) 365.361-014
SHOE-REPAIRER HELPER (personal ser.) 365.674-010
SHOE-REPAIR SUPERVISOR (personal ser.) 365.131-010
SHOE SHINER (personal ser.) 366.677-010
shoe singer (boot & shoe) 788.684-050
shoe stitcher, odd (boot & shoe) 788.381-010
shoe tinter (personal ser.) 364.684-014
SHOE TURNER (boot & shoe) 788.687-130
shook splicer (woodworking) 669.685-042
shooter (any industry) 859.261-010
shooter (grain-feed mills) 523.382-010
shooter (mine & quarry) 931.261-010
shooter (ordnance) 736.384-010
SHOOTER (petrol. & gas) 931.361-014
Shooter Helper, Seismograph (petrol. & gas) 939.364-010
SHOOTER, SEISMOGRAPH (petrol. & gas) 931.361-018
shooter's helper (any industry) 859.687-010
Shooter, Water Well (construction) 859.261-010
Shooting Gallery Operator (amuse. & rec.) 342.657-014
shop blacksmith (mine & quarry) 622.381-030
Shop Clerk (clerical) 219.362-010
shop clerk (clerical) 222.367-042
shop cooper (wood. container) 764.684-022
SHOP ESTIMATOR (automotive ser.) 807.267-010
Shop Mechanic (any industry) 804.281-010
shop mechanic (construction; petrol. & gas; pipe lines) 620.281-046
shop mechanic (machine shop) 600.280-042
shop-mechanic helper (construction; petrol. & gas; pipe lines) 620.664-014
shopper's aid (retail trade) 296.357-010
shopping inspector (business ser.) 376.267-022
SHOPPING INVESTIGATOR (business ser.) 376.267-022
shop repairer (tel. & tel.) 722.281-010
SHOP STEWARD (any industry) term
shop superintendent (motor trans.) 184.167-170
shop supervisor (any industry) 638.131-026
shop supervisor (any industry) 809.130-014
SHOP SUPERVISOR (struct. metal) 619.131-014
SHOP TAILOR (garment; retail trade) 785.361-022
SHOP TAILOR APPRENTICE (garment; retail trade) 785.361-026
shop teacher (education) 091.221-010
SHORE HAND, DREDGE OR BARGE (construction; mine & quarry) 939.667-018
Shorer (construction) 869.664-014
shore-working supervisor (construction) 862.134-010
shortage worker (knitting) 221.587-018
Shortening Mixer (oils & grease) 520.685-070
short-filler-bunch-machine operator (tobacco) 529.685-038
SHORTHAND REPORTER (clerical) 202.362-010
short-log-bolter operator (saw. & plan.) 667.685-022
short piece handler (textile) 689.686-058
Shorts Sifter (tobacco) 521.685-270
SHOT BAGGER (ordnance) 920.687-170
SHOTBLAST-EQUIPMENT OPERATOR (foundry) 503.362-014
Shotblaster (any industry) 503.687-010
shot-blast tender (any industry) 503.685-042
SHOT-COAT TENDER (concrete prod.) 575.665-018
shot-core-drill operator (any industry) 930.682-010
shot-core-drill-operator helper (any industry) 930.687-014
SHOT DROPPER (ordnance) 502.362-010
shot firer (mine & quarry) 931.261-010
SHOT-GRINDER OPERATOR (ordnance) 603.685-074
SHOTGUN-SHELL-ASSEMBLY-MACHINE ADJUSTER (ordnance) 616.360-030
SHOTGUN-SHELL-ASSEMBLY-MACHINE OPERATOR (ordnance) 694.385-010
SHOTGUN-SHELL-LOADING-MACHINE OPERATOR (ordnance) 694.665-010
SHOTGUN-SHELL-REPRINTING-UNIT OPERATOR (ordnance) 659.685-018
shot-hole driller (petrol. & gas) 930.382-018
shot-hole shooter (petrol. & gas) 931.361-018
shot lighter (mine & quarry) 931.261-010
shot packer (ordnance) 920.687-170
SHOT-PEENING OPERATOR (aircraft mfg.) 617.280-010
Shot-Peen Operator (any industry) 503.685-042
SHOT POLISHER AND INSPECTOR (ordnance) 509.485-014
shot-tube-machine tender (ordnance) 920.685-018
SHOT-TUBE-MACHINE TENDER (paper goods) 649.685-106
Shoulder Boner (meat products) 525.684-010
SHOULDER JOINER, LOCKSTITCH (garment) 786.682-222
Shoulder Puncher (meat products) 525.684-046
Shoulder Sawyer (meat products) 525.684-018
Shoveler (mine & quarry) 939.687-014
Shovel-Handle Assembler (woodworking) 762.687-042
Shovel-Loader Operator (logging) 921.683-058
shovel operator (mine & quarry) 932.683-018
show-card writer (any industry) 970.281-022
Showcase Trimmer (retail trade) 298.081-010
Shower Attendant (personal ser.) 335.677-014
Shower-Enclosure Installer (construction) 865.381-010
shower room attendant (any industry) 358.687-010
SHOW GIRL (amuse. & rec.) 159.647-022
SHOW-HORSE DRIVER (amuse. & rec.) 159.344-018
SHOW HOST/HOSTESS (radio-tv broad.) 159.147-018
Show Inspector (government ser.) 375.263-014
Showplace Manager (amuse. & rec.) 191.117-014
shredded-filler cigar-maker, machine (tobacco) 529.685-270
shredded-filler-cutter operator (tobacco) 529.685-110
SHREDDED-FILLER HOPPER-FEEDER (tobacco) 529.687-182
shredded-filler-machine wrapper-layer (tobacco) 529.685-270
shredder (any industry) 680.685-082
SHREDDER OPERATOR (plastic-synth.) 555.685-058
shredder operator (smelt. & refin.) 515.687-010
shredder picker (tex. prod., nec; textile) 680.686-018
SHREDDER TENDER (chemical) 555.665-010
SHREDDER TENDER, PEAT (agriculture) 599.685-086
SHREDDING-FLOOR-EQUIPMENT OPERATOR (plastic-synth.) 559.382-050
shredding-machine-knife changer (tobacco) 638.684-010
shredding-machine operator (tobacco) 521.685-338
shredding-machine tender (saw. & plan.) 663.685-014
Shrimp Blancher (can. & preserv.) 529.685-214
SHRIMP-PEELING-MACHINE OPERATOR (can. & preserv.) 521.682-038
Shrimp-Peeling-Machine Tender (can. & preserv.) 529.685-214
Shrimp Pond Laborer (fishing & hunt.) 446.687-014
shrinker (textile) 587.685-018
SHRINKING-MACHINE OPERATOR (hat & cap) 586.685-034
SHRINK-PIT OPERATOR (ordnance) 619.662-010
SHRINK-PIT SUPERVISOR (ordnance) 619.131-018
SHROUDER (meat products) 525.587-010
Shroud-Line Tier (tex. prod., nec) 789.687-118
Shroud-Web Inspector (tex. prod., nec) 789.687-114
Shrub Grower (agriculture) 405.161-014
shucker (can. & preserv.) 521.687-122
shuttle-bus driver (motor trans.) 913.663-018
SHUTTLE-CAR OPERATOR (mine & quarry) 932.683-022
shuttlecock assembler (toy-sport equip.) 732.685-018
Shuttlecock-Feather Trimmer (toy-sport equip.) 699.685-014
shuttle filler (textile) 689.686-038
SHUTTLE FIXER (textile) 628.684-026
SHUTTLE HAND (textile) 689.686-038
shuttle inspector (textile) 628.684-026
SHUTTLE INSPECTOR (woodworking) 769.684-046
shuttleless-loom weaver (narrow fabrics) 683.665-010
shuttle repairer (textile) 628.684-026
SHUTTLER (tex. prod., nec) 689.687-070
shuttler (tex. prod., nec) 789.684-054
SHUTTLE SPOTTER (woodworking) 664.685-026
shuttle threader (textile) 689.686-038
Side Boss (logging) 459.133-010
Side Framer (mfd. bldgs.; vehicles, nec) 869.684-010
Side Framer (vehicles, nec) 806.684-018
Side Gluer (musical inst.) 763.684-058
Side Guider (fabrication, nec) 590.686-014
sidehand (steel & rel.) 615.687-010
side hemmer (tex. prod., nec) 787.685-018
SIDE LASTER, CEMENT (boot & shoe) 690.685-358
SIDE LASTER, STAPLE (boot & shoe) 690.685-362
Side Laster, Tack (boot & shoe) 690.685-362
Side-Panel Hanger (mfd. bldgs.; vehicles, nec) 809.684-030
Side-Panel Padder (furniture) 780.684-082
side-piece coverer (furniture) 780.684-082
SIDER (construction; mfd. bldgs.; retail trade) 863.684-014
SIDER (mfd. bldgs.) 860.684-014
SIDEROGRAPHER (print. & pub.) 979.381-030
Side-Seam-Envelope-Machine Operator (paper goods) 649.685-042
Side-Seam Tender (welding) 819.685-010
Side-Shearing-Machine Operator (chemical) 930.683-014
Side-Show Entertainer (amuse. & rec.) 159.647-010
Side Splitter (meat products) 525.684-018

side stapler (boot & shoe) 690.685-362
Side-Stitcher (furniture) 780.684-070
Side-Stitching-Machine Feeder-Offbearer (print. & pub.) 653.686-026
Side-Stitching-Machine Operator (print. & pub.) 653.662-010
side trimmer (boot & shoe) 690.685-238
siding applicator (construction; mfd. bldgs.; retail trade) 863.684-014
Siding-Coreboard Inspector (paper & pulp; wood prod., nec) 539.667-010
SIDING STAPLER (millwork-plywood) 762.684-058
SIEVE-GRADER TENDER (can. & preserv.) 521.665-026
SIEVE MAKER (grain-feed mills) 529.684-018
Sieve Repairer (grain-feed mills) 529.684-018
SIFTER (pharmaceut.) 551.687-030
sifter and miller (optical goods) 579.685-046
sifter operator (grain-feed mills) 521.685-030
SIGHT-EFFECTS SPECIALIST (amuse. & rec.) 962.267-010
sighter (ordnance) 736.684-042
SIGHT MOUNTER (ordnance) 736.481-010
Sightseeing-Boat Operator (water trans.) 911.663-010
signaler (any industry) 921.667-022
SIGNALER (construction) 869.667-014
signal inspector (r.r. trans.) 822.281-026
SIGNAL MAINTAINER (r.r. trans.) 822.281-026
SIGNAL MAINTAINER HELPER (r.r. trans.) 822.684-018
signal repairer (r.r. trans.) 822.281-026
SIGNAL SUPERVISOR (r.r. trans.) 822.131-026
signal timer (any industry) 379.362-014
signal-tower operator (r.r. trans.) 910.362-010
SIGN ERECTOR-AND-REPAIRER (fabrication, nec) 869.361-018
SIGN ERECTOR I (fabrication, nec) 869.381-026
SIGN ERECTOR II (fabrication, nec) 869.684-054
sign hanger (fabrication, nec) 869.381-026
Sign Maker (fabrication, nec) 869.381-026
sign poster (any industry) 299.667-010
sign printer (any industry) 659.682-026
SIGN WRITER, HAND (any industry) 970.28[illegible]-022
SIGN WRITER, MACHINE (any industry) 659.682-026
Silent Bit Extra (amuse. & rec.; motion picture; radio-tv broad.) 159.647-014
SILHOUETTE ARTIST (amuse. & rec.) 149.051-010
Silica-Dry-Press Helper (brick & tile) 575.686-010
Silica-Dry-Press Operator (brick & tile) 575.662-010
SILICA-FILTER OPERATOR (beverage) 521.582-010
Silica-Mixer Operator (brick & tile) 570.382-010
SILICA-SPRAY MIXER (smelt. & refin.) 570.685-090
Silicator (chemical) 741.687-018
Silk Beamer (textile) 681.685-058
Silk Brusher (textile) 585.685-070
Silk-Crepe-Machine Operator (textile) 583.685-030
Silk Examiner (textile) 689.685-038
SILK FINISHER (laundry & rel.) 363.681-010
Silk Folder (textile) 689.585-014
Silk-Lining Cutter, Machine (boot & shoe; hat & cap; leather prod.) 699.682-022
Silk Presser I (garment) 363.684-018
Silk Presser II (garment) 363.682-018
SILK-SCREEN CUTTER (any industry) 979.681-022
Silk Screener (optical goods) 920.685-078
SILK-SCREEN ETCHER (engraving) 704.684-014
SILK-SCREEN-FRAME ASSEMBLER (any industry) 709.484-010
Silk-Screen-Layout Drafter (any industry) 979.681-022
silk-screen maker (any industry) 979.681-022
silk-screen operator (any industry) 979.684-034
silk-screen painter (any industry) 979.684-034
Silk-Screen Printer (electron. comp.) 979.684-034
silk-screen printer (textile) 979.684-030
SILK-SCREEN PRINTER, MACHINE (any industry) 979.685-010
SILK-SCREEN REPAIRER (any industry) 979.684-038
Silk Spotter (laundry & rel.) 362.381-010
SILK SPREADER (textile) 680.685-090
silk-top-hat-body maker (hat & cap) 784.684-074
Silo Erector (construction) 861.381-018
SILO OPERATOR (tobacco) 529.682-030
SILO TENDER (cement) 579.685-050
SILVERER (glass products) 574.684-014
silverer (optical goods) 574.484-010
SILVERING APPLICATOR (glass products) 574.582-010
Silver Plater (electroplating) 500.380-010
Silversmith I (jewelry-silver.) 700.281-010
SILVERSMITH II (jewelry-silver.) 700.281-022
SILVER-SOLUTION MIXER (chemical) 550.684-026
SILVER SPRAY WORKER (recording) 500.684-022
SILVER STRIPPER, MACHINE (glass products) 579.685-054
SILVERWARE ASSEMBLER (jewelry-silver.) 700.684-070
Silverware Washer (water trans.) 318.687-014
SILVER WRAPPER (hotel & rest.) 318.687-018
SILVICULTURIST (profess. & kin.) 040.061-050
singeing-torch operator (boot & shoe) 788.684-050
SINGER (amuse. & rec.; motion picture; radio-tv broad.) 152.047-022
SINGER (hat & cap) 784.687-062
SINGER (meat products) 525.687-098
SINGER (narrow fabrics) 585.687-030
SINGER (textile) 585.685-106
singer and unloader (boot & shoe) 788.684-050
Singer Back-Tender (textile) 589.686-010
SINGE WINDER (textile) 681.585-018
SINGING MESSENGER (business ser.) 230.647-010
Single-Beam Clicker (boot & shoe; hat & cap; leather prod.) 699.682-022
Single-Corner Cutter (paper goods) 640.685-030
Single-Ending-Machine Operator (paper goods) 641.685-042
Single-End Sewer (paper goods) 787.686-010
Single-End-Trimming-And-Boring-Machine Operator (woodworking) 669.682-038
Single-Facing-Corrugating-Machine Operator (paper goods) 641.562-010
Single-Fold-Machine Operator (paper goods) 649.685-046
single-needle operator (garment) 786.682-170
Single-Needle Stitcher (boot & shoe) 690.682-082
Single-Pass-Soil-Stabilizer Operator (construction) 859.683-026
single-pointed operator (comm. equip.) 770.382-014
Single-Stroke Preformer (plastic prod.; plastic-synth.) 556.685-058
single-wire-saw operator (stonework) 677.462-014
SINK CUTTER (stonework) 677.682-018
sinker puller (millwork-plywood; paper & pulp; saw. & plan.) 921.686-022
SINKER WINDER (toy-sport equip.) 732.685-030
SINTER FEEDER (steel & rel.) 513.685-010
SINTERING-PRESS OPERATOR (nonfer. metal; steel & rel.) 617.685-038
SINTER-MACHINE OPERATOR (smelt. & refin.; steel & rel.) 510.685-026
siphoner (any industry) 914.682-010
SIPHON OPERATOR (medical ser.; pharmaceut.) 599.687-026
S-Iron Worker (wood prod.; nec) 563.687-010
sisal operator (furniture) 780.687-042
Sisal Picker (furniture) 680.685-078
site planner (profess. & kin.) 001.061-018
Six-Horse Hitch Driver (any industry) 919.664-010
six-pack-loader operator (beverage) 920.685-042
six-pack packer (beverage) 920.685-042
Six-Section Blower (hat & cap) 680.685-046
size cutter (hat & cap) 585.685-122
SIZE MAKER (paper & pulp) 550.682-010
Size Maker (textile) 550.585-018
sizer (button & notion) 739.687-178
sizer (hat & cap) 784.684-054
sizer (hat & cap) 586.685-034
sizer (hat & cap) 589.687-038
sizer (jewelry-silver.) 700.684-010
SIZER (knitting) 684.684-014
sizer (optical goods) 716.687-026
SIZER (textile) 582.687-026
sizer (textile) 582.562-010
sizer grader (woodworking) 669.687-030
SIZER, HAND (hat & cap) 784.684-054
sizer helper (textile) 582.686-026
SIZER, MACHINE (hat & cap) 784.684-058
SIZER, MACHINE (optical goods) 716.360-010
size tester (knitting) 684.684-014
sizing brusher (hat & cap) 589.687-038
sizing end-bander (hat & cap) 784.687-026
SIZING-MACHINE-AND-DRIER OPERATOR (tex. prod., nec) 582.665-026
Sizing-Machine-And-Drier-Operator Helper (tex. prod., nec) 586.686-022
sizing-machine operator (any industry) 599.685-046
sizing-machine operator (can. & preserv.) 521.685-318
SIZING-MACHINE OPERATOR (nonmet. min.) 554.685-026
SIZING-MACHINE OPERATOR (ordnance) 649.582-014
SIZING-MACHINE TENDER (clock & watch) 690.685-366
SIZING-MACHINE TENDER (pen & pencil) 662.685-030
SIZING-MACHINE TENDER (textile) 584.665-018
sizing sponger (hat & cap) 589.687-038
Sizing Sprayer (furniture) 741.687-018
SKATE-SHOP ATTENDANT (amuse. & rec.) 341.464-010
Skein Drier (plastic-synth.) 581.685-018
SKEINER (narrow fabrics) 681.685-102
skein inspector (textile) 689.687-082
skein-mercerizing-machine operator (textile) 584.685-054
skein reeler (textile) 681.685-078
Skein Washer (plastic-synth.) 582.685-162
SKEIN WINDER (elec. equip.) 721.484-022
skein winder (narrow fabrics) 681.685-102
SKEIN WINDER (textile) 681.685-098
skein winder (textile) 681.685-078
SKEIN-WINDING OPERATOR (any industry) 559.687-054
SKEIN-YARN DRIER (textile) 581.685-054
SKEIN-YARN DYER (textile) 582.685-130

SKEIN-YARN-DYER HELPER (textile) 582.686-022
SKELP PROCESSOR (steel & rel.) 619.662-014
sketcher (machinery mfg.) 979.681-010
Sketch Liner (pottery & porc.) 970.381-022
sketch maker (motion picture; radio-tv broad.) 141.061-030
SKETCH MAKER I (print. & pub.) 979.381-034
SKETCH MAKER II (print. & pub.) 972.381-018
SKETCH MAKER, PHOTOENGRAVING (print. & pub.) 970.281-026
SKI BASE TRIMMER (toy-sport equip.) 732.684-110
SKI-BINDING FITTER-AND-REPAIRER (toy-sport equip.) 732.364-014
Skidder Operator (forestry; logging) 929.663-010
Skid-Grapple Operator (logging) 929.663-010
skid-machine operator (machine shop) 605.382-014
SKIFF OPERATOR (fishing & hunt.) 441.683-010
ski-lift operator (amuse. & rec.) 341.665-010
SKI MAKER, WOOD (toy-sport equip.) 761.381-026
Skimmer (foundry) 519.687-022
SKIMMER, REVERBERATORY (smelt. & refin.) 511.687-022
Skimmer-Scoop Operator (any industry) 850.683-030
SKI MOLDER (toy-sport equip.) 732.684-114
skin bundler (meat products) 525.687-102
Skin Carver (furniture) 761.281-010
skin-drying-room attendant (hat & cap) 581.686-022
SKIN FORMER (rubber goods) 752.684-050
SKIN GRADER (meat products) 525.687-102
SKIN-LAP BONDER (aircraft mfg.) 806.684-130
SKIN LIFTER, BACON (meat products) 521.687-126
skinner (any industry) 919.664-010
SKINNER (meat products) 525.684-046
skinner (paper & pulp) 539.686-010
skinner, pelts (agriculture) 410.687-018
SKINNING-MACHINE FEEDER (meat products) 525.686-022
SKIN-PEELING-MACHINE OPERATOR (meat products) 525.685-030
skin specialist (medical ser.) 070.101-018
SKI PATROLLER (amuse. & rec.) 379.664-010
Skip-Hoist Operator (any industry) 921.663-030
SKIP OPERATOR (steel & rel.) 921.683-062
skipper (fishing & hunt.) 197.133-010
skipper (water trans.) see MASTER
Skip Tender, Concrete Mixing Or Batch Plant (construction) 869.687-026
skip tender (mine & quarry) 939.667-010
SKIP TRACER (clerical) 241.367-026
SKI REPAIRER, PRODUCTION (toy-sport equip.) 732.684-118
skirt clipper (furniture) 780.687-070
SKIRT PANEL ASSEMBLER (furniture) 780.687-070
SKI TOPPER (toy-sport equip.) 692.685-170
SKI-TOP TRIMMER (plastic prod.) 690.685-370
SKI-TOW OPERATOR (amuse. & rec.) 341.665-010
SKIVER (leather prod.) 690.685-374
skiver (rubber goods; rubber reclaim.) 690.685-386
SKIVER, BLOCKERS (boot & shoe) 585.685-110
Skiver, Box-Toe (boot & shoe) 690.685-378
Skiver, Counter (boot & shoe) 690.685-378
Skiver, Flare (boot & shoe) 690.685-378
Skiver, Hand (leather prod.) 690.685-374
Skiver, Heel Tap (boot & shoe) 690.685-378
SKIVER, MACHINE (boot & shoe; rubber goods) 690.685-378
skiver-machine operator (hat & cap) 690.686-010
Skiver, Sock Linings (boot & shoe) 690.685-378
Skiver, Tuck (boot & shoe) 690.685-378
Skiver, Uppers Or Linings (boot & shoe) 690.685-378
Skiver, Welt-End (boot & shoe) 690.685-378
skiving-machine operator (boot & shoe; rubber goods) 690.685-378
SKIVING-MACHINE OPERATOR (ordnance) 664.682-018
Skoog-Machine Operator (millwork-plywood) 669.685-098
SKULL GRINDER (meat products) 521.687-130
Skycap (air trans.) 357.677-010
Sky-Line Yarder (logging) 921.663-066
SLABBER (soap & rel.) 559.686-042
Slabber, Light (soap & rel.) 559.686-042
slabbing-machine operator (soap & rel.) 559.686-042
SLAB-CONDITIONER SUPERVISOR (nonfer. metal) 609.132-010
SLAB-DEPILER OPERATOR (steel & rel.) 504.665-010
SLAB GRINDER (stonework) 673.682-030
Slab Inspector (rubber reclaim.) 759.684-074
slab lifting engineer (construction) 869.662-010
slab lifting supervisor (construction) 869.662-010
slab-miller operator (machine shop) 605.282-018
Slab-Off Mill Tender (rubber goods; rubber tire) 550.685-102
Slab Picker (saw. & plan.) 929.687-030
Slab Polisher (stonework) 673.682-030
slab worker (sugar & conf.) 520.684-014
Slack Cooper (wood. container) 764.684-022
slackline operator (construction) 850.683-042
Slack-Line Yarder (logging) 921.663-066
slag expander (steel & rel.) 519.665-010
Slag Scraper (welding) 819.666-010
Slag Worker (foundry) 519.687-022
slasher (boot & shoe) 690.685-470
SLASHER (plastic-synth.) 690.665-010
SLASHER OPERATOR (paper & pulp; saw. & plan.) 667.685-054
slasher sawyer (paper & pulp; saw. & plan.) 667.685-054
SLASHER TENDER (textile) 582.562-010
SLASHER-TENDER HELPER (textile) 582.686-026
SLAT-BASKET MAKER HELPER, MACHINE (wood. container) 669.686-026
SLAT-BASKET MAKER, MACHINE (wood. container) 669.685-074
Slat-Basket-Top Maker (wood. container) 669.685-014
Slate Cutter (stonework) 676.682-014
Slate-Cutter Operator (stonework) 677.462-010
SLATE MIXER (build. mat., nec) 570.685-094
Slate Roofer (construction) 866.381-010
Slate Splitter (stonework) 771.684-010
slate trimmer (stonework) 670.685-010
slat grader (meat products) 589.387-018
slat pickler (meat products) 582.685-126
SLAT TWISTER (furniture) 616.685-066
slaughter-and-butcher apprentice (meat products) 525.381-010
SLAUGHTERER, RELIGIOUS RITUAL (meat products) 525.361-010
Sleeping-Bag Filler (tex. prod., nec) 780.684-066
Sleeping Room Cleaner (hotel & rest.) 323.687-014
Sleeve Baster (garment) 782.684-058
Sleeve-Bottom Feller (garment) 782.684-058
sleeve machine operator (any industry) 652.682-010
Sleeve-Machine Tender (elec. equip.) 692.685-046
sleeve maker (nonmet. min.) 776.684-010
SLEEVE MAKER, LOCKSTITCH (garment) 786.682-226
Sleever (elec. equip.) 691.685-018
SLEEVER (paper goods) 641.686-034
Sleeve Separator (knitting) 789.687-030
SLEEVE SETTER, LOCKSTITCH (garment) 786.682-230
SLEEVE SETTER, OVERLOCK (garment) 786.682-234
Sleeve Setter, Safety-Stitch (garment) 786.682-234
Sleeve Tailor (garment; retail trade) 785.361-022
Sleeve Turner (garment; knitting) 789.687-074
sleeve wheel maker (nonmet. min.) 776.684-010
slice-cutting-machine operator (tobacco) 521.685-298
slice-cutting-machine-operator helper (tobacco) 521.686-054
SLICE-PLUG-CUTTER OPERATOR (tobacco) 521.685-298
SLICE-PLUG-CUTTER-OPERATOR HELPER (tobacco) 521.686-054
Slicer (construction) 869.687-026
slicer (textile) 686.685-066
Slicer-Machine Operator (can. & preserv.) 521.685-018
slicing-machine feeder (sugar & conf.) 521.685-102
SLICING-MACHINE OPERATOR (bakery products) 521.685-302
SLICING-MACHINE OPERATOR (button & notion) 692.685-174
SLICING-MACHINE OPERATOR (dairy products; meat products) 521.685-306
SLICING-MACHINE TENDER (furniture) 663.685-034
SLICING-MACHINE TENDER (wood prod., nec) 663.686-026
SLICKER (hat & cap) 784.684-062
SLIDE-FASTENER-CHAIN ASSEMBLER (button & notion) 734.687-074
SLIDE-FASTENER REPAIRER (button & notion) 734.684-022
slide-forming-machine operator (any industry) 619.382-018
slide-forming-machine tender (any industry) 619.685-050
SLIDE-MACHINE TENDER (fabrication, nec) 641.685-078
SLIDER ASSEMBLER (button & notion; garment) 734.687-078
slider attacher (button & notion; garment) 734.687-078
SLIDING-JOINT MAKER (musical inst.) 730.684-078
SLIME-PLANT-OPERATOR HELPER (smelt. & refin.) 511.685-058
SLIME-PLANT OPERATOR I (smelt. & refin.) 510.685-030
SLIME-PLANT OPERATOR II (smelt. & refin.) 511.685-054
Slimer (can. & preserv.; fishing & hunt.) 525.684-030
slinger (any industry) 921.260-010
SLINGER, SEQUINS (plastic prod.) 692.685-178
SLIPCOVER CUTTER (retail trade; tex. prod., nec) 780.381-034
Slip-Cover Estimator (retail trade) 299.364-010
SLIP-COVER SEWER (tex. prod., nec) 780.682-014
slip feeder (millwork-plywood; paper & pulp; saw. & plan.) 921.686-022
SLIP LASTER (boot & shoe) 788.684-106
slip maker (brick & tile; pottery & porc.) 570.482-010
slip mixer (brick & tile; pottery & porc.) 570.482-010
slip mixer (cement) 570.685-010
SLIP-SEAT COVERER (furniture) 780.684-094
slipstitch-machine operator (garment) 786.682-190
slip tender (r.r. trans.) 919.682-010
slit-roll inspector (plastic-synth.) 554.587-010
SLITTER (knitting) 781.684-054
slitter (textile) 686.685-066
Slitter-And-Cutter Operator (paper & pulp; paper goods) 649.682-038
slitter-and-rewinder (any industry) 699.587-010

slitter-and-rewinder-machine operator (any industry) 699.682-030
SLITTER-CREASER-SLOTTER HELPER (paper goods) 649.686-030
SLITTER-CREASER-SLOTTER OPERATOR (paper goods) 649.682-034
slitter helper (any industry) 699.587-010
slitter operator (plastic-synth.) 690.382-010
Slitter, Processed Film (photofinishing) 976.684-026
SLITTER-SCORER-CUT-OFF OPERATOR (paper goods) 649.682-038
SLITTER SERVICE AND SETTER (tinware) 615.280-010
slitter sheeter operator (any industry) 699.682-018
slitting-machine coiler (nonfer. metal; steel & rel.) 613.685-010
slitting-machine feeder (tobacco) 529.685-090
slitting-machine operator (rubber goods; rubber reclaim.) 690.685-386
SLITTING-MACHINE-OPERATOR HELPER I (any industry) 699.587-010
Slitting-Machine-Operator Helper II (any industry) 619.687-014
SLITTING-MACHINE OPERATOR I (any industry) 699.682-030
SLITTING-MACHINE OPERATOR II (any industry) 615.662-010
sliver chopper (textile) 680.685-102
sliver former (glass mfg.) 575.685-030
sliver handler (glass mfg.) 575.685-030
SLIVER-LAP-MACHINE TENDER (textile) 680.685-094
Sliver-Machine Operator (can. & preserv.) 521.685-018
Slope-Hoist Operator (mine & quarry) 921.663-026
SLOT ROUTER (furniture) 763.684-066
SLOT-TAG INSERTER (clerical) 222.567-018
SLOTTER OPERATOR (paper goods) 640.685-078
SLOTTER-OPERATOR HELPER (paper goods) 640.686-014
slubber (textile) 680.685-098
Slubber Doffer (textile) 689.686-022
slubber-frame changer (textile) 689.686-026
slubber hand (textile) 680.685-098
SLUBBER TENDER (textile) 680.685-098
slub picker (carpet & rug; textile) 689.684-010
Sludge-Control Attendant (sanitary ser.) 955.585-010
Sludge-Control Operator (sanitary ser.) 955.362-010
sludge-filter operator (any industry) 551.685-078
Sludge-Filtration Attendant (sanitary ser.) 955.585-010
Sludge-Filtration Operator (sanitary ser.) 955.362-010
slug-furnace operator (forging) 619.682-022
slugger (tex. prod., nec) 782.684-026
SLUG-PRESS OPERATOR (elec. equip.) 556.685-074
sluice tender (mine & quarry) 939.684-014
slumber-room attendant (personal ser.) 335.677-010
SLUNK-SKIN CURER (meat products) 525.687-106
Slunk Skinner (meat products) 525.684-046
slurry blender (cement) 570.685-010
SLURRY-CONTROL TENDER (smelt. & refin.) 510.465-014
SLURRY MIXER (ordnance) 539.362-018
slurry-plant operator (smelt. & refin.) 570.685-080
slurry-tank tender (cement) 570.685-010
slush caster (jewelry-silver.) 502.381-010
slusher (any industry) 741.684-030
slusher (plastic prod.) 777.684-010
slusher operator (mine & quarry) 921.663-050
slusher operator (paper & pulp; wood prod., nec) 530.685-014
small-appliance repairer (any industry) 723.381-010
SMALL-ENGINE MECHANIC (any industry) 625.281-034
small kick-press operator (pen & pencil) 733.687-014
Small-Parts-Shaper Operator (woodworking) 665.682-034
small-piece cutter (garment) 781.684-062
small press operator (pen & pencil) 733.687-014
Small-Stock Facer (meat products) 525.684-046
SMASH HAND (narrow fabrics; textile) 683.684-026
smearer (hat & cap) 589.687-038
smearer (leather prod.) 589.687-034
smeller (can. & preserv.) 529.687-118
SMELTERY WORKER (smelt. & refin.) term
smocker (fabrication, nec) 780.684-042
Smocking-Machine Operator (garment) 786.682-178
SMOKE AND FLAME SPECIALIST (military ser.) 378.682-014
SMOKED MEAT PREPARER (meat products) 525.587-014
smoke eater (forestry) 452.687-014
smokehouse attendant (meat products) 525.682-010
SMOKE JUMPER (forestry) 452.364-014
SMOKE JUMPER SUPERVISOR (forestry) 452.134-010
SMOKER (meat products) 525.682-010
SMOKE-ROOM OPERATOR (hat & cap) 784.687-066
SMOKE TESTER (smelt. & refin.) 012.281-010
SMOKING-PIPE DRILLER AND THREADER (fabrication, nec) 669.685-078
SMOKING-PIPE LINER (fabrication, nec) 739.687-170
SMOKING-PIPE MAKER (fabrication, nec) 761.381-030
SMOKING-PIPE REPAIRER (any industry) 739.484-018
SMOKING-TOBACCO-CUTTER OPERATOR (tobacco) 521.685-310
Smoking-Tobacco Packer, Hand (tobacco) 920.687-130
Smoking-Tobacco-Packing-Machine Hand (tobacco) 920.685-098
Smooth And Burr Worker, Composites (aircraft mfg.) 754.684-042
Smoother (glass products) 775.684-010
SMOOTHER (hat & cap) 784.684-066
SMOOTHER (pen & pencil) 733.685-026
smoothing-machine operator (boot & shoe) 690.685-350
smooth plater (leather mfg.; leather prod.) 690.682-030
smutter (grain-feed mills) 521.685-254
snagger (foundry) 705.684-074
SNAG GRINDER (foundry) 705.684-074
SNAILER (clock & watch) 603.685-078
Snake Charmer (amuse. & rec.) 159.647-010
Snaker (logging) 919.664-010
Snap Attacher (any industry) 699.685-018
Snap-Fastener-Machine Operator (any industry) 699.685-018
snapper-on (tinware) 703.685-010
Snath-Handle Assembler (woodworking) 762.687-042
Sneller, Hand (toy-sport equip.) 732.687-038
snipper (boot & shoe) 690.685-298
snipper (leather mfg.) 585.684-010
Snout Puller (meat products) 525.684-034
SNOWMAKER (amuse. & rec.) 969.685-010
Snow-Plow Operator, Truck (government ser.) 899.684-014
Snow-Plow Tractor Operator (government ser.) 899.684-014
Snow Ranger (government ser.) 169.167-042
snow remover (government ser.) 955.687-014
SNOW-REMOVING SUPERVISOR (government ser.) 955.137-010
SNOW SHOVELER (government ser.) 955.687-014
SNUFF-BOX FINISHER (tobacco) 920.687-174
SNUFF-CONTAINER INSPECTOR (tobacco) 920.667-014
Snuff Drier (tobacco) 523.685-118
SNUFF GRINDER AND SCREENER (tobacco) 521.685-314
SNUFF-PACKING-MACHINE OPERATOR (tobacco) 920.685-094
Soaker (textile) 587.685-018
SOAKER, HIDES (meat products) 582.685-134
Soaker, Meat (meat products) 525.587-014
soaker-soda worker (beverage) 529.685-226
soaking-pit operator (nonfer. metal) 613.462-014
soaking-room operator (plastic-synth.) 551.687-034
soap boiler (soap & rel.) 559.382-054
SOAP CHIPPER (soap & rel.) 555.686-014
SOAP-DRIER OPERATOR (soap & rel.) 553.685-098
soaper (rubber goods) 599.687-010
SOAP GRINDER (soap & rel.) 555.685-062
SOAPING-DEPARTMENT SUPERVISOR (textile) 582.132-014
Soaping-Machine Back-Tender (textile) 589.686-010
SOAP INSPECTOR (soap & rel.) 559.687-058
SOAP MAKER (soap & rel.) 559.382-054
Soap Mixer (textile) 550.585-018
soap-press feeder (soap & rel.) 559.685-142
soap slabber (soap & rel.) 559.686-042
Soap Worker (nonfer. metal) 519.686-010
Soccer Ball Assembler (toy-sport equip.) 732.684-026
Social Ecologist (profess. & kin.) 054.067-014
SOCIAL GROUP WORKER (social ser.) 195.107-022
Social Problems Specialist (profess. & kin.) 054.067-014
SOCIAL SECRETARY (clerical) 201.162-010
SOCIAL-SERVICES AIDE (social ser.) 195.367-034
social service worker (social ser.) 195.107-010
SOCIAL-WORK CONSULTANT (profess. & kin.) term
Social-Work Consultant, Casework (social ser.) 195.107-010
SOCIAL WORKER (profess. & kin.) term
social worker, clinical (profess. & kin.) 195.107-034
social worker, clinical (profess. & kin.) 195.107-030
SOCIAL WORKER, DELINQUENCY PREVENTION (social ser.) 195.107-026
social worker, health services (profess. & kin.) 195.107-030
SOCIAL WORKER, MEDICAL (profess. & kin.) 195.107-030
social worker, mental (profess. & kin.) 195.107-034
SOCIAL WORKER, PSYCHIATRIC (profess. & kin.) 195.107-034
SOCIAL WORKER, SCHOOL (profess. & kin.) 195.107-038
social work unit supervisor (social ser.) 195.137-010
SOCIOLOGIST (profess. & kin.) 054.067-014
sock-and-stocking ironer (laundry & rel.) 363.687-014
SOCK BOARDER (knitting) 589.686-042
sock drier (laundry & rel.) 363.687-014
Socket Assembler (electron. comp.) 726.684-070
SOCKET PULLER (musical inst.) 730.682-010
Sock Examiner (knitting) 684.684-010
sock folder (laundry & rel.) 363.687-014
Sock Knitter (knitting) 684.685-010
sock-knitting-machine operator (knitting) 684.685-010
Sock Liner (boot & shoe) 788.687-030
Sock-Lining And Heel-Pad Embosser (boot & shoe) 690.685-158
Sock-Lining Examiner (boot & shoe) 788.384-010
Sock-Lining Stitcher (boot & shoe) 690.682-082
soda clerk (hotel & rest.) 319.474-010

SODA-COLUMN OPERATOR (chemical) 558.382-054
SODA DIALYZER (plastic-synth.) 551.685-134
soda dispenser (hotel & rest.) 319.474-010
Soda-Drier Feeder (chemical) 553.686-038
Soda-Dry-House Operator (chemical) 559.685-046
Soda Flaker (chemical) 559.685-074
soda jerker (hotel & rest.) 319.474-010
SODA-ROOM OPERATOR (beverage) 559.682-046
SODA-ROOM OPERATOR (plastic-synth.) 551.687-034
soda worker (beverage) 529.685-226
Sodium-Chlorite Operator (chemical) 559.382-018
Sodium-Methylate Operator (chemical) 558.685-062
Sofa-Cover Inspector (furniture) 789.687-038
Sofa Inspector (furniture) 763.687-026
SOFTBALL CORE MOLDER (toy-sport equip.) 732.687-070
Softball Winder (toy-sport equip.) 692.685-246
SOFT CRAB SHEDDER (fishing & hunt.) 446.684-018
Soft-Drink-Powder Mixer (beverage) 520.685-146
softener (hat & cap) 589.685-034
softener (leather mfg.; tex. prod., nec) 582.685-050
Soft-Hat Binder (hat & cap) 787.682-010
soft-iron inspector (foundry) 514.687-010
Soft-Mud Molder (brick & tile) 575.684-042
Soft-Sugar Boiler (sugar & conf.) 522.382-034
Soft-Sugar Cutter (sugar & conf.) 521.682-010
SOFT-SUGAR OPERATOR, HEAD (sugar & conf.) 521.565-018
SOFT-TILE SETTER (construction; retail trade) 861.381-034
soft tooling technician (electron. comp.) 609.262-010
SOFTWARE ENGINEER (profess. & kin.) 030.062-010
soft-work-cigar-machine operator (tobacco) 529.685-270
SOIL CONSERVATIONIST (profess. & kin.) 040.061-054
SOIL-CONSERVATION TECHNICIAN (profess. & kin.) 040.261-010
soiled linen distributor (laundry & rel.) 361.687-014
Soil Fertility Expert (profess. & kin.) 040.061-058
Soils Analyst (profess. & kin.) 029.081-010
SOIL SCIENTIST (profess. & kin.) 040.061-058
SOLAR-ENERGY-SYSTEM INSTALLER (any industry) 637.261-030
SOLAR-ENERGY-SYSTEM-INSTALLER HELPER (any industry) 637.687-018
SOLAR-ENERGY-SYSTEMS DESIGNER (profess. & kin.) 007.161-038
SOLAR-FABRICATION TECHNICIAN (machine shop) 809.381-034
Solder Cream Maker (nonfer. metal) 519.667-014
SOLDER DEPOSIT OPERATOR (electron. comp.) 726.684-094
SOLDERER (clock & watch) 715.685-058
SOLDERER (jewelry-silver.) 700.381-050
SOLDERER-ASSEMBLER (welding) 813.684-014
Solderer, Assembly Repair (welding) 813.684-014
SOLDERER, BARREL RIBS (ordnance) 736.684-038
SOLDERER-DIPPER (welding) 813.684-018
solderer, electronic (welding) 813.382-010
solderer, furnace (welding) 813.482-010
Solderer, Induction (welding) 813.382-010
SOLDERER, PRODUCTION LINE (welding) 813.684-022
SOLDERER, SILVER (welding) term
SOLDERER, TORCH I (welding) 813.684-026
Solderer, Torch II (welding) 813.684-010
SOLDERER, ULTRASONIC, HAND (welding) 813.684-030
Soldering-Machine Feeder (welding) 819.686-010
Soldering-Machine Operator (welding) 813.382-014
soldering-machine operator, automatic (welding) 813.382-014
Soldering-Machine-Operator Helper (welding) 819.666-010
SOLDER-LEVELER, PRINTED CIRCUIT BOARDS (electron. comp.) 726.685-050
Solder Sprayer (any industry) 505.684-014
sole beater (boot & shoe) 690.685-470
sole blacker (boot & shoe) 690.685-234
Sole Buffer (boot & shoe) 690.685-046
SOLE-CONFORMING MACHINE OPERATOR (boot & shoe) 690.682-070
sole cutter (boot & shoe) 788.685-018
Sole-Cutting-Machine Operator (boot & shoe) 699.682-022
sole dyer (boot & shoe) 690.685-234
Sole-Edge Inker, Machine (boot & shoe) 690.685-234
Sole Layer (boot & shoe) 690.685-074
Sole Layer, Hand (boot & shoe) 788.687-030
Sole-Leather-Cutting-Machine Operator (boot & shoe) 699.682-022
SOLE LEVELER, MACHINE (boot & shoe) 690.685-382
sole-leveling-machine operator (boot & shoe) 690.685-382
sole-molding-machine operator (boot & shoe) 690.682-070
sole pretrimmer (boot & shoe) 690.685-150
Sole Rougher (boot & shoe) 690.685-046
sole rounder (boot & shoe) 690.685-338
sole rounder (boot & shoe) 690.685-334
sole-rounding-machine operator (boot & shoe) 690.685-338
SOLE SCRAPER (boot & shoe) 788.687-134
SOLE SEWER, HAND (boot & shoe) 788.684-110
Sole Splitter (boot & shoe) 585.685-114
sole stainer (boot & shoe) 788.687-098
Sole Stapler, Welt (boot & shoe) 690.685-162
Sole Stitcher (boot & shoe) 690.682-078
sole stitcher, hand (boot & shoe) 788.684-110
Sole-Stock Cutter (leather prod.) 585.685-038
Sole Trimmer (boot & shoe) 690.682-086
Sole Wetter (boot & shoe) 788.687-090
solicitor (retail trade) 291.357-010
solicitor, city or state (government ser.) 110.117-010
solicitor, patent (profess. & kin.) 110.117-026
solid center winder (toy-sport equip.) 692.685-246
Solid-Die Cutter (paper goods) 699.682-022
solid-fiber-paster operator (paper & pulp; paper goods) 534.682-026
solid-glass-rod-d[illegible]wel-machine operator (plastic prod.) 575.682-010
Solid State Tester (electron. comp.) 726.684-026
Solid-Tire Finisher (rubber tire) 750.684-034
Solid-Tire Tuber-Machine Operator (rubber tire) 690.662-014
solid waste facility operator (sanitary ser.) 955.463-010
solid waste facility supervisor (sanitary ser.) 955.133-010
solution-make-up operator (chemical) 559.382-034
solution mixer (photofinishing) 550.485-010
Solution Mixer (plastic-synth.) 550.685-134
SOLUTIONS OPERATOR (plastic-synth.) 550.382-034
solvent-plant operator (chemical) 551.685-062
Solvent-Plant Treater (petrol. refin.) 549.362-014
Solvent Recoverer (plastic-synth.) 552.685-026
solvent-station attendant (rubber reclaim.) 914.665-010
sommelier (hotel & rest.) 310.357-010
SONG PLUGGER (recording) 165.157-010
song writer (profess. & kin.) 131.067-034
SORTER (boot & shoe) 753.587-010
SORTER (brick & tile) 573.687-034
SORTER (button & notion) 734.687-082
Sorter (can. & preserv.) 529.686-014
SORTER (clerical) 209.687-022
SORTER (jewelry-silver.) 735.687-030
Sorter (machine shop) 609.684-014
sorter (mine & quarry; smelt. & refin.) 933.687-010
SORTER (office machines) 706.587-014
sorter (paper & pulp) 649.687-010
Sorter (plastic-synth.) 681.687-018
Sorter (tex. prod., nec) 789.687-146
SORTER, AGRICULTURAL PRODUCE (agriculture; can. & preserv.; wholesale tr.) 529.687-186
sorter, food products (agriculture; can. & preserv.; wholesale tr.) 529.687-186
Sorter-Grader (can. & preserv.) 529.687-186
SORTER I (wood prod., nec) 569.687-022
SORTER II (wood prod., nec) 769.687-042
sorter, laundry articles (laundry & rel.) 361.687-014
Sorter-Lumber Straightener (saw. & plan.) 669.687-018
SORTER, MACHINE (button & notion) 692.685-182
SORTER OPERATOR (saw. & plan.) 921.685-054
sorter-packer (photofinishing) 976.687-018
SORTER-PRICER (nonprofit org.) 222.387-054
SORTER, UPHOLSTERY PARTS (furniture) 780.587-010
Sorting-And-Folding Supervisor (laundry & rel.) 361.137-010
SORTING-GRAPPLE OPERATOR (logging) 921.683-066
sorting-machine attendant (can. & preserv.) 521.685-318
SORTING-MACHINE OPERATOR (can. & preserv.) 521.685-318
SORTING-MACHINE OPERATOR (paper goods) 649.665-010
SORTING SUPERVISOR (brick & tile) 920.137-014
SOUND CONTROLLER (amuse. & rec.) 194.262-014
SOUND CUTTER (motion picture) 962.382-014
sound-effects supervisor (radio-tv broad.) 962.167-010
SOUND-EFFECTS TECHNICIAN (radio-tv broad.) 962.281-014
sound engineer, audio control (radio-tv broad.) 194.262-010
SOUNDER (any industry) 911.667-018
sound installation worker (motion picture) 194.381-010
SOUND MIXER (motion picture; radio-tv broad.; recording) 194.262-018
SOUND RANGING CREWMEMBER (military ser.) 378.362-010
sound recording technician (radio-tv broad.; recording) 194.362-010
SOUND TECHNICIAN (any industry) 829.281-022
Sound-Truck Operator (any industry) 823.261-010
Sour-Bleaching Pleater (textile) 589.685-074
SOUS CHEF (hotel & rest.) 313.131-026
SOUS CHEF (water trans.) 315.137-014
SOUVENIR AND NOVELTY MAKER (metal prod., nec) 739.381-050
souvenir assembler (metal prod., nec) 739.381-050
Soybean Grower (agriculture) 401.161-010
Soyfreeze Operator (food prep., nec) 529.685-290
SPACE-AND-STORAGE CLERK (ordnance) 219.387-026
space clerk (print. & pub.) 247.387-018
Spacer, Type-Bar-And-Segment (office machines) 706.684-026
SPACE SCHEDULER (clerical) 238.367-022

Space Vehicle Inspector, Preflight (aircraft mfg.) 806.261-038
SPAGHETTI-MACHINE OPERATOR (plastic prod.) 690.682-074
spaghetti press helper (food prep., nec) 529.686-062
Spanisher (leather prod.) 781.381-018
SPANNER (tex. prod., nec) 689.687-074
spare hand, carding (textile) 689.685-166
spare-parts clerk (clerical) 222.367-042
Spareribs Trimmer (meat products) 525.684-054
Spares Rework Mechanic (aircraft mfg.) 621.281-014
Spares Scheduler (clerical) 221.167-018
sparker and patcher (elec. equip.; nonfer. metal) 728.684-018
SPARK-PLUG ASSEMBLER (elec. equip.) 729.684-046
SPARK TESTER (elec. equip.) 727.687-078
SPARK TESTER (elec. equip.; nonfer. metal) 728.684-018
SPAR-MACHINE OPERATOR (wood prod., nec) 664.682-022
SPAR-MACHINE-OPERATOR HELPER (wood prod., nec) 664.685-030
Speaking-Unit Assembler (comm. equip.; elec. equip.) 729.684-026
spearer (fishing & hunt.) 443.684-010
Special Ability Extra (amuse. & rec.; motion picture; radio-tv broad.) 159.647-014
SPECIAL AGENT (government ser.) 375.167-042
SPECIAL AGENT (insurance) 166.167-046
SPECIAL AGENT (r.r. trans.) 372.267-010
SPECIAL AGENT, CUSTOMS (government ser.) 188.167-090
Special Agent, FBI (government ser.) 375.167-042
SPECIAL AGENT, GROUP INSURANCE (insurance) 169.167-050
SPECIAL AGENT-IN-CHARGE (r.r. trans.) 376.167-010
Special Agent, IRS (government ser.) 375.167-042
Special Agent, Secret Service (government ser.) 375.167-042
SPECIAL-CERTIFICATE DICTATOR (insurance) 209.382-014
Special-Delivery Carrier (government ser.) 230.367-010
SPECIAL-DELIVERY DRIVER (any industry) term
Special-Distribution Clerk (government ser.) 209.687-014
SPECIAL EFFECTS SPECIALIST (amuse. & rec.; motion picture; radio-tv broad.) 962.281-018
special-gas-and-electric service investigator (utilities) 959.361-010
special inspecting-and-testing supervisor (utilities) 820.131-010
Specialist (financial) 162.167-034
SPECIALIST-IN-CHARGE, EXTENSION SERVICE (government ser.) 096.167-014
Special-Lining Applier (any industry) 741.687-018
special loan officer (financial) 186.167-078
special-machine operator (nonfer. metal) 509.382-014
special officer (hotel & rest.) 376.367-018
Special Officer, Automat (hotel & rest.) 376.667-014
special police officer (any industry) 372.667-034
SPECIAL PROCEDURES TECHNOLOGIST, ANGIOGRAM (medical ser.) 078.362-046
SPECIAL PROCEDURES TECHNOLOGIST, CARDIAC CATHETERIZATION (medical ser.) 078.362-050
SPECIAL PROCEDURES TECHNOLOGIST, CT SCAN (medical ser.) 078.362-054
SPECIAL PROCEDURES TECHNOLOGIST, MAGNETIC RESONANCE IMAGING (MRI) (medical ser.) 078.362-058
special-service representative (tel. & tel.) 253.157-010
special shopper (retail trade) 296.357-010
SPECIAL TESTER (tobacco) 529.487-010
SPECIALTIES OPERATOR (chemical) 559.582-014
Special-Trackwork Blacksmith (r.r. trans.) 610.381-010
SPECIALTY CHEF (hotel & rest.) term
Specialty Molder (plastic prod.) 556.665-018
Specialty-Transformer Assembler (elec. equip.) 820.381-014
specialty trimmer (hat & cap) 784.684-078
special vascular imaging technologist (medical ser.) 078.362-050
SPECIFICATION WRITER (profess. & kin.) 019.267-010
Specimen Boss (mine & quarry) 939.137-018
spectrographer (profess. & kin.) 011.281-014
spectrographic analyst (profess. & kin.) 011.281-014
SPECTROSCOPIST (profess. & kin.) 011.281-014
speech clinician (profess. & kin.) 076.107-010
SPEECH PATHOLOGIST (profess. & kin.) 076.107-010
speech therapist (profess. & kin.) 076.107-010
SPEED-BELT-SANDER TENDER (woodworking) 662.685-034
Speedboat Operator (amuse. & rec.) 342.663-010
speeder-frame changer (textile) 689.686-026
SPEEDER TENDER (textile) 681.685-106
SPEED OPERATOR (steel & rel.) 613.362-022
spent-grain dryer (beverage) 523.685-086
spice blender (food prep., nec) 520.585-026
SPICE CLEANER (food prep., nec) 521.685-322
SPICE FUMIGATOR (food prep., nec) 529.685-218
spice grinder (food prep., nec) 521.685-326
spice-grinding-mill operator (food prep., nec) 521.685-326
SPICE MILLER (food prep., nec) 521.685-326
Spice Miller, Hammer Mill (food prep., nec) 521.685-326
Spice Miller, Rolling Mill (food prep., nec) 521.685-326
SPICE MIXER (can. & preserv.) 520.687-062
SPICE MIXER (food prep., nec) 520.585-026
spice mixer (meat products) 520.687-054
SPIDER ASSEMBLER (elec. equip.) 721.684-026
spieler (amuse. & rec.; personal ser.) 353.363-010
spieler (amuse. & rec.) 342.657-010
SPIKE-MACHINE FEEDER (steel & rel.) 612.666-010
SPIKE-MACHINE HEATER (steel & rel.) 619.686-026
SPIKE-MACHINE OPERATOR (steel & rel.) 612.662-010
SPIKEMAKING SUPERVISOR (steel & rel.) 612.130-010
SPINDLE CARVER (woodworking) 761.682-018
SPINDLE PLUMBER (textile) 628.684-030
spindler (button & notion) 740.687-010
SPINDLE REPAIRER (textile) 628.684-042
Spindle Sander (woodworking) 761.682-014
spindle setter (textile) 628.684-030
spindle tester (textile) 628.684-030
SPINNER (jewelry-silver.) 700.684-074
spinner (nonmet. min.; textile) 682.685-010
SPINNER (plastic-synth.) 557.685-026
SPINNER (sugar & conf.) 520.682-030
Spinner, Box (plastic-synth.) 557.685-026
Spinner, Cap Frame (textile) 682.685-010
spinner, concrete pipe (concrete prod.) 575.664-010
Spinner, Continuous (plastic-synth.) 557.685-026
spinnerette cleaner (plastic-synth.) 557.684-010
SPINNER, FRAME (nonmet. min.; textile) 682.685-010
SPINNER, HAND (any industry) 619.362-018
Spinner Helper (sugar & conf.) 529.686-034
SPINNER, HYDRAULIC (any industry) 619.362-022
spinner, iron (elec. equip.) 729.687-018
SPINNER, MULE (nonmet. min.; textile) 682.685-014
Spinner, Open-End (textile) 682.685-010
Spinner, Ring Frame (textile) 682.685-010
SPINNING-BATH PATROLLER (plastic-synth.) 557.685-030
Spinning Doffer (textile) 689.686-022
spinning-frame changer (textile) 689.686-026
Spinning-Frame Fixer (textile) 689.260-010
spinning-frame tender (nonmet. min.; textile) 682.685-010
spinning-lathe operator (any industry) 619.362-018
SPINNING-LATHE OPERATOR, AUTOMATIC (any industry) 619.685-082
spinning-lathe-operator, hydraulic (any industry) 619.362-022
SPINNING-MACHINE TENDER (tex. prod., nec) 681.685-110
spinning operator (plastic-synth.) 557.685-026
SPINNING-ROOM WORKER (plastic-synth.) term
SPIN-TABLE OPERATOR (toy-sport equip.) 732.687-074
spin-tank tender (plastic-synth.) 559.585-018
SPIRAL BINDER (paper goods; print. & pub.) 653.685-030
spiral-bind operator (paper goods; print. & pub.) 653.685-030
spiral-gear generator (machine shop) 602.382-014
SPIRAL-MACHINE OPERATOR (paper goods) 692.685-186
SPIRAL RUNNER (mine & quarry) 934.685-022
SPIRAL SPRING WINDER (metal prod., nec) 616.685-070
SPIRAL-TUBE WINDER (paper goods) 640.682-022
SPIRAL-TUBE-WINDER HELPER (paper goods) 640.687-014
SPIRAL WEAVER (metal prod., nec) 616.685-074
spiral winder (fabrication, nec) 739.685-030
spiral-winding-machine helper (paper goods) 640.687-014
SPLASH-LINE OPERATOR (fabrication, nec) 559.665-034
splicer (construction; tel. & tel.; utilities) 829.361-010
SPLICER (fabrication, nec) 692.687-010
splicer (narrow fabrics; textile) 782.684-062
SPLICER (photofinishing) 976.684-026
SPLICER (protective dev.) 759.684-070
splice; (rubber goods) 752.684-042
SPLICER (rubber tire) 759.684-058
splicer (tex. prod., nec) 689.682-018
splicer apprentice (construction; tel. & tel.; utilities) 829.361-014
splicer-machine operator (woodworking) 669.685-042
splicer matcher (millwork-plywood) 769.687-046
SPLICER OPERATOR (millwork-plywood) 569.685-062
SPLICING-MACHINE OPERATOR (tex. prod., nec) 689.682-018
SPLICING-MACHINE OPERATOR, AUTOMATIC (tex. prod., nec) 689.685-122
Splicing Supervisor (metal prod., nec) 691.130-014
Spliner (struct. metal) 809.684-010
split-leather mosser (leather mfg.) 584.687-010
splitter (boot & shoe; leather prod.) 585.685-114
splitter (concrete prod.) 677.685-050
splitter (jewelry-silver.) 770.381-014
splitter (mine & quarry) 779.681-010
splitter (woodworking) 667.682-058
SPLITTER, HAND (button & notion) 734.687-086
Splitter, Head (meat products) 525.684-034

SPLITTER, MACHINE

SPLITTER, MACHINE (boot & shoe; leather prod.) 585.685-114
splitter operator (any industry) 699.682-030
SPLITTER OPERATOR (stonework) 677.685-042
SPLITTER TENDER (saw. & plan.) 663.685-038
SPLITTING-MACHINE FEEDER (leather mfg.) 690.686-054
SPLITTING-MACHINE OPERATOR (rubber goods; rubber reclaim.) 690.685-386
SPLITTING-MACHINE OPERATOR (stonework) 677.685-046
SPLITTING-MACHINE-OPERATOR HELPER (stonework) 677.666-010
SPLITTING-MACHINE TENDER (wood prod., nec) 663.685-042
SPOILAGE WORKER (tinware) 709.587-014
Spoke Maker (toy-sport equip.) 617.665-010
SPONGE BUFFER (plastic prod.) 690.685-390
SPONGE CLIPPER (fishing & hunt.; wholesale tr.) 447.687-026
Sponge Diver (fishing & hunt.) 443.664-010
SPONGE HOOKER (fishing & hunt.) 447.684-010
Sponge Packer (wholesale tr.) 920.587-018
SPONGE-PRESS OPERATOR (rubber goods) 559.682-050
Sponger (leather mfg.) 589.685-098
sponger (pottery & porc.) 774.684-018
sponger (textile) 587.685-018
SPONSOR (retail trade) term
spool cleaner, hand (textile) 689.687-014
spooler (narrow fabrics; textile) 681.685-142
Spooler (narrow fabrics; tex. prod., nec) 689.685-014
spooler (pen & pencil) 733.685-022
spooler (tex. prod., nec; textile) 681.685-154
spooler (tex. prod., nec) 681.685-114
spooler (textile) 681.685-098
Spooler And Coiler (nonfer. metal) 691.685-030
SPOOLER OPERATOR, AUTOMATIC (textile) 681.686-018
spooler, rubber strand (rubber goods) 559.685-114
SPOOLER, SEQUINS (plastic prod.) 920.686-046
SPOOLING-MACHINE OPERATOR (metal prod., nec; nonfer. metal) 691.685-026
SPOOLING-MACHINE OPERATOR (tex. prod., nec) 681.685-114
Spooling Supervisor (metal prod., nec) 691.130-014
SPOOL MAKER (paper goods) 641.685-082
spool salvager (glass mfg.; plastic-synth.; textile) 922.687-018
Spool Sander (woodworking) 761.682-014
SPOOL WINDER (nonfer. metal) 619.485-010
spool winder (textile) 681.685-122
Spool Winder (textile) 681.685-154
Sports Announcer (radio-tv broad.) 159.147-010
Sports-Bookmaker (amuse. & rec.) 187.167-014
Sports Cartoonist (print. & pub.) 141.061-010
SPORTS-EQUIPMENT REPAIRER (any industry) 732.684-122
SPORT-SHOE-SPIKE ASSEMBLER (boot & shoe) 690.685-394
SPOT CLEANER (garment; knitting) 582.684-014
Spot Cutter (any industry) 699.682-018
spot-machine operator (any industry) 692.685-062
spot picker (fabrication, nec) 739.667-010
SPOT PICKER, MOLDED GOODS (fabrication, nec) 739.667-010
spot sprayer (any industry) 749.684-038
Spotter (any industry) 215.362-022
spotter (automotive ser.) 915.473-010
spotter (business ser.) 376.267-022
spotter (fabrication, nec) 739.687-182
SPOTTER (glass mfg.) 772.687-014
SPOTTER I (laundry & rel.) 361.684-018
SPOTTER II (laundry & rel.) 362.381-010
SPOTTER (machine tools) 770.381-042
SPOTTER, PHOTOGRAPHIC (photofinishing) 970.381-034
spot washer (tex. prod., nec; textile) 689.687-050
Spot Welder (welding) 819.685-010
spot welder, body assembly (welding) 810.664-010
spot welder, line (welding) 810.664-010
Spout Positioner (any industry) 921.667-018
SPOUT TENDER I (chemical) 932.664-014
SPOUT TENDER I (chemical) 921.685-058
SPOUT WORKER (smelt. & refin.) 514.667-018
spragger (mine & quarry) 932.683-010
Spray Blender (any industry) 550.684-018
Spray Cementer (leather prod.) 741.687-018
spray drier (chemical) 553.685-054
SPRAY-DRIER OPERATOR (brick & tile) 573.382-014
Spray-Drier-Operator Helper (chemical) 553.687-010
spray dyer (laundry & rel.) 364.684-018
sprayer (any industry) 505.685-014
sprayer (boot & shoe) 590.685-038
Sprayer (boot & shoe) 741.687-018
Sprayer (foundry) 514.685-014
sprayer, automatic spray machine (brick & tile; pottery & porc.) 574.682-014
Sprayer, Auto Parts (auto. mfg.) 741.684-026
SPRAYER, HAND (agriculture) 408.684-014
SPRAYER, HAND (leather mfg.) 584.687-014
sprayer helper (any industry) 741.687-014
sprayer, insecticide (government ser.) 379.687-014
SPRAYER, LEATHER (laundry & rel.) 364.684-018
Sprayer, Light Bulbs (elec. equip.; light. fix.) 599.686-014
SPRAYER, MACHINE (leather mfg.) 599.685-094
SPRAYER OPERATOR (smelt. & refin.) 505.682-010
Sprayer, Railroad Car (r.r. trans.) 741.684-026
spray-gun operator (any industry) 741.684-026
SPRAY-GUN REPAIRER (any industry) 630.381-026
SPRAY-GUN-REPAIRER HELPER (any industry) 630.684-034
spray-gun sizer (hat & cap) 589.687-038
SPRAY-MACHINE LOADER (brick & tile; pottery & porc.) 574.686-010
SPRAY-MACHINE OPERATOR (brick & tile; pottery & porc.) 574.682-014
spray-machine operator (any industry) 599.382-010
spray-machine operator (any industry) 599.685-074
spray-machine operator (leather mfg.) 599.685-094
SPRAY-MACHINE OPERATOR (textile) 582.685-138
SPRAY-MACHINE TENDER (tinware) 599.685-090
Spray-Painter, Machine (wood prod., nec) 599.685-074
SPRAY-PAINTING-MACHINE OPERATOR (any industry) 741.685-010
Spray Stainer (leather prod.) 749.684-022
Spray Supervisor (agriculture) 408.131-010
SPRAY-UNIT FEEDER (any industry) 599.686-014
SPREADER (hat & cap) 581.687-022
SPREADER (plastic-synth.) 554.687-010
spreader box operator (construction) 853.663-022
SPREADER I (any industry) 781.687-058
SPREADER II (any industry) term
SPREADER, MACHINE (any industry) 781.685-010
spreader machine tender (rubber goods; rubber tire) 554.362-010
Spreader Operator (construction) 853.663-014
SPREADER OPERATOR, AUTOMATIC (tobacco) 529.685-222
spreading-machine operator (bakery products) 524.682-010
SPREADING-MACHINE OPERATOR (chemical) 559.685-170
spreading-machine operator (textile) 680.685-090
sprigger (tobacco) 521.687-134
SPRING ASSEMBLER (furniture) 780.684-098
SPRING ASSEMBLER (metal prod., nec) 706.684-090
Spring-Assembler Supervisor (furniture) 616.130-022
spring bender (metal prod., nec) 617.482-022
Spring Bender (protective dev.) 712.684-010
SPRING CLIPPER (furniture) 780.684-102
SPRING COILER (metal prod., nec) 616.485-014
Spring Coiler, Hand (metal prod., nec) 619.482-010
SPRING COILING MACHINE SETTER (metal prod., nec) 616.260-018
SPRING COVERER (furniture) 780.687-038
Spring Crater (furniture) 920.685-078
spring encaser (furniture) 780.687-030
SPRINGER (furniture) 780.684-106
SPRING FITTER (metal prod., nec) 709.684-078
spring-fitter helper (automotive ser.) 620.584-010
SPRING FORMER, HAND (metal prod., nec) 709.381-042
SPRING FORMER, MACHINE (metal prod., nec) 617.482-022
SPRING INSPECTOR I (metal prod., nec) 616.361-010
SPRING INSPECTOR II (metal prod., nec) 709.687-038
SPRING LAYER (clock & watch) 715.687-122
SPRING MAKER (metal prod., nec) 616.280-010
spring-maker helper, hand (automotive ser.) 620.584-010
SPRING-MANUFACTURING SET-UP TECHNICIAN (clock & watch) 619.280-018
SPRING REPAIRER, HAND (automotive ser.) 619.380-018
SPRING-REPAIRER HELPER, HAND (automotive ser.) 620.584-010
SPRING SALVAGE WORKER (metal prod., nec) 610.684-014
spring setter (furniture) 780.684-106
spring tacker (furniture) 780.684-106
SPRING TESTER I (metal prod., nec) 612.685-014
SPRING TESTER II (metal prod., nec) 709.687-042
spring tier (furniture) 780.684-106
spring upholsterer (furniture) 780.684-106
Sprinkler-And-Irrigation-System Installer (construction) 862.281-022
SPRINKLER-IRRIGATION-EQUIPMENT MECHANIC (agric. equip.) 624.361-014
Sprinkler-Truck Driver (any industry) 906.683-022
Sprue-Cutting-Press Operator (foundry) 615.685-030
Sprue Knocker (foundry) 519.687-022
spudder (fabrication, nec; paper & pulp) 569.687-026
SPUN-PASTE-MACHINE OPERATOR (elec. equip.) 692.685-190
squad leader (government ser.) 377.137-014
squad sergeant (government ser.) 375.133-010
Square-Shear Operator I (any industry) 615.682-018
Square-Shear Operator II (any industry) 615.685-034
SQUARING-MACHINE OPERATOR (clock & watch) 605.685-046
SQUEAK, RATTLE, AND LEAK REPAIRER (automotive ser.) 620.364-010
Squeegee Finisher (construction) 869.687-026

Squeegee-Machine Tender (glass mfg.) 979.685-010
squeezer and former (plastic prod.) 754.684-050
SQUEEGEE TENDER (rubber tire) 750.685-010
SQUEEZER OPERATOR (wood. container) 669.685-082
squirt-machine operator (boot & shoe) 690.685-278
stabilizer operator (construction) 859.683-026
stabilizing-machine operator (construction) 859.683-026
STABLE ATTENDANT (any industry) 410.674-022
stable manager (any industry) 410.131-010
STAB SETTER AND DRILLER (cutlery-hdwr.) 709.684-082
stack clerk (library) 249.687-014
stacker (any industry) 929.687-030
stacker (beverage) 920.665-014
stacker (elec. equip.) 729.587-026
Stacker (furniture) 569.685-066
STACKER (leather prod.) 222.587-046
stacker (print. & pub.) 651.686-018
stacker (woodworking) 569.685-066
STACKER-AND-SORTER OPERATOR (saw. & plan.) 921.682-018
stacker attendant (any industry) 921.683-014
STACKER, MACHINE (woodworking) 569.685-066
Stacker Operator (any industry) 921.683-014
stacker operator (brick & tile) 579.685-058
Stacker-Straightener (saw. & plan.) 669.687-018
STACKER TENDER (millwork-plywood) 921.685-062
stacking assembler (elec. equip.; electron. comp.) 729.684-066
STACKING-MACHINE OPERATOR I (any industry) 692.682-054
STACKING-MACHINE OPERATOR II (any industry) 739.685-038
stack matcher (textile) 582.687-022
stack puller (sugar & conf.) 520.686-030
Stack Supervisor (smelt. & refin.) 511.132-010
staffing clerk (clerical) 205.367-062
STAFF TOXICOLOGIST (government ser.) 041.061-094
STAGE HAND (amuse. & rec.) term
stage manager (radio-tv broad.) 962.167-014
STAGER (print. & pub.) 971.684-014
STAGE TECHNICIAN (amuse. & rec.) 962.261-014
stage technician (amuse. & rec.) see STAGE HAND
STAIN APPLICATOR (wood prod., nec) 561.585-010
Stain Dipper (furniture) 599.685-026
STAINED GLASS ARTIST (profess. & kin.) 142.061-054
STAINER (fabrication, nec) 739.687-174
STAINER (furniture; wood prod., nec) 742.684-014
STAINER (leather prod.) 589.687-034
STAINING-MACHINE OPERATOR (tex. prod., nec) 582.685-142
Stain Maker (paint & varnish) 550.585-038
Stain Remover (construction) 869.687-026
Stain Wiper (furniture) 742.687-010
Stair Builder (construction) 860.381-022
STAKER (clock & watch) 715.684-182
STAKER, MACHINE (leather mfg.) 580.685-050
Staker, Surveying (any industry) 869.567-010
stakes player (amuse. & rec.) 343.367-010
staking-machine operator (clock & watch) 715.684-182
staking-press operator (clock & watch) 715.684-182
Stallion Keeper (agriculture) 410.674-022
STAMP ANALYST (retail trade) 299.387-014
STAMP CLASSIFIER (retail trade) 299.387-018
stamp cutter (beverage) 640.565-010
stamper (any industry) 920.687-126
Stamper (any industry) 920.587-018
stamper (any industry) 652.682-030
stamper (beverage) 920.665-014
stamper (boot & shoe) 690.685-158
STAMPER (button & notion) 734.685-010
STAMPER (chemical) 556.685-078
stamper (hat & cap) 580.685-042
stamper blocker (hat & cap) 580.685-026
STAMPER I (tex. prod., nec) 781.687-062
STAMPER II (tex. prod., nec) 652.685-082
STAMPER, MACHINE (pottery & porc.) 652.682-022
stamping-die maker, bench (machine shop) 601.281-010
STAMPING-MACHINE OPERATOR (boot & shoe) 690.685-398
Stamping-Machine Operator (clerical) 208.685-026
STAMPING-MACHINE OPERATOR (pen & pencil) 692.685-194
STAMPING-MILL TENDER (smelt. & refin.) 515.685-018
STAMPING-PRESS OPERATOR (any industry) 652.682-030
Stamping-Press Operator (any industry) 617.685-026
stamp maker (pen & pencil) 733.381-014
STAMP MOUNTER (pen & pencil) 733.684-018
STAMP-PAD FINISHER (pen & pencil) 733.687-066
STAMP-PAD MAKER (pen & pencil) 733.687-070
Stamp Presser (beverage) 920.687-042
stamp-press operator (chemical) 556.685-078
Standard-Practice Analyst (profess. & kin.) 131.267-026
standards analyst (profess. & kin.) 007.267-010
STANDARDS ENGINEER (profess. & kin.) 012.061-018
standards laboratory technician (aircraft mfg.; electron. comp.) 019.281-010
Stand-By (motion picture) 358.677-010
Stand Grinder (foundry) 705.684-074
STAND-IN (motion picture; radio-tv broad.) 961.667-014
STANDPIPE TENDER (steel & rel.) 519.665-014
STAPLE CUTTER (textile) 680.685-102
Staple-Fiber-Machine Tender (glass mfg.) 575.685-030
Staple Fiber Washer (plastic-synth.) 582.685-162
staple laster (boot & shoe) 690.685-362
STAPLE-PROCESSING-MACHINE OPERATOR (textile) 680.585-014
stapler (boot & shoe) 690.685-162
Stapler, Coil Unit (furniture) 780.687-042
STAPLER, HAND (furniture) 780.687-042
STAPLER, MACHINE (furniture) 692.685-198
Staple-Shear Operator (steel & rel.) 615.682-018
STAPLING-MACHINE OPERATOR (any industry) 692.685-202
starch and prosize mixer (paper & pulp) 550.682-010
starch crab (sugar & conf.) 529.682-018
Starch Dumper (sugar & conf.) 520.686-030
STARCHER (button & notion) 739.687-178
starcher (textile) 582.687-026
starcher-and-tenter-range feeder (textile) 589.665-014
STARCHMAKER (grain-feed mills) 520.485-030
STARCHMAKER (sugar & conf.) 526.687-014
Starch-Mangle Tender (textile) 584.685-042
Starch Presser (grain-feed mills) 521.687-038
STARCH-TREATING ASSISTANT (grain-feed mills) 521.665-018
starter (amuse. & rec.) 153.267-010
STARTER (amuse. & rec.) 153.667-010
starter (any industry) 388.367-010
starter (hat & cap) 784.684-058
starter (hat & cap) 586.685-034
Starter Adjuster (elec. equip.; light. fix.) 724.381-010
Starter-Cup-Powder Mixer (chemical) 737.687-090
starter, weaving (textile) 683.360-014
Starting-Sheet-Tank Operator (smelt. & refin.) 519.362-014
State Editor (print. & pub.) 132.037-014
STATE-HIGHWAY POLICE OFFICER (government ser.) 375.263-018
STATEMENT CLERK (financial) 214.362-046
state's attorney (government ser.) 110.117-010
State-Surplus-Commodity-And-Property Representative (government ser.) 188.117-122
state trooper (government ser.) 375.263-018
STATIC BALANCER (any industry) 724.384-014
STATION AGENT I (r.r. trans.) 910.137-038
Station Agent II (r.r. trans.) 211.467-030
STATIONARY ENGINEER (any industry) 950.382-026
STATIONARY-ENGINEER APPRENTICE (any industry) 950.382-030
stationary engineer, refrigeration (any industry) 950.362-014
STATIONARY-ENGINEER SUPERVISOR (any industry) 950.131-014
station attendant (automotive ser.) 915.477-010
station chief (pipe lines) 914.132-014
STATION ENGINEER, CHIEF (pipe lines) 914.132-014
STATION ENGINEER, MAIN LINE (pipe lines) 914.362-018
Station Engineer, Operating Chief (pipe lines) 914.132-014
Station Installer (tel. & tel.) 822.261-022
STATION INSTALLER-AND-REPAIRER (tel. & tel.) 822.261-022
STATION MANAGER (r.r. trans.) 184.167-130
station mechanic (any industry) 805.361-010
station mechanic (any industry) 823.281-014
station mechanic (utilities) 631.261-014
station-mechanic apprentice (utilities) 631.261-018
station mechanic helper (utilities) 631.684-010
station operator (government ser.) 379.362-010
station operator (pipe lines) 914.362-018
Station Patroller (r.r. trans.) 376.667-018
Station Repairer (tel. & tel.) 822.261-022
STATIONS-RELATIONS-CONTACT REPRESENTATIVE (radio-tv broad.) 184.167-134
station supervisor (any industry) 950.131-014
station telegrapher (r.r. trans.) 236.562-014
STATISTICAL CLERK (clerical) 216.382-062
STATISTICAL CLERK, ADVERTISING (retail trade) 216.382-066
STATISTICAL-MACHINE SERVICER (any industry) 633.281-030
Statistical Typist (clerical) 203.582-066
Statistician (radio-tv broad.) 216.382-062
statistician (utilities) 216.137-010
Statistician, Analytical (profess. & kin.) 020.167-026
STATISTICIAN, APPLIED (profess. & kin.) 020.167-026
Statistician, Engineering And Physical Science (profess. & kin.) 020.167-026
STATISTICIAN, MATHEMATICAL (profess. & kin.) 020.067-022
statistician, theoretical (profess. & kin.) 020.067-022
statler operator (glass products) 677.686-014

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Stator Connector (elec. equip.) 721.684-018
Stator Repairer (any industry) 721.281-018
Stator Tester (elec. equip.) 724.364-010
Stator Winder (elec. equip.) 721.484-010
statue maker (profess. & kin.) 144.061-018
Stave-Block Splitter (logging) 454.684-022
STAVE-BOLT EQUALIZER (saw. & plan.) 667.682-074
stave grader (wood. container) 764.387-014
stave inspector (wood. container) 764.387-014
stave inspector and culler (wood. container) 764.687-054
STAVE JOINTER (wood. container) 665.685-030
STAVE-LOG-CUT-OFF SAW OPERATOR (saw. & plan.) 667.682-078
STAVE-LOG-RIPSAW OPERATOR (saw. & plan.) 667.685-058
STAVE-MACHINE TENDER (wood. container) 663.685-046
stave matcher (wood. container) 764.687-054
STAVE-PLANER TENDER (saw. & plan.) 665.686-014
STAVE-SAW OPERATOR (wood. container) 667.685-062
stave steamer (woodworking) 562.665-014
stayer (boot & shoe) 690.685-414
stayer (boot & shoe) 690.682-082
stayer (garment; protective dev.) 789.687-018
staying-machine operator (paper goods) 641.685-054
STEAK SAUCE MAKER (can. & preserv.) 529.484-010
STEAK TENDERIZER, MACHINE (meat products) 529.686-082
steam blocker (hat & cap) 580.685-026
Steam-Bone-Press Tender (chemical) 555.685-014
STEAM-BOX OPERATOR (woodworking) 562.665-014
steam-box tender (tobacco) 522.682-014
steam-brush operator (textile) 587.685-010
STEAM CLEANER (automotive ser.) 915.687-026
Steam Cleaner (furniture) 780.687-058
steam cleaner, machine (laundry & rel.) 361.665-010
STEAM-CLEANING-MACHINE OPERATOR (construction) 891.685-010
Steam-Clean-Machine Operator (forging) 915.687-026
steam conditioner, filling (textile) 587.685-022
STEAM-CONDITIONER OPERATOR (tobacco) 522.685-094
STEAM-DISTRIBUTION SUPERVISOR (utilities) 862.137-014
steam drier (can. & preserv.; grain-feed mills) 523.685-058
steam-drier operator (textile) 581.685-054
STEAM-DRIER TENDER (carpet & rug) 581.685-058
STEAMER (beverage) 529.685-226
Steamer (hat & cap) 784.687-078
STEAMER (meat products) 525.687-110
STEAMER (tex. prod., nec) 789.687-170
steamer (textile) 587.685-022
steamer (tobacco) 522.682-014
steamer and shaper (toy-sport equip.) 732.684-106
STEAMER-BLOCKER (hat & cap; knitting) 784.684-070
Steamer, Gum Candy (sugar & conf.) 529.686-034
steamer operator (can. & preserv.) 521.687-090
steamer operator (can. & preserv.) 526.382-026
STEAMER TENDER (textile) 582.685-146
steam finisher (hat & cap) 784.687-010
Steam Fitter (construction) 862.281-022
steam-fitter apprentice (construction) 862.281-026
Steam-Fitter Helper (construction) 862.684-022
Steam-Fitter Supervisor (construction) 862.131-010
Steam-Fitter Supervisor, Maintenance (any industry) 862.131-010
steam flattener (any industry) 363.682-018
steam-frame operator (textile) 580.685-066
Steam-Generating-Powerplant Mechanic (utilities) 631.261-014
Steam-Generating-Powerplant-Mechanic Helper (utilities) 631.684-010
Steam Gigger (textile) 585.685-054
Steam Hammer Operator (forging) 610.362-010
steam hand (knitting) 582.685-078
Steam-Hoist Operator (mine & quarry) 921.663-026
STEAMING-CABINET TENDER (garment) 582.685-150
steaming-machine operator (knitting) 580.685-014
Steam-Iron Assembler (house. appl.) 723.684-010
Steam-Meter Reader (utilities) 209.567-010
STEAM-OVEN OPERATOR (can. & preserv.) 526.382-026
Steam-Pan Sponger (textile) 587.685-018
Steam-Pile-Driver Operator (construction) 859.682-018
Steam-Plant Records Clerk (utilities) 216.382-062
steam-power-plant operator (any industry) 950.382-010
Steam-Powerplant Supervisor (utilities) 631.131-010
steam presser (any industry) 363.682-018
steam-press operator (any industry) 363.682-018
STEAM-PRESS TENDER (textile) 583.685-106
STEAM-PRESS TENDER I (rubber goods) 553.665-046
STEAM-PRESS TENDER II (rubber goods) 553.665-050
steam-pressure-chamber operator (tobacco) 522.685-102
Steam-Room Attendant (personal ser.) 335.677-014
STEAM SERVICE INSPECTOR (utilities) 862.361-022
steam setter (textile) 680.685-026
steam-station supervisor (any industry) 950.131-014
steamtable attendant (hotel & rest.) 311.677-014
Steamtable Attendant, Railroad (r.r. trans.) 311.677-014
Steamtable Worker (hotel & rest.) 311.677-018
STEAM-TANK OPERATOR (nonmet. min.) 573.683-010
STEAM-TUNNEL FEEDER (saw. & plan.) 562.686-010
steam-tunnel feeder (woodworking) 562.665-014
steam-vat tender (wood. container) 562.665-010
STEEL-BARREL REAMER (wood. container) 703.687-022
STEEL-BOX-TOE INSERTER (boot & shoe) 788.687-138
STEEL-DIE PRINTER (print. & pub.) 651.382-030
Steel-Door Setter (construction) 809.381-022
steel-erecting pusher (construction) 809.131-018
steel erector (construction) 801.361-014
steel-erector apprentice (construction) 801.361-018
steel fabricating supervisor (any industry) 809.130-014
steel-floor-pan-placing supervisor (construction) 869.131-026
steel inspector (steel & rel.) 619.381-010
STEEL-PAN-FORM-PLACING SUPERVISOR (construction) 869.131-026
STEEL-PLATE CAULKER (any industry) 843.684-010
STEEL-POST INSTALLER (utilities) 821.687-010
STEEL-POST-INSTALLER SUPERVISOR (utilities) 821.131-022
STEEL POURER (steel & rel.) 502.664-014
STEEL-POURER HELPER (steel & rel.) 502.664-018
steel-rule die maker (paper goods) 739.381-018
steel-rule-die-maker apprentice (paper goods) 739.381-022
Steel-Rule Inspector (cutlery-hrdwr.) 709.587-010
steel sampler (nonfer. metal; steel & rel.) 509.584-010
Steel-Sash Erector (construction) 809.381-022
STEEL-SHOT-HEADER OPERATOR (ordnance) 611.682-010
Steel-Spar Operator (logging) 921.663-066
STEEL-TIE ADJUSTER, AUTOMATIC (paper goods) 649.685-110
Steel-Wheel Engraver (glass products) 775.381-010
STEEL-WOOL-MACHINE OPERATOR (nonmet. min.) 605.482-010
steeper (beverage) 522.685-114
steeping-press operator (plastic-synth.) 551.687-034
STEEPING-PRESS TENDER (plastic-synth.) 551.685-138
STEEPLE JACK (construction) 869.381-030
STEEP TENDER (grain-feed mills) 522.465-010
stem assembler (fabrication, nec) 739.687-014
stem-cleaning-machine feeder (tobacco) 521.685-362
STEM-DRYER MAINTAINER (tobacco) 529.685-230
stem frazer (fabrication, nec) 665.685-014
STEMHOLE BORER (fabrication, nec) 666.685-010
Stemhole-Borer-And-Topper (fabrication, nec) 666.685-010
Stem-Lead Former (electron. comp.) 725.384-010
STEMMER, HAND (tobacco) 521.687-134
STEMMER, MACHINE (tobacco) 521.685-334
STEM MOUNTER (light. fix.) 725.684-018
stem-mounting-machine operator (light. fix.) 692.686-050
STEM-PROCESSING-MACHINE OPERATOR (fabrication, nec) 739.685-042
STEM-ROLLER-OR-CRUSHER OPERATOR (tobacco) 521.685-330
stem setter (fabrication, nec) 739.687-014
STEM SIZER (fabrication, nec) 692.686-062
stem-threshing-machine operator (tobacco) 521.685-362
stencil cutter (any industry) 979.681-022
Stencil Cutter (clerical) 203.582-066
STENCIL CUTTER (railroad equip.) 970.381-038
STENCIL CUTTER (stonework) 771.281-010
Stencil Cutter, Machine (any industry) 920.685-078
STENCILER (any industry) 920.687-178
Stenciler (carpet & rug) 741.684-026
Stenciler (furniture) 749.684-014
STENCILER (garment; tex. prod., nec) 781.687-066
Stenciling-Machine Tender (glass mfg.; glass products) 979.685-010
STENCIL INSPECTOR (pen & pencil) 733.687-074
STENCIL-MACHINE OPERATOR (textile) 652.685-086
STENCIL MAKER (carpet & rug) 979.381-038
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STENOGRAPHER (clerical) 202.362-014
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STEREO-PLOTTER OPERATOR (profess. & kin.) 018.281-010
stereoptic projection topographer (profess. & kin.) 018.281-010
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STERILIZER (medical ser.; pharmaceut.; protective dev.) 599.585-010
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STOCK PREPARER (plastic prod.) 751.387-010
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stock repairer (ordnance) 761.684-042
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Stock Turner (ordnance) 664.685-018
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stone hand (print. & pub.) 973.381-026
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STONE ROUGHER (optical goods) 673.685-074
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STRAP-MACHINE OPERATOR (paper goods) 534.682-034
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street-light inspector (utilities) 952.667-010
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STREET-LIGHT REPAIRER (utilities) 729.381-018
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stretcher (textile) 781.687-014
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STRIKE-OUT-MACHINE OPERATOR (textile) 587.685-030
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striker (water trans.) 911.584-010
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STRINGER (jewelry-silver.) 509.687-018
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STRINGER-MACHINE TENDER (protective dev.) 692.485-010
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Stringing Machine Operator (paper goods) 649.685-054
STRINGING-MACHINE TENDER (tex. prod., nec) 689.585-018
STRING LASTER (boot & shoe) 690.685-406
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STRING-WINDING-MACHINE OPERATOR (musical inst.) 692.682-062
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STRIP-CUTTING-MACHINE OPERATOR (tobacco) 521.685-338
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STRIPER (paper goods) 651.682-018
STRIPER, HAND (any industry) 740.484-010
STRIPER, MACHINE (motor-bicycles) 749.686-010
STRIPER, SPRAY GUN (any industry) 741.687-022
strip feeder (tobacco) 529.685-222
STRIPING-MACHINE OPERATOR (nonfer. metal) 652.682-026
Strip-Machine Tender (fabrication, nec) 590.685-022
STRIP-METAL-PUNCH-AND-STRAIGHTENER OPERATOR (wood. container) 615.685-038
strip-mine supervisor (mine & quarry) 939.137-014
STRIPPER (any industry) term
stripper (boot & shoe; leather prod.) 585.685-114
stripper (chemical) 559.687-046
STRIPPER (furniture) 749.687-030
stripper (garment; protective dev.) 789.687-018
STRIPPER (glass mfg.) 673.666-014
Stripper (mine & quarry) 939.687-014
STRIPPER (plastic prod.; rubber goods) 556.686-018
STRIPPER (print. & pub.) 971.381-050
Stripper (smelt. & refin.) 519.565-014
stripper-and-opaquer apprentice (print. & pub.) 971.381-054
stripper and printer (print. & pub.) 971.381-034
STRIPPER AND TAPER (rubber goods) 899.684-038
STRIPPER APPRENTICE (print. & pub.) 971.381-054
stripper, black and white (print. & pub.) 972.381-022
Stripper, Black And White (print. & pub.) 971.381-050
Stripper, Color (print. & pub.) 971.381-050
STRIPPER-CUTTER, MACHINE (food prep., nec) 521.685-342
STRIPPER-ETCHER, PRINTED CIRCUIT BOARDS (electron. comp.) 590.685-082
Stripper, Latex (rubber goods) 556.686-018
STRIPPER, LITHOGRAPHIC I (print. & pub.) 972.281-022
STRIPPER, LITHOGRAPHIC II (print. & pub.) 972.381-022
stripper-machine operator (sugar & conf.) 521.685-102
stripper-opaquer (print. & pub.) 972.381-022
stripper, preliminary (plastic-synth.) 556.686-014
Stripper, Printed Circuit Boards (electron. comp.) 590.685-082
Stripper, Soft Plastic (plastic prod.) 556.686-018
Stripper Truck Operator (smelt. & refin.) 921.683-050
stripping-and-booking-machine operator (tobacco) 521.685-334
STRIPPING CUTTER AND WINDER (boot & shoe) 585.685-118
stripping-machine operator (paper goods) 641.685-034
STRIPPING-MACHINE OPERATOR (paper goods) 641.685-090
STRIPPING-SHOVEL OILER (mine & quarry) 850.684-018
STRIPPING-SHOVEL OPERATOR (mine & quarry) 850.663-026
STRIP POLISHER (stonework) 673.685-082
STRIP PRESSER (boot & shoe) 583.685-118
STRIP ROLLER (metal prod., nec) 613.682-022
strip shader (textile) 582.687-022
Strip-Stamp Straightener (beverage) 920.687-042
STRIP-TANK TENDER (ordnance) 503.685-046
Strip-Tease Dancer (amuse. & rec.) 151.047-010
streboroma operator (textile) 689.364-010
STROBOSCOPE OPERATOR (textile) 689.364-010
strobotac operator (textile) 689.364-010
STROKE-BELT-SANDER OPERATOR (woodworking) 662.682-018
stroker (sugar & conf.) 524.684-018
stroller rental clerk (retail trade) 295.367-014
STRONG-NITRIC OPERATOR (chemical) 559.682-062
STRUCTURAL ENGINEER (construction) 005.061-034
structural inspector (any industry) 619.261-010
structural-iron erector (construction) 801.361-014
structural-iron worker (construction) 801.361-014
structural-metal-fabricator apprentice (any industry) 619.361-018
STRUCTURAL-MILL SUPERVISOR (nonfer. metal) 619.132-022
structural-shop helper (any industry) 619.686-022
Structural-Steel-Equipment Erector (construction) 801.361-014
structural-steel erector (construction) 801.361-014
Structural-Steel Inspector (construction) 182.267-010
Structural-Steel Lay-Out Worker (any industry) 809.281-010
Structural-Steel-Shop Supervisor (any industry) 809.130-014
STRUCTURAL-STEEL WORKER (construction) 801.361-014
STRUCTURAL-STEEL-WORKER APPRENTICE (construction) 801.361-018
Structural-Steel-Worker Helper (construction) 869.687-026
structural test mechanic (aircraft mfg.) 710.361-014
structures assembler (aircraft mfg.) 806.381-026
STUBBER (retail trade) 222.687-034
STUCCO MASON (construction) 842.381-014
stucco worker (construction) 842.381-014
STUDDER, HAIRSPRING (clock & watch) 715.684-186
Stud Driver (smelt. & refin.) 630.684-010
STUD-DRIVER OPERATOR (construction) term
student-activities adviser (education) 090.167-022
student-union consultant (education) 090.167-022
Studio-Couch-Frame Builder (furniture) 762.684-066
studio engineer (motion picture; radio-tv broad.; recording) 194.262-018
studio technician (motion picture; radio-tv broad.; recording) 194.262-018
studio technician-video operator (radio-tv broad.) 194.382-018
stud setter (garment; tex. prod., nec) 789.685-010
stuffed-casing tier (meat products) 529.687-034
Stuffed-Toy Joiner (toy-sport equip.) 731.687-034
STUFFER (meat products) 520.685-210
STUFFER (tex. prod., nec) 780.687-046
stuffer (tex. prod., nec) 780.684-066
STUFFER (toy-sport equip.) 731.685-014
stuffer, machine (leather mfg.; tex. prod., nec) 582.685-050
stuffer, vertical hydraulic (plastic prod.; plastic-synth.) 557.382-010
STUFFING-MACHINE OPERATOR (furniture) 780.685-014
stuffing-machine operator (paper goods) 649.685-094
STUFFING-MACHINE OPERATOR (toy-sport equip.) 732.685-034
STULL INSTALLER (concrete prod.) 869.684-062
stummel selector (fabrication, nec) 739.687-166
stumper (hat & cap) 784.684-058
stumper (hat & cap) 586.685-034

stumper-feller (logging) 454.684-014
STUNNER, ANIMAL (meat products) 525.687-114
STUNT PERFORMER (amuse. & rec.; motion picture; radio-tv broad.; 159.341-014
Styrene-Continuous-Still Utility Operator (chemical) 559.682-066
Styrene-Dehydration-Reactor Operator (chemical) 558.685-062
STYRENE OPERATOR (chemical) term
Styrene Operator, Chief (chemical; petrol. refin.) 559.132-078
subassembler (agric. equip.) 706.684-042
SUBASSEMBLER (elec. equip.) 729.684-054
SUBASSEMBLER (machinery mfg.) 706.381-038
SUBASSEMBLER (office machines) 706.684-094
subassembler (ordnance) 736.684-014
Subassembly Supervisor (mfd. bldgs.; vehicles, nec) 869.131-030
Subgrade-Roller Operator (construction) 859.683-030
Subgrader Operator (construction) 850.663-022
Subgrade Tester (construction) 869.687-026
subject, scientific research (any industry) 359.677-030
SUBLIMER (chemical) 542.685-014
submarine operator (metal prod., nec) 617.482-022
submarine worker (any industry) 899.261-010
subscription clerk (print. & pub.) 209.362-010
SUBSCRIPTION CREW LEADER (retail trade) 291.157-010
subsorter (laundry & rel.) 369.687-010
SUBSTANCE ABUSE COUNSELOR (profes. & kin.) 045.107-058
Substation Engineer (utilities) 003.167-046
SUBSTATION INSPECTOR (utilities) 952.261-010
Substation Inspector, Automatic (utilities) 952.261-010
SUBSTATION OPERATOR (utilities) 952.362-026
SUBSTATION OPERATOR APPRENTICE (utilities) 952.362-030
Substation Operator, Automatic (utilities) 952.362-026
SUBSTATION OPERATOR, CHIEF (utilities) 952.131-010
Substation Operator, Conversion (utilities) 952.362-026
Substation Operator, Distribution (r.r. trans.; utilities) 952.362-026
Substation Operator, Generation (utilities) 952.362-026
SUBSTATION-OPERATOR HELPER (utilities) 952.687-014
Substation Operator Helper, Generator (utilities) 952.367-014
Substation Operator, Transforming (utilities) 952.362-026
subtitle writer (motion picture; radio-tv broad.) 203.362-026
subwarehouse supervisor (beverage) 520.382-010
SUCKER-MACHINE OPERATOR (sugar & conf.) 529.685-234
suction-dredge-dumping supervisor (construction) 862.134-010
SUCTION-DREDGE-PIPE-LINE-PLACING SUPERVISOR (construction) 862.134-010
Suction-Drum-Drier Operator (textile) 581.685-030
suction-machine operator (textile) 581.685-042
Suction Operator (agriculture) 921.662-018
SUCTION-PLATE-CARRIER CLEANER (tobacco) 529.687-194
suction-plate roller, hand (tobacco) 790.684-022
suction roller (tobacco) 790.684-022
sueding-and-buffing-machine operator (boot & shoe) 753.684-010
Sueding-Machine Tender (textile) 585.685-070
Sueding-Wheel Operator (leather mfg.) 585.685-018
SUGAR BOILER (sugar & conf.) 522.382-034
Sugarcane Planter (agriculture) 404.161-010
SUGAR-CHIPPER-MACHINE OPERATOR (grain-feed mills) 521.685-354
Sugar-Coating Hand (sugar & conf.) 529.686-034
SUGAR CONTROLLER (sugar & conf.) 529.565-010
SUGAR DRIER (grain-feed mills) 523.665-010
sugar drier (sugar & conf.) 523.685-098
sugar-end supervisor (sugar & conf.) 529.130-034
sugar grinder (grain-feed mills) 521.685-354
SUGAR GRINDER (sugar & conf.) 521.685-346
SUGAR PRESSER (grain-feed mills) 521.685-350
SUGAR-REPROCESS OPERATOR, HEAD (sugar & conf.) 529.137-018
Sugar Trucker (grain-feed mills) 929.687-030
Sugar-Wafer-Machine Operator (bakery products) 526.685-066
SUGGESTION CLERK (clerical) 209.387-034
suit attendant (personal ser.) 358.677-014
Suit Finisher (garment; retail trade) 785.361-022
suit maker (rubber goods) 795.684-026
SULFATE DRIER-MACHINE OPERATOR (steel & rel.) 551.685-142
sulfate operator (chemical; steel & rel.) 558.362-018
Sulfonation Equipment Operator (chemical) 559.682-018
Sulfonator Operator (chemical) 559.382-018
Sulfur Burner (chemical) 553.685-094
Sulfur-Chloride Operator (chemical) 558.382-030
Sulfur Feeder (chemical) 553.686-038
sulfuric-acid-plant operator (chemical) 558.585-018
SULKY DRIVER (amuse. & rec.) 153.244-014
Sumac Tanner (leather mfg.) 582.482-018
SUMATRA OPENER (tobacco) 529.687-198
SUNGLASS-CLIP ATTACHER (optical goods) 713.687-042
SUPERCALENDER OPERATOR (paper & pulp) 534.682-038
Supercalender-Operator Helper (paper & pulp) 534.686-010
SUPERCARGO (water trans.) 248.167-010
Supercharger Mechanic (air trans.) 621.281-014
SUPERCHARGER-REPAIR SUPERVISOR (air trans.) 621.131-010
SUPERINTENDENT (agriculture; can. & preserv.) 180.167-054
superintendent (any industry) 189.167-022
superintendent, airport (air trans.) 184.117-026
Superintendent, Airport-Buildings-Maintenance (air trans.) 184.117-026
Superintendent, Airport-Facilities-Repair-And-Maintenance (air trans.) 184.117-026
SUPERINTENDENT, AMMUNITION STORAGE (ordnance) 189.167-038
superintendent, automotive (any industry) 184.167-226
Superintendent, Board Mill (paper & pulp) 539.132-010
SUPERINTENDENT, BUILDING (any industry) 187.167-190
superintendent, building (any industry) 382.664-010
superintendent, camp (profess. & kin.) 187.167-050
SUPERINTENDENT, CAR CONSTRUCTION (railroad equip.) 183.167-034
superintendent, cemetery (real estate) 187.167-074
Superintendent, Circus (amuse. & rec.) 187.117-034
superintendent, city plant (utilities) 184.167-154
SUPERINTENDENT, COLD STORAGE (any industry) 184.167-142
superintendent, colliery (mine & quarry) 181.117-014
SUPERINTENDENT, COMMISSARY (water trans.) 184.117-078
SUPERINTENDENT, COMMUNICATIONS (tel. & tel.) 184.117-082
SUPERINTENDENT, COMPRESSOR STATIONS (pipe lines) 184.167-146
SUPERINTENDENT, CONCRETE-MIXING PLANT (construction) 182.167-022
SUPERINTENDENT, CONSTRUCTION (construction) 182.167-026
Superintendent, Container Terminal (water trans.) 184.167-214
SUPERINTENDENT, DISTRIBUTION I (utilities) 184.167-150
SUPERINTENDENT, DISTRIBUTION II (utilities) 184.167-154
SUPERINTENDENT, DIVISION (motor trans.; r.r. trans.) 184.167-158
superintendent, drilling (petrol. & gas) 930.130-010
SUPERINTENDENT, DRILLING AND PRODUCTION (petrol. & gas) 181.167-014
superintendent, drivers (motor trans.) 913.133-010
superintendent, dyeing (knitting; tex. prod., nec; textile) 582.131-014
superintendent, electrical department (r.r. trans.) 184.167-202
SUPERINTENDENT, ELECTRIC POWER (utilities) 184.167-162
superintendent, factory (any industry) 183.117-014
superintendent, fish hatchery (fishing & hunt.) 180.167-030
superintendent, gas distribution (utilities) 184.167-154
superintendent, general (any industry) 183.117-014
SUPERINTENDENT, GENERATING PLANT (utilities) 184.167-166
superintendent, geophysical laboratory (profess. & kin.) 024.167-010
SUPERINTENDENT, GRAIN ELEVATOR (beverage; grain-feed mills) 529.137-022
SUPERINTENDENT, GREENS (amuse. & rec.) 406.137-014
SUPERINTENDENT, HORTICULTURE (museums) 180.161-014
superintendent, house (hotel & rest.) 329.137-010
SUPERINTENDENT, INDUSTRIES, CORRECTIONAL FACILITY (government ser.) 188.167-094
superintendent, institution (any industry) 187.117-018
superintendent, job (construction) 182.167-026
SUPERINTENDENT, LABOR UTILIZATION (any industry) 189.167-042
superintendent, land department (petrol. & gas) 186.117-046
superintendent, landfill operations (government ser.) 184.167-078
SUPERINTENDENT, LAUNDRY (laundry & rel.) 187.167-194
SUPERINTENDENT, LOCAL (utilities) 952.137-018
SUPERINTENDENT, LOGGING (logging) 183.167-038
SUPERINTENDENT, MAINTENANCE (air trans.) 184.167-174
SUPERINTENDENT, MAINTENANCE (any industry) 189.167-046
SUPERINTENDENT, MAINTENANCE (motor trans.) 184.167-170
superintendent, maintenance, airports (air trans.) 899.137-010
SUPERINTENDENT, MAINTENANCE OF EQUIPMENT (motor trans.; r.r. trans.) 184.167-178
SUPERINTENDENT, MAINTENANCE OF WAY (r.r. trans.) 182.167-030
SUPERINTENDENT, MARINE (water trans.) 184.167-182
SUPERINTENDENT, MARINE OIL TERMINAL (water trans.) 184.167-186
Superintendent, Materials-And-Apparatus Tests (utilities) 184.167-218
SUPERINTENDENT, MEASUREMENT (petrol. & gas; pipe lines) 184.167-190
superintendent, mechanical (profess. & kin.) 007.167-014
superintendent, menagerie (amuse. & rec.) 412.137-010
SUPERINTENDENT, METERS (utilities) 184.167-194
Superintendent, Meter Tests (utilities) 184.167-218
superintendent, mill (any industry) 183.117-014
superintendent, nonselling (retail trade) 189.167-014
SUPERINTENDENT OF GENERATION (utilities) 184.167-138
Superintendent, Oil-Field Drilling (petrol. & gas) 181.167-014
SUPERINTENDENT, OIL-WELL SERVICES (petrol. & gas) 010.167-018
superintendent, operating (retail trade) 189.167-014
superintendent, operations (utilities) 184.167-138
superintendent, operations division (utilities) 184.167-154
Superintendent, Overhead Distribution (utilities) 184.167-150
Superintendent, Pier (water trans.) 184.167-214

SUPERINTENDENT, PIPE-LINES (pipe lines) 184.167-198
superintendent, plant (any industry) 183.117-014
SUPERINTENDENT, PLANT PROTECTION (any industry) 189.167-050
superintendent, police (government ser.) 375.117-010
SUPERINTENDENT, POWER (r.r. trans.) 184.167-202
superintendent, pressure (petrol. & gas; petrol. refin.; pipe lines) 914.167-010
SUPERINTENDENT, PRODUCTION (agriculture) 180.167-058
Superintendent, Production (petrol. & gas) 181.167-014
superintendent, quarry (mine & quarry) 181.117-014
SUPERINTENDENT, RADIO COMMUNICATIONS (government ser.) 193.167-018
SUPERINTENDENT, RECREATION (government ser.) 187.117-054
Superintendent, Refuse Disposal (government ser.) 188.167-098
Superintendent, Research-And-Fault-Analysis Tests (utilities) 184.167-218
SUPERINTENDENT, SALES (construction) 250.157-010
SUPERINTENDENT, SANITATION (government ser.) 188.167-098
superintendent, scheduling (petrol. & gas; petrol. refin.; pipe lines) 184.167-038
SUPERINTENDENT, SCHOOLS (education) 099.117-022
SUPERINTENDENT, SEED MILL (agriculture) 599.137-010
SUPERINTENDENT, SERVICE (hotel & rest.) 329.137-010
superintendent, service (utilities) 953.137-018
superintendent, service establishment (any industry) see MANAGER, SERVICE ESTABLISHMENT
Superintendent, Sewage-Treatment (government ser.) 188.167-098
Superintendent, Station-And-Protection-System Tests (utilities) 184.167-218
SUPERINTENDENT, STATIONS (motor trans.; r.r. trans.) 184.167-206
SUPERINTENDENT, STEVEDORING (water trans.) 911.137-022
superintendent, storage area (any industry) 184.167-114
SUPERINTENDENT, SYSTEM OPERATION (utilities) 184.167-210
SUPERINTENDENT, TERMINAL (water trans.) 184.167-214
SUPERINTENDENT, TESTS (utilities) 184.167-218
SUPERINTENDENT, TRACK (construction) 899.137-014
SUPERINTENDENT, TRANSMISSION (utilities) 184.167-222
SUPERINTENDENT, TRANSPORTATION (any industry) 184.167-226
Superintendent, Underground Distribution (utilities) 184.167-150
superintendent, warehouse (any industry) 184.167-114
SUPERINTENDENT, WATER-AND-SEWER SYSTEMS (waterworks) 184.161-014
Superior-Court Judge (government ser.) 111.107-010
Supermarket Stock Clerk (retail trade) 299.367-014
SUPERVISING AIRPLANE PILOT (government ser.) 196.163-014
Supervising Chef (hotel & rest.) 313.131-026
supervising-chef assistant (hotel & rest.) 313.131-026
Supervising Editor, Feature (motion picture; radio-tv broad.) 962.132-010
Supervising Editor, News Reel (radio-tv broad.) 962.132-010
Supervising Editor, Trailer (motion picture; radio-tv broad.) 962.132-010
SUPERVISING FILM EDITOR (motion picture; radio-tv broad.) 962.132-010
supervising librarian (library) 100.127-010
SUPERVISOR (any industry) master
SUPERVISOR (boot & shoe) 788.131-010
SUPERVISOR (brick & tile) 570.132-022
SUPERVISOR (cement) 579.137-010
SUPERVISOR (clerical) master
SUPERVISOR (clock & watch) 715.131-010
SUPERVISOR (comm. equip.) 619.130-046
SUPERVISOR (cutlery-hrdwr.) 615.130-014
SUPERVISOR (electroplating) 500.131-010
SUPERVISOR (food prep., nec) 529.132-110
SUPERVISOR (glove & mit.) 784.132-010
SUPERVISOR (government ser.) 188.137-010
SUPERVISOR (jewelry-silver.) 700.130-010
SUPERVISOR (jewelry-silver.; plastic prod.) 700.131-010
SUPERVISOR (knitting) 684.137-010
SUPERVISOR (leather prod.) 783.132-010
SUPERVISOR (metal prod., nec) 700.131-014
SUPERVISOR (mine & quarry) 570.137-010
supervisor (motor trans.) 909.127-010
SUPERVISOR (musical inst.) 730.131-010
SUPERVISOR (nonfer. metal) 691.130-010
SUPERVISOR (nut & bolt) 616.130-010
SUPERVISOR (office machines) 706.131-014
SUPERVISOR (oils & grease) 529.137-030
SUPERVISOR (optical goods) 716.130-010
SUPERVISOR (ordnance) 737.137-018
SUPERVISOR (plastic prod.) 690.130-018
SUPERVISOR (plumbing-heat.) 609.130-018
supervisor (print. & pub.) 653.131-010
SUPERVISOR (rubber reclaim.) 559.132-058
SUPERVISOR (rubber tire) 750.130-010
SUPERVISOR (stonework) 679.130-010
SUPERVISOR (struct. metal) 617.130-010
SUPERVISOR (sugar & conf.) 920.137-018
SUPERVISOR (tobacco) 529.137-026
SUPERVISOR (toy-sport equip.) 732.130-010
SUPERVISOR, ABATTOIR (meat products) 525.131-010
SUPERVISOR, ACCOUNTING CLERKS (clerical) 216.132-010
SUPERVISOR, ACCOUNTS RECEIVABLE (utilities; waterworks) 214.137-022
SUPERVISOR, ACOUSTICAL TILE CARPENTERS (construction) 860.131-010
SUPERVISOR, ADJUSTABLE-STEEL-JOIST-SETTING (construction) 869.134-014
Supervisor, Adult Education (education) 099.117-026
SUPERVISOR, ADVERTISING-DISPATCH CLERKS (print. & pub.) 247.137-010
SUPERVISOR, ADVERTISING-MATERIAL DISTRIBUTORS (business ser.) 230.137-010
SUPERVISOR, AGENCY APPOINTMENTS (insurance) 209.137-018
Supervisor, Agricultural Education (education) 099.117-026
SUPERVISOR, AIR-CONDITIONING INSTALLER (any industry) 827.131-018
SUPERVISOR, AIRCRAFT CLEANING (air trans.) 891.137-014
SUPERVISOR, AIRCRAFT MAINTENANCE (air trans.) 621.131-014
SUPERVISOR, AIRPLANE-FLIGHT ATTENDANT (air trans.) 352.137-010
SUPERVISOR, ALTERATION WORKROOM (retail trade) 785.131-010
SUPERVISOR, ALUMINUM BOAT ASSEMBLY (ship-boat mfg.) 806.131-010
SUPERVISOR, ALUMINUM FABRICATION (ship-boat mfg.) 619.130-014
SUPERVISOR, ALUM PLANT (chemical) 559.132-062
Supervisor, Ammunition-Loading (ordnance) 737.137-018
SUPERVISOR, ANIMAL CRUELTY INVESTIGATION (nonprofit org.) 379.137-010
SUPERVISOR, ANIMAL MAINTENANCE (pharmaceut.) 410.137-018
Supervisor, Anodizing (electroplating) 500.131-010
SUPERVISOR, AREA (agriculture) 401.137-010
SUPERVISOR, ARTIFICIAL BREAST FABRICATION (protective dev.) 712.134-010
SUPERVISOR, ARTIFICIAL BREEDING RANCH (agriculture) 410.131-014
SUPERVISOR, ARTIST, SUSPECT (government ser.) 970.131-014
SUPERVISOR, ASBESTOS-CEMENT SHEET (nonmet. min.) 679.130-018
SUPERVISOR, ASBESTOS PIPE (nonmet. min.) 679.130-014
SUPERVISOR, ASBESTOS REMOVAL (construction) 869.134-026
SUPERVISOR, ASBESTOS TEXTILE (nonmet. min.) 579.137-014
SUPERVISOR, ASPHALT PAVING (construction) 853.13.-010
Supervisor, Assembling (rubber goods) 759.137-010
SUPERVISOR, ASSEMBLY (agric. equip.) 801.137-010
Supervisor, Assembly (electron. comp.) 726.134-010
SUPERVISOR, ASSEMBLY (motor-bicycles) 806.131-014
SUPERVISOR, ASSEMBLY (pen & pencil) 733.137-010
SUPERVISOR, ASSEMBLY (woodworking) 769.137-014
SUPERVISOR, ASSEMBLY-AND-PACKING (cutlery-hrdwr.) 701.137-010
SUPERVISOR, ASSEMBLY DEPARTMENT (struct. metal) 809.130-010
SUPERVISOR, ASSEMBLY I (office machines) 710.137-010
Supervisor, Assembly II (office machines) 706.131-014
supervisor, assembly line (house. appl.) 723.131-010
Supervisor, Assembly Line (inst. & app.) 710.131-042
SUPERVISOR, ASSEMBLY ROOM (fabrication, nec) 739.134-010
SUPERVISOR, ASSEMBLY ROOM (furniture) 669.130-010
Supervisor, Assembly Room (print. & pub.) 653.131-010
SUPERVISOR, ASSEMBLY STOCK (clerical) 222.137-042
SUPERVISOR, AUDIT CLERKS (clerical) 210.132-010
supervisor, automatic cutting machines (glass mfg.) 677.131-010
SUPERVISOR, AUTOMATIC MACHINES (clock & watch) 609.130-022
SUPERVISOR, AUTOMOBILE BODY REPAIR (automotive ser.) 807.137-010
SUPERVISOR, AVIONICS SHOP (air trans.) 823.131-018
Supervisor, Backfilling (construction) 850.137-014
Supervisor, Back Shop (hat & cap) 784.130-010
Supervisor, Bakery Sanitation (bakery products) 529.137-014
Supervisor, Baking (steel & rel.) 549.137-010
Supervisor, Barrel Assembly (wood. container) 764.134-010
Supervisor, Battery Assembly (elec. equip.) 727.130-010
SUPERVISOR, BEAM DEPARTMENT (leather mfg.) 589.134-010
SUPERVISOR, BEATER ROOM (paper & pulp) 530.132-014
SUPERVISOR, BEEHIVE KILN (chemical) 563.137-010
SUPERVISOR, BEET END (sugar & conf.) 529.132-018
SUPERVISOR, BELT-AND-LINK ASSEMBLY (ordnance) 737.137-022
Supervisor, Benzene-Refining (petrol. refin.) 549.132-030
SUPERVISOR, BILLPOSTING (business ser.) 841.137-010
SUPERVISOR, BINDERY (print. & pub.) 653.131-010
SUPERVISOR, BIT AND SHANK DEPARTMENT (fabrication, nec) 739.130-010
SUPERVISOR, BLAST FURNACE (smelt. & refin.) 512.132-022
SUPERVISOR, BLAST FURNACE (steel & rel.) 519.132-010
SUPERVISOR, BLAST-FURNACE-AUXILIARIES (steel & rel.) 519.132-014
Supervisor, Blasting (mine & quarry) 939.137-014
SUPERVISOR, BLEACH (chemical) 559.137-018
Supervisor, Bleach Plant (paper & pulp) 539.132-014
SUPERVISOR, BLOOD-DONOR RECRUITERS (medical ser.) 293.137-010
SUPERVISOR, BLOOMING MILL (steel & rel.) 613.130-010

SUPERVISOR, BLUEPRINTING-AND-PHOTOCOPY

SUPERVISOR, BLUEPRINTING-AND-PHOTOCOPY (any industry) 979.130-010
Supervisor, Boarding (knitting) 684.137-010
SUPERVISOR, BOARD MILL (concrete prod.) 579.130-010
SUPERVISOR, BOATBUILDERS, WOOD (ship-boat mfg.) 860.131-014
SUPERVISOR, BOAT OUTFITTING (ship-boat mfg.) 806.131-018
Supervisor, Body Assembly (auto. mfg.) 806.134-010
Supervisor, Body Department (hat & cap) 784.130-010
SUPERVISOR, BOILERMAKING (struct. metal) 805.131-010
Supervisor, Boilermaking Shop (struct. metal) 805.131-010
SUPERVISOR, BOILER REPAIR (any industry) 805.137-010
SUPERVISOR, BONDING (textile) 589.137-014
SUPERVISOR, BONE PLANT (chemical) 559.132-066
Supervisor, Border Department (furniture) 780.137-010
SUPERVISOR, BOTTLE-HOUSE CLEANERS (beverage) 529.132-022
Supervisor, Bottle Machines (glass mfg.) 575.130-018
Supervisor, Braid Department (hat & cap) 784.130-010
Supervisor, Braiding (nonmet. min.) 692.130-022
SUPERVISOR, BRAKE REPAIR (r.r. trans.) 622.137-010
SUPERVISOR, BREW HOUSE (beverage) 529.132-026
SUPERVISOR, BRIAR SHOP (fabrication, nec) 761.130-010
SUPERVISOR, BRIDGES AND BUILDINGS (r.r. trans.) 182.167-034
SUPERVISOR, BRINE (chemical) 558.134-010
SUPERVISOR, BRINEYARD (can. & preserv.) 522.134-010
Supervisor, Broadloom (carpet & rug) 687.132-010
Supervisor, Brooder Farm (agriculture) 411.131-010
SUPERVISOR, BROOMMAKING (fabrication, nec) 692.130-026
Supervisor, Buffing-And-Pasting (leather mfg.) 589.130-030
supervisor, building maintenance (any industry) 381.137-010
SUPERVISOR, BURLING AND JOINING (textile) 689.132-010
SUPERVISOR, BURNING, FORMING, AND ASSEMBLY (elec. equip.) 727.130-010
SUPERVISOR, BYPRODUCTS (steel & rel.) 542.132-010
SUPERVISOR, CAB (motor trans.) 913.133-014
Supervisor, Calcining (smelt. & refin.) 519.130-026
SUPERVISOR, CALENDERING (paper & pulp) 534.132-010
Supervisor, Calibration (inst. & app.) 710.131-042
Supervisor, Camp Department (tex. prod., nec) 787.132-010
SUPERVISOR, CANAL-EQUIPMENT MAINTENANCE (waterworks) 899.130-010
SUPERVISOR, CANDLE MAKING (fabrication, nec) 590.132-010
SUPERVISOR, CANDY (sugar & conf.) 529.130-010
Supervisor, Canvas Products (tex. prod., nec) 789.132-018
Supervisor, Capacitor Processing (electron. comp.) 590.130-010
SUPERVISOR, CAP-AND-HAT PRODUCTION (hat & cap) 784.130-010
SUPERVISOR, CAR AND YARD (r.r. trans.) 622.137-014
SUPERVISOR, CARBON ELECTRODES (steel & rel.) 549.137-010
SUPERVISOR, CARBON-PAPER-COATING (pen & pencil) 534.137-010
SUPERVISOR, CARDING (textile) 680.130-010
SUPERVISOR, CARDROOM (amuse. & rec.) 343.137-014
SUPERVISOR, CAR INSTALLATIONS (railroad equip.) 806.137-010
Supervisor, Car-Loading-And-Unloading (motor trans.) 929.137-018
SUPERVISOR, CARPENTERS (construction) 860.131-018
SUPERVISOR, CARTOGRAPHY (profess. & kin.) 018.131-010
SUPERVISOR, CARTON AND CAN SUPPLY (beverage) 920.132-014
Supervisor, Case Loading (beverage) 922.137-018
SUPERVISOR, CASHIERS (hotel & rest.; retail trade) 211.137-010
SUPERVISOR, CASTING-AND-PASTING (elec. equip.) 502.130-010
SUPERVISOR, CD-AREA (chemical) 559.132-070
SUPERVISOR, CELLARS (beverage) 914.132-018
SUPERVISOR, CELL-EFFICIENCY (chemical) 558.134-018
Supervisor, Cell Maintenance (smelt. & refin.) 630.134-010
SUPERVISOR, CELL OPERATION (smelt. & refin.) 519.132-018
SUPERVISOR, CELL ROOM (chemical) 558.134-014
SUPERVISOR, CEMETERY WORKERS (real estate) 406.134-010
SUPERVISOR, CENTRAL SUPPLY (medical ser.) 381.137-014
SUPERVISOR, CEREAL (grain-feed mills) 529.132-030
SUPERVISOR, CHANNEL PROCESS (chemical) 559.137-022
SUPERVISOR, CHAR HOUSE (sugar & conf.) 523.132-010
Supervisor, Chassis Assembly (auto. mfg.) 806.134-010
SUPERVISOR, CHEMICAL (plastic-synth.) 558.132-010
Supervisor, Chicken Hatchery (agriculture) 411.137-010
SUPERVISOR, CHIMNEY CONSTRUCTION (construction) 801.131-010
supervisor, chipping (chemical; saw. & plan.) 564.132-010
Supervisor, Chlorine-Liquefaction (chemical) 559.132-106
SUPERVISOR, CHOCOLATE-AND-COCOA PROCESSING (sugar & conf.) 529.130-014
SUPERVISOR, CHRISTMAS-TREE FARM (forestry) 451.137-014
Supervisor, Cigarette-Filter Making Department (tobacco) 529.137-026
Supervisor, Cigarette-Making Department (tobacco) 529.137-026
Supervisor, Cigarette-Packing Department (tobacco) 529.137-026
SUPERVISOR, CIGAR MAKING, HAND (tobacco) 790.134-010
SUPERVISOR, CIGAR-MAKING MACHINE (tobacco) 529.132-034
Supervisor, Cigar Processing (tobacco) 529.137-026
SUPERVISOR, CIGAR TOBACCO PROCESSING (tobacco) 529.137-034
SUPERVISOR, CIRCUS (amuse. & rec.) 969.137-010
SUPERVISOR, CLAIMS (insurance) 241.137-018
Supervisor, Clam-Bed (fishing & hunt.) 446.133-010
SUPERVISOR, CLASSIFIED ADVERTISING (print. & pub.) 247.137-014
SUPERVISOR, CLAY PREPARATION (pottery & porc.) 570.130-010
SUPERVISOR, CLAY SHOP (pottery & porc.) 774.130-010
SUPERVISOR, CLEANING (beverage; can. & preserv.; dairy products; food prep., nec) 699.137-010
Supervisor, Cleaning And Annealing (steel & rel.) 619.130-018
SUPERVISOR, CLOTH WINDING (tex. prod., nec) 689.130-022
supervisor, coal handling (any industry) 921.137-010
SUPERVISOR, COAL HANDLING (steel & rel.) 549.132-018
SUPERVISOR, COATING (photo. appar.) 534.130-010
SUPERVISOR, COATING (plastic-synth.) 554.137-014
SUPERVISOR, COFFEE (food prep., nec) 529.130-018
Supervisor, Coil And Armature Inspection (elec. equip.) 721.131-014
supervisor, coil springs (metal prod., nec) 619.130-026
Supervisor, Coil Winding (elec. equip.; electron. comp.) 724.130-010
SUPERVISOR, COIL WINDING (elec. equip.) 724.131-010
SUPERVISOR, COIN-MACHINE (svc. ind. mach.) 706.130-010
SUPERVISOR, COKE HANDLING (steel & rel.) 549.132-022
SUPERVISOR, COLD ROLLING (steel & rel.) 619.130-018
Supervisor, Color Making (chemical) 559.132-054
supervisor, color making (chemical) 559.132-122
SUPERVISOR, COLOR-PASTE MIXING (textile) 550.135-010
Supervisor, Commercial Fish Hatchery (fishing & hunt.) 446.134-010
SUPERVISOR, COMMISSARY PRODUCTION (hotel & rest.) 319.137-022
SUPERVISOR, COMMUNICATIONS-AND-SIGNALS (r.r. trans.) 184.167-290
SUPERVISOR, COMPONENT ASSEMBLER (mfd. bldgs.) 762.134-010
SUPERVISOR, COMPOSING-ROOM (print. & pub.) 973.137-010
SUPERVISOR, COMPOUNDING-AND-FINISHING (chemical) 550.137-010
SUPERVISOR, COMPRESSED YEAST (food prep., nec) 520.132-014
SUPERVISOR, COMPUTER OPERATIONS (clerical) 213.132-010
SUPERVISOR, CONCRETE BLOCK PLANT (concrete prod.) 579.130-014
SUPERVISOR, CONCRETE PIPE PLANT (concrete prod.) 579.130-018
SUPERVISOR, CONCRETE-STONE FABRICATING (concrete prod.) 575.131-010
SUPERVISOR, CONCRETE-STONE FINISHING (concrete prod.) 775.131-010
SUPERVISOR, CONDITIONING YARD (steel & rel.) 619.134-010
SUPERVISOR, CONTACT AND SERVICE CLERKS (utilities) 249.137-014
Supervisor, Contact Lens (optical goods) 716.130-010
SUPERVISOR, CONTINGENTS (retail trade) 205.367-050
SUPERVISOR, CONTINUOUS-WELD-PIPE MILL (steel & rel.) 619.130-022
SUPERVISOR, CONTRACT-SHELTERED WORKSHOP (nonprofit org.) 187.134-010
SUPERVISOR, COOK HOUSE (chemical) 559.132-074
SUPERVISOR, COOK ROOM (can. & preserv.) 529.132-038
SUPERVISOR, COOLER SERVICE (svc. ind. mach.) 637.131-010
SUPERVISOR, COOPERAGE SHOP (wood. container) 764.134-010
SUPERVISOR, CORDUROY CUTTING (textile) 585.130-010
SUPERVISOR, CORE DRILLING (construction) 850.137-010
SUPERVISOR, COREMAKER (paper & pulp) 640.132-010
Supervisor, Core Shop (toy-sport equip.) 692.132-018
SUPERVISOR, CORNCOB PIPE MANUFACTURING (fabrication, nec) 739.132-010
SUPERVISOR, CORRESPONDENCE SECTION (insurance) 249.137-018
SUPERVISOR, COSTUMING (motion picture; radio-tv broad.) 962.137-018
supervisor, counseling and guidance (education) 045.117-010
SUPERVISOR, COVERING AND LINING (fabrication, nec) 780.134-010
Supervisor, Crack-Off (glass mfg.) 775.130-010
SUPERVISOR, CREDIT AND LOAN COLLECTIONS (clerical) 241.137-010
Supervisor, Culvert Laying (construction) 859.137-010
SUPERVISOR, CURED-MEAT PACKING (meat products) 529.135-014
SUPERVISOR, CURED MEATS (meat products) 525.132-010
SUPERVISOR, CURING ROOM (tobacco) 529.137-038
SUPERVISOR, CUSTOMER-COMPLAINT SERVICE (clerical) 241.137-014
SUPERVISOR, CUSTOMER RECORDS DIVISION (utilities) 249.137-022
SUPERVISOR, CUSTOMER SERVICES (motor trans.) 248.137-018
SUPERVISOR, CUTTING AND BONING (meat products) 525.131-014
SUPERVISOR, CUTTING-AND-SEWING DEPARTMENT (furniture) 780.131-010
Supervisor, Cutting-And-Sewing Room (furniture) 780.137-010
SUPERVISOR, CUTTING AND SPLICING (motion picture; photofinishing) 976.134-010
SUPERVISOR, CUTTING DEPARTMENT (any industry) 781.134-010
Supervisor, Cutting Department (furniture) 780.131-010
SUPERVISOR, CUTTING DEPARTMENT (pen & pencil) 669.130-014
Supervisor, Cytogenetic Laboratory (medical ser.) 078.261-026
Supervisor, Cytology (medical ser.) 078.281-010
SUPERVISOR, DAIRY FARM (agriculture) 410.131-018
SUPERVISOR, DAIRY PROCESSING (dairy products) 529.131-014
Supervisor, Dairy Sanitation (dairy products) 529.137-014
supervisor, data processing (clerical) 213.132-010

Supervisor, Decaling (pottery & porc.) 749.131-010
SUPERVISOR, DECORATING (glass mfg.) 652.130-010
SUPERVISOR, DECORATING (pottery & porc.) 749.131-010
SUPERVISOR, DEHYDROGENATION (chemical; petrol. refin.) 559.132-078
SUPERVISOR, DELIVERY DEPARTMENT (tel. & tel.) 230.137-014
SUPERVISOR, DENTAL LABORATORY (protective dev.) 712.131-010
Supervisor, Denture Department (protective dev.) 712.131-010
SUPERVISOR, DETASSELING CREW (agriculture) 401.137-014
SUPERVISOR, DIALS (clock & watch) 715.131-014
SUPERVISOR, DIAMOND FINISHING (jewelry-silver.) 770.131-014
SUPERVISOR, DIE CASTING (foundry; smelt. & refin.) 514.130-014
SUPERVISOR, DIMENSION WAREHOUSE (furniture) 769.134-010
SUPERVISOR, DISPLAY FABRICATION (fabrication, nec) 739.134-014
Supervisor, Ditching (construction) 850.137-014
SUPERVISOR, DIVERSIFIED CROPS (agriculture) 407.131-010
SUPERVISOR, DOCK (petrol. refin.; pipe lines) 914.137-018
Supervisor, Dock (steel & rel.) 921.137-010
SUPERVISOR, DOG LICENSE OFFICER (nonprofit org.) 379.137-014
SUPERVISOR, DOPING (construction) 843.134-010
SUPERVISOR, DRAFTING AND PRINTED CIRCUIT DESIGN (profess. & kin.) 003.131-010
Supervisor, Drapery Hanging (motion picture) 962.137-022
SUPERVISOR, DRAWING (nonfer. metal; steel & rel.) 614.132-010
Supervisor, Drawing (textile) 680.130-010
Supervisor, Drawing-in Department (textile) 681.130-010
SUPERVISOR, DRIED YEAST (food prep., nec) 529.132-042
Supervisor, Drilling And Shooting (mine & quarry) 939.137-014
SUPERVISOR, DRY-CELL ASSEMBLY (elec. equip.) 727.137-010
SUPERVISOR, DRY CLEANING (laundry & rel.) 369.137-010
SUPERVISOR, DRYING (millwork-plywood) 563.135-010
Supervisor, Drying-And-Softening (leather mfg.) 589.130-030
SUPERVISOR, DRYING AND WINDING (plastic-synth.) 559.134-014
SUPERVISOR, DRY PASTE (chemical) 559.132-082
SUPERVISOR, DRY-STARCH (grain-feed mills) 529.132-046
SUPERVISOR, DRY-WALL APPLICATION (construction) 842.131-010
Supervisor, Dumping (construction) 859.137-010
Supervisor, Dyeing And Finishing Department (fabrication, nec) 739.137-018
SUPERVISOR, EDGING (glass products) 673.130-010
SUPERVISOR, EDUCATION (education) 099.117-026
supervisor, education and custody (government ser.) 375.367-010
SUPERVISOR, EGG PROCESSING (can. & preserv.; wholesale tr.) 529.137-042
Supervisor, Egg-Producing Farm (agriculture) 411.131-010
SUPERVISOR, ELECTRICAL ASSEMBLIES (elec. equip.; machinery mfg.) 826.131-014
SUPERVISOR, ELECTRICAL ASSEMBLY (elec. equip.) 729.130-010
SUPERVISOR, ELECTRICAL REPAIR AND TELEPHONE LINE MAINTENANCE (utilities) 829.131-022
Supervisor, Electric Motor Testing (elec. equip.) 721.131-014
Supervisor, Electrolytic Tinning (nonfer. metal) 500.131-010
SUPERVISOR, ELECTRONIC COILS (elec. equip.; electron. comp.) 724.130-010
SUPERVISOR, ELECTRONIC CONTROLS REPAIRER (engine-turbine) 828.131-010
Supervisor, Electronics Assembly (electron. comp.; office machines) 726.130-010
Supervisor, Electronics Inspection (electron. comp.) 726.130-010
SUPERVISOR, ELECTRONICS PROCESSING (electron. comp.) 590.130-010
SUPERVISOR, ELECTRONICS PRODUCTION (comm. equip.; electron. comp.) 726.130-010
SUPERVISOR, ELECTRONICS SYSTEMS MAINTENANCE (any industry) 828.161-010
Supervisor, Electronics Testing (electron. comp.) 726.130-010
supervisor, electronic testing (electron. comp.) 726.131-018
Supervisor, Electron-Tube Processing (electron. comp.) 590.130-010
SUPERVISOR, ELECTROTYPING AND STEREOTYPING (print. & pub.) 974.131-010
Supervisor, Elementary Education (education) 099.117-026
SUPERVISOR, ENDLESS TRACK VEHICLE (automotive ser.) 620.131-010
supervisor, energy conservation representative (utilities) 959.137-022
Supervisor, Engine Assembly (auto. mfg.) 806.134-010
SUPERVISOR, ENGINE ASSEMBLY (engine-turbine) 806.130-010
SUPERVISOR, ENGINE-REPAIR (engine-turbine) 625.131-014
supervisor, engraving (furniture) 652.132-010
SUPERVISOR, ENGRAVING (pen & pencil) 704.131-014
Supervisor, Enrobing (sugar & conf.) 529.130-010
SUPERVISOR, EPOXY FABRICATION (brick & tile) 579.134-014
SUPERVISOR, ERECTION SHOP (railroad equip.) 806.131-022
SUPERVISOR, ESTERS-AND-EMULSIFIERS (chemical) 559.132-086
SUPERVISOR, ESTIMATOR AND DRAFTER (utilities) 019.161-010
SUPERVISOR, EVAPORATOR (chemical) 559.137-026
supervisor, excavating (construction) 859.137-010
SUPERVISOR, EXTERMINATION (business ser.) 389.134-010
SUPERVISOR, EXTRUDING DEPARTMENT (plastic prod.) 557.130-010
SUPERVISOR, EXTRUSION (forging) 614.132-014
Supervisor, Extrusion (steel & rel.) 549.137-010
Supervisor, Fabrication (office machines) 706.131-014
SUPERVISOR, FABRICATION (wood prod., nec) 769.130-010
SUPERVISOR, FABRICATION AND ASSEMBLY (toy-sport equip.) 809.131-010
SUPERVISOR, FABRICATION DEPARTMENT (light. fix.) 723.132-010
SUPERVISOR, FACEPIECE LINE (protective dev.) 712.137-010
SUPERVISOR, FARM-EQUIPMENT MAINTENANCE (agric. equip.) 624.131-010
SUPERVISOR, FEED HOUSE (grain-feed mills) 529.132-050
SUPERVISOR, FEED MILL (grain-feed mills) 529.132-054
SUPERVISOR, FELLING-BUCKING (logging) 454.134-010
Supervisor, Felting (tex. prod., nec) 586.130-010
SUPERVISOR, FENCE MANUFACTURE (metal prod., nec) 617.130-014
SUPERVISOR, FERMENTING CELLARS (beverage) 529.132-058
SUPERVISOR, FERRY TERMINAL (water trans.) 911.137-026
SUPERVISOR, FERTILIZER (chemical) 559.132-090
SUPERVISOR, FERTILIZER PROCESSING (chemical) 559.130-014
SUPERVISOR, FIBERGLASS BOAT ASSEMBLY (ship-boat mfg.) 806.134-014
Supervisor, Fiberglass-Ship-Component Assembly (ship-boat mfg.) 806.134-014
SUPERVISOR, FIBER-LOCKING (textile) 689.132-014
Supervisor, Field Assembly-And-Erection (struct. metal) 805.131-010
SUPERVISOR, FIELD-CROP FARMING (agriculture) 404.131-010
SUPERVISOR, FIELD-PIPE-LINES (pipe lines) 914.132-022
SUPERVISOR, FILES (clerical) 206.137-010
SUPERVISOR, FILLING-AND-PACKING (paint & varnish) 920.137-022
SUPERVISOR, FILM PROCESSING (motion picture; photofinishing; radio-tv broad.) 976.131-014
SUPERVISOR, FILM PROCESSING (photofinishing) 976.132-010
Supervisor, Filter Assembly (elec. equip.; electron. comp.) 724.130-010
SUPERVISOR, FILTRATION (sugar & conf.) 529.130-022
Supervisor, Final (electron. comp.) 726.134-010
Supervisor, Final Assembly (auto. mfg.) 806.134-010
SUPERVISOR, FINAL ASSEMBLY AND PACKING (protective dev.) 712.137-014
Supervisor, Fine Grading (construction) 859.137-010
Supervisor, Finish-End (furniture) 669.130-022
Supervisor, Finishing (carpet & rug) 687.132-010
SUPERVISOR, FINISHING (fabrication, nec) 749.134-010
SUPERVISOR, FINISHING (furniture) 742.134-010
SUPERVISOR, FINISHING (glass mfg.) 775.130-010
Supervisor, Finishing (nonmet. min.) 692.130-022
Supervisor, Finishing (toy-sport equip.) 692.132-018
SUPERVISOR, FINISHING-AND-SHIPPING (steel & rel.) 619.132-026
Supervisor, Finishing/Binding (print. & pub.) 653.131-010
supervisor, finishing department (beverage) 529.132-098
Supervisor, Finishing Department (furniture) 780.137-010
Supervisor, Finishing Department (garment) 786.132-010
Supervisor, Finishing Department (hat & cap) 784.130-010
SUPERVISOR, FINISHING DEPARTMENT (nonmet. min.) 679.137-010
SUPERVISOR, FINISHING DEPARTMENT (pen & pencil) 733.137-014
SUPERVISOR, FINISHING DEPARTMENT (photofinishing) 976.137-014
SUPERVISOR, FINISHING ROOM (leather mfg.) 589.130-018
SUPERVISOR, FINISHING ROOM (print. & pub.) 979.137-010
SUPERVISOR, FIREWORKS ASSEMBLY (chemical) 737.131-010
SUPERVISOR, FISH BAIT PROCESSING (toy-sport equip.) 550.132-014
SUPERVISOR, FISH HATCHERY (fishing & hunt.) 446.134-010
SUPERVISOR, FISH PROCESSING (can. & preserv.) 525.134-010
SUPERVISOR, FITTING (any industry) 801.131-014
SUPERVISOR, FLAME CUTTING (steel & rel.) 819.132-010
Supervisor, Fleshing (leather mfg.) 589.130-022
supervisor, floor assembly (elec. equip.) 619.131-010
Supervisor, Flushing (chemical) 559.132-054
SUPERVISOR, FOAM CUTTING (tex. prod., nec) 690.130-022
SUPERVISOR, FOOD CHECKERS AND CASHIERS (hotel & rest.) 211.137-014
SUPERVISOR, FORCE ADJUSTMENT (tel. & tel.) 215.137-018
Supervisor, Forming And Tempering (metal prod., nec) 616.130-018
SUPERVISOR, FORMING DEPARTMENT I (glass mfg.) 575.130-018
SUPERVISOR, FORMING DEPARTMENT II (glass mfg.) 579.130-022
Supervisor, Frame Assembly (motor-bicycles) 806.131-014
SUPERVISOR, FRAME SAMPLE AND PATTERN (furniture) 661.137-010
SUPERVISOR, FRAMING MILL (wood prod., nec) 669.130-018
SUPERVISOR, FRUIT GRADING (wholesale tr.) 529.137-046
Supervisor, Fryer Farm (agriculture) 411.131-010
Supervisor, Fulling (tex. prod., nec) 586.130-010
supervisor, functional testing (electron. comp.) 726.131-018
SUPERVISOR, FUR DRESSING (leather mfg.) 589.130-022
Supervisor, Fur-Floor Worker (leather mfg.) 589.130-022
supervisor, furnace (glass mfg.) 579.137-026
SUPERVISOR, FURNACE PROCESS (chemical) 559.132-094
supervisor, furnace room (glass mfg.) 579.137-026
SUPERVISOR, FURNITURE ASSEMBLY (furniture) 763.134-014
SUPERVISOR, FURRIER SHOP (fur goods) 783.131-010

Supervisor, Fusing Room (optical goods) 716.130-010
SUPERVISOR, GAME FARM (agriculture) 412.131-010
SUPERVISOR, GARAGE (automotive ser.) 620.131-014
SUPERVISOR, GARMENT MANUFACTURING (garment) 786.132-010
SUPERVISOR, GAS METER REPAIR (utilities) 710.131-010
SUPERVISOR, GATE SERVICES (air trans.) 238.137-018
SUPERVISOR, GEAR REPAIR (water trans.) 623.131-014
SUPERVISOR, GELATIN PLANT (chemical) 559.137-030
supervisor, general (mine & quarry) 181.167-018
SUPERVISOR, GLAZING DEPARTMENT (textile) 582.130-010
SUPERVISOR, GLUE SPECIALTY (chemical) 559.137-034
Supervisor, Gluing (woodworking) 769.137-014
SUPERVISOR, GLYCERIN (soap & rel.) 559.132-098
Supervisor, Gold Department (protective dev.) 712.131-010
SUPERVISOR, GRADING (construction) 859.137-010
SUPERVISOR, GRAIN AND YEAST PLANTS (beverage) 529.132-062
Supervisor, Graphite (steel & rel.) 549.137-010
supervisor, grease making (petrol. refin.) 549.132-010
SUPERVISOR, GREASE REFINING (oils & grease) 553.132-010
SUPERVISOR, GREEN END DEPARTMENT (millwork-plywood) 663.132-010
Supervisor, Grid-Casting-And-Pasting (elec. equip.) 502.130-010
SUPERVISOR, GRINDING (any industry) 603.130-010
Supervisor, Grinding (glass mfg.) 775.130-010
Supervisor, Grinding (paint & varnish) 559.132-114
supervisor, grinding (smelt. & refin.) 515.130-010
Supervisor, Grinding And Polishing (optical goods) 716.130-010
SUPERVISOR, GRINDING AND SPRAYING (struct. metal) 809.134-010
supervisor, grips (motion picture) 962.137-010
supervisor, groundwood mill (paper & pulp) 530.132-022
supervisor, grove (agriculture) 403.131-010
SUPERVISOR, HAIRSPRING FABRICATION (clock & watch) 715.131-018
SUPERVISOR, HAND SILVERING (glass products) 574.134-010
Supervisor, Hand Workers (jewelry-silver.; plastic prod.) 700.131-010
Supervisor, Hanging-And-Trimming (leather mfg.) 589.130-030
SUPERVISOR, HARDBOARD (wood prod., nec) 539.130-010
Supervisor, Hard Candy (sugar & conf.) 529.130-010
supervisor, hardening (heat treating) 504.131-010
Supervisor, Harvest-Hat Department (hat & cap) 784.130-010
SUPERVISOR, HARVESTING (chemical) 939.137-022
Supervisor, Heading (wood. container) 764.134-010
SUPERVISOR, HEARING-AID ASSEMBLY (protective dev.) 726.131-014
supervisor, heat treating (heat treating) 504.131-010
SUPERVISOR, HIDE HOUSE (leather mfg.) 922.137-014
Supervisor, Histology (medical ser.) 078.261-030
SUPERVISOR, HISTORIC SITES (government ser.) 102.117-010
Supervisor, Home Economics (education) 099.117-026
SUPERVISOR, HOME-ENERGY CONSULTANT (utilities) 959.137-022
SUPERVISOR, HOME RESTORATION SERVICE (any industry) 389.137-010
SUPERVISOR, HORTICULTURAL-SPECIALTY FARMING (agriculture) 405.131-010
SUPERVISOR, HOSPITALITY HOUSE (amuse. & rec.) 359.137-010
SUPERVISOR, HOT-DIP PLATING (galvanizing) 501.137-010
SUPERVISOR, HOT-DIP-TINNING (steel & rel.) 501.130-010
SUPERVISOR, HOT-STRIP MILL (steel & rel.) 613.132-010
SUPERVISOR, HOT-WOUND SPRING PRODUCTION (metal prod., nec) 619.130-026
SUPERVISOR, HOUSECLEANER (hotel & rest.) 323.137-010
SUPERVISOR, HYDROCHLORIC AREA (chemical) 558.134-022
SUPERVISOR I (button & notion) 692.130-018
SUPERVISOR I (chemical) 559.132-054
SUPERVISOR I (fabrication, nec) 739.131-010
SUPERVISOR I (nonmet. min.) 779.131-010
SUPERVISOR I (protective dev.) 692.137-014
SUPERVISOR I (rubber goods) 759.137-010
SUPERVISOR I (tex. prod., nec) 789.132-014
SUPERVISOR, ICE HOUSE (food prep., nec) 523.137-010
SUPERVISOR, ICE STORAGE, SALE, AND DELIVERY (food prep., nec) 299.137-022
SUPERVISOR, IDENTIFICATION AND COMMUNICATIONS (government ser.) 377.134-010
SUPERVISOR II (button & notion) 734.131-010
SUPERVISOR II (chemical) 550.132-010
SUPERVISOR II (fabrication, nec) 739.131-014
SUPERVISOR II (nonmet. min.) 579.132-010
SUPERVISOR II (protective dev.) 789.134-014
SUPERVISOR II (rubber goods) 559.137-014
SUPERVISOR II (tex. prod., nec) 789.134-010
SUPERVISOR III (button & notion) 690.130-010
SUPERVISOR III (fabrication, nec) 549.132-014
SUPERVISOR III (nonmet. min.) 575.130-014
SUPERVISOR III (tex. prod., nec) 789.132-018
SUPERVISOR, INCINERATOR PLANT (sanitary ser.) 955.131-010
supervisor, in-circuit testing (electron. comp.) 726.131-018
Supervisor, Incising (wood prod., nec) 561.131-010
Supervisor, Industrial Arts Education (education) 099.117-026
supervisor, industrial garment (laundry & rel.) 222.137-014
SUPERVISOR, INSECT AND DISEASE INSPECTION (agriculture) 408.137-010
SUPERVISOR, INSECTICIDE (chemical) 559.132-102
Supervisor, Inspect, Clean-Up, And Wrap (furniture) 920.137-026
Supervisor, Inspecting (knitting) 685.130-010
Supervisor, Inspecting (optical goods) 716.130-010
SUPERVISOR, INSPECTING (paper goods) 979.137-014
SUPERVISOR, INSPECTION (agric. equip.) 801.137-014
SUPERVISOR, INSPECTION (aircraft mfg.) 806.131-038
SUPERVISOR, INSPECTION (clock & watch) 715.131-022
SUPERVISOR, INSPECTION (glass mfg.) 579.134-010
Supervisor, Inspection (inst. & app.) 710.131-042
Supervisor, Inspection (office machines) 706.131-014
SUPERVISOR, INSPECTION (pen & pencil) 733.137-018
SUPERVISOR, INSPECTION (plastic-synth.) 559.137-038
SUPERVISOR, INSPECTION (sugar & conf.) 529.137-074
SUPERVISOR, INSPECTION AND TESTING (elec. equip.) 721.131-014
SUPERVISOR, INSPECTION AND TESTING (motor-bicycles) 806.131-026
Supervisor, Inspection Department (garment) 786.132-010
Supervisor, Inspection Room (sugar & conf.) 920.137-018
SUPERVISOR, INSTANT POTATO PROCESSING (food prep., nec) 529.137-078
SUPERVISOR, INSTRUMENT ASSEMBLY (electron. comp.; inst. & app.) 710.131-038
SUPERVISOR, INSTRUMENT MAINTENANCE (any industry) 710.131-014
SUPERVISOR, INSTRUMENT MECHANICS (utilities) 710.131-018
SUPERVISOR, INSTRUMENT REPAIR (any industry) 710.131-022
SUPERVISOR, INSULATION (construction) 863.134-014
SUPERVISOR, INSULATION (nonmet. min.) 590.130-014
Supervisor, Integrated Circuit Manufacturing (electron. comp.) 590.130-010
Supervisor, Intermediates (chemical) 559.132-054
supervisor, ironworking (construction) 801.134-010
supervisor, irrigation (agriculture) 409.137-010
SUPERVISOR IV (nonmet. min.) 692.132-010
SUPERVISOR IV (tex. prod., nec) 789.132-010
SUPERVISOR, JANITORIAL SERVICES (any industry) 381.137-010
SUPERVISOR, JEWELRY DEPARTMENT (jewelry-silver.) 700.131-018
SUPERVISOR, JOINERS (ship-boat mfg.) 860.131-022
supervisor, kashruth (hotel & rest.) 319.137-026
SUPERVISOR, KENNEL (nonprofit org.) 410.134-018
SUPERVISOR, KEYMODULE ASSEMBLY (office machines) 692.130-038
Supervisor, Knitting I (knitting) 684.137-010
SUPERVISOR, KNITTING II (knitting) 685.130-010
SUPERVISOR, KOSHER DIETARY SERVICE (hotel & rest.) 319.137-026
SUPERVISOR, LABORATORY (textile) 689.134-026
SUPERVISOR, LABORATORY ANIMAL FACILITY (agriculture) 418.137-010
SUPERVISOR, LABOR GANG (any industry) 899.133-010
SUPERVISOR, LABOR GANG (construction) 850.137-014
SUPERVISOR, LACE TEARING (tex. prod., nec) 689.134-014
SUPERVISOR, LAMP SHADES (fabrication, nec) 739.137-014
SUPERVISOR, LANDSCAPE (museums; waterworks) 406.134-014
SUPERVISOR, LAST-MODEL DEPARTMENT (wood prod., nec) 761.131-010
SUPERVISOR, LATHING (construction) 842.131-014
SUPERVISOR, LAUNDRY (laundry & rel.) 361.137-010
supervisor, layout (print. & pub.) 979.131-010
Supervisor, Lead Burning (elec. equip.) 727.130-010
SUPERVISOR, LEAD REFINERY (smelt. & refin.) 519.130-018
Supervisor, Leaf-Spring Fabrication (metal prod., nec) 616.130-018
Supervisor, Leaf-Spring Repair (metal prod., nec) 616.130-018
SUPERVISOR, LENDING ACTIVITIES (financial) 249.137-034
Supervisor, Lens Generating (optical goods) 716.130-010
SUPERVISOR, LIME (concrete prod.) 579.132-014
SUPERVISOR, LINE (any industry) 619.130-030
SUPERVISOR, LINE DEPARTMENT (r.r. trans.) 825.137-010
SUPERVISOR, LIQUEFACTION-AND-REGASIFICATION (utilities) 953.132-010
SUPERVISOR, LIQUEFACTION (chemical) 559.132-106
SUPERVISOR, LIQUID YEAST (food prep., nec) 529.132-066
SUPERVISOR, LIQUOR STORES AND AGENCIES (government ser.) 185.167-062
SUPERVISOR, LITHARGE (paint & varnish) 559.132-110
SUPERVISOR, LIVESTOCK-YARD (any industry) 410.134-010
SUPERVISOR, LOADING AND UNLOADING (any industry) 922.137-018
Supervisor, Loading (any industry) 922.137-018
supervisor, loading (construction; mfd. bldgs.) 921.137-014
SUPERVISOR, LOCOMOTIVE (r.r. trans.) 625.137-010
SUPERVISOR, LOGGING (logging) 459.133-010
SUPERVISOR, LOG SORTING (logging; millwork-plywood) 455.134-010
Supervisor, Long Goods (food prep., nec) 529.132-110
Supervisor, Looping I (knitting) 684.137-010
Supervisor, Looping II (knitting) 685.130-010

Supervisor, Lost And Found (air trans.; motor trans.) 241.137-014
SUPERVISOR, LUBRICATION (any industry) 699.131-010
SUPERVISOR, LUMP ROOM (tobacco) 520.137-010
SUPERVISOR, MACHINE SETTER (any industry) 619.130-034
Supervisor, Machine Workers (jewelry-silver.; plastic prod.) 700.131-010
SUPERVISOR, MACHINING (woodworking) 669.130-022
SUPERVISOR, MAIL CARRIERS (government ser.) 230.137-018
SUPERVISOR, MAILS (government ser.) 243.137-010
SUPERVISOR, MAINSPRING FABRICATION (clock & watch) 715.131-026
SUPERVISOR, MAINTENANCE (chemical) 382.137-010
SUPERVISOR, MAINTENANCE (petrol. refin.) 899.137-018
Supervisor, Maintenance And Custodians (education) 381.137-010
SUPERVISOR, MAJOR APPLIANCE ASSEMBLY (house. appl.) 827.131-014
SUPERVISOR, MALTED MILK (dairy products) 529.132-070
SUPERVISOR, MALT HOUSE (beverage) 522.132-010
SUPERVISOR, MANUFACTURED BUILDINGS (mfd. bldgs.; vehicles, nec) 869.131-030
SUPERVISOR, MAPLE PRODUCTS (food prep., nec) 529.137-050
SUPERVISOR, MAPPING (petrol. & gas; pipe lines) 018.167-030
SUPERVISOR, MARBLE (construction) 861.131-022
SUPERVISOR, MARINA SALES AND SERVICE (retail trade) 299.137-026
SUPERVISOR, MARKING ROOM (retail trade) 209.137-026
SUPERVISOR, MATRIX (recording) 500.134-010
SUPERVISOR, MATTRESS AND BOXSPRINGS (furniture) 780.137-010
Supervisor Mechanic, Boilermaking (struct. metal) 805.131-010
SUPERVISOR, MELT HOUSE (sugar & conf.) 522.130-010
Supervisor, Mending I (knitting) 684.137-010
Supervisor, Mending II (knitting) 685.130-010
SUPERVISOR, MERCHANT-MILL ROLLING AND FINISHING (steel & rel.) 613.130-014
SUPERVISOR, METAL CANS (tinware) 703.132-010
SUPERVISOR, METAL FABRICATING (any industry) 809.130-014
SUPERVISOR, METAL FURNITURE ASSEMBLY (furniture) 709.134-010
Supervisor, Metal Furniture Fabrication (furniture) 619.130-030
SUPERVISOR, METAL HANGING (mfd. bldgs.) 809.134-014
SUPERVISOR, METALIZING (any industry) 505.130-010
SUPERVISOR, METALLURGICAL-AND-QUALITY-CONTROL-TESTING (profess. & kin.) 011.161-010
supervisor, metal placing (construction) 801.134-010
SUPERVISOR, METER-AND-REGULATOR SHOP (petrol. refin.; utilities) 710.137-014
SUPERVISOR, METER REPAIR SHOP (utilities) 710.131-026
SUPERVISOR, METER SHOP (waterworks) 710.131-030
Supervisor, Microbiology Technologists (medical ser.) 078.261-014
SUPERVISOR, MICROFILM DUPLICATING UNIT (business ser.) 976.131-018
SUPERVISOR, MICROWAVE (radio-tv broad.) 003.167-058
SUPERVISOR, MILL (tex. prod., nec) 589.130-026
SUPERVISOR, MILL HOUSE (grain-feed mills) 529.132-074
SUPERVISOR, MINE (mine & quarry) 181.167-018
SUPERVISOR, MIRROR FABRICATION (glass products) 679.137-014
SUPERVISOR, MIRROR MANUFACTURING DEPARTMENT (glass products) 579.131-010
SUPERVISOR, MIXING (tex. prod., nec) 680.135-010
SUPERVISOR, MIXING (textile) 680.130-014
Supervisor, Mixing (paint & varnish) 559.132-114
SUPERVISOR, MIXING PLACE (construction) 853.137-010
SUPERVISOR, MODEL MAKING (clock & watch) 693.130-010
Supervisor, Model Making (toy-sport equip.) 731.131-010
Supervisor, Modern Languages (education) 099.117-026
SUPERVISOR, MOLD CLEANING AND STORAGE (glass mfg.) 579.137-018
SUPERVISOR, MOLD CONSTRUCTION (concrete prod.) 860.131-026
Supervisor, Molding (nonmet. min.) 679.130-014
SUPERVISOR, MOLD MAKING (glass mfg.) 609.131-014
SUPERVISOR, MOLD-MAKING PLASTICS SHEETS (plastic-synth.) 579.137-022
SUPERVISOR, MOLD SHOP (glass mfg.) 609.131-018
SUPERVISOR, MOLD SHOP (pottery & porc.) 777.131-010
SUPERVISOR, MOLD YARD (steel & rel.) 519.137-010
SUPERVISOR, MONEY-ROOM (amuse. & rec.) 211.137-018
SUPERVISOR, MOTION-PICTURE EQUIPMENT (motion picture; photo. appar.) 714.131-010
Supervisor, Motorcycle And Wheel Assembly (motor-bicycles) 806.131-014
SUPERVISOR, MOTORCYCLE REPAIR SHOP (automotive ser.) 620.131-018
SUPERVISOR, MOTOR VEHICLE ASSEMBLY (auto. mfg.) 806.134-010
Supervisor, Multifocal Lens (optical goods) 716.130-010
SUPERVISOR, NATURAL-GAS-FIELD PROCESSING (petrol. & gas; pipe lines) 549.131-010
SUPERVISOR, NATURAL-GAS PLANT (petrol. refin.) 542.130-010
SUPERVISOR, NET MAKING (toy-sport equip.) 789.132-022
SUPERVISOR, NETWORK CONTROL OPERATORS (any industry) 031.132-010
Supervisor, Newspaper Deliveries (wholesale tr.) 292.137-014
SUPERVISOR, NUT PROCESSING (can. & preserv.) 529.130-026
SUPERVISOR, NUTRITIONAL YEAST (food prep., nec) 529.132-078
SUPERVISOR OF COMMUNICATIONS (any industry) 184.167-230
Supervisor, Offset-Plate Preparation (print. & pub.) 972.137-010
supervisor of guidance and testing (education) 045.117-010
supervisor of research (education) 045.117-010
SUPERVISOR OF SALES (business ser.) 185.157-014
SUPERVISOR OF WAY (r.r. trans.) 184.167-234
SUPERVISOR, OPEN-HEARTH STOCKYARD (steel & rel.) 922.137-022
Supervisor, Opening And Picking (textile) 680.130-010
SUPERVISOR, OPERATIONS (utilities) 952.137-026
SUPERVISOR, OPTICAL INSTRUMENTS (inst. & app.) 711.137-010
supervisor, orchard (agriculture) 403.131-010
SUPERVISOR, ORDER TAKERS (clerical) 249.137-026
SUPERVISOR, ORDNANCE TRUCK INSTALLATION (ordnance) 806.137-014
supervisor, ore dressing (smelt. & refin.) 515.130-010
SUPERVISOR, ORNAMENTAL IRONWORKING (construction) 809.131-014
SUPERVISOR, OVENS (steel & rel.) 542.132-014
Supervisor, Oyster Farm (fishing & hunt.) 446.133-010
SUPERVISOR, PACKING (boot & shoe) 788.137-010
Supervisor, Packing (glass products) 920.137-026
SUPERVISOR, PACKING (sugar & conf.) 920.130-010
SUPERVISOR, PACKING AND WRAPPING (any industry) 920.137-026
SUPERVISOR, PACKING ROOM (leather mfg.) 589.137-010
SUPERVISOR, PAINT (paint & varnish) 559.132-114
SUPERVISOR, PAINT DEPARTMENT (any industry) 749.131-014
SUPERVISOR, PAINTING (construction) 840.131-010
SUPERVISOR, PAINTING DEPARTMENT (pen & pencil) 692.137-010
SUPERVISOR, PAINTING, SHIPYARD (ship-boat mfg.) 840.131-014
SUPERVISOR, PAINT ROLLER COVERS (fabrication, nec) 692.130-030
Supervisor, Pairing And Inspecting (knitting) 684.137-010
SUPERVISOR, PAPER COATING (paper & pulp; paper goods) 534.132-014
SUPERVISOR, PAPER MACHINE (paper & pulp) 539.132-010
SUPERVISOR, PAPER PRODUCTS (paper goods) 649.130-010
SUPERVISOR, PAPER TESTING (paper & pulp; paper goods) 539.134-010
SUPERVISOR, PARACHUTE MANUFACTURING (tex. prod., nec) 789.132-026
SUPERVISOR, PARKING LOT (automotive ser.) 915.133-010
Supervisor, Partial Denture Department (protective dev.) 712.131-010
SUPERVISOR, PARTICLEBOARD (wood prod., nec) 569.132-010
SUPERVISOR, PASTE MIXING (chemical) 550.137-014
SUPERVISOR, PASTE PLANT (steel & rel.) 549.132-026
Supervisor, Patching (construction) 853.133-010
Supervisor, Patching Department (fabrication, nec) 739.137-018
SUPERVISOR, PATTERN MARKING (garment) 781.131-010
SUPERVISOR, PAYROLL (clerical) 215.137-014
supervisor, permits, easements, and right-of-way (any industry) 191.117-050
SUPERVISOR, PERSONNEL CLERKS (clerical) 209.132-010
SUPERVISOR, PHOSPHATIC FERTILIZER (chemical) 558.130-010
SUPERVISOR, PHOSPHORIC ACID (chemical) 558.132-014
SUPERVISOR, PHOSPHORUS PROCESSING (chemical) 559.132-118
Supervisor, Photocomposition (print. & pub.) 650.132-010
SUPERVISOR, PHOTOENGRAVING (print. & pub.) 971.131-010
Supervisor, Photostat (any industry) 979.130-010
SUPERVISOR, PICKING (tobacco) 521.137-010
SUPERVISOR, PICKING CREW (agriculture) 409.131-010
SUPERVISOR, PIG-MACHINE (steel & rel.) 514.137-010
SUPERVISOR, PIGMENT MAKING (chemical) 559.132-122
SUPERVISOR, PILE DRIVING (construction) 859.137-014
SUPERVISOR, PIPE FINISHING (steel & rel.) 619.130-038
SUPERVISOR, PIPE JOINTS (brick & tile) 590.134-010
SUPERVISOR, PIPE-LINE MAINTENANCE (pipe lines) 869.134-018
SUPERVISOR, PIPE-LINES (petrol. & gas) 862.131-022
SUPERVISOR, PIPE MANUFACTURE (fabrication, nec) 739.137-018
SUPERVISOR, PIT-AND-AUXILIARIES (steel & rel.) 514.137-014
SUPERVISOR, PLASTERING (construction) 842.131-018
SUPERVISOR, PLASTICS (toy-sport equip.) 556.130-014
SUPERVISOR, PLASTIC SHEETS (plastic prod.) 557.130-014
SUPERVISOR, PLASTICS PRODUCTION (boot & shoe; inst. & app.; plastic prod.; plastic-synth.) 556.130-010
Supervisor, Plate Forming (elec. equip.) 727.130-010
SUPERVISOR, PLATE HEATING, ROLLING, AND FINISHING (steel & rel.) 619.132-030
Supervisor, Plate Pasting (elec. equip.) 502.130-010
SUPERVISOR, PLATING AND POINT ASSEMBLY (pen & pencil) 733.130-010
SUPERVISOR, PLEATING (tex. prod., nec) 583.137-010
Supervisor, Pole Yard (wood prod., nec) 669.130-018
SUPERVISOR, POLICY-CHANGE CLERKS (insurance) 219.132-010
Supervisor, Polishing (glass mfg.) 775.130-010
SUPERVISOR, POND (chemical) 939.130-010
Supervisor, Porcelain Department (protective dev.) 712.131-010
Supervisor, Post-Wave (electron. comp.) 726.134-010
SUPERVISOR, POULTRY FARM (agriculture) 411.131-010
SUPERVISOR, POULTRY HATCHERY (agriculture) 411.137-010

SUPERVISOR, POULTRY PROCESSING (meat products) 525.134-014
Supervisor, Powder-And-Primer-Canning (ordnance) 737.137-018
SUPERVISOR, POWDERED METAL (nonfer. metal; steel & rel.) 509.130-010
SUPERVISOR, POWDERED SUGAR (sugar & conf.) 521.130-014
SUPERVISOR, POWER-REACTOR (chemical) 509.130-014
SUPERVISOR, PRECAST AND PRESTRESSED CONCRETE (concrete prod.) 575.131-014
Supervisor, Precision Optical Elements (optical goods) 716.130-010
supervisor, prep (print. & pub.) 972.137-010
SUPERVISOR, PREPARATION DEPARTMENT (textile) 681.130-010
SUPERVISOR, PREPARATION PLANT (mine & quarry) 549.137-014
SUPERVISOR, PREPRESS (print. & pub.) 972.137-010
SUPERVISOR, PRESSING DEPARTMENT (garment) 583.132-010
SUPERVISOR, PRESS ROOM (print. & pub.) 651.130-010
Supervisor, Pre-Wave (electron. comp.) 726.134-010
SUPERVISOR, PRINTED CIRCUIT BOARD ASSEMBLY (electron. comp.) 726.134-010
Supervisor, Printed Circuit Board Processing (electron. comp.) 590.130-010
SUPERVISOR, PRINTED CIRCUIT BOARD TESTING (electron. comp.) 726.131-018
Supervisor, Printing (rubber goods) 759.137-010
SUPERVISOR, PRINTING AND STAMPING (jewelry-silver.; leather prod.) 652.130-014
Supervisor, Printing Department (print. & pub.) 979.130-014
SUPERVISOR, PRINT LINE (furniture) 652.132-010
SUPERVISOR, PRINT SHOP (print. & pub.) 979.130-014
SUPERVISOR, PROCESSING (chemical) 551.130-010
SUPERVISOR, PROCESSING (sugar & conf.) 529.137-082
Supervisor, Process Testing (electron. comp.) 590.130-010
SUPERVISOR, PRODUCT INSPECTION (textile) 689.134-018
SUPERVISOR, PRODUCTION (paper goods) 979.137-018
SUPERVISOR, PRODUCTION (petrol. & gas) 939.131-014
SUPERVISOR, PRODUCTION (tex. prod., nec) 589.135-010
supervisor, production (tex. prod., nec) 689.130-010
SUPERVISOR, PRODUCTION CLERKS (clerical) 221.137-014
SUPERVISOR, PRODUCTION CONTROL (clerical) 221.137-018
SUPERVISOR, PRODUCTION DEPARTMENT (aircraft mfg.) 806.131-042
Supervisor, Propellant-Charge-Loading (ordnance) 737.137-018
SUPERVISOR, PROPERTIES (motion picture) 962.137-026
SUPERVISOR, PROP-MAKING (motion picture) 962.137-022
SUPERVISOR, PROTECTIVE-SIGNAL OPERATIONS (business ser.) 379.137-022
SUPERVISOR, PUBLICATIONS PRODUCTION (print. & pub.) 979.131-010
supervisor, publications (profess. & kin.) 132.017-018
supervisor, public-health nursing (medical ser.) 075.127-026
SUPERVISOR, PUBLIC MESSAGE SERVICE (tel. & tel.) 239.137-026
Supervisor, Pullet Farm (agriculture) 411.131-010
SUPERVISOR, PULP HOUSE (sugar & conf.) 529.130-030
SUPERVISOR, PULP PLANT (paper & pulp) 539.132-014
SUPERVISOR, PUMPING (smelt. & refin.) 914.131-010
SUPERVISOR, PUMPING STATION (waterworks) 954.130-010
SUPERVISOR, PUNCH-AND-ASSEMBLY DEPARTMENT (elec. equip.) 619.130-042
SUPERVISOR, PURIFICATION (petrol. refin.) 549.132-030
SUPERVISOR, PUTTY AND CALKING (paint & varnish) 559.137-042
Supervisor, Pyrotechnic-Loading (ordnance) 737.137-018
Supervisor, Quality Control (electron. comp.) 726.134-010
SUPERVISOR, QUALITY CONTROL (furniture) 763.134-010
SUPERVISOR, QUALITY CONTROL (photofinishing) 976.131-022
SUPERVISOR, QUILTING (textile) 689.134-022
SUPERVISOR, RADIO INTERFERENCE (electron. comp.) 823.131-022
SUPERVISOR, RAG ROOM (paper & pulp) 539.137-010
SUPERVISOR, RAILROAD CAR REPAIR (railroad equip.) 622.131-010
SUPERVISOR, REACTOR FUELING (chemical) 929.132-010
SUPERVISOR, READY-MIXED FOOD PREPARATION (food prep., nec) 529.137-054
SUPERVISOR, REAL-ESTATE OFFICE (real estate) 249.137-030
SUPERVISOR, RECEIVING AND PROCESSING (glass mfg.) 579.137-026
SUPERVISOR, RECLAMATION (mine & quarry) 850.133-010
SUPERVISOR, RECLAMATION (wholesale tr.) 621.137-010
SUPERVISOR, RECORD PRESS (recording) 559.130-018
supervisor, records change (insurance) 219.132-010
SUPERVISOR, REFINING (chemical) 559.132-126
SUPERVISOR, REFINING (sugar & conf.) 529.130-034
SUPERVISOR, REFRACTORY PRODUCTS (brick & tile) 579.134-018
SUPERVISOR, REINFORCED-STEEL-PLACING (construction) 801.134-010
Supervisor, Remelt (sugar & conf.) 522.130-010
SUPERVISOR, REPULPING (paper & pulp) 539.132-018
SUPERVISOR, RESEARCH DAIRY FARM (agriculture) 410.134-022
SUPERVISOR, RESEARCH KENNEL (agriculture) 418.137-014
supervisor, research shop (petrol. & gas) 710.131-034
SUPERVISOR, REVERBERATORY FURNACE (smelt. & refin.) 519.130-022
Supervisor, Rework (inst. & app.) 710.131-042
SUPERVISOR, RICE MILLING (grain-feed mills) 521.131-010
SUPERVISOR, RIDE ASSEMBLY (amuse. & rec.) 801.131-018
SUPERVISOR, RIDES (amuse. & rec.) 342.137-010
SUPERVISOR, RIGGER (ship-boat mfg.) 806.131-030
SUPERVISOR, RIGHT-OF-WAY MAINTENANCE (utilities) 859.133-010
SUPERVISOR, RIPRAP PLACING (construction) 850.137-018
Supervisor, Riveting (construction) 809.131-018
SUPERVISOR, ROCKET PROPELLANT PLANT (ordnance) 559.137-046
supervisor, rod placing (construction) 801.134-010
Supervisor, Roe Processing (can. & preserv.) 529.137-062
SUPERVISOR, ROLLER PRINTING (textile) 652.130-018
SUPERVISOR, ROLLER SHOP (textile) 979.131-014
supervisor, rolling room (tobacco) 520.137-010
SUPERVISOR, ROLL SHOP (steel & rel.) 604.130-010
SUPERVISOR, ROOFING PLANT (build. mat., nec) 590.130-018
SUPERVISOR, ROSE-GRADING (agriculture) 405.137-010
Supervisor, Rough-End (furniture) 669.130-022
Supervisor, Rough Grading (construction) 859.137-010
SUPERVISOR, ROUNDHOUSE (railroad equip.) 622.131-014
SUPERVISOR, ROUTE SALES-DELIVERY DRIVERS (retail trade; wholesale tr.) 292.137-014
Supervisor, Roving (textile) 680.130-010
SUPERVISOR, ROVING DEPARTMENT (textile) 689.130-026
Supervisor, Rubber Covering (textile) 681.130-014
SUPERVISOR, RUBBER STAMPS AND DIES (pen & pencil) 733.131-010
SUPERVISOR, RUG CLEANING (laundry & rel.) 369.137-014
Supervisor, Ruling (paper products; print. & pub.) 653.131-010
SUPERVISOR, SAFETY DEPOSIT (financial) 295.137-010
SUPERVISOR, SALVAGE (petrol. refin.) 929.131-010
SUPERVISOR, SAMPLE (plastic-synth.) 754.137-010
SUPERVISOR, SAMPLE PREPARATION (textile) 979.137-022
SUPERVISOR, SANDBLASTER (ship-boat mfg.) 503.137-010
Supervisor, Sanding (toy-sport equip.) 692.132-018
SUPERVISOR, SANDING (woodworking) 662.132-010
Supervisor, Sanding Department (fabrication, nec) 739.137-018
SUPERVISOR, SAWING AND ASSEMBLY (furniture) 669.132-010
SUPERVISOR, SAWMILL (saw. & plan.) 669.130-026
SUPERVISOR, SCENIC ARTS (motion picture; radio-tv broad.) 149.031-010
SUPERVISOR, SCOURING PADS (nonmet. min.) 759.135-010
SUPERVISOR, SCRAP PREPARATION (steel & rel.) 519.137-014
SUPERVISOR, SCREEN MAKING (textile) 971.131-014
SUPERVISOR, SCREEN PRINTING (textile) 652.137-014
Supervisor, Seaming (knitting) 684.137-010
Supervisor, Seat Assembly (auto. mfg.) 806.134-010
SUPERVISOR, SECURITIES VAULT (financial) 216.132-014
Supervisor, Self-Service Store (government ser.) 185.167-062
Supervisor, Semiconductor Wafer Manufacturing (electron. comp.) 590.130-010
SUPERVISOR, SEWER MAINTENANCE (government ser.) 851.137-014
SUPERVISOR, SEWER SYSTEM (waterworks) 184.167-238
SUPERVISOR, SEWING DEPARTMENT (carpet & rug) 689.137-010
Supervisor, Sewing Department (furniture) 780.131-010
Supervisor, Sewing Department (hat & cap) 784.130-010
SUPERVISOR, SEWING ROOM (fabrication, nec) 787.132-014
Supervisor, Sewing Room (garment) 786.132-010
Supervisor, Shaving-And-Splitting (leather mfg.) 589.130-030
SUPERVISOR, SHEARING (any industry) 615.132-010
Supervisor, Shearing (leather mfg.) 589.130-022
SUPERVISOR, SHED WORKERS (agriculture) 404.131-014
SUPERVISOR, SHEET MANUFACTURING (smelt. & refin.) 500.132-010
SUPERVISOR, SHELLFISH FARMING (fishing & hunt.) 446.133-010
SUPERVISOR, SHIPFITTERS (ship-boat mfg.) 806.131-034
supervisor, ship maintenance services (ship-boat mfg.) 891.131-010
Supervisor, Shipping (bakery products) 922.137-018
SUPERVISOR, SHIPPING (chemical) 550.137-018
Supervisor, Shipping (plastic-synth.) 690.130-014
Supervisor, Shipping Room (beverage) 922.137-018
SUPERVISOR, SHIPPING TRACK (railroad equip.) 806.137-018
SUPERVISOR, SHOP (fabrication, nec) 692.130-042
SUPERVISOR, SHOP (petrol. & gas) 710.131-034
Supervisor, Short Goods (food prep., nec) 529.132-110
SUPERVISOR, SHOW OPERATIONS (amuse. & rec.) 969.137-014
Supervisor, Shrimp Pond (fishing & hunt.) 446.133-010
SUPERVISOR, SHUTTLE FITTING (woodworking) 669.130-030
SUPERVISOR, SHUTTLE PREPARATION (woodworking) 669.130-034
SUPERVISOR, SHUTTLE VENEERING (woodworking) 669.130-038
SUPERVISOR, SIGN SHOP (fabrication, nec) 970.137-010
SUPERVISOR, SILK-SCREEN CUTTING AND PRINTING (any industry) 979.131-018
SUPERVISOR, SILVERING DEPARTMENT (glass products) 574.132-014
SUPERVISOR, SINTERING PLANT (smelt. & refin.) 519.130-026
SUPERVISOR, SKI PRODUCTION (toy-sport equip.) 692.132-018
Supervisor, Slashing Department (textile) 681.130-010
SUPERVISOR, SLATE SPLITTING (stonework) 771.137-010
Supervisor, Sleeping-Bag Department (tex. prod., nec) 787.132-010
SUPERVISOR, SLITTING-AND-SHIPPING (plastic-synth.) 690.130-014
SUPERVISOR, SMALL APPLIANCE ASSEMBLY (house. appl.) 723.131-010

SUPERVISOR, SMOKE CONTROL (steel & rel.) 861.134-010
SUPERVISOR, SOAKERS (beverage) 529.132-082
SUPERVISOR, SOAKING PITS (steel & rel.) 509.132-010
SUPERVISOR, SOFT SUGAR (sugar & conf.) 529.130-038
Supervisor, Soldering (office machines) 706.131-014
SUPERVISOR, SOLDER MAKING (nonfer. metal) 519.132-022
SUPERVISOR, SOUND TECHNICIAN (business ser.) 823.131-026
SUPERVISOR, SPECIAL EDUCATION (education) 094.167-010
Supervisor, Special Effects (motion picture) 962.137-022
SUPERVISOR, SPECIAL SERVICES (education) 169.267-026
SUPERVISOR, SPECIALTY FOOD PRODUCTS (can. & preserv.; meat products) 529.137-062
SUPERVISOR, SPECIALTY MANUFACTURING (steel & rel.) 616.130-014
SUPERVISOR, SPECIALTY PLANT (petrol. refin.) 549.137-018
SUPERVISOR, SPINNING (textile) 682.130-010
SUPERVISOR, SPINNING AND WINDING (plastic-synth.) 689.130-038
SUPERVISOR, SPLIT AND DRUM ROOM (leather mfg.) 589.132-014
SUPERVISOR, SPLIT LEATHER DEPARTMENT (leather mfg.) 589.130-030
SUPERVISOR, SPRAY, LAWN AND TREE SERVICE (agriculture) 408.131-010
SUPERVISOR, SPRING PRODUCTION (metal prod., nec) 616.130-018
SUPERVISOR, SPRING-UP (furniture) 780.134-014
Supervisor, Stage Carpentry (motion picture) 962.137-022
SUPERVISOR, STATEMENT CLERKS (financial) 214.137-014
SUPERVISOR, STAVE CUTTING (wood. container) 667.137-010
Supervisor, Stave Finishing (wood. container) 764.134-010
SUPERVISOR, STEEL DIVISION (furniture) 616.130-022
SUPERVISOR, STEFFEN HOUSE (sugar & conf.) 529.132-086
SUPERVISOR, STENO POOL (clerical) 202.132-010
SUPERVISOR, STITCHING DEPARTMENT (tex. prod., nec) 787.132-018
SUPERVISOR, STOCK RANCH (agriculture) 410.131-022
Supervisor, Stripping (print. & pub.) 972.137-010
SUPERVISOR, STRUCTURAL ROLLING-AND-FINISHING (steel & rel.) 613.130-018
SUPERVISOR, STRUCTURAL-STEEL ERECTION (construction) 809.131-018
Supervisor, Stuffed-Toy Shells (toy-sport equip.) 787.132-010
SUPERVISOR, SUGAR HOUSE (grain-feed mills) 529.132-090
SUPERVISOR, SUGAR REFINERY (grain-feed mills) 529.132-094
SUPERVISOR, SULFURIC-ACID PLANT (chemical) 558.132-018
Supervisor, Sunglasses (optical goods) 716.130-010
SUPERVISOR, SURGICAL GARMENT ASSEMBLY (protective dev.) 712.132-010
SUPERVISOR, SURVEY WORKERS (clerical) 205.137-014
SUPERVISOR, SWIMMING-POOL MAINTENANCE (construction) 869.131-038
SUPERVISOR, SYRUP SHED (sugar & conf.) 529.137-058
SUPERVISOR, TANK CLEANING (paint & varnish) 559.137-050
Supervisor, Tank Cleaning (petrol. refin.) 899.137-018
SUPERVISOR, TANK CLEANING (water trans.) 891.137-018
SUPERVISOR, TANK HOUSE (meat products) 525.132-014
SUPERVISOR, TANK STORAGE (beverage) 529.132-098
SUPERVISOR, TAN ROOM (leather mfg.) 582.132-018
SUPERVISOR, TAPING (construction) 842.134-010
SUPERVISOR, TAR DISTILLATION (chemical) 542.130-014
SUPERVISOR, TEA AND SPICE (food prep., nec) 529.132-102
SUPERVISOR, TELECOMMUNICATOR (government ser.) 379.132-010
SUPERVISOR, TELEGRAPHIC-TYPEWRITER OPERATORS (clerical) 203.132-010
Supervisor, Telephone-Answering-Service (business ser.) 235.137-010
SUPERVISOR, TELEPHONE CLERKS (tel. & tel.) 239.132-010
SUPERVISOR, TELEPHONE INFORMATION (motor trans.) 237.137-010
Supervisor, Television-Chassis Repair (comm. equip.) 726.130-010
SUPERVISOR, TELLERS (utilities) 211.137-022
SUPERVISOR, TERMINAL OPERATIONS (motor trans.) 184.167-242
SUPERVISOR, TERRAZZO (construction) 861.131-026
Supervisor, Test And Inspection (elec. equip.; electron. comp.) 724.130-010
Supervisor, Testing (electron. comp.) 726.134-010
Supervisor, Testing (rubber goods) 759.137-010
SUPERVISOR, THERMOSTATIC CONTROLS (inst. & app.) 710.131-042
Supervisor, Thinning-Tinting (paint & varnish) 559.132-114
SUPERVISOR, THRESHING DEPARTMENT (tobacco) 521.132 014
Supervisor, Throwing Department (textile) 681.130-014
SUPERVISOR, TICKET SALES (air trans.) 238.137-022
Supervisor, Tie Yard (wood prod., nec) 669.130-018
SUPERVISOR, TILE-AND-MOTTLE (fabrication, nec) 559.130-022
SUPERVISOR, TOILET-AND-LAUNDRY SOAP (soap & rel.) 559.132-130
SUPERVISOR, TOWER (petrol. refin.) 549.130-010
SUPERVISOR, TOY ASSEMBLY (toy-sport equip.) 731.131-010
SUPERVISOR, TOY PARTS FORMER (toy-sport equip.) 692.130-034
Supervisor, Trade And Industrial Education (education) 099.117-026
SUPERVISOR, TRAIN OPERATIONS (r.r. trans.) 184.167-294
SUPERVISOR, TRANSCRIBING OPERATORS (clerical) 203.132-014
Supervisor, Transferring And Boxing (knitting) 684.137-010
Supervisor, Transmission And Fork Assembly (motor-bicycles) 806.131-014
SUPERVISOR, TRAVEL-INFORMATION CENTER (government ser.) 237.137-014
Supervisor, Travel Trailer (vehicles, nec) 869.131-030
SUPERVISOR, TREATING AND PUMPING (petrol. refin.) 549.132-034
SUPERVISOR, TREE-FRUIT-AND-NUT FARMING (agriculture) 403.131-010
SUPERVISOR, TREE-TRIMMING (utilities) 408.137-014
Supervisor, Trim Assembly (auto. mfg.) 806.134-010
Supervisor, Truck-Trailer Assembly (auto. mfg.) 806.134-010
SUPERVISOR, TRUST ACCOUNTS (financial) 219.132-014
SUPERVISOR, TUBING (textile) 689.137-014
SUPERVISOR, TUFTING (carpet & rug) 687.132-010
SUPERVISOR, TUMBLERS (ordnance) 599.132-010
SUPERVISOR, TUMBLING AND ROLLING (clock & watch) 715.131-030
SUPERVISOR, TUNNEL HEADING (construction) 859.137-018
Supervisor, Turkey Farm (agriculture) 411.131-010
Supervisor, Turkey Hatchery (agriculture) 411.137-010
Supervisor, Twisting Department (textile) 681.130-014
Supervisor, Type-Bar-And-Segment (office machines) 706.131-014
SUPERVISOR, TYPE-DISK QUALITY CONTROL (machinery mfg.) 979.137-026
SUPERVISOR, TYPE PHOTOGRAPHY (machinery mfg.) 976.131-026
SUPERVISOR, TYPESETTING (print. & pub.) 650.132-010
SUPERVISOR, UNDERWRITING CLERKS (insurance) 219.132-022
Supervisor, Unloading (any industry) 922.137-018
Supervisor, Unwrapping Room (sugar & conf.) 920.137-018
Supervisor, Upholstering (motion picture) 962.137-022
SUPERVISOR, UPHOLSTERY DEPARTMENT (any industry) 780.131-014
SUPERVISOR, URANIUM PROCESSING (smelt. & refin.) 519.130-030
SUPERVISOR V (nonmet. min.) 692.132-014
SUPERVISOR V (tex. prod., nec) 586.130-010
SUPERVISOR, VACUUM METALIZING (any industry) 505.130-014
SUPERVISOR, VARNISH (paint & varnish) 559.132-134
SUPERVISOR, VAT HOUSE (chemical; leather mfg.) 582.132-022
SUPERVISOR, VEGETABLE FARMING (agriculture) 402.131-010
SUPERVISOR, VENDOR QUALITY (any industry) 012.167-062
SUPERVISOR, VENEER (millwork-plywood) 569.135-010
SUPERVISOR VI (nonmet. min.) 692.130-022
SUPERVISOR VI (tex. prod., nec) 589.132-010
SUPERVISOR, VINE-FRUIT FARMING (agriculture) 403.131-014
SUPERVISOR, VOLUNTEER SERVICES (profess. & kin.) 187.137-014
SUPERVISOR, WALL MIRROR DEPARTMENT (glass products) 739.137-022
Supervisor, Warping Department (textile) 681.130-010
SUPERVISOR, WASH HOUSE (beverage) 529.132-106
SUPERVISOR, WATERPROOFING (construction) 843.137-010
SUPERVISOR, WATER SOFTENER SERVICE (business ser.) 862.134-014
SUPERVISOR, WATER TREATMENT PLANT (waterworks) 954.132-010
SUPERVISOR, WATERWORKS (waterworks) 184.167-246
SUPERVISOR, WEAVING (carpet & rug) 689.130-030
SUPERVISOR, WEBBING (tex. prod., nec) 789.137-014
Supervisor, Weights and Measures, Gas And Oil Inspection (government ser.) 168.167-090
SUPERVISOR, WELDING EQUIPMENT REPAIRER (welding) 626.137-010
SUPERVISOR, WET END (wood prod., nec) 539.131-010
SUPERVISOR, WET POUR (concrete prod.) 575.137-014
SUPERVISOR, WET ROOM (paper & pulp) 539.130-014
SUPERVISOR, WHEEL SHOP (railroad equip.) 622.131-018
SUPERVISOR, WHIPPED TOPPING (dairy products) 529.137-066
SUPERVISOR, WHITE SUGAR (sugar & conf.) 529.130-042
SUPERVISOR, WINDING AND TWISTING DEPARTMENT (textile) 681.130-014
Supervisor, Winding Department (textile) 681.130-014
SUPERVISOR, WIRE-ROPE FABRICATION (metal prod., nec) 691.130-014
SUPERVISOR, WOOD-CREW (saw. & plan.) 669.137-010
SUPERVISOR, WOOD ROOM (paper & pulp) 530.132-018
SUPERVISOR, WOOL-SHEARING (agriculture) 410.134-014
SUPERVISOR, WORD PROCESSING (clerical) 203.137-010
Supervisor, Wrapping Room (sugar & conf.) 920.137-018
SUPERVISOR, YARD (beverage) 529.137-070
SUPERVISOR, YARN PREPARATION (textile) 689.130-034
supervisory park ranger (government ser.) 188.167-062
SUPERVISORY WASTEWATER-TREATMENT-PLANT OPERATOR (sanitary ser.) 955.130-010
SUPPLIES PACKER (any industry) 919.687-022
supply clerk (clerical) 222.387-058
SUPPLY CLERK (personal ser.) 339.687-010
SUPPLY CONTROLLER (concrete prod.) 570.382-018
Supply Representative, Dry Gas (petrol. & gas; petrol. refin.; pipe lines) 163.117-010
supply representative, petroleum products (petrol. & gas; petrol. refin.; pipe lines) 163.117-010
supply-room clerk (clerical) 222.387-058
supply service worker (hotel & rest.) 319.484-010
Suppository Molder (pharmaceut.) 556.687-022

SUPPOSITORY-MOLDING-MACHINE OPERATOR

SUPPOSITORY-MOLDING-MACHINE OPERATOR (pharmaceut.) 556.686-022
Suppression-Crew Leader (forestry) 452.687-014
Supreme-Court Justice (government ser.) 111.107-010
Surface Carpenter (construction) 860.381-042
surface grinder (machine shop) 603.280-014
Surface-Grinder Tender (machine shop) 603.685-062
surface-grinding-machine hand (machine shop) 603.280-014
Surface-Lay-Out Technician (optical goods) 716.381-014
SURFACE-PLATE FINISHER (stonework) 775.281-010
surface-plate inspector (machine shop) 601.281-022
surface printer (paper goods) 652.662-014
surfacer operator (stonework) 677.682-022
SURFACE SUPERVISOR (mine & quarry) 932.132-014
surfacing-machine operator (stonework) 677.682-022
SURFBOARD MAKER (toy-sport equip.) 732.684-126
SURGEON (medical ser.) 070.101-094
Surgeon Assistant (medical ser.) 079.364-018
surgeon, chief (government ser.) 070.101-082
surgical-appliance fitter (retail trade) 276.257-022
SURGICAL-DRESSING MAKER (protective dev.) 689.685-130
SURGICAL-ELASTIC KNITTER, HAND FRAME (protective dev.) 685.382-010
SURGICAL-FORCEPS FABRICATOR (inst. & app.) 712.684-054
surgical orderly (medical ser.) 079.374-022
Surgical Pathologist (medical ser.) 070.061-010
SURGICAL TECHNICIAN (medical ser.) 079.374-022
surplus-property disposal agent (any industry) 163.167-026
surplus sales officer (any industry) 163.167-026
SURVEILLANCE-SYSTEM MONITOR (government ser.) 379.367-010
Survey Compiler (clerical) 209.387-014
survey hand (textile) 221.367-034
SURVEYOR ASSISTANT, INSTRUMENTS (profess. & kin.) 018.167-034
SURVEYOR, GEODETIC (profess. & kin.) 018.167-038
SURVEYOR, GEOPHYSICAL PROSPECTING (petrol. & gas) 018.167-042
SURVEYOR HELPER (any industry) 869.567-010
Surveyor Helper, Chain (any industry) 869.567-010
Surveyor Helper, Rod (any industry) 869.567-010
surveyor, hydrographic (profess. & kin.) 018.167-046
SURVEYOR, MARINE (profess. & kin.) 018.167-046
SURVEYOR, MINE (profess. & kin.) 018.161-010
SURVEYOR, OIL-WELL DIRECTIONAL (petrol. & gas) 010.261-022
SURVEY WORKER (clerical) 205.367-054
SURVIVAL-EQUIPMENT REPAIRER (government ser.) 739.381-054
SURVIVAL SPECIALIST (military ser.) 378.227-018
Suspender Cutter (garment) 686.685-066
Suspension-Cord Tier (tex. prod., nec) 789.687-118
suture gauger (protective dev.) 712.687-018
suture measurer (protective dev.) 712.687-018
SUTURE POLISHER (protective dev.) 712.687-030
SUTURE WINDER, HAND (protective dev.) 712.687-034
swabber (leather mfg.) 584.687-010
Swabber (petrol. & gas) 930.363-010
SWAGER OPERATOR (pen & pencil) 616.685-078
SWAGE TENDER (ordnance) 617.685-042
swage toolsetter (ordnance) 617.360-014
Swaging-And-Plastic Supervisor (metal prod., nec) 691.130-014
SWAGING-MACHINE ADJUSTER (ordnance) 617.360-014
SWAGING-MACHINE OPERATOR (ordnance) 617.585-010
swamper (any industry) 459.687-010
swamper (any industry) 932.664-010
swamper (saw. & plan.) 667.687-018
SWATCH CHECKER (textile) 683.260-022
SWATCH CLERK (garment) 222.587-050
SWEATBAND-CUTTING-MACHINE OPERATOR (hat & cap) 690.686-062
Sweatband-Decorating-Machine Operator (hat & cap) 583.685-030
sweatband drummer (hat & cap) 583.686-010
SWEATBAND FLANGER (hat & cap) 690.686-058
Sweatband Maker (hat & cap) 699.685-018
sweatband perforator (hat & cap) 686.685-038
Sweatband Printer (hat & cap) 652.682-030
SWEATBAND SEPARATOR (hat & cap) 585.685-122
SWEATBAND SHAPER (hat & cap) 784.687-090
sweat-box attendant (personal ser.) 335.677-014
sweater operator (petrol. refin.) 543.682-022
swedger (elec. equip.) 724.684-030
SWEDGER (jewelry-silver.) 735.687-038
sweeper (any industry) 381.687-018
sweeper (any industry) 381.687-014
SWEEPER-BRUSH MAKER, MACHINE (fabrication, nec) 692.682-066
SWEEPER-CLEANER, INDUSTRIAL (any industry) 389.683-010
Sweeper Operator, Highways (construction) 919.683-022
SWEEPING-COMPOUND BLENDER (chemical) 550.685-110
SWEEP-PRESS OPERATOR (clock & watch) 616.685-082
Sweet-Dough Mixer (bakery products) 520.685-234
SWEET-GOODS-MACHINE OPERATOR (bakery products) 520.685-214
Sweet-Pickled-Fruit Maker (can. & preserv.) 522.684-010
Sweet-Pickle Maker (can. & preserv.) 522.684-010
SWEET-POTATO DISINTEGRATOR (can. & preserv.) 521.685-358
swift tender (textile) 681.685-098
Swimming Coach (amuse. & rec.) 153.227-010
SWIMMING POOL INSTALLER-AND-SERVICER (construction) 869.463-010
SWIMMING-POOL SERVICER (any industry) 891.684-018
Swine Rancher (agriculture) 410.161-018
swing-folding-machine operator (knitting; textile) 589.685-086
swing-frame-grinder operator (foundry) 705.684-074
swing grinder (foundry) 705.684-074
Swinging-Cut-Off-Saw Operator (woodworking) 667.682-022
Swing-Ride Operator (amuse. & rec.) 342.663-010
swing tender (textile) 589.686-010
SWING-TYPE-LATHE OPERATOR (woodworking) 664.382-010
Switch Adjuster (elec. equip.) 724.381-010
Switchboard Assembler (comm. equip.; elec. equip.) 729.381-022
switchboard contact assembler (elec. equip.; light. fix.) 729.687-010
SWITCHBOARD OPERATOR (chemical) 952.362-038
switchboard operator (clerical) 235.662-022
switchboard operator (tel. & tel.) 235.462-010
SWITCHBOARD OPERATOR (utilities) 952.362-034
SWITCHBOARD OPERATOR ASSISTANT (utilities) 952.367-014
switchboard-operator helper (utilities) 952.367-014
SWITCHBOARD OPERATOR, POLICE DISTRICT (government ser.) 235.562-014
SWITCHBOX ASSEMBLER I (comm. equip.) 722.687-010
Switchbox Assembler II (comm. equip.; elec. equip.) 729.684-026
switch-house operator (mine & quarry; str., lt. & refin.) 939.362-014
Switching Clerk (r.r. trans.) 222.387-014
switching operator (radio-tv broad.) 962.162-010
SWITCH INSPECTOR (utilities) 952.381-010
switchpanel mounter (svc. ind. mach.) 731.684-010
SWITCH REPAIRER (r.r. trans.) 622.684-018
SWITCH TENDER (r.r. trans.) 910.667-026
SWITCHYARD WORKER (r.r. trans.) term
Sword Swallower (amuse. & rec.) 159.647-010
SYMBOL STAMPER, SEMICONDUCTOR PACKAGES (electron. comp.) 652.685-110
Synchro Assembler (photo. appar.) 714.684-010
Synchro-Unit Assembler (elec. equip.) 721.381-014
synthetic department supervisor (pharmaceut.) 559.130-010
SYNTHETIC-FILAMENT EXTRUDER (plastic-synth.) 557.565-014
SYNTHETIC-GEM-PRESS OPERATOR (jewelry-silver.) 575.685-078
synthetic-resin operator (plastic-synth.) 558.382-050
SYNTHETIC-STAPLE EXTRUDER (plastic-synth.) 557.665-010
Syrup Blender (beverage) 520.485-026
Syrup Crystallizer (sugar & conf.) 529.686-034
syruper (can. & preserv.) 529.685-190
Syruper, Machine (can. & preserv.) 529.685-190
Syrup Filterer (beverage) 520.485-026
syrup-kettle operator (plastic-synth.) 558.382-050
SYRUP MAKER (beverage) 520.485-026
SYRUP MAKER (sugar & conf.) 529.482-022
SYRUP-MIXER ASSISTANT (grain-feed mills) 520.687-058
SYRUP MIXER (grain-feed mills) 529.462-010
system dispatcher (utilities) 952.167-014
system operator (print. & pub.) 979.282-010
system operator, chief (utilities) 952.137-010
system operator (utilities) 952.167-014
system-planning engineer (utilities) 003.167-026
SYSTEMS ANALYST (profess. & kin.) 030.167-014
systems analyst (profess. & kin.) 161.167-010
systems checkout mechanic (aircraft mfg.) 806.261-050
systems inspector (comm. equip.; electron. comp.; inst. & app.) 726.381-010
Systems Manager (print. & pub.) 972.137-010
SYSTEMS PROGRAMMER (profess. & kin.) 030.162-022
Systems-Testing-Laboratory Technician (profess. & kin.) 003.161-014
TABBER (paper goods) 794.687-058
TAB-CARD-PRESS OPERATOR (print. & pub.) 651.382-034
Table-And-Desk Finisher (furniture) 709.687-014
table and slab depiler (steel & rel.) 504.665-010
Table Assembler, Metal (furniture) 709.684-014
table attendant (amuse. & rec.) 340.477-010
table attendant, cafeteria (hotel & rest.) 311.677-010
TABLE-COVER FOLDER (tex. prod., nec) 920.687-186
Table-Cut-Off-Saw Operator (woodworking) 667.682-022
table draper (garment; tex. prod., nec) 782.687-026
Table Filler (sugar & conf.) 529.686-034
TABLE HAND (tobacco) 521.687-138
table inspector (textile) 689.387-010
table inspector (tobacco) 529.687-090
TABLE OPERATOR (nonfer. metal; steel & rel.) 613.682-026

Table Operator (steel & rel.) 919.683-018
tablet (tex. prod., nec) 781.684-034
Table Setter (hotel & rest.) 311.677-018
tablet coater (pharmaceut.) 554.382-010
TABLE TENDER (smelt. & refin.) 511.685-062
Table Tender, Sludge (smelt. & refin.) 511.685-062
TABLET-MACHINE OPERATOR (dairy products) 529.685-238
tablet-machine operator (plastic prod.; plastic-synth.) 556.685-058
TABLET-MAKING-MACHINE OPERATOR (paper goods) 649.682-042
TABLET-MAKING-MACHINE-OPERATOR HELPER (paper goods) 649.685-130
TABLE-TOP TILE SETTER (brick & tile) 763.684-074
TABLET TESTER (pharmaceut.) 559.667-010
Table Worker (any industry) 920.587-018
TABLE WORKER (boot & shoe) 788.687-142
TABLE WORKER (fabrication, nec) 739.687-182
TABLE WORKER (leather prod.) 783.687-030
table worker (paper goods) 794.687-022
table worker (print. & pub.) 653.685-010
table worker (tex. prod., nec) 734.687-014
table worker, sewing (any industry) 782.684-058
TAB-MACHINE OPERATOR (nonmet. min.) 754.685-010
Tabular Typist (clerical) 203.582-066
tabulating clerk (clerical) 216.382-062
tacker (boot & shoe) 690.685-162
Tacker (elec. equip.) 787.685-042
tacker (fabrication, nec) 739.684-162
Tacker (garment) 782.684-058
Tacker (plastic prod.) 690.685-438
tacker (welding) 810.684-010
Tacker, Elastic Band (knitting) 787.682-074
TACKING-MACHINE OPERATOR (any industry) 787.685-042
TACKING-MACHINE OPERATOR (garment) 786.685-034
Tacking-Stitch Remover (textile) 689.686-050
TACK PULLER (boot & shoe) 788.687-146
TACK PULLER, MACHINE (boot & shoe) 690.685-410
Taco Maker (food prep., nec) 520.687-046
Taffy-Candy Maker (sugar & conf.) 529.361-014
Taffy Puller (sugar & conf.) 520.685-046
Tag-And-Label Cutter (print. & pub.) 699.682-018
Tagger (forestry) 920.687-046
tagger (laundry & rel.) 369.687-026
tagger (paper goods) 794.687-058
tagger (textile) 229.587-018
TAG-MACHINE OPERATOR (paper goods) 649.685-118
tag-meter operator (tobacco) 529.687-162
TAG-PRESS OPERATOR (paper goods) 649.682-046
tail-end rider (any industry) 932.664-010
TAILER (mine & quarry) 930.666-014
tailer (woodworking) 669.686-034
tailing hand (textile) 689.686-014
Tailing-Machine Operator (textile) 681.685-154
TAILINGS-DAM LABORER (smelt. & refin.) 511.687-026
Tailings-Dam Pumper (smelt. & refin.) 914.682-010
TAILINGS MACHINERY TENDER (smelt. & refin.) term
Tailing-Thickener Operator (smelt. & refin.) 511.485-014
tailor (garment; personal ser.; retail trade) 785.261-014
TAILOR APPRENTICE, ALTERATION (garment; personal ser.; retail trade) 785.261-018
TAILOR APPRENTICE, CUSTOM (garment; personal ser.; retail trade) 785.261-022
Tailor, Men's Ready-To-Wear Garment (retail trade) 785.261-010
Tailor, Women's-Garment Alteration (retail trade) 785.261-010
take-away attendant (textile) 589.686-010
Take-Down Inspector (photofinishing) 976.687-014
TAKE-DOWN SORTER (photofinishing) 976.665-010
taker-off (tex. prod., nec) 589.686-046
Taker-Off, Braker Machine (tex. prod., nec) 589.686-046
Taker-Off, Drying Kiln (tex. prod., nec) 589.686-046
TAKER-OFF, HEMP FIBER (tex. prod., nec) 589.686-046
Taker-Off, Scutcher Machine (tex. prod., nec) 589.686-046
TAKE-UP OPERATOR (plastic-synth.) 557.685-034
Take-Up Supervisor (construction) 899.131-010
talent (radio-tv broad.) 159.147-018
talent agent (amuse. & rec.) 191.117-010
talent director (motion picture; radio-tv broad.) 159.267-010
talk show host/hostess (radio-tv broad.) 159.147-018
TALLIER (clerical) 221.587-030
Tallow Pumper (meat products) 529.685-202
TAMALE-MACHINE FEEDER (food prep., nec) 520.686-038
Tamale Maker (food prep., nec) 520.687-046
tamper operator (construction) 869.683-018
TAMPING-MACHINE OPERATOR (construction) 869.683-018
Tamping-Machine Operator (elec. equip.) 692.482-010
Tamping-Machine Operator (r.r. trans.) 859.683-018
tamping-machine operator, road forms (construction) 869.683-010
tanbark peeler (logging) 454.687-014
Tandem-Mill Operator (nonfer. metal) 613.462-018
Tandem-Mill Roller (steel & rel.) 613.662-018
Tandem-Taping-And-Paper-Wrapping-Machine Operator (nonfer. metal) 691.682-018
tangled-yarn-spool straightener (tex. prod., nec; textile) 681.687-026
Tankage-Grinder Ope... (meat products) 529.685-202
TANKAGE SUPERVISOR (construction) 869.131-034
TANK AND AMPHIBIAN TRACTOR OPERATIONS CHIEF (military ser.) 620.137-010
tank-and-batch operator (glass mfg.) 572.382-010
TANK ASSEMBLER (wood. container) 764.684-030
Tank-Bottom Assembler (wood. container) 764.684-030
tank builder (petrol. & gas) 801.361-022
TANK BUILDER AND ERECTOR (construction) 860.381-066
tank-builder helper (petrol. & gas) 801.687-018
tank-builder supervisor (construction) 869.131-034
TANK CALIBRATOR (business ser.) 229.387-014
Tank-Car Cleaner (petrol. refin.) 891.687-022
TANK-CAR INSPECTOR (chemical) 622.684-022
TANK-CAR INSPECTOR (petrol. refin.) 910.384-010
tank-car loader (any industry) 914.667-010
Tank-Car Repairer (railroad equip.) 622.381-014
Tank Charger (meat products) 529.685-202
tank charger (oils & grease) 921.685-030
TANK CLEANER (any industry) 891.687-022
TANK CLEANER (chemical; plastic-synth.) 559.687-062
Tank Cleaner (elec. equip.) 727.687-058
TANK CLEANER (paint & varnish) 559.684-022
tank cooper (wood. container) 764.684-030
TANK CREWMEMBER (military ser.) 378.683-018
TANK ERECTOR (construction) 860.381-070
TANKER (wood prod., nec) 561.665-010
TANK-FARM ATTENDANT (chemical) 559.665-038
tank-farm gauger (petrol. & gas; petrol. refin.; pipe lines) 914.384-010
Tank-Furnace Operator (glass mfg.) 572.382-010
TANK-HOUSE OPERATOR (smelt. & refin.) 519.362-014
TANK-HOUSE-OPERATOR HELPER (smelt. & refin.) 519.565-014
Tank Insulator, Rubber (machinery mfg.) 759.684-050
tank maker, wood (construction) 860.381-066
tank operator (fabrication, nec) 582.665-022
TANK PUMPER, PANELBOARD (beverage) 529.685-242
tank refinisher (beverage) 779.684-026
tankroom supervisor (paint & varnish) 559.132-134
TANKROOM TENDER (plastic-synth.) 559.585-018
TANK SETTER (petrol. & gas) 801.361-022
TANK-SETTER HELPER (petrol. & gas) 801.687-018
Tank-Shop Supervisor (any industry) 809.130-014
Tank-Stave Assembler (wood. container) 764.684-030
TANK TENDER (smelt. & refin.) 509.685-054
TANK TENDER (sugar & conf.) 529.585-014
TANK-TRUCK DRIVER (petrol. refin.; retail trade; wholesale tr.) 903.683-018
Tank Worker (plastic-synth.) 550.685-034
tanned-hide-cutter, machine (leather prod.) 585.685-038
tanner (leather mfg.) 582.482-018
tanner (leather mfg.) 589.361-010
TANNER, ROTARY DRUM, CONTINUOUS PROCESS (leather mfg.) 582.482-014
tannery gummer (leather mfg.) 584.687-010
TANNING-DRUM OPERATOR (leather mfg.) 582.482-018
TANNING-SOLUTION MAKER (chemical) 550.682-014
Tanning Supervisor (leather mfg.) 582.131-010
Tanning-Wheel Filler (leather mfg.) 582.685-050
TAP-AND-DIE-MAKER TECHNICIAN (clock & watch) 601.280-034
Tap Dancer (amuse. & rec.) 151.047-010
tape armorer (nonfer. metal) 691.685-010
tape calender (nonmet. min.) 583.585-010
TAPE COATER (nonmet. min.) 692.685-210
Tape Control Skin-Or-Spar-Mill Operator (machine shop) 605.380-010
Tape Cutter (garment; knitting) 699.682-030
Tape Cutter (garment) 699.685-014
Tape-Cutting-Machine Operator (garment; tex. prod., nec) 686.685-066
tape duplicator (radio-tv broad.; recording) 194.382-014
TAPE-FASTENER-MACHINE OPERATOR (paper goods) 649.685-122
TAPE-FOLDING-MACHINE OPERATOR (rubber goods; tex. prod., nec) 689.685-134
Tape Keller Operator (machine shop) 605.380-010
TAPE LIBRARIAN (clerical) 206.367-018
tape machine tailer (millwork-plywood) 569.686-054
TAPE-MAKING-MACHINE OPERATOR (tex. prod., nec) 689.685-138
taper (any industry) 787.682-010
taper (any industry) 749.687-018
taper (boot & shoe) 690.685-414
taper (boot & shoe) 690.685-074

TAPER (construction; mfd. bldgs.) 842.664-010
taper (textile) 920.587-010
taper (textile) 628.684-014
taper and bedder (construction; mfd. bldgs.) 842.664-010
taper and floater (construction; mfd. bldgs.) 842.664-010
TAPE-RECORDER REPAIRER (any industry) 720.281-014
Tape-Recording-Machine Operator (radio-tv broad.; recording) 194.362-010
TAPER, MACHINE (boot & shoe) 690.685-414
TAPER, MACHINE (fabrication, nec) 692.685-214
TAPER OPERATOR (paper goods) 649.685-126
TAPER, PRINTED CIRCUIT LAYOUT (electron. comp.) 017.684-010
tape-sewing-machine operator (print. & pub.) 653.685-014
Tape Stitcher (boot & shoe) 690.682-082
TAPE STRINGER (garment; knitting) 782.687-054
TAPE TRANSFERRER (radio-tv broad.; recording) 194.382-014
Tape Weaver (narrow fabrics; nonmet. min.) 683.682-046
Tape Winder (narrow fabrics; nonmet. min.) 689.685-014
Taping Machine Operator (tex. prod., nec) 787.682-066
Tap-Out Operator (wood. container) 669.682-014
TAPPER (beverage) 529.685-246
TAPPER (nonfer. metal; smelt. & refin.) 514.664-014
TAPPER, BALANCE-WHEEL SCREW HOLE (clock & watch) 715.682-022
TAPPER, BIT (fabrication, nec) 739.685-046
TAPPER, HAND (ordnance) 737.687-134
Tapper I (clock & watch) 604.685-026
TAPPER II (clock & watch) 715.685-062
Tapper Operator (machine shop) 606.682-014
TAPPER OPERATOR (nut & bolt) 606.682-022
TAPPER, SHANK (fabrication, nec) 739.685-050
TAPPER SUPERVISOR (smelt. & refin.) 514.134-010
Tapping-Machine Operator (construction) 869.664-014
Tapping-Machine Operator, Automatic (clock & watch) 606.685-030
Tapping-Machine Operator, Automatic (nut & bolt) 619.365-010
TAPROOM ATTENDANT (amuse. & rec.) 312.677-010
tar-and-ammonia pump operator (steel & rel.) 541.362-014
tar chaser (steel & rel.) 549.687-010
TARE WEIGHER (meat products; sugar & conf.; tobacco) 221.587-034
TARGET AIRCRAFT TECHNICIAN (military ser.) 378.281-010
TARGETEER (ordnance) 736.684-042
Target-Face Maker (toy-sport equip.) 979.684-034
TARGET TRIMMER (toy-sport equip.) 732.687-078
Tar Heater (construction) 869.685-010
Tar-Heater Operator (chemical) 552.462-010
Tar Heat-Exchanger Cleaner (petrol. refin.) 891.687-030
TARIFF INSPECTOR (r.r. trans.) 214.362-034
TARIFF PUBLISHING AGENT (business ser.) 184.167-250
TARRING-MACHINE OPERATOR (tex. prod., nec) 584.685-046
tar runner (steel & rel.) 549.687-010
TASSEL-MAKING-MACHINE OPERATOR (tex. prod., nec) 689.685-142
TASTER (food prep., nec) 529.281-010
TATTOO ARTIST (personal ser.) 339.571-010
tattooer (personal ser.) 339.571-010
tattooist (personal ser.) 339.571-010
Tavern Inspector (government ser.) 168.267-066
tawer (leather mfg.) 582.482-018
tax agent (profess. & kin.) 110.117-038
Tax Analyst (government ser.) 160.167-038
TAX ATTORNEY (profess. & kin.) 110.117-038
TAX CLERK (clerical) 219.487-010
Tax Clerk (financial) 249.362-014
Tax Economist (profess. & kin.) 050.067-010
Tax Examiner (government ser.) 160.167-038
tax form preparer (business ser.) 219.362-070
TAXICAB COORDINATOR (motor trans.) 215.367-018
TAXICAB STARTER (motor trans.) 913.367-010
TAXIDERMIST (profess. & kin.) 199.261-010
TAXI DRIVER (motor trans.) 913.463-018
TAXIMETER REPAIRER (automotive ser.) 710.281-038
TAXI SERVICER (motor trans.) 915.687-030
TAX PREPARER (business ser.) 219.362-070
Tax-Record Clerk (utilities) 216.482-010
tax representative (profess. & kin.) 110.117-038
Tax Searcher (real estate) 209.367-046
TC operator (chemical) 559.682-062
Tea-Bag-Machine Tender (food prep., nec) 920.685-078
Tea Blender (food prep., nec) 520.585-026
TEACHER (museums) 099.227-038
TEACHER, ADULT EDUCATION (education) 099.227-030
TEACHER, ADVENTURE EDUCATION (education) 099.224-014
teacher aide, clerical (education) 249.367-074
TEACHER AIDE I (education) 099.327-010
TEACHER AIDE II (education) 249.367-074
TEACHER, ART (education) 149.021-010
teacher assistant (education) 099.327-010
Teacher, Ballet (education) 151.027-014
Teacher, Child Development Center (education) 092.227-018
Teacher, Citizenship (education) 099.227-030
teacher, dancing (education) 151.027-014
Teacher, Day Care Center (education) 092.227-018
TEACHER, DRAMA (education) 150.027-014
teacher, dramatics (education) 150.027-014
teacher, driver education (education) 099.223-010
Teacher, Early Childhood Development (education) 092.227-018
TEACHER, ELEMENTARY SCHOOL (education) 092.227-010
TEACHER, EMOTIONALLY IMPAIRED (education) 094.227-010
TEACHER, HEARING IMPAIRED (education) 094.224-010
TEACHER, HOME (education) term
TEACHER, HOME THERAPY (social ser.) 195.227-018
TEACHER, INDUSTRIAL ARTS (education) 091.221-010
Teacher, Instrumental (education) 152.021-010
Teacher, Junior College (education) 090.227-010
TEACHER, KINDERGARTEN (education) 092.227-014
TEACHER, LEARNING DISABLED (education) 094.227-030
Teacher, Lip Reading (education) 094.224-010
TEACHER, MENTALLY IMPAIRED (education) 094.227-022
TEACHER, MUSIC (education) 152.021-010
Teacher, Nursery School (education) 092.227-018
teacher, physical education (education) 099.224-010
TEACHER, PHYSICALLY IMPAIRED (education) 094.224-014
TEACHER, PRESCHOOL (education) 092.227-018
teacher, private (education) 099.227-034
teacher, public health (profess. & kin.) 079.117-014
TEACHER, RESOURCE (education) 099.227-042
TEACHER, SECONDARY SCHOOL (education) 091.227-010
teacher selection specialist (education) 099.167-010
teacher, theater arts (education) 150.027-014
TEACHER, VISUALLY IMPAIRED (education) 094.224-018
Teacher, Vocal (education) 152.021-010
teacher, vocational training (education) 097.221-010
TEACHER, VOCATIONAL TRAINING (education) 094.227-026
Teaching Assistant (education) 090.227-010
Tea-Leaf Reader (amuse. & rec.) 159.647-018
team coordinator (auto. mfg.) 806.367-014
team coordinator (auto. mfg.) 806.367-010
team driver (any industry) 919.664-010
team leader (auto. mfg.) 806.134-010
team leader (auto. mfg.) 806.367-014
team member (auto. mfg.) 806.684-010
TEAMSTER (any industry) 919.664-010
tear-down matcher (textile) 582.687-022
tearer (garment) 781.687-018
tearer, press clipping (business ser.) 249.587-014
tear-up worker, spring (automotive ser.) 620.584-010
Tea Taster (food prep., nec) 529.281-010
technical aide, flight test data (aircraft mfg.) 002.262-010
technical aide (profess. & kin.) see TECHNICIAN
technical assistant (pharmaceut.) 559.384-010
technical assistant (profess. & kin.) see TECHNICIAN
TECHNICAL COORDINATOR (government ser.) 209.132-014
TECHNICAL DIRECTOR, CHEMICAL PLANT (profess. & kin.) 008.167-010
TECHNICAL ILLUSTRATOR (profess. & kin.) 017.281-034
technical-maintenance technician (photo. appar.) 714.281-026
technical manager, chemical plant (profess. & kin.) 008.167-010
technical operations specialist (profess. & kin.) 033.162-018
TECHNICAL OPERATOR (petrol. & gas) 930.167-010
Technical Operator, Grain Preparation (chemical) 590.464-010
technical release analyst (any industry) 229.267-010
technical specialist (museums) 962.261-010
technical specialist, aircraft systems (aircraft mfg.) 621.221-010
Technical Stenographer (clerical) 202.362-014
TECHNICAL SUPPORT SPECIALIST (profess. & kin.) 033.162-018
TECHNICAL TESTING ENGINEER (motion picture) 194.381-010
TECHNICAL TRAINING COORDINATOR (education) 166.167-054
technician (glass mfg.) 579.367-014
TECHNICIAN (profess. & kin.) term
technician, automated equipment (machinery mfg.) 638.261-010
technician, automatic (tel. & tel.) 822.281-010
TECHNICIAN, NEWS GATHERING (radio-tv broad.) 194.362-022
technician-photographer/editor (radio-tv broad.) 194.362-022
TECHNICIAN, PLANT AND MAINTENANCE (radio-tv broad.) 822.281-030
TECHNICIAN, SEMICONDUCTOR DEVELOPMENT (profess. & kin.) 003.161-018
TECHNICIAN, SUBMARINE CABLE EQUIPMENT (tel. & tel.) 822.281-034
technician, terminal and repeater (tel. & tel.) 822.261-026
technician, test systems (any industry) 726.261-018
technologist, biochemistry (medical ser.) 078.261-010
Tectonophysicist (profess. & kin.) 024.061-030
TELECINE OPERATOR (radio-tv broad.) 194.362-018
TELECOMMUNICATOR (government ser.) 379.362-018
Telegram Messenger (tel. & tel.) 230.663-010

telegraph-equipment maintainer (tel. & tel.) 822.281-010
TELEGRAPHER (r.r. trans.) 236.562-010
TELEGRAPHER AGENT (r.r. trans.) 236.562-014
Telegraphic-Instrument Supervisor (tel. & tel.) 722.131-010
Telegraphic-Service Dispatcher (tel. & tel.) 959.167-010
Telegraphic-Typewriter Installer (tel. & tel.) 822.381-010
TELEGRAPHIC-TYPEWRITER OPERATOR (clerical) 203.582-050
telegraphic-typewriter operator, chief (clerical) 203.132-010
Telegraphic-Typewriter Repairer (tel. & tel.) 822.281-010
telegraph operator, automatic (clerical) 203.582-050
TELEGRAPH PLANT MAINTAINER (tel. & tel.) 822.381-022
Telegraph-Repeater Installer (tel. & tel.) 822.381-010
Telegraph-Repeater Technician (tel. & tel.) 822.261-026
TELEGRAPH-SERVICE RATER (tel. & tel.) 214.587-010
telemarketer (any industry) 299.357-014
telemetry technician (medical ser.) 078.367-010
Telephone Ad-Taker (print. & pub.) 247.367-010
TELEPHONE-ANSWERING-SERVICE OPERATOR (business ser.) 235.662-026
TELEPHONE CLERK, TELEGRAPH OFFICE (tel. & tel.) 239.362-010
Telephone Coin-Box Collector (tel. & tel.) 292.687-010
Telephone-Diaphragm Assembler (comm. equip.; elec. equip.) 729.684-026
TELEPHONE-DIRECTORY DELIVERER (business ser.) 230.667-014
TELEPHONE-DIRECTORY-DISTRIBUTOR DRIVER (business ser.) 906.683-018
telephone-information clerk (financial) 237.367-046
Telephone-Instrument Supervisor (tel. & tel.) 722.131-010
telephone-interceptor operator (business ser.) 235.662-026
TELEPHONE OPERATOR (clerical) 235.662-022
telephone operator (tel. & tel.) 235.462-010
TELEPHONE OPERATOR, CHIEF (clerical) 235.137-010
Telephone-Order Clerk (clerical) 249.362-026
Telephone-Order Clerk, Drive-in (hotel & rest.) 209.567-014
Telephone-Order Clerk, Room Service (hotel & rest.) 209.567-014
Telephone-Order Dispatcher (clerical) 249.362-026
telephone-plant power operator (tel. & tel.) 952.382-014
TELEPHONE-QUOTATION CLERK (financial) 237.367-046
telephoner (r.r. trans.) 236.562-010
telephone repairer (tel. & tel.) 822.281-022
telephone-sales agent (air trans.) 238.367-018
telephone sales representative (any industry) 299.357-014
TELEPHONE SOLICITOR (any industry) 299.357-014
telephone supervisor (tel. & tel.) 239.132-010
telephone-switchboard operator (clerical) 235.662-022
Telephone-Switch Repairer (comm. equip.; elec. equip.) 729.684-038
telephoto engineer (print. & pub.; tel. & tel.) 193.362-010
Telephoto Installer (tel. & tel.) 822.381-018
telephoto operator (print. & pub.) 239.382-010
Teleprinter Installer (tel. & tel.) 822.381-018
teleticketing agent (air trans.) 248.382-010
Teletype Installer (tel. & tel.) 822.381-010
teletypesetter monitor (print. & pub.) 650.685-010
teletype-telegrapher (r.r. trans.) 236.562-010
TELEVISION-AND-RADIO REPAIRER (any industry) 720.281-018
Television Announcer (radio-tv broad.) 159.147-010
Television-Cabinet Finisher (woodworking) 763.381-010
TELEVISION INSTALLER (any industry) 823.361-010
television-picture-tube rebuilder (electron. comp.) 725.381-010
Television Producer (radio-tv broad.) 159.117-010
Television-Receiver Analyzer (electron. comp.) 726.261-018
television repairer (any industry) 720.281-018
TELEVISION-SCHEDULE COORDINATOR (radio-tv broad.) 199.382-010
TELEVISION TECHNICIAN (radio-tv broad.) 194.062-010
Television-Tube Inspector (glass mfg.) 579.384-018
TELLER (financial) 211.362-018
TELLER (utilities) 211.462-034
TELLER, HEAD (financial) 211.132-010
TELLER, VAULT (financial) 211.382-010
Tempeh Maker (food prep., nec) 529.685-290
TEMPERATURE-CONTROL INSPECTOR (plastic-synth.) 559.467-010
TEMPERATURE INSPECTOR (meat products) 529.687-202
TEMPERATURE REGULATOR, PYROMETER (foundry) 512.667-010
TEMPERER (heat treating) 504.682-026
temperer (leather mfg.; tex. prod., nec) 582.685-050
tempering-kiln tender (heat treating) 504.685-018
tempering-machine operator (sugar & conf.) 523.682-010
Temper-Mill Roller (steel & rel.) 613.662-018
TEMPLATE CUTTER (cutlery-hrdwr.) 703.684-018
Template Inspector (any industry) 619.261-010
TEMPLATE MAKER (any industry) 601.381-038
TEMPLATE MAKER, EXTRUSION DIE (machine shop) 601.280-038
TEMPLATE MAKER, TRACK (any industry) 809.484-014
TEMPLATE REPRODUCTION TECHNICIAN (aircraft mfg.) 976.381-022
Template-Storage Clerk (clerical) 222.387-058
Temple-Meat Cutter (meat products) 525.684-034
templer, head (meat products) 525.684-034
tenant relations coordinator (social ser.) 195.167-014
tenderizer tender (millwork-plywood) 669.685-038
TENNIS-BALL-COVER CEMENTER (toy-sport equip.) 795.687-030
TENNIS-BALL COVERER, HAND (toy-sport equip.) 795.687-026
Tennis Coach (amuse. & rec.) 153.227-010
Tennis-Court Attendant (amuse. & rec.) 341.367-010
Tennis-Net Maker (tex. prod., nec) 789.684-030
Tennis-Racket Repairer (any industry) 732.684-122
Tenoner Offbearer (woodworking) 669.686-034
TENONER OPERATOR (wood prod., nec) 677.682-026
TENONER OPERATOR (woodworking) 669.382-018
tension checker (textile) 683.687-034
TENSIONING-MACHINE OPERATOR (concrete prod.) 616.665-010
tension machine operator (paper goods) 649.685-070
Tension Regulator (print. & pub.) 651.362-030
Tent Assembler (tex. prod., nec) 787.682-058
Tenter-Frame Back-Tender (textile) 589.686-010
Tenter-Frame Feeder (textile) 589.686-014
TENTER-FRAME OPERATOR (textile) 580.685-066
tentering-machine off-bearer (textile) 589.686-010
tentering-machine operator (textile) 580.685-066
Tent Finisher (tex. prod., nec) 789.484-014
Tentmaker (tex. prod., nec) 739.381-010
Terminal-Block Assembler (elec. equip.) 729.687-010
terminal gauger (petrol. & gas; petrol. refin.; pipe lines) 914.384-010
terminal-gauger supervisor (pipe lines) 914.132-022
TERMINAL-MAKEUP OPERATOR (print. & pub.) 208.382-010
terminal manager (motor trans.) 184.167-110
terminal superintendent (petrol. refin.; retail trade) 181.117-010
TERMINAL SUPERINTENDENT (r.r. trans.) 184.167-254
terminal supervisor (chemical) 559.132-138
terminal supervisor (petrol. refin.; pipe lines) 914.137-018
termination clerk (insurance) 203.382-014
termite treater (business ser.) 383.364-010
termite-treater helper (business ser.) 383.687-010
Terra-Cotta Mason (construction) 861.381-018
TERRAZZO FINISHER (construction) 861.664-014
terrazzo helper (construction) 861.664-014
terrazzo mechanic helper (construction) 861.664-014
Terrazzo Polisher (construction) 861.381-046
TERRAZZO-TILE MAKER (brick & tile) 575.684-046
TERRAZZO WORKER (construction) 861.381-046
TERRAZZO-WORKER APPRENTICE (construction) 861.381-050
terrazzo worker helper (construction) 861.664-014
Terry-Cloth Cutter, Hand (tex. prod., nec) 781.684-074
Terry Cloth Cutter, Machine (tex. prod., nec) 781.684-014
test assembler (nonfer. metal; steel & rel.) 509.584-010
test-bore helper (any industry) 930.687-014
test borer (any industry) 930.682-010
test-boring crew chief (construction) 850.137-010
test carrier (nonfer. metal; steel & rel.) 509.584-010
Test Cell Technician (aircraft mfg.) 621.261-014
test clerk (education) 219.467-010
TEST-DEPARTMENT HELPER (comm. equip.; elec. equip.) 729.664-010
TEST-DESK SUPERVISOR (tel. & tel.) 822.131-030
TEST DRIVER I (auto. mfg.) 806.283-014
TEST DRIVER II (auto. mfg.) 806.283-010
TEST ENGINEER (profess. & kin.) master
TEST ENGINEER, AGRICULTURAL EQUIPMENT (profess. & kin.) 013.061-022
TEST ENGINEER, MARINE EQUIPMENT (profess. & kin.) 014.061-022
TEST ENGINEER, MECHANICAL EQUIPMENT (profess. & kin.) 007.161-034
TEST ENGINEER, MINING-AND-OILFIELD EQUIPMENT (mine & quarry; petrol. & gas) 010.061-030
TEST ENGINEER, NUCLEAR EQUIPMENT (profess. & kin.) 015.061-022
TEST-ENGINE EVALUATOR (petrol. refin.) 010.261-026
TEST-ENGINE OPERATOR (petrol. refin.) 029.261-018
test equipment certification technician (aircraft mfg.) 019.281-010
TEST EQUIPMENT MECHANIC (aircraft mfg.) 710.361-014
tester (agric. equip.) 624.361-010
Tester (cutlery-hrdwr.) 701.687-026
tester (mine & quarry) 579.484-010
TESTER (musical inst.) 730.684-086
TESTER (petrol. refin.) 029.261-022
TESTER (pottery & porc.) 774.687-026
TESTER (profess. & kin.) 011.361-010
TESTER (rubber goods) 899.487-010
tester (woodworking) 762.384-010
TESTER AND INSPECTOR, LAMPS (light. fix.) 723.687-014
tester, armature or fields (elec. equip.) 724.384-010
TESTER, COMPRESSED GASES (chemical) 549.364-010
TESTER, CONVERTIBLE SOFA BEDSPRING (furniture) 780.684-110
tester, electrical accessories (aircraft mfg.) 729.381-010

TESTER, ELECTRICAL CONTINUITY (elec. equip.; house. appl.; light. fix.) 729.684-058
TESTER, ELECTRONIC SCALE (office machines) 710.381-046
tester, equipment (tel. & tel.) 822.261-026
TESTER, FOOD PRODUCTS (any industry) 199.251-010
tester helper (any industry) 381.687-022
TESTER, MOTORS AND CONTROLS (elec. equip.) 721.281-030
TESTER OPERATOR (nonfer. metal) 614.684-014
tester operator (tobacco) 529.387-014
TESTER-OPERATOR HELPER (nonfer. metal) 614.686-014
Tester, Printed Circuit Boards (electron. comp.) 726.684-026
TESTER, REGULATOR (protective dev.; toy-sport equip.) 710.387-010
tester, rocket engine (aircraft mfg.) 806.261-022
TESTER, ROCKET MOTOR (aircraft mfg.) 806.261-022
TESTER, SEMICONDUCTOR PACKAGES (electron. comp.) 726.685-054
TESTER, SEMICONDUCTOR WAFERS (electron. comp.) 726.684-102
TESTER, SOUND (machinery mfg.) 706.382-014
tester, systems (any industry) 726.261-018
tester, vibrator equipment (machinery mfg.) 825.361-014
TESTER, WAFER SUBSTRATE (electron. comp.) 726.684-106
TESTER, WASTE DISPOSAL LEAKAGE (house. appl.) 723.687-018
test examiner (clerical) 249.367-078
TEST FIXTURE ASSEMBLER (electron. comp.) 726.684-098
TEST FIXTURE DESIGNER (electron. comp.) 726.364-014
test-hole driller (any industry) 930.682-010
TESTING AND ANALYSIS DEPARTMENT SUPERVISOR (can. & preserv.) 523.131-010
TESTING-AND-REGULATING CHIEF (tel. & tel.) 184.167-258
TESTING-AND-REGULATING TECHNICIAN (tel. & tel.) 822.2[illegible]026
testing-machine operator (profess. & kin.) 011.361-010
TESTING-MACHINE OPERATOR (tex. prod., nec) 586.685-038
TESTING-MACHINE OPERATOR (tinware) 703.685-014
testing-tool operator (petrol. & gas) 930.261-014
Test-Kitchen-Home Economist (profess. & kin.) 096.121-014
TEST PILOT (aircraft mfg.) 196.263-042
TEST PREPARER (nonfer. metal; steel & rel.) 509.584-010
test puller (tobacco) 529.587-022
test rack operator (railroad equip.) 622.382-010
Test Rider (motor-bicycles) 806.281-018
TEST-SKEIN WINDER (glass mfg.) 575.685-082
TEST TECHNICIAN (agric. equip.) 019.261-022
TEST TECHNICIAN (clerical) 249.367-078
test technician (elec. equip.) 727.381-022
test technician (any industry) 726.261-018
TEST TECHNICIAN (profess. & kin.) 019.161-014
TEST TECHNICIAN, SEMICONDUCTOR PROCESSING EQUIPMENT (electron. comp.) 590.262-014
TEST WORKER (foundry) 51[illegible]687-042
Tetryl-Blender Operato. (chemical) 550.665-010
Tetryl-Boiling-Tub Operator (chemical) 551.685-014
TETRYL-DISSOLVER OPERATOR (chemical) 550.685-114
Tetryl-Nitrator Operator (chemical) 558.382-046
TETRYL-SCREEN OPERATOR (chemical) 551.685-146
tetryl-wringer operator (chemical) 551.685-162
TEXTILE ENGINEER (profess. & kin.) term
textile-scrap salvager (tex. prod., nec) 789.687-010
textile stylist (profess. & kin.) 142.061-014
TEXTURING-MACHINE FIXER (textile) 628.684-046
THAW-SHED HEATER TENDER (steel & rel.) 543.685-022
Theater Coach (profess. & kin.) 150.027-010
theater projectionist (amuse. & rec.; motion picture) 960.362-010
theatrical performer (amuse. & rec.; motion picture; radio-tv broad.) see ENTERTAINER
theatrical-scenic designer (amuse. & rec.) 142.061-050
Theatrical Variety Agent (amuse. & rec.) 191.117-014
therapeutic recreation worker (medical ser.) 076.124-014
therapist for blind (education; medical ser.; nonprofit org.) 076.224-014
THERMAL CUTTER, HAND I (welding) 816.464-010
THERMAL CUTTER, HAND II (welding) 816.684-010
Thermal-Cutter Helper (welding) 819.687-014
THERMAL-CUTTING-MACHINE OPERATOR (welding) 816.482-010
Thermal-Cutting-Tracer-Machine Operator (welding) 816.482-010
THERMAL MOLDER (rubber goods) 553.585-022
THERMAL-SURFACING-MACHINE OPERATOR (stonework) 679.685-018
Thermite-Bomb Loader (ordnance) 737.684-014
thermo-cementing-folder operator (boot & shoe) 690.685-070
Thermodynamics Engineer (aircraft mfg.) 002.061-010
Thermoelectric-Heat-Sealing-Machine Operator (tex. prod., nec) 754.684-010
thermograph operator (print. & pub.) 652.686-034
THERMOMETER MAKER (inst. & app.) 710.681-026
THERMOMETER PRODUCTION WORKER (inst. & app.) 710.685-014
THERMOMETER TESTER (inst. & app.) 710.384-030
THERMOSCREW OPERATOR (can. & preserv.) 526.685-058
Thermospray Operator (any industry) 505.380-010
Thermostat Assembler (inst. & app.) 710.684-046
THERMOSTAT-ASSEMBLY-MACHINE TENDER, AUTOMATIC (inst. & app.) 692.685-218
THERMOSTAT REPAIRER (inst. & app.) 710.381-050
THICKENER OPERATOR (smelt. & refin.) 511.485-014
Thimble-Press Operator (smelt. & refin.) 519.664-010
THINNER (paint & varnish) 550.585-038
Thinner Sprayer (auto. mfg.) 741.684-026
third assistant engineer (water trans.) 623.281-034
Third-Calender Operator (tex. prod., nec) 584.685-010
THIRD DRY-CELL-ASSEMBLING-MACHINE TENDER (elec. equip.) 692.686-066
THIRD HELPER (steel & rel.) 512.687-014
THIRD-RAIL INSTALLER (r.r. trans.) 825.381-038
Thorough Bred Horse Farm Manager (agriculture) 410.161-018
THRASHER FEEDER (paper & pulp) 533.685-030
THREAD CUTTER (any industry) 789.684-050
thread cutter (garment) 782.684-038
THREAD-CUTTER TENDER (tex. prod., nec) 689.665-014
thread drawer (tex. prod., nec) 789.687-174
thread dresser (textile) 681.682-010
THREADER (knitting) 685.680-010
THREADER (tex. prod., nec) 689.687-078
thread-grinder, tool (machine shop) 603.260-010
THREADING-MACHINE FEEDER, AUTOMATIC I (machine shop) 604.666-010
Threading-Machine Feeder, Automatic II (machine shop) 609.684-014
THREADING-MACHINE OPERATOR (machine shop) 604.682-014
THREADING-MACHINE OPERATOR (ordnance) 604.685-038
THREADING-MACHINE SETTER (machine shop) 609.380-014
THREADING-MACHINE TENDER (carpet & rug) 683.685-030
THREAD INSPECTOR (petrol. & gas) 862.381-038
THREAD INSPECTOR (plastic-synth.) 681.687-018
THREAD LASTER (boot & shoe) 788.684-114
Thread-Machine Operator (rubber goods) 559.682-034
THREAD MARKER (garment) 782.687-058
THREAD-MILLING-MACHINE SET-UP OPERATOR (machine shop) 605.382-042
thread puller (textile) 689.687-058
THREAD-PULLING-MACHINE ATTENDANT (garment) 689.686-046
THREAD SEPARATOR (tex. prod., nec) 789.687-174
thread singer (textile) 585.685-050
thread spooler (toy-sport equip.) 681.685-090
thread weaver (personal ser.) 782.381-022
THREAD WINDER, AUTOMATIC (textile) 681.685-122
three-dimensional-map modeler (any industry) 777.381-042
THRESHER, BROOMCORN (agriculture) 429.685-014
THRESHING-MACHINE OPERATOR (tobacco) 521.685-362
THRILL PERFORMER (amuse. & rec.) 159.347-018
THROWER (pottery & porc.) 774.381-010
THROW-OUT CLERK (retail trade) 241.367-030
Thumb Sewer (glove & mit.) 784.682-010
Ticker Installer (tel. & tel.) 822.381-010
ticket agent (air trans.) 248.382-010
TICKET AGENT (any industry) 238.367-026
TICKET BROKER (amuse. & rec.) 259.357-034
TICKET-CHOPPER ASSEMBLER (furniture) 739.684-154
ticket clerk (any industry) 238.367-026
ticket clerk (clerical) 211.462-010
ticket counter (amuse. & rec.) 219.587-010
TICKET-DISPENSER CHANGER (amuse. & rec.) 349.680-010
TICKETER (any industry) 652.685-098
ticketer (clerical) 221.387-046
TICKETER (textile) 229.587-018
TICKETING CLERK (air trans.) 248.382-010
ticket maker (any industry) 652.685-098
ticket maker (retail trade; wholesale tr.) 209.587-034
TICKET MARKER (wholesale tr.) 216.567-010
ticket printer (any industry) 652.685-098
TICKET PRINTER AND TAGGER (garment) 652.685-094
TICKET PULLER (tobacco) 221.687-014
ticket sales instructor (air trans.) 099.227-018
TICKET SCHEDULER (boot & shoe) 221.587-038
ticket seller (any industry) 238.367-026
TICKET SELLER (clerical) 211.467-030
ticket stamper (textile) 229.587-018
TICKET TAKER (amuse. & rec.) 344.667-010
TICKET TAKER, FERRYBOAT (water trans.) 911.677-010
TICKET WORKER (tobacco) 221.482-013
tick sewer (furniture) 780.682-010
Tie-Back Sewer, Automatic (tex. prod., nec) 787.685-014
TIE BINDER (garment) 920.687-190
tie fastener (paper goods) 649.685-122
Tie Handler (wood prod., nec) 561.686-010
TIE INSPECTOR (saw. & plan.) 669.687-026
Tie-Knitter Helper (knitting) 685.686-014

tie-mill operator (wood prod., nec) 669.682-010
tie-out worker (agriculture) 920.687-074
TIE PRESSER (knitting) 789.687-178
Tie Presser (laundry & rel.) 363.681-010
tie puller (any industry) 920.685-010
tier (garment; glove & mit.) 781.687-010
TIER (meat products) 525.687-118
TIER-AND-DETONATOR (mine & quarry) 931.664-010
Tier-Lift-Truck Operator (any industry) 921.683-050
Tier, Meat (meat products) 525.587-014
tie-tape-machine operator (paper goods) 649.685-122
TIE-UP WORKER (office machines) 710.687-034
tiger-machine operator (textile) 587.685-030
Tight Cooper (wood. container) 764.684-022
TIGHTENING-MACHINE OPERATOR (paper goods) 640.685-082
tight-rope walker (amuse. & rec.) 159.347-022
Tile-And-Terra-Cotta Roofer (construction) 866.381-010
tile classifier (brick & tile) 574.367-010
TILE-CONDUIT LAYER (construction) 861.381-062
TILE DECORATOR (brick & tile) 773.381-010
tile edger (brick & tile) 779.684-018
TILE FINISHER (construction) 861.664-018
tile fitter (construction) 861.381-054
TILE GRINDER (brick & tile) 679.685-022
Tile Inspector (fabrication, nec) 590.367-010
Tile Installer (mfd. bldgs.; vehicles, nec) 869.684-026
tile layer (construction) 861.381-054
Tile-Machine Operator (wood prod., nec) 539.562-010
tile mason (construction) 861.381-054
tile mechanic helper (construction) 861.664-018
Tile-Molder, Hand (brick & tile) 575.684-042
tile paster (brick & tile) 773.684-014
TILE-POWER-SHEAR OPERATOR (fabrication, nec) 692.685-222
TILE SETTER (construction) 861.381-054
tile setter (construction; retail trade) 861.381-034
TILE SETTER (mfd. bldgs.) 861.684-018
TILE SETTER APPRENTICE (construction) 861.381-058
tile setter helper (construction) 861.664-018
Tile Setter Supervisor (construction) 861.131-010
TILE SHADER (brick & tile) 574.367-010
TILE SORTER (brick & tile) 573.687-038
Tile Sprayer (brick & tile) 7[illegible]687-018
Tilting-Furnace Operator, Oil Or Gas (foundry) 512.362-018
tilting-head band-sawyer (woodworking) 667.682-010
Tilting-Saw Operator (woodworking) 667.682-022
Tilting-Table Operator (steel & rel.) 613.682-026
Tilt-Wall Supervisor (construction) 869.131-014
timber cruiser (forestry; logging) 459.387-010
Timber Cutter (mine & quarry) 667.682-022
TIMBER FRAMER (mine & quarry) 869.381-034
TIMBER-FRAMER HELPER (mine & quarry) 869.687-042
Timber-Incisor Operator (wood prod., nec) 569.662-010
Timbering Supervisor (construction) 860.131-018
TIMBER PACKER (saw. & plan.) 922.687-094
timber repairer (mine & quarry) 869.381-034
Timber Setter (construction) 860.381-042
TIMBER-SIZER OPERATOR (saw. & plan.) 665.482-018
Timber Sprinkler (mine & quarry) 741.687-018
timber supervisor (logging) 454.134-010
timber-treating-tank operator (wood prod., nec) 561.362-010
timber trimmer (paper & pulp; saw. & plan.) 667.685-034
Time-Analysis Clerk (clerical) 216.382-062
Time Checker (clerical) 215.362-022
Time-Clock Repairer (clock & watch) 715.281-010
Time Clock Repairer (elec. equip.) 829.261-018
TIMEKEEPER (clerical) 215.362-022
timekeeper supervisor (clerical) 215.137-014
Timer (amuse. & rec.) 153.387-014
timer (clock & watch) 715.685-034
Timer (motion picture) 976.381-010
Time-Signal Wirer (tel. & tel.) 822.381-010
time-study analyst (profess. & kin.) 012.167-070
Time-Study Analyst (profess. & kin.) 012.267-010
TIME-STUDY ENGINEER (profess. & kin.) 012.167-070
TIMING ADJUSTER (clock & watch) 715.681-010
timing-machine operator (clock & watch) 715.685-034
tin-can feeder (tobacco) 920.686-030
TIN-CONTAINER STRIAGHTENER (tobacco) 709.687-046
Tin Dipper (galvanizing) 501.685-010
Tinner, Automatic (galvanizing) 501.362-010
Tinner Operator, Connecting Rods (auto. mfg.) 599.685-026
TINNING-EQUIPMENT TENDER (elec. equip.) 501.685-014
TINNING-MACHINE SET-UP OPERATOR (print. & pub.) 653.682-022
Tin Plater (electroplating) 500.380-010
TIN RECOVERY WORKER (smelt. & refin.) 512.382-018
TIN ROLLER, HOT MILL (steel & rel.) 613.360-018
TINSEL-MACHINE OPERATOR (fabrication, nec) 692.685-226
Tinsmith (any industry) 804.281-010
TIN STACKER (tinware) 922.687-098
TINTER (paint & varnish) 550.381-014
tinter, photograph (photofinishing) 970.381-010
tin-tie-machine operator, automatic (paper goods) 649.685-110
tint layer (print. & pub.) 970.681-010
TIN-WHIZ-MACHINE OPERATOR (textile) 582.685-154
TIP BANDER (pen & pencil) 733.685-030
tip-banding-machine operator (pen & pencil) 733.685-030
Tip Burnisher (boot & shoe) 690.685-058
tip cementer (boot & shoe) 788.685-014
TIP FINISHER (boot & shoe) 690.685-418
TIP INSERTER (woodworking) 669.682-06[illegible]
TIP-LENGTH CHECKER (tobacco) 529.467-010
Tip Maker (hat & cap) 784.682-014
TIP-OUT WORKER (concrete prod.) 575.687-038
tipper (agriculture; meat products) 525.687-070
Tipper (glove & mit.) 784.682-010
tipper (hat & cap) 580.685-062
tipper (hat & cap) 580.685-026
tipper (jewelry-silver.) 705.682-014
tipper (pen & pencil) 733.685-034
TIPPER (print. & pub.) 795.684-022
Tipping-Machine Operator (fabrication, nec) 787.685-010
tipping-machine operator (hat & cap) 580.685-062
TIPPING-MACHINE OPERATOR (pen & pencil) 733.685-034
tipping-machine operator (pen & pencil) 686.686-010
tipping-machine operator, automatic (narrow fabrics) 686.685-062
TIPPLE OPERATOR (saw. & plan.) 921.662-026
Tipple Repairer (mine & quarry) 630.281-022
tipple supervisor (mine & quarry) 549.137-014
TIPPLE TENDER (grain-feed mills) 521.685-366
TIPPLE TENDER (millwork-plywood) 669.685-090
tipple worker (any industry) 921.685-038
TIP PRINTER (hat & cap) 651.682-022
Tip Puncher (boot & shoe) 690.685-114
Tip Sewer (glove & mit.) 787.685-042
Tip Stitcher (boot & shoe) 690.682-082
TIP STRETCHER (hat & cap) 580.685-062
tip tester (tobacco) 529.467-010
tip tightener (pen & pencil) 733.687-014
TIRE ADJUSTER (retail trade) 241.367-034
tire-and-tube repairer (automotive ser.) 915.684-010
tire-and-tube servicer (automotive ser.) 915.684-010
tire assembler (fabrication, nec) 739.684-158
TIRE BALANCER (rubber tire) 750.687-014
TIRE-BLADDER MAKER (rubber tire) 750.684-042
TIRE BUFFER (automotive ser.) 690.685-422
Tire Buffer (rubber tire) 759.684-022
TIRE BUILDER (automotive ser.) 750.684-022
TIRE BUILDER (rubber tire) term
TIRE BUILDER, AUTOMOBILE (rubber tire) 750.384-010
Tire Builder, Heavy Service (rubber tire) 750.384-010
Tire-Building Supervisor (rubber tire) 750.130-010
Tire Changer (automotive ser.) 915.684-010
Tire Changer, Aircraft (air trans.) 915.684-010
Tire Changer, Road Service (automotive ser.) 915.684-010
TIRE CLASSIFIER (rubber tire) 750.387-010
Tire Debeader (rubber reclaim.) 690.685-386
Tire-Fabric-Impregnating-Range Back-Tender (tex. prod., nec) 589.686-010
TIRE-FABRIC-IMPREGNATING-RANGE OPERATOR, CHIEF (tex. prod., nec) 589.662-014
Tire-Fabric-Impregnating-Range Tender (tex. prod., nec) 589.685-026
Tire-Fabric Inspector (tex. prod., nec) 689.685-038
Tire-Finishing Supervisor (rubber tire) 750.130-010
tire fixer (automotive ser.) 915.684-010
TIRE GROOVER (automotive ser.) 750.684-026
TIRE INSPECTOR (automotive ser.) 750.687-018
TIRE INSPECTOR (rubber tire) 750.684-030
Tire Mold Engraver, Numerical Control (machine shop) 605.382-014
TIRE MOLDER (rubber tire) 553.685-102
TIRE MOUNTER (fabrication, nec) 739.684-158
tire rebuilder (automotive ser.) 750.684-022
TIRE RECAPPER (automotive ser.) 750.685-014
TIRE-REGROOVING-MACHINE OPERATOR (automotive ser.) 690.662-010
TIRE REPAIRER (automotive ser.) 915.684-010
TIRE REPAIRER (rubber tire) 750.681-010
Tire-Room Supervisor (rubber tire) 750.130-010
tire servicer (automotive ser.) 915.684-010
TIRE-SERVICE SUPERVISOR (automotive ser.) 915.134-010
TIRE SETTER (toy-sport equip.) 731.685-018
TIRE SORTER (rubber tire) 750.687-022
tire spotter (rubber tire) 750.687-014

TIRE TECHNICIAN (rubber tire) 750.382-010
TIRE TRIMMER, HAND (rubber tire) 75[illegible]84-034
Tire Trucker (rubber tire) 929.687-030
TIRE VULCANIZER (automotive ser.) 750.684-038
Tire Wrapper (automotive ser.; rubber tire) 920.685-078
Tissue Inserter (knitting) 920.687-062
tissue technologist (medical ser.) 078.261-030
title abstractor (profess. & kin.) 119.267-010
Title Artist (motion picture; radio-tv broad.) 141.061-022
TITLE ATTORNEY (profess. & kin.) 110.117-042
TITLE CLERK (petrol. & gas; petrol. refin.; pipe lines) 162.267-010
Title Clerk, Automobile (clerical) 203.582-066
TITLE EXAMINER (profess. & kin.) 119.287-010
title examiner (profess. & kin.) 110.117-042
TITLE SEARCHER (real estate) 209.367-046
TITLE SUPERVISOR (profess. & kin.) 119.167-018
titrator (textile) 582.587-010
TNT-LINE SUPERVISOR (chemical) 559.131-018
Toaster-Element Repairer (house. appl.) 723.584-010
Toaster Operator (tobacco) 523.685-118
Tobacco Baler (tobacco) 920.685-010
TOBACCO BLENDER (retail trade) 790.381-010
Tobacco-Checkout Clerk (wholesale tr.) 222.687-030
tobacco cleaner (tobacco) 521.685-270
TOBACCO-CLOTH RECLAIMER (tex. prod., nec) 589.686-050
tobacco conditioner (tobacco) 522.687-026
TOBACCO CURER (agriculture) 523.682-038
tobacco curer (tobacco) 522.687-026
tobacco cutter (tobacco) 521.685-338
tobacco cutter (tobacco) 521.685-310
tobacco cutter (tobacco) 521.685-298
tobacco dipper (tobacco) 522.687-026
TOBACCO-DRIER OPERATOR (tobacco) 523.685-118
tobacco drying-machine operator (tobacco) 522.662-014
Tobacco Farmworker (agriculture) 404.687-010
tobacco flavorer (tobacco) 522.685-030
Tobacco Grader (agriculture) 409.687-010
Tobacco Grower (agriculture) 404.161-010
Tobacco Packer (agriculture) 920.687-134
TOBACCO-PACKING-MACHINE OPERATOR (tobacco) 920.685-098
tobacco roller (tobacco) 790.687-030
TOBACCO-SAMPLE PULLER (tobacco) 529.587-022
Tobacco-Scrap Sifter (tobacco) 521.685-270
tobacco shaker (tobacco) 521.687-110
tobacco-sieve operator (tobacco) 521.685-270
tobacco sprayer (tobacco) 522.687-042
Tobacco-Stem-Drier Operator (tobacco) 523.685-118
tobacco stemmer, machine (tobacco) 521.685-334
tobacco stripper, hand (tobacco) 521.687-134
tobacco-stripping-machine operator (tobacco) 521.685-334
TOBACCO-WAREHOUSE AGENT (business ser.) 259.357-038
Tobacco Weigher (clerical) 222.387-074
toe and heel laster (boot & shoe) 690.682-018
TOE-CLOSING-MACHINE TENDER (knitting) 787.685-046
TOE FORMER, STITCHDOWNS (boot & shoe) 690.685-426
TOE LASTER, AUTOMATIC (boot & shoe) 690.685-430
toe laster, automatic (boot & shoe) 690.685-426
Toe-Lining Closer (boot & shoe) 690.682-082
Toe Pounder (boot & shoe) 690.685-314
Toe Puller (meat products) 525.687-094
TOE PUNCHER (knitting) 689.685-162
Toe Sewer (knitting) 787.682-074
Toe Stapler (boot & shoe) 690.685-162
Toe Stripper (wood prod., nec) 669.682-054
Tofu Maker (food prep., nec) 529.685-290
TOGGLE-PRESS FOLDER-AND-FEEDER (boot & shoe) 690.686-066
toggle-press operator (any industry) 617.260-010
toggler (leather mfg.) 589.686-026
toilet attendant (any industry) 358.677-018
Toll-Bridge Attendant (government ser.) 211.462-038
TOLL COLLECTOR (government ser.) 211.462-038
Toll-Line Repairer (tel. & tel.) 822.381-014
Toll Repairer, Central Office (tel. & tel.) 822.281-014
Tomato Grader (wholesale tr.) 529.687-186
Tomato-Paste Maker (can. & preserv.) 521.382-010
Tomato-Pulper Operator (can. & preserv.) 521.685-262
tombstone setter (construction) 861.361-014
tonal regulator (any industry) 730.361-010
Ton-Container Filler (chemical) 559.565-010
Ton-Container Shipper (chemical) 549.587-010
Ton-Cylinder Inspector (chemical) 953.387-010
tone artist (print. & pub.) 972.281-010
tone-artist apprentice (print. & pub.) 972.281-018
TONE CABINET ASSEMBLER (musical inst.) 730.684-090
TONE REGULATOR (musical inst.) 730.684-094
Tongue-And-Groove-Machine Feeder (woodworking) 669.686-030
TONGUE-AND-GROOVE-MACHINE OPERATOR (woodworking) 669.662-018
Tongue-And-Groove-Machine Setter (woodworking) 669.280-010
Tongue And Quarter Stitcher (boot & shoe) 690.682-082
Tongue Cutter (meat products) 525.684-034
Tongue-Lining Stitcher (boot & shoe) 690.682-082
TONGUE PRESSER (boot & shoe) 788.685-022
Tongue Stitcher (boot & shoe) 690.682-082
TONNAGE-COMPILATION CLERK (water trans.) 248.387-014
tonsorial artist (personal ser.) 330.371-010
tool-and-die inspector (machine shop) 601.281-022
TOOL-AND-DIE MAKER (machine shop) 601.260-010
TOOL-AND-DIE-MAKER APPRENTICE (machine shop) 601.260-014
Tool-And-Die Repairer (machine shop) 601.260-010
TOOL-AND-DIE SUPERVISOR (machine shop) 601.130-010
TOOL-AND-EQUIPMENT-RENTAL CLERK (business ser.; retail trade) 295.357-014
tool-and-gauge inspector (machine shop) 601.281-022
tool-and-machine maintainer (any industry) 638.281-014
tool-and-production planner (profess. & kin.) 012.167-050
Tool Bender, Hand (any industry) 619.361-010
TOOL BUILDER (aircraft mfg.) 693.281-030
Tool Chaser (any industry) 922.687-058
tool clerk (clerical) 222.367-062
TOOL-CRIB ATTENDANT (clerical) 222.367-062
TOOL-CRIB SUPERVISOR (clerical) 222.137-046
TOOL DESIGN CHECKER (aircraft mfg.) 007.267-014
TOOL DESIGNER (profess. & kin.) 007.061-026
TOOL-DESIGNER APPRENTICE (profess. & kin.) 007.061-030
tool-drawing checker (aircraft mfg.) 007.267-014
TOOL DRESSER (any industry) 601.682-010
Tool-Dresser (forging) 610.381-010
tool dresser (machine shop) 603.280-038
tooler (leather prod.) 781.381-018
TOOL FILER (pottery & porc.) 701.684-030
tool filer, hand (machine shop) 705.484-010
TOOL, GAUGE, AND FIXTURE REPAIRER (auto. mfg.) 601.281-030
tool grinder (machine shop) 603.382-038
tool grinder (machine shop) 603.280-038
TOOL GRINDER I (any industry) 701.381-018
TOOL GRINDER II (any industry) 603.664-010
TOOL-GRINDER OPERATOR (machine shop) 603.280-038
tool-grinding-machine operator (machine shop) 603.280-038
TOOLING COORDINATOR, PRODUCTION ENGINEERING (aircraft mfg.) 169.167-054
tooling inspector (machine shop) 601.281-022
tooling reproduction technician (aircraft mfg.) 976.381-022
Tool Liaison (aircraft mfg.) 012.167-038
TOOL-MACHINE SET-UP OPERATOR (machine shop) 601.280-054
TOOL-MAINTENANCE WORKER (office machines) 701.384-010
TOOL MAKER (machine shop) 601.280-042
TOOL-MAKER APPRENTICE (machine shop) 601.280-058
TOOL MAKER, BENCH (machine shop) 601.281-026
Tool Marker (machine shop) 609.684-014
TOOL PLANNER (any industry) 012.167-074
tool procurement coordinator (aircraft mfg.) 169.167-054
tool programmer (any industry) 007.167-018
TOOL PROGRAMMER, NUMERICAL CONTROL (any industry) 007.167-018
TOOL PROGRAMMER, NUMERICAL CONTROL (electron. comp.) 609.262-010
TOOL PUSHER (petrol. & gas) 930.130-010
Tool Pusher, Shallow-Exploratory Drilling (petrol. & gas) 930.130-010
Tool Repairer (machine shop) 601.280-042
Tool Repairer, Bench (machine shop) 601.281-026
TOOL REPAIRER (smelt. & refin.) 519.684-026
tool-room gear-machine operator (machine shop) 602.280-010
tool-room-lathe operator (machine shop) 604.280-010
tool setter (button & notion) 617.380-010
tool setter (jewelry-silver.) 615.130-010
tool sharpener (any industry) 603.664-010
tool sharpener (any industry) 701.381-018
tool sharpener (machine shop) 603.280-038
Tool Straightener (any industry) 709.484-014
Tooth-Brush-Boring-And-Filling-Machine Operator (fabrication, nec) 692.682-018
TOOTH CLERK (protective dev.) 222.687-038
TOOTH CUTTER (clock & watch) 605.685-050
Tooth Cutter, Clutch (clock & watch) 605.685-050
Tooth Cutter, Contact Wheel (clock & watch) 605.682-026
TOOTH CUTTER, ESCAPE WHEEL (clock & watch) 605.682-026
Tooth Cutter, Hobbing Machine (clock & watch) 605.685-050
Tooth Cutter, Pinion (clock & watch) 605.685-050
Tooth Cutter, Spur (clock & watch) 605.685-050

TOOTH INSPECTOR (protective dev.) 712.687-038
TOOTH POLISHER (clock & watch) 715.682-026
top-and-seat-cover fitter (automotive ser.) 780.384-010
top-bottom-attaching-machine operator (garment; hat & cap) 699.685-010
Top Cager (mine & quarry) 939.667-010
Top Case Assembler (musical inst.) 763.684-058
top cleaner (textile) 680.687-014
Top-Collar Baster (garment) 782.684-058
Top-Collar Maker (garment; retail trade) 785.361-022
Top Coverer (fabrication, nec) 780.684-026
TOP-DYEING-MACHINE LOADER (tex. prod., nec; textile) 582.686-030
Top-Dyeing-Machine Tender (textile) 582.685-102
Top-Edge Beveler (any industry) 705.687-014
top flavor attendant (tobacco) 520.687-026
TOP FORMER (boot & shoe) 788.685-026
Top-Frame Coverer (fabrication, nec) 780.684-026
Top-Frame Fitter (fabrication, nec) 739.684-190
Top-Frame Maker (fabrication, nec) 739.684-190
TOP-HAT-BODY MAKER (hat & cap) 784.684-074
top icer (wholesale tr.) 922.687-046
Top Installer (automotive ser.) 780.381-010
top ironer (boot & shoe) 788.685-026
top-lift and automatic-window repairer (automotive ser.) 825.381-014
Top-Lift Compressor (boot & shoe) 690.685-210
Top-Lift Cutter (boot & shoe) 699.682-022
Top-Lift Nailer (boot & shoe) 690.685-162
Top-Lift Scourer (boot & shoe) 690.685-046
Top-Lift Trimmer (boot & shoe) 690.685-434
topline-beading-machine tender (boot & shoe) 788.685-014
topographic computator (profess. & kin.) 018.167-014
topper (fabrication, nec) 761.684-030
topper (furniture) 780.685-018
TOPPER (knitting) 685.687-026
Topper Packer (agriculture) 920.687-134
Topper-Press Operator (laundry & rel.) 363.682-018
Topper-Press Operator, Automatic (laundry & rel.) 363.682-018
Toppiece Chopper (boot & shoe) 699.685-014
Toppiece Cutter (boot & shoe) 699.682-022
TOP POLISHER (stonework) 673.662-010
TOP-PRECIPITATOR OPERATOR (smelt. & refin.) 511.465-010
TOP-PRECIPITATOR-OPERATOR HELPER (smelt. & refin.) 511.586-010
TOP SCREW (agriculture) 410.137-014
Topside Inspector (optical goods) 716.687-018
Top Steep Tender (grain-feed mills) 522.465-010
Top Stitcher (boot & shoe) 690.682-082
Top Stitcher (hat & cap) 784.682-014
Top Stitcher (toy-sport equip.) 732.684-050
TOPSTITCHER, LOCKSTITCH (garment) 786.682-238
TOPSTITCHER, ZIGZAG (garment) 786.682-242
Top-Stop Attacher (button & notion) 692.685-206
Top Taper, Machine (boot & shoe) 690.685-414
top-tile decorator (brick & tile) 773.684-010
Top Trimmer I (boot & shoe) 690.685-434
Top Trimmer II (boot & shoe) 690.682-086
top waddy (agriculture) 410.137-014
torch brazer (welding) 813.684-010
torch cutter (welding) 816.464-010
TORCH-STRAIGHTENER-AND HEATER (any industry) 709.684-086
torpedo shooter (petrol. & gas) 931.361-014
Torpedo Specialist (government ser.) 632.261-018
TORQUE TESTER (clock & watch) 715.685-066
TORSION SPRING COILING MACHINE SETTER (metal prod., nec) 616.260-022
Tortilla Maker (food prep., nec) 529.685-078
toter (any industry) 919.664-010
TOUCH-UP CARVER (fabrication, nec) 761.684-054
touch-up finisher, metal (automotive ser.) 807.381-010
touch-up inspector, printed circuit boards (electron. comp.) 726.684-062
TOUCH-UP PAINTER, HAND (any industry) 740.684-026
TOUCH-UP SCREENER, PRINTED CIRCUIT BOARD ASSEMBLY (electron. comp.) 726.684-110
touch-up worker (office machines) 706.587-010
Tour Agent (motor trans.) 252.152-010
touring counselor (nonprofit org.) 238.167-014
tourist-camp attendant (hotel & rest.) 329.467-010
TOURIST-INFORMATION ASSISTANT (government ser.) 237.367-050
tow-car driver (automotive ser.) 919.663-026
Towel Bander (paper goods) 920.687-026
TOWEL-CABINET REPAIRER (business ser.) 709.364-014
Towel Folder (tex. prod., nec) 589.687-014
Towel Inspector (tex. prod., nec) 789.587-014
TOWEL INSPECTOR (textile) 652.686-042
Towel-Rack Assembler (woodworking) 762.687-070
towel-rolling-machine operator (laundry & rel.) 361.685-014
Towel Sewer (tex. prod., nec) 787.682-026
TOWER ATTENDANT (paper & pulp) 559.666-010
TOWER-CRANE OPERATOR (construction) 921.663-054
tower-dragline operator (construction) 850.683-042
TOWER ERECTOR (construction; utilities) 821.361-038
TOWER ERECTOR HELPER (construction; utilities) 821.684-014
TOWER-EXCAVATOR OPERATOR (construction) 850.683-042
TOWER HELPER (chemical) 558.385-014
Tower-Hoist Operator (mine & quarry) 921.663-026
TOWER-LOADER OPERATOR (water trans.) 921.683-074
TOWER OPERATOR (r.r. trans.) 910.362-010
TOWER OPERATOR (soap & rel.) 559.362-034
TOWER OPERATOR I (chemical) term
Tower Operator II (chemical) 558.685-062
Tower Supervisor (construction) 809.131-018
Tower-Truck Driver (tel. & tel.; utilities) 905.663-014
Tower-Whirler Operator (any industry) 921.663-010
Tow Feeder (tex. prod., nec) 680.686-014
TOWN CLERK (government ser.) 243.367-018
town planner (profess. & kin.) 199.167-014
Tow Picker (furniture) 680.685-078
Tow-Picker Operator (furniture) 680.685-082
TOW-TRUCK OPERATOR (automotive ser.) 919.663-026
TOXICOLOGIST (pharmaceut.) 022.081-010
TOXIC OPERATOR (chemical) term
TOY ASSEMBLER (retail trade) 731.684-018
TOY ASSEMBLER (toy-sport equip.) 731.687-034
Toy Assembler, Plastic (toy-sport equip.) 731.687-034
Toy Assembler, Wood (toy-sport equip.) 731.687-034
Toy-Department Manager (retail trade) 299.137-010
TOY-ELECTRIC-TRAIN REPAIRER (retail trade) 731.684-022
Toy Sorter (sugar & conf.) 529.686-034
toy stuffer (toy-sport equip.) 731.685-014
tracer (clerical) 241.367-026
TRACER (construction; stonework) 779.381-022
tracer (medical ser.) 078.384-010
tracer-bullet assembly-machine tool setter (ordnance) 616.360-034
TRACER-BULLET-CHARGING-MACHINE OPERATOR (ordnance) 694.382-014
TRACER-BULLET-SECTION SUPERVISOR (ordnance) 694.131-010
Tracer Clerk (clerical) 241.367-014
tracer-controlled-milling-machine operator (machine shop) 605.280-018
tracer-lathe set-up operator (machine shop) 604.280-010
TRACER-POWDER BLENDER (chemical) 550.585-042
Tracing-Lathe Set-Up Operator (machine shop) 604.380-018
Track-Broom Operator (r.r. trans.) 859.683-018
track-grinder operator (r.r. trans.) 910.684-010
track inspector (r.r. trans.) 910.367-030
track laborer (r.r. trans.) 910.684-014
TRACK LAMINATING MACHINE TENDER (inst. & app.) 692.685-290
Track Layer (construction) 869.687-026
track layer, head (construction) 869.134-022
track-laying-machine operator (construction; mine & quarry) 910.663-010
TRACK-LAYING SUPERVISOR (construction) 869.134-022
track leader (construction) 869.134-022
Track-Liner Operator (construction) 910.683-018
TRACKMOBILE OPERATOR (any industry) 919.683-026
TRACK-MOVING-MACHINE OPERATOR (construction; mine & quarry) 910.663-010
TRACK OILER (r.r. trans.) 910.687-026
TRACK REPAIRER (r.r. trans.) 910.684-014
Track-Repairer Helper (construction) 869.687-026
TRACK SUPERVISOR (grain-feed mills) 921.132-010
track supervisor (r.r. trans.) 910.367-030
TRACK-SURFACING-MACHINE OPERATOR (construction) 910.683-018
Track-Template-Thermal-Cutting-Machine Operator (welding) 816.482-010
tractor-crane engineer (any industry) 921.663-058
TRACTOR-CRANE OPERATOR (any industry) 921.663-058
Tractor-Drill Operator (construction; mine & quarry) 930.382-010
TRACTOR MECHANIC (automotive ser.) 620.281-058
TRACTOR-MECHANIC HELPER (automotive ser.) 620.684-030
TRACTOR OPERATOR (any industry) 929.683-014
Tractor Operator (water trans.) 911.663-014
Tractor Operator, Battery (mine & quarry) 929.683-014
Tractor Operator, Laser Leveling (any industry) 929.683-014
tractor-sweeper driver (government ser.) 919.683-022
TRACTOR-TRAILER-TRUCK DRIVER (any industry) 904.383-010
TRADE MARKER (fabrication, nec) 690.685-510
trader (financial) 162.167-034
trader (financial) 162.167-038
Trade-Show Representative (any industry) 297.367-010
TRAFFIC AGENT (air trans.; motor trans.; r.r. trans.; water trans.) 252.257-010
TRAFFIC CHECKER (government ser.) 205.367-058
traffic chief (tel. & tel.) 184.167-106
TRAFFIC CLERK (radio-tv broad.) 209.382-022

TRAFFIC CLERK (business ser.) 221.367-078
TRAFFIC CLERK (clerical) 214.587-014
traffic controller, cable (tel. & tel.) 239.137-026
traffic-control operator (r.r. trans.) 184.167-262
traffic control signaler (construction) 372.667-022
Traffic-Court Magistrate (government ser.) 111.107-014
Traffic Engineer (government ser.) 005.061-038
traffic engineer (radio-tv broad.) 003.187-014
Traffic Enumerator (clerical) 216.382-062
TRAFFIC INSPECTOR (motor trans.; r.r. trans.) 184.163-010
TRAFFIC LIEUTENANT (government ser.) 375.167-046
Traffic-Maintenance Officer (government ser.) 869.137-010
TRAFFIC-MAINTENANCE SUPERVISOR (government ser.) 869.137-010
traffic manager (radio-tv broad.) 209.382-022
traffic officer (government ser.) 375.263-014
Traffic Police Officer (government ser.) 375.263-014
TRAFFIC-RATE CLERK (clerical) 214.362-038
TRAFFIC-SAFETY ADMINISTRATOR (government ser.) 188.167-102
TRAFFIC SERGEANT (government ser.) 375.137-026
Traffic-Signal Repairer (utilities) 824.381-010
Traffic-Signal Supervisor, Maintenance (government ser.) 869.137-010
Traffic-Sign Erection Supervisor (government ser.) 869.137-010
traffic superintendent (tel. & tel.) 184.167-106
traffic supervisor (any industry) 921.133-018
TRAFFIC TECHNICIAN (government ser.) 199.267-030
trailer (any industry) 932.664-010
TRAILER ASSEMBLER I (auto. mfg.) 806.381-058
TRAILER ASSEMBLER II (auto. mfg.) 806.684-082
trailer assembler, paneling (auto. mfg.) 806.684-082
Trailer-Body Assembler (auto. mfg.) 806.381-058
Trailer Chief (photofinishing) 976.131-010
TRAILER-RENTAL CLERK (automotive ser.) 295.467-022
trailer-sections assembler (auto. mfg.) 806.684-082
Trailer Steerer (logging) 904.683-010
Trailer-Tank-Truck Driver (petrol. refin.; retail trade; wholesale tr.) 903.683-018
trailer-truck driver (any industry) 904.383-010
TRAIN CLERK (r.r. trans.) 219.462-014
train conductor (any industry) 932.664-010
TRAIN DISPATCHER (r.r. trans.) 184.167-262
TRAIN DISPATCHER, ASSISTANT CHIEF (r.r. trans.) 910.167-014
TRAINEE (any industry) term
TRAINEE ENGINEER (profess. & kin.) term
training administrator (education) 166.167-026
training instructor (education) 166.227-010
TRAINING REPRESENTATIVE (education) 166.227-010
training specialist (education) 166.221-010
TRAINING TECHNICIAN (can. & preserv.) 522.264-010
Train Operator (amuse. & rec.) 342.663-010
trammer (any industry) 919.663-014
Tram Operator (amuse. & rec.) 353.363-010
transcriber (profess. & kin.) 152.067-010
TRANSCRIBING-MACHINE OPERATOR (clerical) 203.582-058
transcribing operator, head (clerical) 203.132-014
transcripter (profess. & kin.) 152.067-010
transfer and line-up worker (auto. mfg.) 221.367-026
transfer-and-pumphouse operator (chemical) 559.665-038
TRANSFER-AND-PUMPHOUSE OPERATOR, CHIEF (chemical) 559.132-138
TRANSFER-CAR OPERATOR (brick & tile) 921.683-078
TRANSFER-CAR OPERATOR, DRIER (nonmet. min.) 921.583-010
TRANSFER CLERK (financial) 216.362-046
TRANSFER CONTROLLER (saw. & plan.) 921.682-022
Transfer Engineer (logging) 921.663-030
transfer-iron operator (knitting; tex. prod., nec) 659.685-022
transfer knitter (knitting) 685.665-010
TRANSFER-MACHINE OPERATOR (knitting; tex. prod., nec) 659.685-022
TRANSFER-MACHINE OPERATOR (machine shop) 609.685-022
TRANSFER OPERATOR (paper & pulp) 921.685-066
TRANSFER OPERATOR (print. & pub.) 651.382-038
transfer operator (woodworking) 569.683-010
TRANSFERRER (clock & watch) 715.684-190
TRANSFERRER (print. & pub.) 972.381-026
TRANSFER-TABLE OPERATOR (railroad equip.; r.r. trans.) 910.683-022
Transfer-Table Operator (steel & rel.) 613.682-026
TRANSFER-TABLE OPERATOR HELPER (railroad equip.; r.r. trans.) 910.667-030
transformer assembler (any industry) 724.381-018
transformer assembler (utilities) 821.361-034
TRANSFORMER ASSEMBLER I (elec. equip.) 820.381-014
TRANSFORMER ASSEMBLER II (elec. equip.) 820.684-010
TRANSFORMER ASSEMBLY SUPERVISOR (elec. equip.) 820.137-010
Transformer-Coil Winder (elec. equip.; electron. comp.) 724.684-026
Transformer-Coil Winder (utilities) 829.261-018
Transformer-Core Assembler (elec. equip.) 729.684-066
Transformer Inspector (elec. equip.) 829.361-018
Transformer Molder (elec. equip.) 729.684-030
transformer rebuilder (any industry) 724.381-018
TRANSFORMER REPAIRER (any industry) 724.381-018
TRANSFORMER SHOP SUPERVISOR (any industry) 724.131-014
TRANSFORMER-STOCK CLERK (utilities) 222.587-054
Transformer Tester (elec. equip.) 721.281-030
Transformer Tester (electron. comp.) 726.684-078
TRANSFORMER TESTER (utilities) 724.281-010
transit clerk (financial) 217.382-010
transit-mix operator (construction) 900.683-010
transit-operations supervisor (motor trans.) 913.167-014
TRANSLATOR (profess. & kin.) 137.267-018
translator, deaf (profess. & kin.) 137.267-014
Transliterator (profess. & kin.) 137.267-018
transmission-and-coordination engineer (utilities) 003.167-050
TRANSMISSION-AND-PROTECTION ENGINEER (tel. & tel.) 003.167-066
Transmission Assembler (motor-bicycles) 806.684-094
transmission engineer (radio-tv broad.) 003.167-030
transmission engineer (tel. & tel.) 003.167-066
transmission-line engineer (utilities) 003.167-050
Transmission-Maintenance Supervisor (tel. & tel.) 822.131-014
TRANSMISSION MECHANIC (automotive ser.) 620.281-062
Transmission Repairer (auto. mfg.) 620.381-022
Transmission Repairer (motor-bicycles) 620.684-026
TRANSMISSION TESTER (auto. mfg.) 806.684-134
TRANSMISSION TESTER (tel. & tel.) 822.361-026
Transmitter Assembler (elec. equip.) 721.381-014
transmitter engineer (radio-tv broad.) 003.167-034
transmitter engineer (radio-tv broad.) 193.262-038
TRANSMITTER OPERATOR (radio-tv broad.) 193.262-038
Transmitter Tester (electron. comp.) 726.261-018
TRANSPLANT COORDINATOR (medical ser.) 079.151-010
TRANSPLANTER, ORCHID (agriculture) 405.687-018
TRANSPORTATION AGENT (air trans.) 912.367-014
transportation clerk (hotel & rest.) 238.367-030
transportation consultant (business ser.) 184.267-010
transportation department head (any industry) 184.167-226
transportation-department supervisor (automotive ser.) 620.131-014
Transportation Director (nonprofit org.) 187.167-214
TRANSPORTATION ENGINEER (profess. & kin.) 005.061-038
TRANSPORTATION-EQUIPMENT-MAINTENANCE WORKER (museums) 899.384-010
transportation inspector (motor trans.; r.r. trans.) 184.163-010
TRANSPORTATION INSPECTOR (motor trans.; r.r. trans.) 168.167-082
TRANSPORTATION-MAINTENANCE SUPERVISOR (any industry) 184.167-266
transportation-museum helper (museums) 899.384-010
Transportation Planning Engineer (government ser.) 005.061-038
Transport Driver (motor trans.) 904.383-010
TRANSPORTER, PATIENTS (medical ser.) 355.677-014
Transport Pilot (air trans.) 196.263-014
trapeze artist (amuse. & rec.) 159.247-014
trapeze performer (amuse. & rec.) 159.247-014
TRAPPER, ANIMAL (fishing & hunt.) 461.684-014
TRAPPER, BIRD (fishing & hunt.) 461.684-018
trash-collection supervisor (motor trans.) 909.137-014
trash collector (any industry) 381.687-018
trash collector (any industry) 929.687-022
Trash Collector (motor trans.) 955.687-022
trauma coordinator (medical ser.) 079.117-010
TRAVEL AGENT (business ser.; motor trans.; retail trade) 252.152-010
travel clerk (clerical) 238.362-014
TRAVEL CLERK (government ser.) 238.167-010
TRAVEL CLERK (hotel & rest.) 238.367-030
travel clerk (motor trans.; r.r. trans.; water trans.) 237.367-018
travel counselor (business ser.; motor trans.; retail trade) 252.152-010
TRAVEL COUNSELOR, AUTOMOBILE CLUB (nonprofit org.) 238.167-014
TRAVELER CHANGER (textile) 682.687-010
traveling cleaner, maintenance (textile) 628.684-022
traveling clerk (nonprofit org.) 238.167-014
traveling-crane operator (any industry) 921.663-010
Traveling-Freight-And-Passenger Agent (air trans.; motor trans.; r.r. trans.; water trans.) 252.257-010
Traveling-Maintenance Supervisor (any industry) 638.131-026
traveling-plant operator (construction) 859.683-026
Travel-Ticketing Reviewer (nonprofit org.) 238.167-014
TRAVERSE-ROD ASSEMBLER (furniture) 739.687-186
TRAWL NET MAKER (tex. prod., nec) 789.381-018
TRAY-CASTING-MACHINE OPERATOR (dairy products) 520.685-218
TRAY DRIER (knitting) 581.686-038
TRAY-DRIER OPERATOR (chemical) 553.665-054
TRAY FILLER (tobacco) 920.686-050
Tray-Line Supervisor (medical ser.) 319.137-010
tray packer (tobacco) 920.686-050

tray setter (hotel & rest.) 319.484-010
tray thickener operator (smelt. & refin.) 511.562-010
tray worker (medical ser.) 319.677-014
Treadle-Cut-Off-Saw Operator (woodworking) 667.682-022
Treadmill Inspector (agric. equip.) 624.361-010
Tread-Tuber-Machine Operator (rubber tire) 690.662-014
TREASURER (profess. & kin.) 161.117-018
TREASURER, FINANCIAL INSTITUTION (financial) 186.117-070
Treasurer, Savings Bank (financial) 186.117-070
treasury representative (profess. & kin.) 161.117-018
TREATER (any industry) 582.687-030
treater (petrol. & gas) 541.382-014
TREATER (petrol. refin.) 549.362-014
treater (textile) 589.665-014
TREATER HELPER (petrol. refin.) 549.685-030
treating and pumping supervisor (petrol. refin.) 549.132-034
TREATING ENGINEER (wood prod., nec) 561.362-010
TREATING-ENGINEER HELPER (wood prod., nec) 561.685-010
TREATING INSPECTOR (wood prod., nec) 569.367-010
treating-plant operator (petrol. refin.) 549.362-014
TREATING-PLANT OPERATOR (wood prod., nec) 563.662-010
treating-plant operator (wood prod., nec) 561.362-010
TREATING-PLANT SUPERVISOR (wood prod., nec) 561.131-010
TREATMENT-PLANT MECHANIC (waterworks) 630.281-038
TREE CUTTER (agriculture; logging) 454.684-026
TREE DRILLER (boot & shoe) 788.684-118
Tree Loader, Meat (meat products) 525.587-014
TREE PLANTER (forestry) 452.687-018
TREE PRUNER (agriculture) 408.684-018
tree puller (forestry) 451.687-018
treer (boot & shoe) 788.687-122
Tree-Service Supervisor (agriculture) 408.131-010
TREE-SHEAR OPERATOR (logging) 454.683-010
tree sorter (forestry) 451.687-022
TREE SURGEON (agriculture) 408.181-010
Tree-Surgeon Helper I (agriculture) 408.684-018
TREE-SURGEON HELPER II (agriculture) 408.687-018
TREE TRIMMER (tel. & tel.; utilities) 408.664-010
TREE-TRIMMER HELPER (utilities) 408.667-010
tree trimmer helper, line clearance (utilities) 408.667-010
tree trimmer, line clearance (tel. & tel.; utilities) 408.664-010
tree-trimming-line technician (tel. & tel.; utilities) 408.664-010
Tree Wrapper (agriculture) 920.687-134
trench backfiller (construction) see DITCH DIGGER
trench digger (construction) see DITCH DIGGER
Trench Trimmer, Fine (construction) 869.687-026
trichologist (personal ser.) 339.371-014
Tricot-Knitting-Machine Operator (knitting) 685.665-018
tricot-warper tender (knitting; narrow fabrics; nonmet. min.; textile) 681.685-018
trim and burr operator (ordnance) 609.685-026
TRIM ATTACHER (cutlery-hrdwr.) 692.685-230
Trim-Crew Supervisor (mfd. bldgs.) 869.131-018
trim die maker (machine shop) 601.280-014
Trim Inspector (auto. mfg.) 806.687-018
Trim Installer (ship-boat mfg.) 806.684-146
TRIM-MACHINE ADJUSTER (ordnance) 609.280-010
TRIM-MACHINE OPERATOR (ordnance) 609.685-026
trimmer (aircraft mfg.) 693.261-010
trimmer (any industry) 789.687-070
trimmer (any industry) 782.684-058
trimmer (any industry) 920.687-038
trimmer (boot & shoe) 690.685-434
Trimmer (can. & preserv.) 529.686-014
trimmer (fabrication, nec) 664.685-022
Trimmer (forestry) 920.687-046
TRIMMER (hat & cap) 784.684-078
trimmer (hat & cap) 784.387-010
TRIMMER (jewelry-silver.) 705.682-014
TRIMMER (mfd. bldgs.) 869.684-066
Trimmer (mine & quarry) 939.687-014
trimmer (pen & pencil) 662.685-030
TRIMMER (plastic prod.) 690.482-014
trimmer (tex. prod., nec) 789.687-050
trimmer and reinforcer (boot & shoe) 690.685-246
trimmer and sorter (leather mfg.) 585.684-010
Trimmer, Buffing Wheel (tex. prod., nec) 585.685-086
TRIMMER, HAND (any industry) 781.687-070
TRIMMER, HAND (boot & shoe) 788.687-150
TRIMMER, HAND (leather mfg.) 585.684-010
TRIMMER, HAND (paper goods) 794.687-062
trimmer, hand (rubber goods) 751.684-014
TRIMMER HELPER (saw. & plan.) 667.686-018
Trimmer Loader (saw. & plan.) 669.687-018
TRIMMER, MACHINE (garment; knitting) 781.682-010
TRIMMER, MACHINE (leather mfg.) 585.685-126
trimmer, machine (toy-sport equip.) 732.685-038
TRIMMER, MACHINE I (boot & shoe) 690.685-434
TRIMMER, MACHINE II (boot & shoe) 690.682-086
trimmer maker (machine shop) 601.280-014
TRIMMER, MEAT (meat products) 525.684-054
TRIMMER OPERATOR (nut & bolt) 619.462-014
trimmer operator (woodworking) 667.682-022
trimmer operator, three knife (print. & pub.) 640.685-010
trimmer, press clippings (business ser.) 249.587-014
TRIMMER, PRINTED CIRCUIT BOARD PANELS (electron. comp.) 699.685-054
TRIMMER SAWYER (saw. & plan.) 667.682-094
Trimmer-Sorter (can. & preserv.) 529.687-186
Trimmer Tailer (saw. & plan.) 669.687-018
TRIMMING ASSEMBLER (furniture) 780.684-114
Trimming Cutter (garment) 699.682-022
Trimming Cutter, Machine (boot & shoe) 699.682-022
Trimming-Department Blocker (hat & cap) 580.684-014
Trimming Finisher (garment) 782.684-058
Trimming Inspector (hat & cap) 784.387-010
trimming-machine operator (any industry) 789.684-050
TRIMMING-MACHINE OPERATOR (button & notion) 690.682-090
TRIMMING-MACHINE OPERATOR (garment; knitting) 583.685-122
trimming-machine operator (paper goods) 640.685-034
trimming-machine operator (rubber goods; rubber reclaim.) 690.685-386
TRIMMING-MACHINE OPERATOR (toy-sport equip.) 732.685-038
TRIMMING MACHINE SET-UP OPERATOR (fabrication, nec) 664.382-018
Trimming-Press Operator (forging) 615.685-030
TRIMMING SEWER, AUTOMATIC (garment; tex. prod., nec) 787.685-050
Trimming Supervisor (tex. prod., nec) 589.130-014
Trim Mounter (toy-sport equip.) 732.384-010
Trim Mounter I (optical goods) 713.684-022
Trim Mounter II (optical goods) 713.681-010
trim operator (tex. prod., nec) 699.682-026
trim preparer (hat & cap) 784.687-050
trim sawyer (saw. & plan.) 667.482-018
Trim Setter (construction) 860.381-022
trim-setter helper (forging) 619.686-034
TRIM-STENCIL MAKER (any industry) 781.684-058
TRIPE COOKER (meat products) 526.685-062
TRIP FOLLOWER (air trans.) 209.367-050
TRIPLE-AIR-VALVE TESTER (railroad equip.) 622.382-010
Triple-Drum Operator (logging) 921.663-066
Tripod-Drill Operator (mine & quarry) 930.684-018
tripoler (fabrication, nec) 739.684-026
trip rider (any industry) 932.664-010
trolley-car operator (r.r. trans.) 913.463-014
TROLLEY CLEANER (meat products) 529.687-206
Trolley-Coach Driver (motor trans.) 913.463-010
TROLLEY OPERATOR (bakery products) 524.565-010
TROLLEY-WIRE INSTALLER (mine & quarry) 821.684-022
TROMBONE-SLIDE ASSEMBLER (musical inst.) 730.381-054
TROMMEL TENDER (smelt. & refin.) 511.685-066
tromper (agriculture) 920.687-198
TROPHY ASSEMBLER (jewelry-silver.) 735.684-018
trouble dispatcher (utilities) 959.167-010
trouble dispatcher (utilities) 952.167-010
TROUBLE LOCATOR, TEST DESK (tel. & tel.) 822.361-030
trouble shooter (any industry) see MAINTENANCE WORKER
trouble shooter (any industry) 726.261-018
TROUBLE SHOOTER I (utilities) 952.364-010
TROUBLE SHOOTER II (utilities) 821.261-026
trouble shooter, radio (any industry) 720.281-010
Trout Farmer (fishing & hunt.) 446.161-010
truant officer (education) 168.367-010
TRUCK-BODY BUILDER (auto. mfg.; automotive ser.) 807.281-010
TRUCK-CRANE OPERATOR (any industry) 921.663-062
Truck-Crane-Operator Helper (any industry) 921.667-022
TRUCK DRIVER (any industry) term
Truck Driver, Flatbed (logging) 905.663-014
TRUCK DRIVER, HEAVY (any industry) 905.663-014
TRUCK-DRIVER HELPER (any industry) 905.687-010
TRUCK DRIVER, LIGHT (any industry) 906.683-022
truck driver, sales route (retail trade; wholesale tr.) 292.353-010
Trucker, Hand (any industry) 929.687-030
trucker helper (any industry) 905.687-010
Truck Farmer (agriculture) 402.161-010
Truck-Headlight Assembler (light. fix.) 729.684-034
TRUCKLOAD CHECKER (construction) 222.367-066
truck loader (any industry) 914.667-010
TRUCK LOADER, OVERHEAD CRANE (nonfer. metal) 921.663-070
Truck Mechanic (automotive ser.) 620.261-010
Truck-Mechanic Helper (automotive ser.) 620.684-014
truck operator (any industry) see TRUCK DRIVER

Truck-Rental Clerk (automotive ser.) 295.467-022
truck repairer (any industry) 620.281-050
Truck-Repair-Service Estimator (automotive ser.) 620.261-018
TRUCK SUPERVISOR (motor trans.) 909.137-018
Truck-Tire Inspector (rubber tire) 750.684-050
Truck Washer (dairy products) 913.687-014
TRUER (metal prod., nec) 616.484-010
Truer (optical goods) 716.682-014
TRUER, PINION AND WHEEL (clock & watch) 715.684-194
Trunk Repairer (any industry) 365.361-010
Truss Assembler (protective dev.) 712.684-010
TRUSS ASSEMBLER (saw. & plan.) 762.684-062
Truss Driver (wood. container) 669.682-014
Truss-Driver Helper (wood. container) 669.685-010
Truss Puller (wood. container) 669.682-014
Truss-Puller Helper (wood. container) 669.685-010
trust administrator (financial) 186.117-074
TRUST OFFICER (financial) 186.117-074
TRUST OPERATIONS ASSISTANT (financial) 219.362-074
TRUST-VAULT CLERK (financial) 216.367-014
Try-on Baster (garment) 785.261-014
tub attendant (personal ser.) 335.677-014
TUBBER (jewelry-silver.) 599.685-098
tub chucker (wood. container) 664.685-014
TUBE-AND-MANIFOLD BUILDER (rubber goods) 759.684-062
tube-and-rod straightener (plastic-synth.) 559.587-010
TUBE ASSEMBLER, CATHODE RAY (electron. comp.) 725.684-022
TUBE ASSEMBLER, ELECTRON (electron. comp.) 725.384-010
tube backer (rubber goods) 559.686-018
TUBE BALANCER (rubber tire) 750.684-046
tube bender-assembler (aircraft mfg.) 806.381-034
TUBE BENDER, BRASS-WIND INSTRUMENTS (musical inst.) 617.382-010
TUBE BENDER, HAND I (any industry) 709.684-090
TUBE BENDER, HAND II (any industry) 709.687-050
Tube-Bending-Machine Operator I (any industry) 617.482-010
Tube-Bending-Machine Operator II (any industry) 617.685-010
TUBE BUILDER, AIRPLANE (rubber tire) 750.384-014
TUBE-BUILDING-MACHINE OPERATOR (rubber goods) 559.685-174
TUBE CLEANER (any industry) 891.687-030
TUBE CLEANER (textile) 589.687-042
TUBE-CLEANING OPERATOR (foundry) 514.685-026
tube clerk (clerical) 239.687-014
tube closing machine operator (glass mfg.) 573.685-018
TUBE COATER (metal prod., nec) 599.685-102
Tube-Component Assembler (electron. comp.) 725.384-010
tube coremaker (foundry) 518.685-018
TUBE COVERER (textile) 589.687-046
tube cutter (paper goods) 640.685-034
tube depatcher (rubber reclaim.) 559.687-066
tube dispatcher (clerical) 239.687-014
TUBE DRAWER (nonfer. metal; steel & rel.) 614.685-022
tube-draw helper (nonfer. metal; steel & rel.) 614.686-010
Tube-Drawing Supervisor (nonfer. metal; steel & rel.) 614.132-010
tube filler (any industry) 619.687-018
Tube-Filling-Machine Operator (can. & preserv.; chemical) 920.685-078
tube finishing machine operator (glass mfg.) 573.685-018
Tube Fitter (electron. comp.) 725.384-010
TUBE HANDLER (textile) 582.686-034
Tube Inspector (electron. comp.) 726.684-022
Tube Inspector (paper goods) 649.367-010
tube-machine operator (nonfer. metal) 691.382-010
TUBE-MACHINE OPERATOR (paper goods) 641.662-014
tube-machine operator (pottery & porc.) 575.685-026
TUBE-MACHINE-OPERATOR HELPER (paper goods) 641.686-038
tube maker (nonmet. min.) 692.685-234
tube maker (paper goods) 641.662-014
tube-making-machine operator (paper goods) 641.662-014
Tube-Mill Operator (cement) 570.685-046
TUBE MOLDER, FIBERGLASS (plastic prod.) 690.685-438
TUBE OPERATOR (clerical) 239.687-014
Tube Packer (rubber tire) 920.587-018
tube puller (petrol. & gas) 930.382-030
tuber (rubber tire) 750.687-010
tuber (textile) 689.685-046
TUBE REBUILDER (electron. comp.) 725.381-010
TUBE REPAIRER (rubber tire) 750.684-050
Tuber Feeder (nonfer. metal) 691.685-030
tuber helper (paper goods) 641.686-038
TUBER-MACHINE CUTTER (rubber goods; rubber tire) 690.685-446
TUBER-MACHINE OPERATOR (rubber goods; rubber tire) 690.662-014
TUBER-MACHINE-OPERATOR HELPER (rubber goods; rubber tire) 690.686-070
tube roller (hat & cap) 690.686-034
Tube Roller (plastic prod.) 690.685-438
tube roller (steel & rel.) 619.682-042
Tube-Room Supervisor (rubber tire) 750.130-010
tuber operator (plastic prod.; plastic-synth.) 557.382-010
tuber operator (rubber reclaim.) 551.365-010
TUBE SIZER-AND-CUTTER OPERATOR (ordnance) 640.685-086
TUBE SORTER (rubber reclaim.) 559.687-066
TUBE SPLICER (rubber tire) 690.685-442
tube-station attendant (clerical) 239.687-014
Tube Tester (electron. comp.) 726.684-026
Tube-Test Technician (electron. comp.) 726.261-018
Tube-Trailer Filler (chemical) 559.565-010
tube turner (knitting) 689.685-110
Tube Winder (any industry) 681.685-154
TUBE WINDER, HAND (nonmet. min.) 692.685-234
tubing drier (textile) 581.685-030
Tubing Inspector (steel & rel.) 619.381-010
TUBING-MACHINE OPERATOR (nonfer. metal; steel & rel.) 613.685-030
TUBING-MACHINE TENDER (clock & watch) 715.685-070
Tubing-Machine Tender (elec. equip.) 692.685-046
Tubing-Mill Operator I (any industry) 616.685-042
Tubing-Mill Operator II (any industry) 616.360-026
Tubing-Mill Setter (any industry) 616.260-014
Tub Operator (chemical) 559.682-018
tub rider (any industry) 932.664-010
tub turner (wood. container) 669.682-018
Tubular-Products Fabricator (any industry) 809.381-010
TUBULAR-SPLITTING-MACHINE TENDER (knitting) 686.685-070
Tub Washer (textile) 599.687-030
Tuck-And-Insole Cementer (boot & shoe) 690.686-018
TUCKING-MACHINE OPERATOR (any industry) 787.682-082
Tuck Pointer (construction) 869.664-014
TUFTER (furniture) 687.684-014
TUFTER, HAND (furniture) 780.687-050
tufter operator (furniture) 687.684-014
Tufting-Machine Fixer (carpet & rug) 689.260-010
TUFTING-MACHINE OPERATOR (carpet & rug; textile) 687.685-018
TUFTING-MACHINE OPERATOR (furniture) 687.685-014
TUFTING-MACHINE OPERATOR, SINGLE-NEEDLE (carpet & rug) 687.685-022
TUFT-MACHINE OPERATOR (carpet & rug; tex. prod., nec) 687.682-014
TUGBOAT CAPTAIN (water trans.) 197.133-030
Tugboat Deckhand (water trans.) 911.687-022
Tugboat Engineer (water trans.) 197.130-010
TUGBOAT MATE (water trans.) 197.133-034
Tugger Operator (mine & quarry) 921.663-026
tumbler (amuse. & rec.) 159.247-010
TUMBLER (clock & watch) 599.685-106
tumbler-drier operator (laundry & rel.) 369.685-034
tumbler-dyeing-machine operator (knitting) 582.685-170
TUMBLER-MACHINE OPERATOR (rubber goods) 559.685-178
tumbler-machine operator (tex. prod., nec) 582.685-066
TUMBLER OPERATOR (any industry) 599.685-110
TUMBLER OPERATOR (chemical) 550.685-118
TUMBLER OPERATOR (laundry & rel.) 369.685-034
tumbler operator (laundry & rel.) 361.685-010
TUMBLER OPERATOR (rubber goods) 553.585-026
tumbler plater (electroplating) 500.362-014
Tumbler-Switch Assembler (elec. equip.) 729.687-010
TUMBLER TENDER (food prep., nec) 520.685-222
TUMBLER TENDER (knitting) 581.685-062
TUMOR REGISTRAR (medical ser.) 079.362-018
tuner (any industry) 730.361-010
TUNER, PERCUSSION (musical inst.) 730.381-058
TUNE-UP MECHANIC (automotive ser.) 620.281-066
Tung-Nut Grower (agriculture) 403.161-010
TUNGSTEN REFINER (smelt & refin.) 511.382-010
tunnel-drier operator (chemical) 553.582-010
TUNNEL-ELASTIC OPERATOR, CHAINSTITCH (garment) 786.682-246
TUNNEL-ELASTIC OPERATOR, LOCKSTITCH (garment) 786.682-250
TUNNEL-ELASTIC OPERATOR, ZIGZAG (garment) 786.682-254
Tunnel-Form-Placing Supervisor (construction) 869.131-014
Tunnel-Heading Inspector (construction) 182.267-010
tunneling-machine operator (construction) 850.662-010
Tunnel-Kiln Drawer (pottery & porc.) 573.667-010
TUNNEL-KILN OPERATOR (brick & tile) 573.382-018
Tunnel-Kiln Repairer (brick & tile; pottery & porc.) 861.381-014
Tunnel Miner (mine & quarry) 939.281-010
TUNNEL WORKER (construction) term
turbinated-bone grinder (meat products) 521.687-130
TURBINE ATTENDANT (utilities) 952.567-010
TURBINE-BLADE ASSEMBLER (engine-turbine) 600.380-026
Turbine Inspector (engine-turbine) 609.361-010
TURBINE OPERATOR (utilities) 952.362-042
TURBINE OPERATOR, HEAD (utilities) 952.137-022
TURBINE SUBASSEMBLER (engine-turbine) 706.381-042
turbogenerator operator (utilities) 952.362-042

Turkey Cleaner (meat products) 525.687-074
Turkey Dresser (meat products) 525.687-070
Turkey Farmer (agriculture) 411.161-018
TURKEY-ROLL MAKER (meat products) 525.684-058
Turkish-Line Attendant (tobacco) 520.685-026
Turkish Rubber (personal ser.) 334.677-010
TURNER (any industry) 789.687-182
turner (brick & tile) 579.686-026
TURNER (can. & preserv.) 522.687-038
TURNER (fabrication, nec) 669.685-094
turner (knitting) 689.685-110
TURNER (pottery & porc.) 774.684-038
turner (stonework) 674.662-010
turner (tex. prod., nec) 689.685-146
turner (toy-sport equip.) 732.687-066
Turner (woodworking) 669.686-030
turner and former, automatic (glove & mit.) 583.686-018
TURNER, MACHINE (clock & watch) 770.685-034
turner-machine operator (wood. container) 667.685-066
turner-splitter-machine operator (rubber goods; rubber reclaim.) 690.685-386
TURNING-AND-BEADING-MACHINE OPERATOR (button & notion) 679.685-026
TURNING LATHE TENDER (furniture) 664.685-034
turning-machine operator (hat & cap) 690.686-034
turning-machine operator (knitting) 689.685-110
TURNING-MACHINE OPERATOR (tex. prod., nec) 689.685-146
TURNING-MACHINE OPERATOR (wood. container) 667.685-066
TURNING-MACHINE-OPERATOR HELPER (wood. container) 667.686-022
TURNING MACHINE SET-UP OPERATOR (fabrication, nec) 669.382-026
TURNING-SANDER TENDER (woodworking) 662.685-038
turn keeper (mine & quarry) 932.167-010
turnkey (government ser.) 372.367-014
turn-machine operator (hat & cap) 585.685-074
turn-out worker (glass mfg.) 579.687-018
Turnstile Attendant (amuse. & rec.) 344.667-010
Turnstile Collector (water trans.) 211.462-038
Turret Lathe Operator, Numerical Control (machine shop) 604.362-010
TURRET-LATHE OPERATOR, TUMBLE TAILSTOCK (clock & watch) 604.685-042
TURRET-LATHE SET-UP OPERATOR (machine shop) 604.380-026
TURRET-LATHE SET-UP OPERATOR, TOOL (machine shop) 604.280-022
Turret-Lathe Set-Up Operator, Tool, Vertical (machine shop) 604.280-022
turret-lathe tender (machine shop) 604.685-026
TURRET-PUNCH-PRESS OPERATOR (any industry) 615.482-038
TURRET-PUNCH-PRESS OPERATOR, TAPE-CONTROL (any industry) 615.685-042
TUTOR (education) 099.227-034
Tuyere Fitter (steel & rel.) 862.281-022
Twenty-One Dealer (amuse. & rec.) 343.464-010
Twin-Beam Clicker (boot & shoe; hat & cap; leather prod.) 699.682-022
twine operator (tex. prod., nec) 689.685-138
Twine-Reeling-Machine Operator (tex. prod., nec) 681.685-078
Twine Winder (tex. prod., nec) 681.685-154
TWISTER (tex. prod., nec) 681.685-126
Twister Doffer (textile) 689.686-022
TWISTER, HAND (tobacco) 790.687-030
TWISTER TENDER (glass mfg.; nonmet. min.; plastic-synth.; textile) 681.685-130
TWISTER TENDER, PAPER (tex. prod., nec) 681.685-134
twisthand (tex. prod., nec) 683.682-026
twisting-frame changer (textile) 689.686-026
Twisting-Frame Fixer (textile) 689.260-010
TWISTING-MACHINE OPERATOR (any industry) 619.485-014
TWISTING-MACHINE OPERATOR (comm. equip.; elec. equip.) 691.686-010
TWISTING-MACHINE OPERATOR (fabrication, nec) 692.682-070
Twisting-Press Operator (forging) 611.685-010
twisting-tube selector (textile) 689.687-042
twist maker (tobacco) 790.687-030
Twist Packer (tobacco) 920.687-130
TWITCHELL OPERATOR (chemical) 558.585-042
Two-Stage, Steel-Bender Annealer (toy-sport equip.) 617.685-010
tying-in-machine operator (narrow fabrics; textile) 683.685-034
Tying-Machine Operator (any industry) 920.685-078
TYING-MACHINE OPERATOR (paper goods; tex. prod., nec) 929.685-014
TYING-MACHINE OPERATOR, LUMBER (woodworking) 929.685-018
type caster (machinery mfg.; print. & pub.) 654.382-010
TYPE-CASTING MACHINE OPERATOR (print. & pub.) 654.582-010
TYPE-COPY EXAMINER (machinery mfg.) 979.687-026
TYPE COPYIST (machinery mfg.) 970.381-042
TYPE-PROOF REPRODUCER (machinery mfg.) 652.685-106
TYPE-ROLLING-MACHINE OPERATOR (office machines) 619.382-022
TYPESETTER (print. & pub.) term
typesetter (print. & pub.) 973.381-010
typesetter (print. & pub.) 650.582-018
typesetter (print. & pub.) 652.585-010
typesetter apprentice (print. & pub.) 973.381-014
TYPESETTER-PERFORATOR OPERATOR (print. & pub.) 203.582-062
TYPESETTING-MACHINE TENDER (print. & pub.) 650.685-010
TYPE-SOLDERING-MACHINE TENDER (office machines) 706.685-010
Typewriter Operator, Automatic (clerical) 203.582-038
typewriter-ribbon winder (pen & pencil) 733.685-022
Typewriter Servicer (any industry) 633.281-018
Typing Checker (clerical) 209.687-010
TYPING-ELEMENT-MACHINE OPERATOR (office machines) 616.382-018
TYPING SECTION CHIEF (clerical) 203.137-014
TYPIST (clerical) 203.582-066
typographer (print. & pub.) 973.381-010

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Ultrasonic Cleaner (any industry) 503.685-030
ULTRASONIC-SEAMING-MACHINE OPERATOR (garment) 786.682-258
ULTRASONIC-SEAMING-MACHINE OPERATOR, SEMIAUTOMATIC (garment) 786.685-038
ULTRASONIC TESTER (any industry) 739.281-014
ULTRASONIC TESTER (chemical) 709.687-054
ULTRASOUND TECHNOLOGIST (medical ser.) 078.364-010
UMBRELLA FINISHER (fabrication, nec) 739.687-190
UMBRELLA REPAIRER (any industry) 369.684-018
UMBRELLA TIPPER, HAND (fabrication, nec) 739.684-162
UMBRELLA TIPPER, MACHINE (fabrication, nec) 739.685-054
UMPIRE (amuse. & rec.) 153.267-018
Umpire (profess. & kin.) 169.107-010
UNATTENDED-GROUND-SENSOR SPECIALIST (military ser.) 378.382-018
unbundler (leather mfg.) 585.684-010
UNCLAIMED PROPERTY OFFICER (government ser.) 188.167-106
uncrater (any industry) 827.584-010
Underbaster (garment) 786.682-102
UNDERCOATER (automotive ser.) 843.684-014
Undercoat Sprayer (aircraft mfg.; auto. mfg.) 741.687-018
Undercollar Baster (garment; retail trade) 785.361-022
Undercollar Maker (garment; retail trade) 785.361-022
undercover agent (business ser.) 376.267-018
undercover agent (motor trans.; r.r. trans.) 168.167-082
undercover agent (retail trade) 376.367-026
undercover operator (business ser.) 376.267-018
UNDERCOVER OPERATOR (retail trade) 376.367-026
undercutter (mine & quarry) 930.683-014
Underground-Distribution Engineer (utilities) 003.167-046
Underground Repairer (utilities) 829.261-018
Underground Supervisor (utilities) 829.131-010
Underlay Stitcher (boot & shoe) 690.682-082
Underpresser, Hand (garment) 363.684-018
undertaker (personal ser.) 187.167-030
undertaker assistant (personal ser.) 359.677-014
UNDERWATER HUNTER-TRAPPER (fishing & hunt.) 461.664-010
Underwriter, Direct Endorsement (financial) 186.267-026
UNDERWRITER (insurance) 169.267-046
UNDERWRITER, MORTGAGE LOAN (financial) 186.267-026
underwriting analyst (insurance) 219.367-038
UNDERWRITING CLERK (insurance) 219.367-038
Unemployment-Insurance-Hearing Officer (government ser.) 119.107-010
unhairing inspector (leather mfg.) 585.687-010
Unhairing-Machine Operator (leather mfg.) 585.685-094
uniform attendant (hotel & rest.; medical ser.) 222.387-030
Uniform-Cap Operator (hat & cap) 784.684-018
uniformer (boot & shoe) 788.687-034
uniform-force captain (government ser.) 375.167-034
unit assembler (machinery mfg.) 706.684-038
UNIT CLERK (medical ser.) 245.362-014
united states attorney (government ser.) 110.117-010
UNIT OPERATOR (chemical) 542.685-018
unit tender (chemical) 558.382-026
universal grinder, tool (machine shop) 603.280-030
universal-saw operator (woodworking) 667.682-086
university dean (education) 090.117-010
UNLEAVENED-DOUGH MIXER (bakery products) 520.685-226
unloading checker (clerical) 222.687-018
UNSCRAMBLER (can. & preserv.) 921.685-070
Unstacker (woodworking) 569.685-066
upfitter (furniture) 763.684-042
UPHOLSTERER (aircraft mfg.) 780.384-014
upholsterer (any industry) 780.381-018
upholsterer (furniture) 780.684-046
Upholsterer (r.r. trans.) 780.381-018
upholsterer apprentice (any industry) 780.381-022
upholsterer apprentice (automotive ser.) 780.381-014
UPHOLSTERER, ASSEMBLY LINE (furniture) 780.684-134
UPHOLSTERER HELPER (any industry) 780.687-054

upholsterer helper (furniture) 780.684-010
UPHOLSTERER, INSIDE (furniture) 780.381-038
UPHOLSTERER, LIMOUSINE AND HEARSE (auto. mfg.) 780.381-026
UPHOLSTERER, OUTSIDE (furniture) 780.684-118
upholstery and drapery measurer (retail trade) 299.364-010
upholstery bundler (furniture) 780.587-010
UPHOLSTERY CLEANER (furniture) 780.687-058
Upholstery Cutter, Machine (furniture) 781.684-014
Upholstery Estimator (retail trade) 299.387-010
upholstery handler (furniture) 780.587-010
UPHOLSTERY REPAIRER (furniture) 780.684-122
Upholstery Restorer (museums) 763.380-010
UPHOLSTERY SEWER (any industry) 780.682-018
UPHOLSTERY TRIMMER (furniture) 780.684-126
upkeep mechanic (glass mfg.) 575.380-010
UPPER-AND-BOTTOM LACER, HAND (boot & shoe) 788.684-122
Upper Cutter, Machine (boot & shoe) 699.682-022
upper cutter-out (boot & shoe) 788.684-082
Upper Doubler (boot & shoe) 788.687-030
upper edger (boot & shoe) 690.685-138
Upper Inspector (boot & shoe) 788.384-010
upper-leather cutter (boot & shoe) 788.684-082
UPPER-LEATHER SORTER (boot & shoe) 788.387-010
Upper-Lining Cementer (boot & shoe) 690.686-018
upper marker (boot & shoe) 788.584-014
Upper Muller (boot & shoe) 788.687-090
upper shaper (boot & shoe) 788.685-026
upper stamper (boot & shoe) 690.685-398
Upper Stitcher (boot & shoe) 690.682-082
Upper Trimmer (boot & shoe) 690.685-434
UPSETTER (forging) 611.662-010
Upsetter Helper (forging) 619.686-034
Upsetter Setter-Up (forging) 612.360-010
Upset-Welding-Machine Operator (welding) 812.682-010
UPTWISTER TENDER (textile) 681.685-138
uptwist spinner (textile) 681.685-138
Urban Anthropologist (profess. & kin.) 055.067-010
URBAN PLANNER (profess. & kin.) 199.167-014
Urban Sociologist (profess. & kin.) 054.067-014
UROLOGIST (medical ser.) 070.101-098
used-car conditioner (retail trade) 620.684-034
used-car-lot attendant (retail trade; wholesale tr.) 915.687-022
USED-CAR RENOVATOR (retail trade) 620.684-034
USER REPRESENTATIVE, INTERNATIONAL ACCOUNTING (profess. & kin.) 189.117-038
USER SUPPORT ANALYST (profess. & kin.) 032.262-010
USER SUPPORT ANALYST SUPERVISOR (profess. & kin.) 032.132-010
USHER (amuse. & rec.) 344.677-014
usher (personal ser.) 359.677-014
USHER, HEAD (amuse. & rec.) 344.137-010
UTILITIES-AND-MAINTENANCE SUPERVISOR (any industry) 899.131-018
utilities operator (sanitary ser.) 955.362-010
UTILITIES SERVICE INVESTIGATOR (utilities) 821.364-010
Utility Assembler (motor-bicycles) 806.684-090
UTILITY BAG ASSEMBLER (leather prod.) 783.684-030
Utility-Bill-Collection Clerk (utilities) 241.357-010
Utility-Bill Collector (clerical) 241.367-010
UTILITY CLERK (utilities) 239.367-034
utility hand (tobacco) see RELIEF WORKER
Utility Hand (water trans.) 318.687-014
Utility Inspector (office machines) 706.387-014
Utility Inspector (utilities) 953.367-018
UTILITY OPERATOR (garment) 786.682-262
UTILITY OPERATOR (saw. & plan.) 669.682-070
UTILITY OPERATOR I (chemical) 559.682-066
UTILITY OPERATOR II (chemical) 709.684-094
UTILITY OPERATOR III (chemical) 549.685-042
utility repairer (any industry) 899.261-014
UTILITY SUPERVISOR, BOAT AND PLANT (ship-boat mfg.) 899.131-022
UTILITY TENDER, CARDING (textile) 689.685-166
UTILITY-TRACTOR OPERATOR (construction) 850.683-046
utility worker (any industry) 929.687-030
UTILITY WORKER (mfd. bldgs.; vehicles, nec) 869.684-074
UTILITY WORKER (sugar & conf.) 529.686-086
UTILITY WORKER, CLOTH PRINTING (textile) 652.586-010
UTILITY WORKER, EXTRUSION (nonfer. metal) 691.685-030
UTILITY WORKER, FILM PROCESSING (photofinishing) 976.685-030
UTILITY WORKER, FORGE (forging) 612.684-010
UTILITY WORKER, LINE ASSEMBLY (auto. mfg.) 806.367-010
UTILITY WORKER, MERCHANT MILL (steel & rel.) 801.664-014
UTILITY WORKER, MOLDING (plastic prod.) 559.684-026
UTILITY WORKER, PRODUCTION (pharmaceut.) 559.684-034
UTILITY WORKER, ROLLER SHOP (textile) 628.684-034
utility worker, virus (pharmaceut.) 559.684-034
UTILITY WORKER, WOOLEN MILL (textile) 689.686-050
UTILIZATION COORDINATOR (radio-tv broad.) 169.167-078
UTILIZATION ENGINEER (utilities) 007.061-034
UTILIZATION-REVIEW COORDINATOR (medical ser.) 079.267-010
utilization supervisor (utilities) 187.167-010

V

VACUUM-APPLICATOR OPERATOR (fabrication, nec) 692.685-238
VACUUM-BOTTLE ASSEMBLER (glass products) 739.687-194
VACUUM CASTER (foundry) 514.582-010
vacuum cleaner (any industry) 381.687-018
vacuum-cleaner operator (any industry) 389.683-010
VACUUM CLEANER REPAIRER (any industry) 723.381-014
Vacuum-Cleaner Repairer (house. appl.) 723.584-010
VACUUM-CONDITIONER OPERATOR (tobacco) 522.685-102
Vacuum-Cooker Operator (sugar & conf.) 526.382-014
VACUUM DRIER OPERATOR (can. & preserv.) 523.685-122
VACUUM-DRIER OPERATOR (tex. prod., nec) 581.685-066
VACUUM-DRIER TENDER (chemical) 553.685-106
vacuum-drum-drier operator (chemical; pharmaceut.) 553.685-042
Vacuum-Evaporation Operator (electron. comp.) 590.684-014
vacuum-extractor operator (textile) 581.685-042
vacuum-filter operator (any industry) 551.685-078
vacuum-forming-machine operator (plastic prod.) 553.685-014
vacuum-frame operator (any industry) 976.361-010
VACUUM-METALIZER OPERATOR (any industry) 505.685-018
vacuum-pan operator (chemical) 553.382-018
VACUUM-PAN OPERATOR I (chemical) 551.685-150
VACUUM-PAN OPERATOR II (chemical) 551.685-154
VACUUM-PAN OPERATOR III (chemical) 559.585-022
VACUUM PLASTIC-FORMING-MACHINE OPERATOR (plastic prod.) 556.685-082
Vacuum-Spindle Sander (furniture) 761.682-010
VACUUM-TANK TENDER (textile) 689.665-018
VACUUM TESTER, CANS (can. & preserv.) 920.687-194
Vacuum Worker (hotel & rest.) 323.687-018
Valance Shirrer (tex. prod., nec) 787.685-038
Valet Manager (hotel & rest.) 369.137-010
Valuation Engineer (profess. & kin.) 160.162-026
VALUE ENGINEER (aircraft mfg.) 002.167-010
Valve Assembler (inst. & app.) 710.684-046
VALVE GRINDER (machine shop) 706.684-098
valve inspector-and-assembler (chemical) 630.381-030
valve inspector (chemical) 630.381-030
valve lapper (machine shop) 706.684-098
Valve Liner, Rubber (machinery mfg.) 759.684-050
Valve Maker I (musical inst.) 730.381-018
VALVE MAKER II (musical inst.) 730.681-018
VALVE REPAIRER (chemical) 630.381-030
valve repairer, reclamation (petrol. refin.) 709.684-070
Valve Steamer (chemical) 549.587-010
VALVING-MACHINE OPERATOR (paper goods) 641.685-094
vamp-and-whole-shoe cutter, hand (boot & shoe) 788.684-082
VAMP CREASER (boot & shoe) 788.687-154
vamper (boot & shoe) 690.682-078
Vamp Marker (boot & shoe) 690.685-282
Vamp Presser (boot & shoe) 690.685-350
Vamp Stitcher (boot & shoe) 690.682-082
VAMP-STRAP IRONER (boot & shoe) 788.687-158
Vamp Wetter (boot & shoe) 788.687-090
VAN DRIVER (motor trans.) 905.663-018
van driver (motor trans.) 913.663-018
VAN-DRIVER HELPER (motor trans.) 905.687-014
van helper (motor trans.) 905.687-014
Vanilla-Chocolate-Coin Counter (sugar & conf.) 529.686-034
vapor coater (any industry) 505.685-018
variety-lathe operator (woodworking) 664.382-010
VARIETY-SAW OPERATOR (woodworking) 667.682-086
VARITYPE OPERATOR (clerical) 203.382-026
varnish blender (paint & varnish) 553.382-022
Varnish-Cambric-Covering-Machine Operator (nonfer. metal) 691.682-018
varnish cooker (paint & varnish) 553.382-022
Varnish Dipper (furniture) 599.685-026
Varnisher (construction) 840.381-010
VARNISHER (fabrication, nec) 569.685-070
Varnisher (hat & cap) 589.687-038
Varnisher-Plasticoater (fabrication, nec) 534.682-018
Varnish Filterer I (paint & varnish) 551.685-034
Varnish Filterer II (paint & varnish) 551.685-082
Varnishing-Machine Operator (elec. equip.) 599.685-046
VARNISHING-MACHINE OPERATOR (print. & pub.) 534.685-030
VARNISHING-UNIT OPERATOR (ordnance) 737.687-138
VARNISHING-UNIT TOOL SETTER (ordnance) 632.380-026
VARNISH INSPECTOR (paint & varnish) 559.584-014

VARNISH MAKER (paint & varnish) 553.382-022
VARNISH-MAKER HELPER (paint & varnish) 553.686-042
varnish melter (paint & varnish) 553.382-022
Varnish Thinner (paint & varnish) 550.585-038
vat overhauler (meat products) 522.687-034
vat packer (meat products) 522.687-034
Vat Tender (chemical) 582.482-014
vat tender (textile) 582.665-014
VAULT CASHIER (business ser.) 222.137-050
vault custodian (financial) 216.367-014
VAULT CUSTODIAN (laundry & rel.) 369.587-010
vault mechanic (business ser.; wholesale tr.) 869.381-022
vault supervisor (business ser.) 222.137-050
VAULT WORKER (business ser.) 222.587-058
V-BELT BUILDER (rubber goods) 759.684-066
V-BELT COVERER (rubber goods) 690.685-450
V-BELT CURER (rubber goods) 553.682-026
V-BELT FINISHER (rubber goods) 690.685-454
V-Belt Inspector (rubber goods) 759.684-074
v-belt mold assembler and curer (rubber goods) 752.685-010
V-BELT SKIVER (rubber goods) 690.685-458
V-Block Saw Operator (electron. comp.) 677.382-018
VECTOR CONTROL ASSISTANT (government ser.) 049.364-014
vegetable grower (agriculture) 402.161-010
Vegetable Scullion (water trans.) 318.687-014
Vegetable Sorter (agriculture; can. & preserv.; wholesale tr.) 529.687-186
Vegetable Vendor (retail trade) 291.457-018
vegetable worker (agriculture) 402.687-010
Vehicle-Fare Collector (motor trans.; water trans.) 211.462-038
VEHICLE-FUEL-SYSTEMS CONVERTER (automotive ser.) 620.281-070
vehicle-safety inspector (government ser.) 379.364-010
Vehicle Unloader (any industry) 929.687-030
vein pumper (meat products) 522.685-086
Velvet Steamer (laundry & rel.) 363.681-010
Velvet Weaver (carpet & rug) 683.682-010
vending-enterprises supervisor (government ser.) 185.167-066
VENDING-MACHINE ASSEMBLER (svc. ind. mach.) 706.684-102
VENDING-MACHINE ATTENDANT (hotel & rest.) 319.464-014
Vending-Machine Coin Collector (business ser.) 292.483-010
vending-machine repairer (svc. ind. mach.) 639.281-014
VENDING-STAND SUPERVISOR (government ser.) 185.167-066
VENDOR (amuse. & rec.) 291.457-022
vendor (retail trade) 291.457-018
vendor (r.r. trans.) 291.457-014
VENEER CLIPPER (millwork-plywood) 663.685-050
VENEER-CLIPPER HELPER (millwork-plywood) 663.686-030
veneer cutter (millwork-plywood) 663.685-050
VENEER DRIER (millwork-plywood) 563.685-022
VENEER-DRIER FEEDER (millwork-plywood) 563.686-014
veneer-drier tailer (millwork-plywood) 563.685-022
veneer-edge bander (furniture) 762.684-038
veneer-glue-jointer feedback (millwork-plywood) 665.686-018
veneer gluer (millwork-plywood; wood prod., nec) 569.685-042
VENEER GRADER (millwork-plywood) 569.687-034
veneer joiner (millwork-plywood) 569.685-074
VENEER JOINTER (millwork-plywood) 665.682-038
VENEER-JOINTER HELPER (millwork-plywood) 665.686-018
VENEER-JOINTER OFFBEARER (millwork-plywood) 665.686-022
veneer-jointer returner (millwork-plywood) 665.686-018
VENEER-LATHE OPERATOR (millwork-plywood) 664.662-010
Veneer Marker (woodworking) 761.684-022
Veneer Matcher (furniture) 769.687-046
VENEER MATCHER (millwork-plywood) 769.687-046
veneer-press operator (millwork-plywood) 569.685-054
VENEER REDRIER (millwork-plywood) 563.685-026
VENEER REPAIRER, MACHINE (millwork-plywood) 669.685-098
Veneer Sander (woodworking) 662.682-014
VENEER-SLICING-MACHINE OPERATOR (millwork-plywood) 663.682-018
Veneer Sorter (millwork-plywood) 921.685-054
veneer splicer (millwork-plywood) 569.685-062
Veneer Stacker (millwork-plywood) 569.687-010
VENEER STAPLER (ship-boat mfg.) 869.684-078
VENEER-STOCK GRADER (wood. container) 769.687-050
VENEER-STOCK LAYER (millwork-plywood) 762.687-066
VENEER TAPER (millwork-plywood) 569.685-074
VENEER-TAPING-MACHINE OFFBEARER (millwork-plywood) 569.686-054
veneer-taping-machine operator (millwork-plywood) 569.685-074
veneer trimmer (millwork-plywood) 663.685-
VENETIAN-BLIND ASSEMBLER (furniture; retail trade) 739.684-166
VENETIAN-BLIND CLEANER AND REPAIRER (any industry) 739.687-198
VENETIAN-BLIND INSTALLER (furniture; retail trade) 869.484-018
Venetian-Blind-Tape Cutter (furniture) 781.687-026
VENTILATION EQUIPMENT TENDER (any industry) 950.585-010
ventilation mechanic (any industry) 950.585-010
ventilation worker (mine & quarry) 869.684-058
VENTILATOR (fabrication, nec) 739.384-022
VENTRILOQUIST (amuse. & rec.) 159.044-010
verger (nonprofit org.) 389.667-010
vermin exterminator (business ser.) 389.684-010
Vertical-Kiln Operator (concrete prod.) 573.462-010
Vertical-Mill Operator (cement) 570.685-046
Vertical-Roll Operator (any industry) 619.362-014
Vertical-Shade Assembler (furniture) 739.684-166
Vertical-Stretching-Machine Operator (tex. prod., nec) 580.685-058
Vessel Liner (steel & rel.) 861.381-026
vessel ventilation system operator (chemical) 950.562-010
Vest Busheler (retail trade) 785.261-010
Vest-Front Presser (garment) 363.682-018
Vest Presser (garment) 363.684-018
Vest Tailor (garment; retail trade) 785.361-022
veterans' claims representative (nonprofit org.) 187.167-198
VETERANS CONTACT REPRESENTATIVE (nonprofit org.) 187.167-198
veterans' coordinator (education) 169.267-026
veterans' counselor (nonprofit org.) 187.167-198
veterans' service officer (nonprofit org.) 187.167-198
VETERINARIAN, LABORATORY ANIMAL CARE (medical ser.) 073.061-010
VETERINARIAN (medical ser.) 073.101-010
VETERINARIAN, POULTRY (agriculture) 073.101-014
Veterinarian, Public Health (government ser.) 073.101-010
VETERINARY ANATOMIST (profess. & kin.) 073.061-014
veterinary assistant (medical ser.) 079.361-014
Veterinary Bacteriologist (profess. & kin.) 073.061-018
VETERINARY EPIDEMIOLOGIST (profess. & kin.) 073.061-022
Veterinary-Hospital Attendant (medical ser.) 410.674-010
VETERINARY LIVESTOCK INSPECTOR (government ser.) 073.161-010
VETERINARY MEAT-INSPECTOR (government ser.) 073.264-010
veterinary medical officer (government ser.) 073.264-010
VETERINARY MICROBIOLOGIST (profess. & kin.) 073.061-018
Veterinary Milk-Specialist (government ser.) 073.264-010
VETERINARY PARASITOLOGIST (profess. & kin.) 073.061-026
VETERINARY PATHOLOGIST (medical ser.) 073.061-030
VETERINARY PHARMACOLOGIST (profess. & kin.) 073.061-034
VETERINARY PHYSIOLOGIST (profess. & kin.) 073.061-038
Veterinary-Poultry Inspector (government ser.) 073.264-010
Veterinary Radiologist (medical ser.) 073.101-010
VETERINARY TECHNICIAN (medical ser.) 079.361-014
Veterinary Virologist (profess. & kin.) 073.061-018
VETERINARY VIRUS-SERUM INSPECTOR (government ser.) 073.261-010
Vial Gauger (cutlery-hrdwr.) 701.687-026
Vibrating-Screed Operator (construction) 853.663-014
vibrating-screen operator (chemical) 551.685-130
Vibration Technician (profess. & kin.) 003.261-010
Vibrator Assembler (machinery mfg.) 706.361-010
VIBRATOR-EQUIPMENT TESTER (machinery mfg.) 825.361-014
VICE PRESIDENT (any industry) 189.117-034
Vice President, Commercial Bank (financial) 186.117-078
VICE PRESIDENT, FINANCIAL INSTITUTION (financial) 186.117-078
vice president for institutional research (education) 090.167-018
vice president for instruction (education) 090.117-010
vice president, industrial relations (profess. & kin.) 166.117-010
Vice President, Lending (financial) 186.117-078
vice president of student affairs (education) 090.117-018
vice-squad police officer (government ser.) 375.267-022
video engineer (radio-tv broad.) 194.282-010
Video Installer (tel. & tel.) 822.381-018
VIDEO OPERATOR (radio-tv broad.) 194.282-010
videotape engineer (radio-tv broad.) 194.382-018
VIDEOTAPE OPERATOR (radio-tv broad.) 194.382-018
Videotape-Recording Engineer (radio-tv broad.) 194.362-010
Vinegar Maker (beverage) 183.161-014
VINEGAR MAKER (food prep., nec) 522.382-038
VINE PRUNER (agriculture) 403.687-022
Viner Mechanic (agric. equip.) 624.281-010
Vineyard Supervisor (agriculture) 403.131-014
Vinyl Dipper (rubber goods) 599.685-026
Violinist (amuse. & rec.) 152.041-010
VIOLIN MAKER, HAND (musical inst.) 730.281-046
VIOLIN REPAIRER (any industry) 730.281-050
Violin Restorer (musical inst.) 730.281-046
Virginia-Line Attendant (tobacco) 520.685-026
Virologist (profess. & kin.) 041.061-058
Viscera Washer (meat products) 525.684-038
Viscose-Cellar Attendant (plastic-synth.) 559.682-038
vise hand (machinery mfg.; machine tools) 600.281-022
Visiting Professor (education) 090.227-010
visiting-student counselor (education) 090.107-010
visiting teacher (profess. & kin.) 195.107-038
VISUAL-INFORMATION SPECIALIST (profess. & kin.) term
Vocational Adviser (education) 045.107-010

VOCATIONAL REHABILITATION CONSULTANT

VOCATIONAL REHABILITATION CONSULTANT (government ser.) 094.117-018
VOCATIONAL-REHABILITATION COUNSELOR (government ser.) 045.107-042
VOICE PATHOLOGIST (profess. & kin.) 076.104-010
voicer (musical inst.) 730.381-038
Volcanologist (profess. & kin.) 024.061-030
Volleyball Assembler (toy-sport equip.) 732.684-026
Voltage-Regulator Assembler (elec. equip.) 721.381-014
VOLTAGE TESTER (utilities) 821.381-014
volumetric weigher (ordnance) 920.687-170
volunteer coordinator (social ser.) 187.167-022
volunteer services assistant (profess. & kin.) 187.137-014
Vortex Operator (sugar & conf.) 520.585-018
VOTATOR-MACHINE OPERATOR (meat products; oils & grease) 529.685-250
Voting-Machine Repairer (government ser.) 828.261-022
VOUCHER CLERK (r.r. trans.) 219.362-066
VULCAN CREWMEMBER (military ser.) 378.663-010
VULCANIZED-FIBER-UNIT OPERATOR (paper goods) 539.565-010
VULCANIZER (boot & shoe) 690.685-462
vulcanizer operator (rubber goods; rubber reclaim.; rubber tire) 553.665-038
Vulcanizer, Rubber Plate (pen & pencil; print. & pub.) 556.582-010
VULCANIZING-PRESS OPERATOR (boot & shoe) 690.685-466

W

WAD-BLANKING-PRESS ADJUSTER (ordnance) 690.360-010
WAD-COMPRESSOR OPERATOR-ADJUSTER (ordnance) 535.482-010
WADER-BOOT-TOP ASSEMBLER (rubber goods) 795.684-026
WAD IMPREGNATOR (ordnance) 590.685-054
WAD LUBRICATOR (ordnance) 590.685-058
WAD-PRINTING-MACHINE OPERATOR (ordnance) 652.685-102
WAFER ABRADING MACHINE TENDER (electron. comp.) 673.685-102
Wafer-Batter Mixer (bakery products) 520.685-010
WAFER BREAKER, SEMICONDUCTORS (electron. comp.) 726.687-046
wafer-cell-battery assembler (elec. equip.) 727.687-082
WAFER CLEANER (electron. comp.) 590.685-102
Wafer Cutter (bakery products) 521.685-302
wafer etcher (electron. comp.) 590.685-078
wafer fab operator (electron. comp.) 590.684-042
WAFER-LINE WORKER (elec. equip.) 727.687-082
WAFER-MACHINE OPERATOR (bakery products) 526.685-066
WAFER-MACHINE OPERATOR (elec. equip.) 692.662-018
WAFER MOUNTER (electron. comp.) 726.685-058
wafer polisher (electron. comp.) 673.685-094
wafer slicer (electron. comp.) 677.382-018
waffle baker (bakery products) 526.685-066
waffle-machine operator (bakery products) 526.685-066
wage and salary administrator (profess. & kin.) 166.167-022
wage worker (agriculture) see FARMWORKER, SEASONAL
Wagon-Drill Operator (construction; mine & quarry) 930.382-010
Wagon Driver (any industry) 919.664-010
WAISTBAND SETTER, LOCKSTITCH (garment) 786.682-266
WAISTLINE JOINER, LOCKSTITCH (garment) 786.682-270
WAISTLINE JOINER, OVERLOCK (garment) 786.682-274
WAIST PLEATER (tex. prod., nec) 583.684-014
Waist Presser (garment) 363.684-018
WAITER/WAITRESS (water trans.) 350.677-030
WAITER/WAITRESS, BANQUET, HEAD (hotel & rest.) 311.137-014
Waiter/Waitress, Banquet (hotel & rest.) 311.477-026
WAITER/WAITRESS, BAR (hotel & rest.) 311.477-018
WAITER/WAITRESS, BUFFET (hotel & rest.) 311.674-018
Waiter/Waitress, Cabin Class (water trans.) 350.677-030
waiter/waitress, cafeteria (hotel & rest.) 311.677-010
WAITER/WAITRESS, CAPTAIN (hotel & rest.) 311.137-018
WAITER/WAITRESS, CLUB (hotel & rest.) 352.677-018
waiter/waitress, cocktail lounge (hotel & rest.) 311.477-018
waiter/waitress, counter (hotel & rest.) 311.477-014
WAITER/WAITRESS, DINING CAR (r.r. trans.) 311.477-022
Waiter/Waitress, Economy Class (water trans.) 350.677-030
Waiter/Waitress, First Class (water trans.) 350.677-030
WAITER/WAITRESS, FORMAL (hotel & rest.) 311.477-026
WAITER/WAITRESS, HEAD (hotel & rest.) 311.137-022
waiter/waitress, head (hotel & rest.) 310.137-010
WAITER/WAITRESS, INFORMAL (hotel & rest.) 311.477-030
WAITER/WAITRESS, ROOM SERVICE (hotel & rest.) 311.477-034
Waiter/Waitress, Second Class (water trans.) 350.677-030
WAITER/WAITRESS, TAKE OUT (hotel & rest.) 311.477-038
Waiter/Waitress, Tavern (hotel & rest.) 311.477-018
Waiter/Waitress, Third Class (water trans.) 350.677-030
Waiter/Waitress, Tourist Class (water trans.) 350.677-030
Walking-Dragline Oiler (mine & quarry) 850.684-018
Walking-Dragline Operator (any industry) 850.683-018
walk-through operator (amuse. & rec.) 342.665-010
wall attendant (amuse. & rec.) 249.587-010
WALLCOVERING TEXTURER (paper goods) 749.684-054
Wall-Crane Operator (foundry) 921.663-010
Wallet Assembler (leather prod.) 783.684-010
wallpaper cleaner (any industry) 381.687-026
wallpaper-embosser helper (paper goods) 640.685-070
WALLPAPER INSPECTOR (paper goods) 652.687-042
WALLPAPER INSPECTOR AND SHIPPER (paper goods) 652.687-046
WALLPAPER-PRINTER HELPER (paper goods) 652.687-050
WALLPAPER PRINTER I (paper goods) 652.662-014
Wallpaper Printer II (paper goods) 979.684-074
Wallpaper Remover, Steam (construction) 869.687-026
wall washer (any industry) 381.687-026
Wall Washer (construction) 869.687-026
Walnut-Dehydrator Operator (can. & preserv.) 523.685-066
Walnut Grower (agriculture) 403.161-010
Warble-Saw Operator (woodworking) 669.382-010
ward attendant (medical ser.) 355.377-014
ward clerk (medical ser.) 245.362-014
Warden (government ser.) 187.117-018
wardrobe draper (motion picture; radio-tv broad.) 346.374-010
WARDROBE-SPECIALTY WORKER (motion picture; radio-tv broad.) 969.381-010
WARDROBE SUPERVISOR (amuse. & rec.) 346.361-010
Ward Supervisor (medical ser.) 355.377-014
WARE CLEANER (pottery & porc.) 774.667-022
WARE DRESSER (pottery & porc.) 774.684-042
WARE FINISHER (glass mfg.) 772.381-018
WARE FORMER (pottery & porc.) term
Warehouse Checker (clerical) 222.687-010
Warehouse Cutter (glass mfg.) 779.684-054
Warehouse Guard (any industry) 372.667-034
Warehouse-Record Clerk (clerical) 222.387-034
warehouse supervisor (any industry) 184.167-114
warehouse supervisor (any industry) 921.133-018
WAREHOUSE SUPERVISOR (any industry) 929.137-022
warehouse supervisor (clerical) 222.137-034
WAREHOUSE SUPERVISOR (motor trans.) 929.137-018
WAREHOUSE TRAFFIC SUPERVISOR (wholesale tr.) 922.137-026
warehouse worker (any industry) 922.687-058
WARE SERVER (glass mfg.) 652.686-046
Wares Sorter (nonprofit org.) 222.387-054
WARE TESTER (glass mfg.) 579.384-018
Ware Washer (pottery & porc.) 599.687-030
WARM-IN WORKER (glass mfg.) 772.684-018
Warp-Bleaching-Vat Tender (textile) 582.685-158
warp changer (textile) 683.360-010
warp clamper (textile) 681.686-010
WARP COILER (textile) 582.686-038
warp drawer (textile) 683.684-014
warp dresser (textile) 681.682-010
WARP-DYEING-VAT TENDER (textile) 582.685-158
WARPER (narrow fabrics) 681.685-146
warper tender (knitting; narrow fabrics; nonmet. min.; textile) 681.685-018
warper tender (textile) 681.682-010
warp hanger (textile) 681.686-010
warp hanger (textile) 683.680-010
warping-mill operator (textile) 681.682-010
Warp-Knitter Helper (knitting) 685.686-014
WARP-KNITTING-MACHINE OPERATOR (knitting) 685.665-018
warp placer (textile) 681.686-010
Warp-Scouring-Vat Tender (textile) 582.685-158
WARP SPOOLER (narrow fabrics; textile) 681.685-142
Warp-Spool Slasher (narrow fabrics) 582.562-010
warp starter (textile) 683.360-014
warp starter (textile) 683.684-018
WARP-TENSION TESTER (textile) 683.687-034
warp tier (textile) 683.680-010
warp trucker (textile) 681.686-010
warp-tying-machine knotter (narrow fabrics; textile) 683.685-034
WARP-TYING-MACHINE TENDER (narrow fabrics; textile) 683.685-034
WARP-YARN SORTER (textile) 681.687-022
washateria attendant (laundry & rel.) 369.677-010
wash-barrel leader (ordnance) 599.132-010
wash-box operator (mine & quarry) 541.382-010
wash-box operator (mine & quarry; smelt. & refin.) 939.362-014
Wash-Clothes Presser (laundry & rel.) 363.682-018
Washcloth Folder (tex. prod., nec) 589.687-014
Washcoat Wiper (furniture) 742.687-010
wash driller (any industry) 930.682-010
wash-driller helper (any industry) 930.687-014
WASHER (any industry) 599.687-030
WASHER (clock & watch) 715.687-126
washer (garment; knitting) 582.684-014

WASHER (grain-feed mills) 529.687-210
WASHER (optical goods) 713.684-042
WASHER (pen & pencil) 733.687-078
WASHER (plastic-synth.) 582.685-162
WASHER, AGRICULTURAL PRODUCE (agriculture; can. & preserv.; sugar & conf.; wholesale tr.) 529.685-258
washer-and-capper-machine operator (elec. equip.) 692.685-042
WASHER-AND-CRUSHER TENDER (mine & quarry) 939.685-014
Washer, Blanket (laundry & rel.) 361.665-010
WASHER, CARCASS (meat products) 525.687-122
Washer Cutter (rubber goods) 690.680-010
washer driver (automotive ser.; retail trade) 919.663-010
Washer-Dryer Preparer (any industry) 827.584-010
WASHER ENGINEER (paper & pulp) 533.685-034
WASHER-ENGINEER HELPER (paper & pulp) 533.686-014
WASHER, HAND (laundry & rel.) 361.687-030
Washer Helper, Machine (laundry & rel.) 361.686-010
WASHER, MACHINE (any industry) 599.685-114
WASHER, MACHINE (laundry & rel.) 361.665-010
Washer, Meat (meat products) 525.587-014
washer-off (jewelry-silver.) 735.687-010
washer operator (mine & quarry) 541.382-010
washery boss (mine & quarry) 549.137-014
WASH HELPER (chemical) 559.665-042
WASH-HOUSE WORKER (beverage) 529.685-254
WASHING-AND-SCREENING PLANT SUPERVISOR (construction) 570.132-018
Washing-And-Waxing-Machine Operator (agriculture; wholesale tr.) 529.685-258
Washing-Machine Assembler (house. appl.) 827.684-010
WASHING-MACHINE LOADER-AND-PULLER (laundry & rel.) 361.686-010
Washing-Machine Loader I (laundry & rel.) 361.686-010
Washing-Machine Loader II (laundry & rel.) 361.687-018
WASHING-MACHINE OPERATOR (any industry) 599.685-118
Washing-Machine Operator (leather mfg.) 582.685-050
washing-machine operator (pharmaceut.) 559.685-022
washing-machine operator (rubber reclaim.) 559.685-138
washing-machine operator (textile) 582.685-030
Washing-Machine Servicer (any industry) 827.261-010
Washing-Machine Striper (elec. equip.) 741.687-022
washing-tub operator (chemical) 551.685-014
WASH-MILL OPERATOR (chemical) 559.485-010
wash-oil-cooler operator (steel & rel.) 549.382-018
WASH-OIL-PUMP OPERATOR (steel & rel.) 549.382-018
WASH-OIL-PUMP OPERATOR HELPER (steel & rel.) 549.685-034
WASH OPERATOR (chemical) 559.662-014
washroom attendant (any industry) 358.677-018
WASHROOM CLEANER (sugar & conf.) 529.687-214
WASHROOM OPERATOR (sugar & conf.) 529.665-014
Washroom Supervisor (laundry & rel.) 361.137-010
WASH-TANK TENDER (chemical) 559.685-182
wash-test checker (textile) 587.384-010
waste baler (any industry) 920.685-010
WASTE CHOPPER (tex. prod., nec) 689.686-054
waste chopper (textile) 680.685-102
waste collector (any industry) 929.687-022
waste collector (any industry) 381.687-018
waste-cotton cleaner (tex. prod., nec; textile) 680.685-114
WASTE-DISPOSAL ATTENDANT (any industry) 955.383-010
waste duster (tex. prod., nec; textile) 680.685-114
waste filling remover (textile) 689.685-094
WASTE HAND (textile) term
waste-house operator (chemical) 551.687-018
WASTE-MACHINE OFFBEARER (tex. prod., nec) 680.686-022
waste-machine operator (textile) 680.685-050
WASTE-MACHINE TENDER (tex. prod., nec; textile) 680.685-114
WASTE-MANAGEMENT ENGINEER, RADIOACTIVE MATERIALS (profess. & kin.) 005.061-042
WASTE-PAPER-HAMMERMILL OPERATOR (paper & pulp) 530.686-018
WASTE SALVAGER (garment) 781.684-062
WASTE-TREATMENT OPERATOR (chemical) 955.382-014
WASTEWATER-TREATMENT-PLANT ATTENDANT (sanitary ser.) 955.585-010
WASTEWATER-TREATMENT-PLANT OPERATOR (sanitary ser.) 955.362-010
watch adjuster (clock & watch) 715.281-010
WATCH-AND-CLOCK-REPAIR CLERK (retail trade) 299.367-018
WATCH ASSEMBLER (clock & watch) 715.381-094
watch-assembly inspector (clock & watch) 715.381-050
Watch Balance Assembly Manufacturing Supervisor (clock & watch) 609.130-026
WATCH-BAND ASSEMBLER (jewelry-silver.) 700.684-082
watch commander (government ser.) 377.137-014
WATCH-CRYSTAL EDGE GRINDER (glass products) 775.684-062
WATCH-CRYSTAL MOLDER (glass products) 772.684-022
watch-dial maker (clock & watch) 715.381-046
watch-dial printer (clock & watch) 715.684-190
Watch-Dial Stoner (clock & watch) 715.684-170
Watch Electrician (tel. & tel.) 829.261-018
watch engineer (any industry) 950.131-014
watch engineer (any industry) 950.382-026
WATCHER, AUTOMAT (tex. prod., nec) 689.685-150
Watcher, Automat, Frame Goods (tex. prod., nec) 689.685-150
Watcher, Automat, Long Goods (tex. prod., nec) 689.685-150
watcher, lookout tower (forestry) 452.367-010
WATCHER, PANTOGRAPH (tex. prod., nec) 689.685-154
watchguard (any industry) 372.667-034
watch guard, gate (any industry) 372.667-030
Watchguard, Racetrack (amuse. & rec.) 372.667-034
watch-hairspring assembler (clock & watch) 715.381-054
Watch Hairspring Manufacturing Supervisor (clock & watch) 609.130-026
watch inspector, final movement (clock & watch) 715.381-050
watchmaker (clock & watch) 715.281-010
watchmaker apprentice (clock & watch) 715.281-014
WATCH MANUFACTURING SUPERVISOR (clock & watch) 609.130-026
Watch Metal Dial Manufacturing Supervisor (clock & watch) 609.130-026
WATCH REPAIRER (clock & watch) 715.281-010
WATCH REPAIRER APPRENTICE (clock & watch) 715.281-014
Watchstander (water trans.) 911.364-010
watch supervisor (air trans.; business ser.) 193.162-022
WATER-AND-SEWER-SYSTEMS SUPERVISOR (waterworks) 862.137-018
Water Chaser (logging) 921.667-014
water-control-station engineer (waterworks) 954.382-014
WATER CONTROL SUPERVISOR (waterworks) 184.167-270
WATER-FILTER CLEANER (waterworks) 954.587-010
water filterer (waterworks) 954.382-014
water-filterer helper (waterworks) 954.587-010
Water Hauler (logging) 905.663-014
Water-Jet Loom Fixer (textile) 683.260-018
WATER LEAK REPAIRER (auto. mfg.) 807.684-034
water-maintenance supervisor (waterworks) 862.137-018
Water-Mangle Tender (textile) 584.685-042
Watermelon-Harvesting Supervisor (agriculture) 409.131-010
Watermelon Inspector (agriculture) 409.687-010
WATER-METER INSTALLER (waterworks) 954.564-010
Water-Meter Reader (waterworks) 209.567-010
water-plant-pump operator (waterworks) 954.382-010
water-plant-pump-operator supervisor (waterworks) 954.130-010
Waterproof-Bag-Cutting-Machine Operator (tex. prod., nec) 686.585-010
Waterproof-Bag Sewer (tex. prod., nec) 787.682-058
Waterproof-Coating-Machine Tender (paper goods) 534.682-018
Waterproofer (boot & shoe) 741.687-018
Waterproofer (construction) 869.664-014
Waterproofer Helper (construction) 869.687-026
Waterproofing-Machine Operator (textile) 589.665-014
Waterproofing Mixer (textile) 550.585-018
waterproof-material folder (tex. prod., nec) 789.687-058
Water-Pump Assembler (engine-turbine) 706.481-010
Water-Pumping-Station Engineer (any industry) 950.382-026
Water-Pump Servicer (any industry) 630.281-018
water purifier (waterworks) 954.382-014
Water Quality Analyst (profess. & kin.) 029.081-010
Water Quality-Control Engineer (profess. & kin.) 019.081-018
WATER-QUALITY TESTER (paper & pulp) 539.367-014
WATER REGULATOR AND VALVE REPAIRER (waterworks) 862.684-030
Water Router Operator (aircraft mfg.) 699.382-010
Water Server (hotel & rest.) 311.677-018
WATER-SERVICE DISPATCHER (waterworks) 954.367-010
water-service supervisor (waterworks) 862.137-018
WATERSHED TENDER (waterworks) 954.382-018
Water-Ski Assembler (toy-sport equip.) 732.684-014
WATER-SOFTENER SERVICER-AND-INSTALLER (business ser.) 862.684-034
water sponger (textile) 587.685-018
water supervisor (waterworks) 862.137-018
Water-Taxi Driver (water trans.) 911.663-010
WATER TENDER (any industry) 599.685-122
water tender (waterworks) 954.362-010
Water-Treatment-Plant Engineer (profess. & kin.) 005.061-030
water-treatment-plant mechanic (waterworks) 630.281-038
WATER-TREATMENT-PLANT OPERATOR (chemical) 551.485-010
WATER-TREATMENT-PLANT OPERATOR (waterworks) 954.382-014
Water-Truck Driver I (construction; petrol. & gas) 904.383-010
WATER-TRUCK DRIVER II (construction; petrol. & gas) 905.683-010
WATERWAY TRAFFIC CHECKER (water trans.) 248.367-030
water-well driller (construction) 859.362-010
WAVE-SOLDERING MACHINE OPERATOR (comm. equip.; electron. comp.; inst. & app.; office machines) 726.362-014
WAVE-SOLDER OFFBEARER (electron. comp.) 726.686-010
WAX-BALL KNOCK-OUT WORKER (toy-sport equip.) 732.687-082

WAX BLEACHER (chemical) 551.685-158
WAX BLENDER (fabrication, nec) 550.585-046
wax-coating-machine tender (paper goods) 534.482-010
Waxed-Bag-Machine Operator (paper goods) 649.685-014
WAXER (glass products) 779.687-038
waxer (hat & cap) 582.685-082
waxer (protective dev.) 712.381-046
WAXER, FLOOR (any industry) 381.687-034
waxer operator (paper goods) 534.482-010
Waxer Tender (motion picture) 976.685-018
Wax Impregnator (electron. comp.) 599.682-014
Waxing-Machine Operator (elec. equip.) 599.685-046
WAXING-MACHINE OPERATOR (paper goods) 534.482-010
Waxing-Machine-Operator Helper (paper goods) 534.686-010
WAX-MACHINE OPERATOR (textile) 584.685-050
WAX MOLDER (foundry; jewelry-silver.) 549.685-038
WAX-PATTERN ASSEMBLER (foundry) 518.684-022
WAX-PATTERN COATER (foundry) 518.687-022
WAX-PATTERN REPAIRER (foundry) 518.684-026
WAX-POT TENDER (foundry) 553.685-110
WAX POURER (chemical) 737.685-018
wax pumper (petrol. refin.) 541.682-010
Wax-Room Supervisor (foundry) 519.131-010
Wax Treater (petrol. refin.) 549.362-014
Waybill Clerk (air trans.; motor trans.; r.r. trans.; water trans.) 214.362-014
WAY INSPECTOR (r.r. trans.) 910.367-030
ways operator (ship-boat mfg.) 921.662-022
Wearing-Apparel Assembler (laundry & rel.) 369.687-010
Wearing-Apparel Finisher, Hand (laundry & rel.) 363.684-018
Wearing-Apparel Folder (laundry & rel.) 369.687-018
wearing-apparel presser (laundry & rel.) 363.685-010
Weasand Rodder (meat products) 525.687-010
WEATHER CLERK (air trans.) 248.362-014
weather forcaster (profess. & kin.) 025.062-010
WEATHER OBSERVER (profess. & kin.) 025.267-014
WEATHERSTRIP-MACHINE OPERATOR (rubber goods) 690.382-014
Weather Stripper (construction) 860.381-022
WEAVE-DEFECT-CHARTING CLERK (textile) 221.587-042
weaver (boot & shoe) 788.684-070
WEAVER (carpet & rug) 683.682-034
WEAVER (fabrication, nec) 739.684-170
weaver (furniture) 763.684-018
weaver (furniture) 692.685-262
WEAVER (nonmet. min.; textile) 683.682-038
WEAVER (wood. container) 769.684-054
WEAVER APPRENTICE (nonmet. min.; textile) 683.682-042
WEAVER, AXMINSTER (carpet & rug) 683.685-038
WEAVER, BENCH LOOM (metal prod., nec) 616.681-010
weaver, broadloom (nonmet. min.; textile) 683.682-038
Weaver, Dobby Loom (textile) 683.682-038
WEAVER, HAND (narrow fabrics; textile) 782.684-062
WEAVER, HAND (personal ser.) 782.381-022
WEAVER, HAND LOOM (carpet & rug; textile) 683.684-030
WEAVER, NARROW FABRICS (narrow fabrics; nonmet. min.) 683.682-046
WEAVER, NEEDLE LOOM (narrow fabrics) 683.665-010
WEAVE-ROOM SUPERVISOR (carpet & rug) 683.130-018
Weaver, Rapier-Insertion Loom (textile) 683.682-030
WEAVER, TIRE CORD (tex. prod., nec) 683.682-050
Weaver, Wire Loom (textile) 683.682-030
WEAVING INSPECTOR (carpet & rug; textile) 683.684-034
weaving-machine operator (metal prod., nec) 616.685-046
WEAVING SUPERVISOR (nonmet. min.; textile) 683.130-022
Webbing Seamer, Pound Net (tex. prod., nec) 782.684-026
WEBBING TACKER (furniture) 780.684-130
Webb Layer (wood. container) 669.685-014
web-machine tender (paper & pulp) 539.686-010
WEB-PRESS OPERATOR (print. & pub.) 651.362-030
WEB-PRESS-OPERATOR APPRENTICE (print. & pub.) 651.362-034
web-press-operator assistant (print. & pub.) 651.585-010
Web Sizer (textile) 680.687-018
web worker (fishing & hunt.) 449.664-010
WEDDING CONSULTANT (retail trade) 299.357-018
wedger-and-gluer (woodworking) 762.687-038
WEDGER, MACHINE (cutlery-hrdwr.) 701.687-034
web-press-operator helper, offset (print. & pub.) 651.685-026
weed-cooking operator (chemical) 529.382-030
WEEDER-THINNER (agriculture) 409.687-018
WEED INSPECTOR (agriculture) 408.381-014
weft maker (fabrication, nec) 739.684-170
WEFT STRAIGHTENER (textile) 580.682-010
weigh and charge worker (rubber reclaim.) 558.666-010
weigher (clerical) 221.587-030
Weigher (recording) 559.686-010
WEIGHER (toy-sport equip.) 732.687-086
WEIGHER, ALLOY (nonfer. metal) 509.687-022
Weigher-And-Charger (fabrication, nec) 929.687-062
WEIGHER-AND-CRUSHER (smelt. & refin.) 515.567-010
WEIGHER AND GRADER (chemical) 559.567-014
WEIGHER AND MIXER (chemical) 550.685-122
WEIGHER-BULKER (chemical) 550.582-014
WEIGHER OPERATOR (chemical) 559.687-070
Weigher, Packing (any industry) 929.687-062
WEIGHER, PRODUCTION (any industry) 929.687-062
weigh-station inspector (government ser.) 168.267-058
WEIGHT ANALYST (profess. & kin.) 020.167-030
weight-and-test-bar clerk (foundry) 221.387-042
WEIGH-TANK OPERATOR (oils & grease) 529.485-026
Weight Calculator (ship-boat mfg.) 216.482-022
Weight Caller (clerical) 209.667-014
weight clerk (clerical) 221.587-030
Weight-Count Operator (electron. comp.) 590.684-014
weight engineer (profess. & kin.) 020.167-030
weighter (toy-sport equip.) 732.687-026
WEIGHT GUESSER (amuse. & rec.) 342.357-010
weight recorder (clerical) 222.387-074
WEIGHT-REDUCTION SPECIALIST (personal ser.) 359.367-014
WEIGHT TESTER (paper & pulp) 539.485-010
weight tester (toy-sport equip.) 732.687-086
WEIGHT-YARDAGE CHECKER (textile) 589.487-010
welcome-wagon host/hostess (business ser.) 293.357-018
Welder, Acetylene (welding) 811.684-014
WELDER APPRENTICE, ARC (welding) 810.384-010
WELDER APPRENTICE, COMBINATION (welding) 819.384-008
WELDER APPRENTICE, GAS (welding) 811.684-010
WELDER, ARC (welding) 810.384-014
WELDER-ASSEMBLER (machinery mfg.) 819.381-010
Welder, Boilermaker (struct. metal) 810.384-014
Welder, Carbon Arc (welding) 810.384-014
WELDER, CERTIFIED (welding) term
WELDER, COMBINATION (welding) 819.384-010
WELDER, EXPERIMENTAL (welding) 819.281-022
WELDER, EXPLOSION (welding) 814.684-010
WELDER-FITTER (welding) 819.361-010
WELDER-FITTER APPRENTICE (welding) 819.361-014
Welder-Fitter, Arc (welding) 819.361-010
Welder-Fitter, Gas (welding) 819.361-010
welder-fitter helper (any industry) 801.687-014
Welder, Flux-Cored Arc (welding) 810.384-014
WELDER, GAS (welding) 811.684-014
welder, gas, automatic (welding) 811.482-010
Welder, Gas-Metal Arc (welding) 810.384-014
Welder, Gas-Tungsten Arc (welding) 810.384-014
WELDER, GUN (welding) 810.664-010
Welder, Hand, Submerged Arc (welding) 810.384-014
WELDER HELPER (welding) 819.687-014
Welder, Oxyacetylene (welding) 811.684-014
Welder, Oxyhydrogen (welding) 811.684-014
Welder, Pipe Making (steel & rel.) 616.360-026
Welder, Plasma Arc (welding) 810.384-014
welder, plastic (plastic prod.) 553.684-010
WELDER, PRODUCTION LINE (welding) 819.684-010
Welder, Production Line, Arc (welding) 819.684-010
Welder, Production Line, Combination (welding) 819.684-010
Welder, Production Line, Gas (welding) 819.684-010
Welder, Repair (welding) 819.384-010
WELDER SETTER, ELECTRON-BEAM MACHINE (welding) 815.380-010
WELDER SETTER, RESISTANCE MACHINE (welding) 812.360-010
Welder, Shielded-Metal Arc (welding) 810.384-014
Welder, Structural Repair (welding) 819.361-010
WELDER, TACK (welding) 810.684-010
Welder, Tool And Die (welding) 819.361-010
WELDING ENGINEER (profess. & kin.) 011.061-026
Welding-Machine Assembler (elec. equip.) 826.361-010
Welding-Machine Feeder (welding) 819.686-010
WELDING-MACHINE OPERATOR, ARC (welding) 810.382-010
Welding-Machine Operator, Electro-Gas (welding) 810.382-010
WELDING MACHINE OPERATOR, ELECTRON BEAM (welding) 815.382-010
WELDING-MACHINE OPERATOR, ELECTROSLAG (welding) 815.382-014
WELDING-MACHINE OPERATOR, FRICTION (welding) 814.382-010
WELDING-MACHINE OPERATOR, GAS (welding) 811.482-010
Welding-Machine Operator, Gas-Metal Arc (welding) 810.382-010
Welding-Machine Operator, Gas-Tungsten Arc (welding) 810.382-010
Welding-Machine-Operator Helper, Arc (welding) 819.666-010
Welding-Machine-Operator Helper, Gas (welding) 819.666-010
Welding-Machine Operator, Plasma Arc (welding) 810.382-010
WELDING-MACHINE OPERATOR, RESISTANCE (welding) 812.682-010
Welding-Machine Operator, Submerged Arc (welding) 810.382-010
WELDING-MACHINE OPERATOR, THERMIT (welding) 815.682-014
WELDING-MACHINE OPERATOR, ULTRASONIC (welding) 814.682-010

WELDING-MACHINE TENDER (welding) 819.685-010
WELDING-ROD COATER (elec. equip.) 505.382-014
WELDING SUPERVISOR (welding) 819.131-014
Welding Supervisor, Electric-Weld Pipe Mill (welding) 819.131-014
WELDING TECHNICIAN (profess. & kin.) 011.261-014
welding tester (welding) 819.281-018
WELD INSPECTOR (elec. equip.) 724.685-014
WELD INSPECTOR I (welding) 819.281-018
WELD INSPECTOR II (welding) 819.687-010
WELFARE DIRECTOR (government ser.) 188.117-126
well cleaner (petrol. & gas) 930.363-010
Well Digger (construction) 869.687-026
well driller (petrol. & gas) 930.382-026
WELL-DRILL OPERATOR (construction) 859.362-010
Well-Drill Operator, Cable Tool (construction) 859.362-010
Well-Drill-Operator Helper, Cable Tool (construction) 869.664-014
Well-Drill-Operator Helper, Rotary Drill (construction) 869.664-014
Well-Drill Operator, Rotary Drill (construction) 859.362-010
WELL-LOGGING CAPTAIN, MUD ANALYSIS (petrol. & gas) 010.131-010
WELL-LOGGING OPERATOR, MUD ANALYSIS (petrol. & gas) 010.281-022
WELL-POINT PUMPING SUPERVISOR (construction) 862.132-010
WELL-POINT SETTER (construction) term
WELL PULLER (petrol. & gas) 930.382-030
WELL PULLER, HEAD (petrol. & gas) 939.131-018
Well-Reactivator Operator (construction) 859.362-010
well shooter (petrol. & gas) 931.361-014
WELT BEATER (boot & shoe) 690.685-470
WELT-BUTTER, HAND (boot & shoe) 788.687-162
WELT BUTTER, MACHINE (boot & shoe) 690.685-474
WELT CUTTER (boot & shoe) 690.685-478
welt cutter (hat & cap) 686.685-074
welt-edge rounder (hat & cap) 784.684-050
welter (boot & shoe) 690.682-078
Welting Stitcher, Front (boot & shoe) 690.682-082
welt-insole channeler (boot & shoe) 690.685-086
welt maker (boot & shoe) 690.685-478
welt-pocket-machine operator (garment) 786.685-022
Welt Rougher (boot & shoe) 690.685-046
Welt Sewer (furniture) 780.682-018
Welt-Sole Layer (boot & shoe) 690.685-074
Welt-Strip Cementer, Machine (boot & shoe) 690.686-018
Welt Treater (boot & shoe) 788.687-090
welt trimmer (boot & shoe) 690.685-238
WELT-TRIMMING-MACHINE OPERATOR (hat & cap) 686.685-074
WELT WHEELER (boot & shoe) 690.685-482
western-felt-hat blocker (hat & cap) 580.685-026
Western-Saddle Maker (leather prod.) 783.381-026
WET-AND-DRY-SUGAR-BIN OPERATOR (sugar & conf.) 529.665-018
Wet-Char Conveyor Tender (sugar & conf.) 529.685-050
wet cleaner, machine (laundry & rel.) 361.665-010
WET-COTTON FEEDER (textile) 581.686-042
wet-crown-blocking operator (hat & cap) 580.685-026
WET-END HELPER (wood prod., nec) 534.685-034
WET-END OPERATOR I (plastic-synth.) 559.685-186
WET-END OPERATOR II (plastic-synth.) 559.685-190
Wet-End Tester (paper & pulp) 539.364-010
wet finisher, wool (textile) 586.682-010
WET INSPECTOR, OPTICAL GLASS (optical goods) 716.687-034
WET-MACHINE TENDER (paper & pulp) 539.685-030
wet-milling-wheel operator (leather mfg.; tex. prod., nec) 582.685-050
wet mixer (brick & tile; pottery & porc.) 570.482-010
wet mixer (chemical) 550.582-010
WET MIXER (chemical) 550.685-126
WET-MIX OPERATOR (chemical) 558.382-058
wet-mix operator (pharmaceut.) 559.382-026
Wet-Pan Mixer (smelt. & refin.; steel & rel.) 570.685-070
WET-PLANT OPERATOR (smelt. & refin.) 519.665-018
wet-press tender (paper & pulp) 539.686-010
Wet Roaster (can. & preserv.) 529.685-174
Wet Roller (leather mfg.) 583.685-094
Wet Trimmer (leather mfg.) 585.684-010
wet washer, machine (laundry & rel.) 361.665-010
WHARF ATTENDANT (amuse. & rec.) 342.667-010
wharf hand (can. & preserv.) 922.687-062
wharf hand (water trans.) 911.364-014
wharf helper (water trans.) 911.687-010
WHARFINGER (water trans.) 184.387-010
WHARFINGER, CHIEF (water trans.) 184.167-274
wharf operator (water trans.) 911.364-014
WHARF TENDER (steel & rel.) 542.667-010
wharf tender (water trans.) 911.364-014
wharf tender, head (petrol. refin.; pipe lines) 914.137-018
wharf-tender helper (water trans.) 911.687-010
WHARF WORKER (water trans.) 921.667-026
WHEAT CLEANER (grain-feed mills) 529.685-262
Wheat Grower (agriculture) 401.161-010
wheel-alignment mechanic (automotive ser.) 620.281-038
wheel and axle inspector (railroad equip.) 622.381-034
WHEEL-AND-CASTER REPAIRER (any industry) 630.684-038
WHEEL ASSEMBLER (mfd. bldgs.; vehicles, nec) 809.684-038
wheel assembler (motor-bicycles) 706.684-106
Wheel Assembler, Baby Carriage (toy-sport equip.) 731.687-034
wheelbarrow pusher (construction) see WHEELER
wheel blocker (knitting) 685.684-010
wheelchair and baby-stroller rental clerk (retail trade) 295.367-014
wheelchair repairer (protective dev.; retail trade) 639.281-022
WHEEL CUTTER (clock & watch) 605.682-030
wheel engraver (glass products) 775.381-010
Wheeler (chemical) 559.687-050
WHEELER (construction) term
Wheel Filler (auto. mfg.) 749.684-042
Wheel Fitter (railroad equip.) 622.381-014
WHEEL INSPECTOR (r.r. trans.) 806.387-014
Wheel Inspector (steel & rel.) 619.381-010
Wheel Installer (mfd. bldgs.; vehicles, nec) 869.684-0..0
WHEEL LACER AND TRUER (motor-bicycles) 706.684-106
wheel loader operator (any industry) 921.683-042
WHEEL-MILL OPERATOR (chemical) 555.685-066
WHEEL-PRESS CLERK (railroad equip.) 221.587-046
Wheel-Press Operator (railroad equip.) 616.682-010
wheel setter (any industry) 776.684-014
wheel truer (motor-bicycles) 706.684-106
WHEEL-TRUING MACHINE TENDER (motor-bicycles) 706.685-014
WHEELWRIGHT (automotive ser.) 706.381-046
Whip Operator (amuse. & rec.) 342.663-010
WHIPPED-TOPPING FINISHER (oils & grease) 529.682-034
whipper-beater (sugar & conf.) 520.685-050
whirling-machine operator (textile) 585.685-022
Whisky Filterer (beverage) 522.382-018
Whisky Inspector (beverage) 522.667-010
Whisky-Proof Reader (beverage) 522.382-018
Whisky-Regauger (beverage) 522.382-018
White-Kid Buffer (leather mfg.) 585.685-018
white-metal corrosion proofer (any industry) 500.682-010
White Mixing Operator (tex. prod., nec) 680.685-010
Whitener (wood prod., nec) 763.381-010
whiteprinting-machine operator (any industry) 979.682-014
White-Shoe Examiner (boot & shoe) 788.384-010
WHITE-SHOE RAGGER (boot & shoe) 788.687-166
White-Sidewall-Tire Buffer (rubber tire) 759.684-022
White-Sugar Boiler (sugar & conf.) 522.382-034
White-Sugar Centrifugal Operator (sugar & conf.) 521.682-010
White-Sugar-Pan-Tank Operator (sugar & conf.) 529.585-014
White-Sugar-Syrup Operator (sugar & conf.) 529.585-014
White Washer (construction) 869.687-026
White-Washer Piler (textile) 589.686-010
white-work cleaner (engraving) 704.687-010
WHITING-MACHINE OPERATOR (wood prod., nec) 562.485-010
whittling-room operator (hat & cap) 784.361-010
WHIZZER (hat & cap) 581.685-070
whizzer operator (hat & cap) 581.685-070
WHOLESALER I (wholesale tr.) 185.167-070
WHOLESALER II (wholesale tr.) 185.157-018
WICK-AND-BASE ASSEMBLER (fabrication, nec) 739.687-202
wick cutter (fabrication, nec) 739.687-050
WICKER, MOLDED CANDLES (fabrication, nec) 692.685-242
WICKER WORKER (furniture) 763.684-078
wicker worker (wood, container) 769.684-054
wick tender (fabrication, nec) 692.685-242
wide-cloth folder (textile) 689.685-050
Wide-Piece-Goods Inspector (fabrication, nec) 590.367-010
WIDTH STRIPPER (boot & shoe) 690.685-486
width stripper (leather prod.) 585.685-038
Wig Comber (toy-sport equip.) 731.687-018
WIG DRESSER (fabrication, nec; personal ser.) 332.361-010
WIG MAKER (fabrication, nec) 739.381-058
Wig Stylist (personal ser.) 261.351-010
WILDLIFE AGENT, REGIONAL (government ser.) 379.137-018
Wildlife Biologist (profess. & kin.) 041.061-030
WILDLIFE CONTROL AGENT (government ser.) 379.267-010
will-call clerk (retail trade) 299.467-010
willower (any industry) 680.685-082
willow-machine operator (tex. prod., nec; textile) 680.685-114
willow-machine tender (tex. prod., nec; textile) 680.685-114
Willow Worker (furniture) 763.684-078
Willow Worker (wood, container) 769.684-054
Wilton Weaver (carpet & rug) 683.682-014
WINCH DRIVER (water trans.) 921.683-082
Wincher (any industry) 921.667-018

Wincher (wood prod., nec) 561.686-010
winch operator (petrol. & gas) 932.363-010
Winch Operator (water trans.) 911.663-014
WINDER (clock & watch) 715.687-130
winder (fabrication, nec) 739.684-018
winder (garment; knitting) 583.685-122
winder (paper goods) 640.682-022
winder (pen & pencil) 640.685-018
winder (tex. prod., nec; textile) 681.685-154
winder (tex. prod., nec) 681.685-114
WINDER (toy-sport equip.) 692.685-246
Winder Fixer (textile) 689.260-010
winder, gammeter (toy-sport equip.) 692.685-246
WINDER HELPER (paper & pulp) 539.687-010
winder helper (paper goods) 640.687-014
winder operator (build. mat., nec) 549.685-022
WINDER OPERATOR (fabrication, nec) 590.665-018
winder operator (nonmet. min.) 692.685-234
WINDER OPERATOR, AUTOMATIC (textile) 681.685-150
WIND-GENERATING-ELECTRIC-POWER INSTALLER (construction; utilities) 821.381-018
WINDING INSPECTOR (house. appl.) 729.384-022
WINDING INSPECTOR AND TESTER (elec. equip.) 724.364-010
WINDING-LATHE OPERATOR (ordnance) 619.685-086
winding-machine operator (tex. prod., nec; textile) 681.685-154
winding-machine operator (textile) 689.685-046
WINDING-MACHINE OPERATOR (concrete prod.) 619.665-010
winding-machine operator (tex. prod., nec) 681.685-114
WINDING-RACK OPERATOR (tex. prod., nec) 581.685-074
Winding-Rack-Operator Helper (tex. prod., nec) 589.687-026
WIND-INSTRUMENT REPAIRER (any industry) 730.281-054
windlace-machine operator (rubber goods) 690.382-014
Window Assembler (saw. & plan.) 865.684-014
Window Dresser (retail trade) 298.081-010
window-glass cutter off (glass mfg.) 677.685-030
Window Installer (mfd. bldgs.; vehicles, nec) 809.684-030
Window Installer (ship-boat mfg.) 806.684-146
window-machine operator (paper goods) 641.685-066
WINDOW REPAIRER (any industry) 899.684-042
Window-Shade-Cloth Sewer (furniture) 787.682-026
WINDOW-SHADE CUTTER AND MOUNTER (furniture) 692.685-250
Window-Shade Estimator (retail trade) 299.364-010
window-shade-ring coverer (furniture) 692.685-254
WINDOW-SHADE-RING SEWER (furniture) 692.685-254
window washer (any industry) 389.687-014
windshield installer (automotive ser.) 865.684-010
Windshield Installer (ship-boat mfg.) 806.684-146
Windshield-Wiper Repairer (automotive ser.) 825.281-022
Windshield-Wiper Repairer (railroad equip.) 620.381-018
WIND TUNNEL MECHANIC (aircraft mfg.) 869.261-026
wind-up operator (rubber goods; rubber tire) 554.686-018
wine-bottle inspector (beverage) 529.687-058
Wine-Cellar Stock Clerk (hotel & rest.) 222.387-058
WINE MAKER (beverage) 183.161-014
WINE PASTEURIZER (beverage) 523.685-126
WINERY WORKER (beverage) 521.685-370
WINE STEWARD/STEWARDESS (hotel & rest.) 310.357-010
WING-MAILER-MACHINE OPERATOR (print. & pub.) 208.685-034
WINK-CUTTER OPERATOR (rubber goods) 557.382-014
WINTERIZER (oils & grease) 521.685-374
wiper (any industry) 699.687-014
wiper (fabrication, nec) 739.687-058
WIPER (furniture) 742.687-010
WIPER (light. fix.) 723.687-022
wiper-blender (furniture) 742.687-010
Wiping-Rag Washer (tex. prod., nec) 361.685-018
wire-and-repeater technician (tel. & tel.) 822.261-026
WIRE-BASKET MAKER (metal prod., nec) 709.687-062
Wire Bender (elec. equip.) 727.687-022
WIRE BENDER (furniture) 709.687-058
Wire Bender (wood. container) 669.686-014
Wire Bender, Hand (any industry) 709.687-050
WIRE-BORDER ASSEMBLER (furniture) 780.685-018
Wire-Bound-Box-Machine Helper (wood. container) 669.686-014
Wire-Bound-Box-Machine Operator (wood. container) 669.662-010
Wire-Brush-Boring-And-Filling-Machine Operator (fabrication, nec) 692.682-018
Wire Brusher (any industry) 705.687-014
wire-brushing-machine operator (button & notion) 603.685-050
wire-brush maker (elec. equip.) 724.684-038
WIRE BRUSH OPERATOR (fabrication, nec) 761.684-058
WIRE CHARGER (elec. equip.) 614.586-010
wire chief (tel. & tel.) 822.131-010
WIRE-COATING OPERATOR, METAL (galvanizing) 501.485-010
WIRE COILER (house. appl.) 724.362-010
WIRE COINER (button & notion) 616.685-086
Wire Cutter (elec. equip.) 691.685-018
WIRE CUTTER (svc. ind. mach.) 731.687-038
WIRE DRAWER (clock & watch) 614.382-014
WIRE DRAWER (jewelry-silver.) 735.687-042
WIRE DRAWER (nonfer. metal) 614.382-010
WIRE DRAWING MACHINE OPERATOR (inst. & app.; jewelry-silver.) 614.382-018
WIRE-DRAWING-MACHINE TENDER (nonfer. metal) 614.685-026
Wire-Drawing-Machine Tender (welding) 819.685-010
Wire-Drawing Supervisor (nonfer. metal; steel & rel.) 614.132-010
wire-draw operator (nonfer. metal) 614.382-010
wire dropper (textile) 683.687-014
wired-sweatband cutter (hat & cap) 585.685-122
wire-fence builder (construction) 869.684-022
Wire-Fence Erector (construction) 869.684-022
WIRE-FRAME DIPPER (button & notion) 734.684-026
WIRE-FRAME-LAMP-SHADE MAKER (fabrication, nec) 709.684-098
WIRE-FRAME MAKER (button & notion) 734.481-010
wire galvanizer (galvanizing) 501.485-010
WIRE HARNESS ASSEMBLER (elec. equip.; electron. comp.; office machines) 728.684-010
WIRE INSERTER (hat & cap) 784.687-082
wire-loop-machine operator (metal prod., nec) 616.682-014
Wire-Machine Operator (hat & cap) 784.682-014
WIRE-MESH-FILTER FABRICATOR (metal prod., nec) 709.381-046
WIRE-PHOTO OPERATOR, NEWS (print. & pub.) 239.382-010
WIRE PREPARATION MACHINE TENDER (any industry) 728.685-010
wire-preparation worker (elec. equip.; electron. comp.) 728.684-022
wirer (auto. mfg.; vehicles, nec) 829.684-014
wirer (construction) 824.261-010
wirer (elec. equip.; electron. comp.; office machines) 728.684-010
WIRER (office machines) 729.281-042
wirer (tel. & tel.) 722.381-010
WIRER, CABLE (comm. equip.; elec. equip.) 729.381-022
WIRE REPAIRER (carpet & rug) 628.684-038
wirer helper (any industry) 829.684-022
Wirer Helper (utilities) 821.667-010
Wirer, Maintenance (utilities) 829.261-018
WIRE-ROPE-SLING MAKER (metal prod., nec) 709.684-102
Wirer, Passenger Car (railroad equip.) 825.281-026
WIRER, STREET LIGHT (utilities) 821.684-018
WIRER, SUBASSEMBLIES (office machines) 729.684-062
Wire Saw Operator (electron. comp.) 677.382-018
wire-saw operator (stonework) 677.462-014
WIRE SAWYER (stonework) 677.462-014
WIRE SETTER (glass mfg.) 579.665-018
Wire-Shape Maker (hat & cap) 784.684-030
wire-spiral binder (paper goods; print. & pub.) 653.685-030
Wire-Spring-Relay Adjuster (elec. equip.) 724.381-010
wire stitcher, hand (furniture) 780.687-042
wire-stitcher, machine (furniture) 692.685-198
wire-stitcher operator (any industry) 692.685-202
Wire Stockkeeper (metal prod., nec) 222.387-058
Wire-Straightening-Machine Operator (any industry) 613.662-022
Wire Stripper (elec. equip.) 691.685-018
wire-taping-machine operator (nonfer. metal) 691.682-018
WIRE THREADER (clock & watch) 604.686-010
Wire Tinner (galvanizing) 501.485-010
WIRE-TRANSFER CLERK (financial) 203.562-010
WIRE-TURNING-MACHINE OPERATOR (wood. container) 692.685-258
WIRE WALKER (amuse. & rec.) 159.347-022
wire weaver (metal prod., nec) 616.382-014
WIRE WEAVER, CLOTH (metal prod., nec) 616.382-014
WIRE-WEAVER HELPER (metal prod., nec) 616.687-014
wire winder (rubber goods) 690.685-490
WIRE-WINDING-MACHINE OPERATOR (wood. container) 619.685-090
WIRE-WINDING-MACHINE TENDER (rubber goods) 690.685-490
WIREWORKER (elec. equip.; electron. comp.) 728.684-022
WIREWORKER SUPERVISOR (utilities) 821.131-026
WIRE-WRAPPING-MACHINE OPERATOR (electron. comp.) 726.682-014
WIRE-WRAPPING-MACHINE OPERATOR (office machines) 692.662-022
Wiring Inspector (elec. equip.) 829.361-018
Wiring-Machine Operator (paper goods) 649.685-054
Wolf Hunter (fishing & hunt.) 461.661-010
Women's-Activities Adviser (education) 090.167-022
Women's Garment Fitter (retail trade) 785.361-014
Women's Leather-Belt Maker (leather prod.) 690.685-266
Wood And Hardware Outfitter (ship-boat mfg.) 806.684-146
wood barker (fabrication, nec; paper & pulp) 569.687-026
Wood Buffer (musical inst.) 761.684-026
wood carver, hand (woodworking) 761.281-010
WOOD-CARVING-MACHINE OPERATOR (woodworking) 665.382-018
WOOD CAULKER (ship-boat mfg.) 843.384-010
Wood-Club-Neck Whipper (toy-sport equip.) 732.684-082

wood cooker (wood. container) 562.665-010
WOOD-CREW SUPERVISOR (chemical, saw, & plan.) 564.132-010
wood-cut engraver (print. & pub.) 979.281-014
Wooden-Fence Erector (construction) 869.684-022
WOODEN-FRAME BUILDER (furniture) 762.684-066
Wooden-Heel Beveler (boot & shoe) 690.685-198
WOODEN-SHADE HARDWARE INSTALLER (furniture) 739.684-174
WOODENWARE ASSEMBLER (woodworking) 762.687-070
wood finisher (woodworking) 763.381-010
wood-finisher apprentice (woodworking) 763.381-014
wood-form builder (construction) 860.381-046
WOOD-FUEL PELLETIZER (fabrication, nec) 569.685-078
WOOD GRINDER, HEAD (paper & pulp) 530.132-022
WOOD GRINDER OPERATOR (paper & pulp) 530.662-014
WOOD HACKER (fabrication, nec; paper & pulp) 569.687-026
WOOD HANDLER (paper & pulp) 921.687-034
WOOD-HEEL BACK-LINER (boot & shoe) 662.685-042
Wood-Heel Cementer (boot & shoe) 788.684-126
wood-heel cementer (boot & shoe) 788.684-058
Wood-Heel-Cover Ironer (boot & shoe) 788.684-130
WOOD-HEEL FINISHER (boot & shoe) 788.684-126
wood-heel fitter, machine (boot & shoe) 690.682-046
Wood-Heel-Flap Inserter (boot & shoe) 788.684-126
Wood-Heel-Flap Rubber (boot & shoe) 788.684-126
Wood-Heel-Flap Trimmer (boot & shoe) 788.684-126
WOOD INSPECTOR (paper & pulp) 663.687-010
wood-lathe operator (woodworking) 664.382-014
Wood Lather (construction) 842.361-010
wood-mill supervisor (paper & pulp) 530.132-018
Wood-Pile-Driver Operator (construction) 859.682-018
wood piler (woodworking) 569.685-066
WOOD-POLE TREATER (wood prod., nec) 561.687-010
wood-preparation supervisor (paper & pulp) 530.132-018
Wood-Sash-And-Frame Carpenter (construction) 860.381-022
WOODS BOSS (logging) 459.137-010
WOOD SCRAP HANDLER (millwork-plywood) 564.686-010
Wood-Shingle Roofer (construction) 866.381-010
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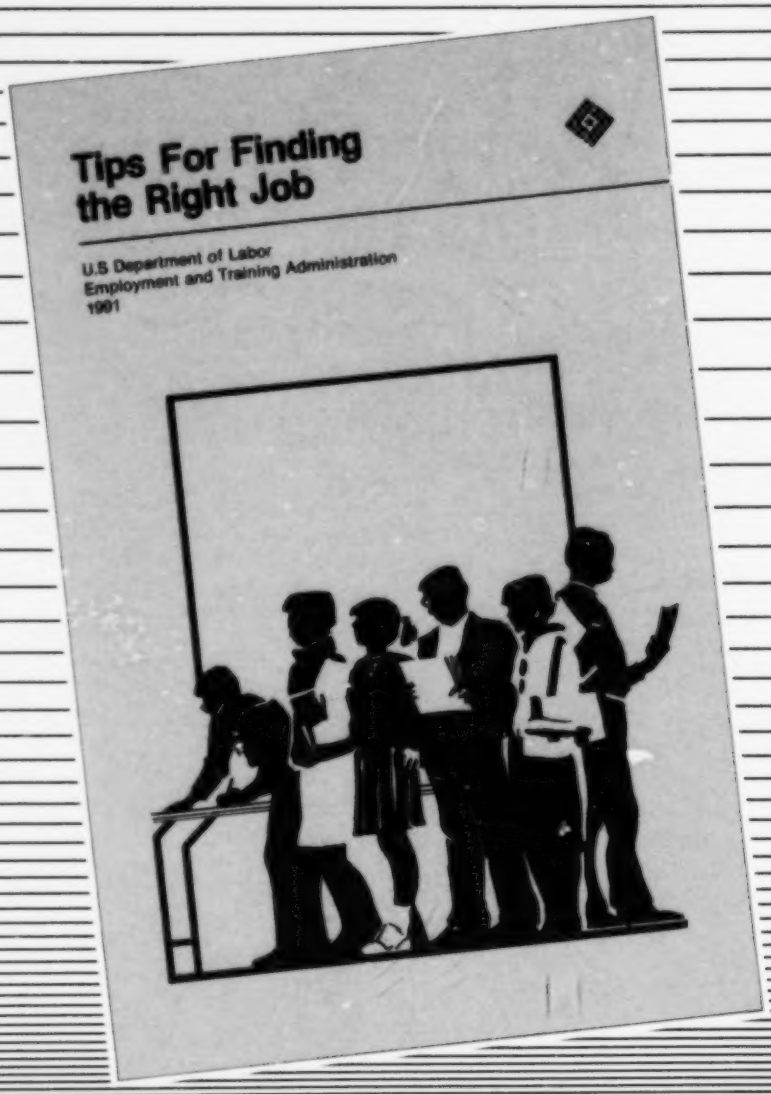

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